



ARBORICULTURAL METHOD STATEMENT

to BS 5837:2012 at

***Cannon Hall Farm,
Cawthorne,
Barnsley,
South Yorkshire
S75 4AT***

This document describes how the trees will be protected and managed during the development of this site. It explains how and when the protection measures must be installed and maintained throughout the development.

A copy of this document report must be permanently available on site for the duration of all development activity and should be referenced for practical guidance on how to protect the retained trees at this site.

Prepared for:
Walker Associates Architects LLP
*5 New Hagg Farm,
Oldfield Road,
Honley,
West Yorkshire
HD9 6RN*

Date: *March 2019*

Reference: *AWA2560*



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1. Introduction

1.1 Instruction

1.1.1 We are instructed by Malcolm Walker of Walker Associates Architects LLP Limited to prepare an arboricultural method statement for the proposed development at:

- **Cannon Hall Farm, Cawthorne, Barnsley, South Yorkshire S75 4AT**

1.2 Purpose

1.2.1 This method statement has been prepared in order to demonstrate that the development operations at this site can be undertaken with minimal risk of adverse impact on the trees to be retained.

1.2.2 This method statement conforms to BS 5837:2012 *Trees in relation to design, demolition and construction - Recommendations*. It is based on the arboricultural data, collected at a site visit during September 2018, detailed within Appendix 3 of this report.

1.3 Description of Development

1.3.1 It is proposed to erect a new animal feed store and pig shed and to extend the current cattle shed. The proposed development layout has been provided by my client and is the basis for the Tree Protection Plan (TPP) at Appendix 4.

1.4 Details of Consent

1.4.1 Planning consent is subject to this method statement being agreed upon in advance by the Local Planning Authority. The contents of this report must be adhered to, before, during, and after the construction phase.

1.4.2 As such, no equipment, machinery or materials shall be brought onto the site in connection with the development until this arboricultural method statement detailing tree management and tree protection measures has been submitted to and approved by the Local Planning Authority.

2. Method Statement Timeline

2.1 Overview of Sequence of Operations

2.1.1 In overview, it is necessary to undertake the following sequence of operations in relation to arboricultural input for development operations.

- 1 Method Statement approved by the LPA
- 2 Install tree protective fencing and ground protection
- 3 Pre commencement meeting/ confirm fencing and tree protection is as specified
- 4 Construction of development
- 5 Removal of tree protection

2.2 Specific Sequence of Operations

2.2.1 The following timeline table informs the key principles for development operations proceeding in relation to arboricultural requirements conditioned as part of this method statement.

2.2.2 The actions and timescales within this table must be adhered to in order to discharge the arboricultural method statement planning condition for this site.

2.2.3 The precise timing and order of some of the development operations may need to be changed due to site specific operational requirements, yet any operations that may affect the trees on the site must be done so under arboricultural supervision by a suitably qualified person appointed by the contractor.

Sequence of Operations		
Stages	Action	Arboricultural Input
1 Approval	This AMS is submitted to and approved in writing by the LPA.	If necessary, liaise with contractor and LPA to discuss methodologies detailed.
2 Tree Protection	Installing the tree protective fencing and ground protection boards will take place prior to any storage of plant, materials and machinery. As shown at Appendix 5.	If necessary, liaise with the contractor installing the protective fencing and ground protection boards until completed to the standard specified in this method statement.
3 Site Meeting	Following installation of tree protection measures, the LPA shall be invited to inspect the fencing, ground protection and tree works, and discuss any other site operations that have implications for trees.	Meeting with a representative of the LPA and the site manager. Alternatively, contractor can confirm the fencing, ground protection, and tree works are as specified by taking photographs of the tree protection measures.
4 Construction	Undertake the construction of the new development.	If necessary, liaise with the local authority and the site foreman to ensure any issues are adequately resolved.
5 Site Finishing	Removal of tree protective measures must only be undertaken when all site traffic and machinery has left the site.	If acceptable to the LPA, the contractor can take photos of the site to give to the LPA to gain approval for the removal of protective fencing.

3. Tree Management

3.1 Tree Works

- 3.1.1 No tree removals or pruning works are required to facilitate the development.
- 3.1.2 Any tree work should be carried out according to British Standard 3998:2010 Tree Work - Recommendations.
- 3.1.3 When appointing a tree surgeon, only properly qualified and experienced companies should be used, who have adequate Public Liability and Employer's Liability Insurance.

4. Tree Protection

4.1 Tree Protection Fencing

- 4.1.1 The protective fencing for this site should be located as shown on the Tree Protection Plan (TPP) at Appendix 5 (as illustrated with a thick purple line).
- 4.1.2 The precise fencing location may need to be slightly adjusted on site due to local site conditions, but is not expected to differ from that shown on the TPP. The final fencing position must be agreed on by the LPA before the commencement of any site works.
- 4.1.3 The tree protective fencing details should be incorporated into relevant subsequent plans, method statements used for design purposes and construction drawings issued for use on site, to ensure that all interested parties are fully aware of the areas in which access and works may and may not take place.
- 4.1.4 The protective fencing will be appropriate to the degree and proximity of likely construction works. In this instance, the default BS 5837:2012 tree protection fencing is deemed disproportionate. It is suggested (if acceptable by the LPA) an adequate level of protection for the trees could be provided by the existing secure wooden fencing that surrounds the trees or by 'Heras' type fencing, of welded mesh panels on rubber or concrete feet.

- 4.1.5 The Heras fencing should be joined together using a minimum of two anti-tamper couplers, installed so that they can only be removed from inside the fence. The fencing panels should be supported on the inner side by stabilizer struts, which should normally be attached to a base plate secured with ground pins or mounted on a block tray (see Appendix 1 for an example).
- 4.1.6 The area enclosed by the fencing is referred to as the Construction Exclusion Zone (CEZ); this area should be considered a restricted area. No pedestrians, vehicles, storage of materials, equipment or machinery should be allowed within the CEZ unless specified within this method statement. The site manager must ensure that all personnel are aware of the restrictions that apply to the fenced-off area.
- 4.1.7 Once the fencing is erected, waterproof warning signs labelled '*Tree Protection Area*' should be placed at 3m intervals to ensure that all personnel are aware of the restrictions that apply to the fenced-off area (see Appendix 1 for an example sign).
- 4.1.8 The protective fencing should be inspected for faults or damage by the site manager or other responsible named person on a regular basis and a written record kept. Any faults or defects should be repaired or replaced as soon as is reasonably practicable. The Tree Protection Fencing shall not be removed, breached or altered without prior written authorisation from the local planning authority and under arboricultural supervision by a suitable named responsible individual appointed by the site manager.

4.2 Ground Protection

- 4.2.2 The development work is within the exposed RPA of retained trees. As such, ground protection will be required within the RPA of T7 to avoid compaction of the soil which can arise from the single passage of a heavy vehicle, especially in wet conditions, so that tree root functions remain unimpaired.
- 4.2.3 Interlinked ground protection boards should be used. They should be located as shown on the Tree Protection Plan (TPP) at Appendix 5 (as illustrated with a light blue hatched area).
- 4.2.4 The precise location of the boards may need to be slightly adjusted on site due to local site conditions, but is not expected to differ significantly from that shown on the TPP.

- 4.2.5 The new temporary ground protection should be capable of supporting any traffic entering or using the site without being distorted or causing compaction of underlying soil.
- 4.2.6 For pedestrian movements only, a single thickness of scaffold boards placed either on top of a driven scaffold frame, so as to form a suspended walkway, or on top of a compression-resistant layer (e.g. 100 mm depth of woodchip), laid onto a geotextile membrane.
- 4.2.7 For pedestrian-operated plant up to a gross weight of 2t, proprietary, inter-linked ground protection boards placed on top of a compression-resistant layer (e.g. 150 mm depth of woodchip), laid onto a geotextile membrane.

4.3 Drainage and Utilities

- 4.3.2 Drainage and utilities are to be directed away from the retained trees. Over-ground services should ideally be routed away from areas where they are likely to interfere with the crowns of mature trees. New underground services should be grouped together and routed away from RPAs. *NJUG 10: Guidelines for the Planning, Installation and Maintenance of Utility Services in Proximity to Trees* should be considered when installing services.

4.4 Additional Precautions

- 4.4.2 Allowance should be made for operations outside of the CEZ that could indirectly impact on trees. Including space for site huts, temporary toilet facilities (including their drainage) and other temporary structures; and space for storing (whether temporary or long-term) materials.
- 4.4.3 Care must be taken to prevent contamination with chemical spillages, including petrol, diesel and oils. Cement mixers and any other toxic materials should not be permitted within the RPA of the trees. Any materials whose accidental spillage would cause damage to a tree should be stored and handled well away from the outer edge of its RPA.
- 4.4.4 Fires on the site should be avoided if possible. Where they are unavoidable, and approved by the Local environmental health authority, they should not be lit in a position where heat could affect foliage or branches. The potential size of a fire and the wind direction should be considered when determining its location, and it should be attended always until safe enough to leave.

5. Signature

I trust this report provides all the required information.

Signed



.....

Adam Winson

Chartered Arboriculturist, MSc, BSc (Hons), MICFor, AIEEM.

15th March 2019

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Appendix 1: Images and Figures

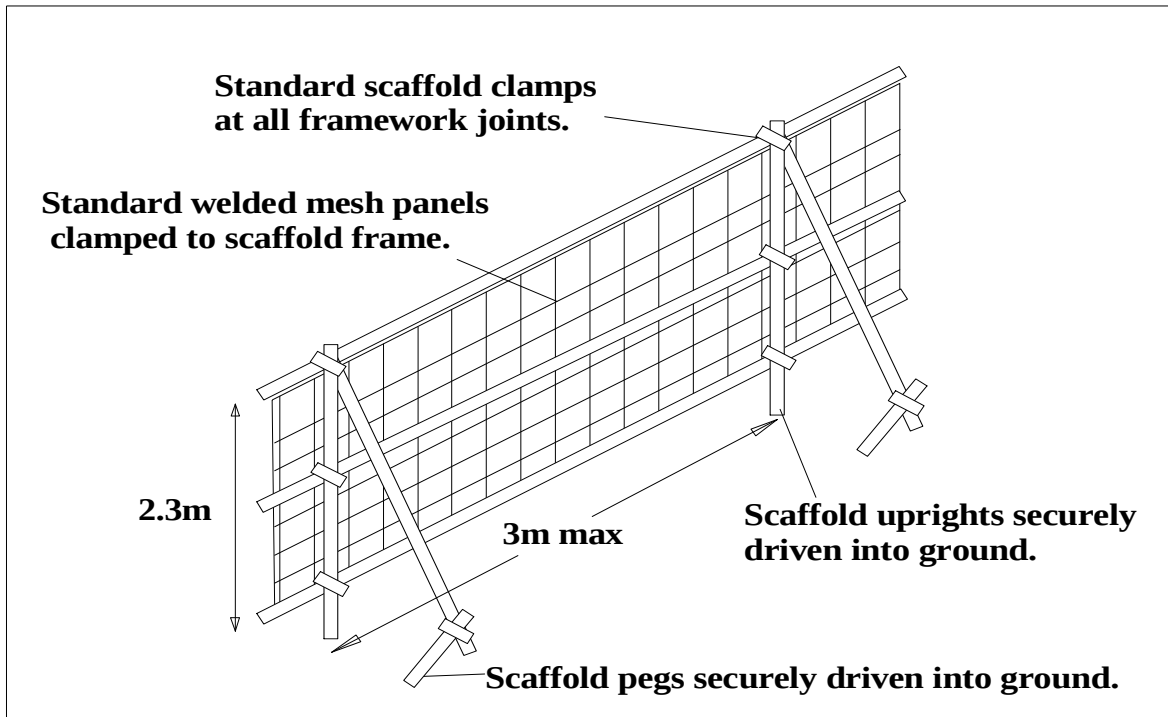


Figure 1: Fencing to BS 5837:2012



Figure 2: Photo of Fencing to BS 5837:2012

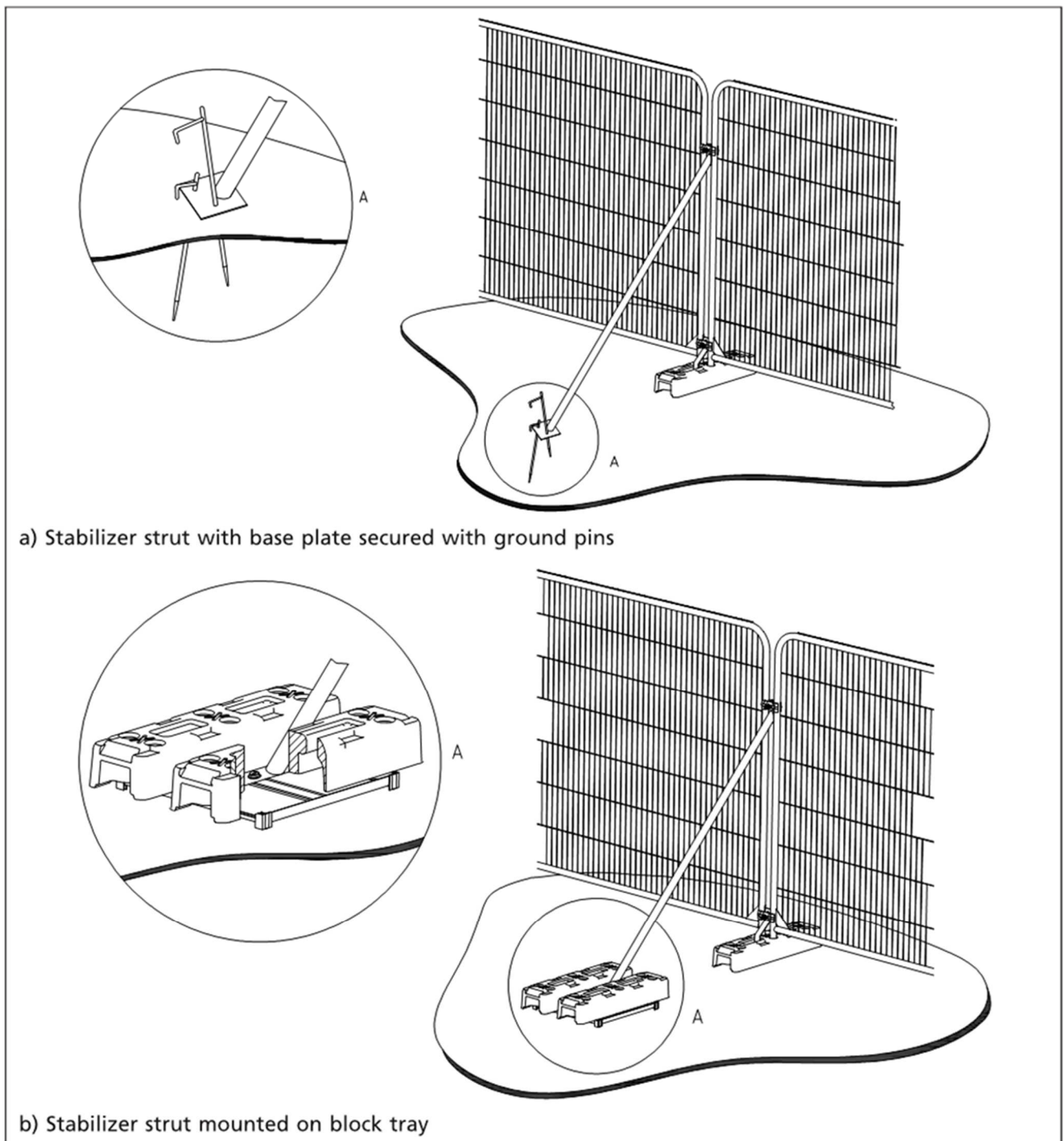


Figure 3: Secured 'Heras' type fencing with stabilizing system and fixed central pins (©BSI)



Figure 4: Warning sign for fencing



Figure 5: Example of A3 Correx Tree Protection Warning Sign fixed to fencing panel.



Figure 6: Secured 'Heras' type fencing with stabilizing system and anti-tamper couplers



Figure 7: Anti-tamper couplers to secure fencing and avoid unauthorised access

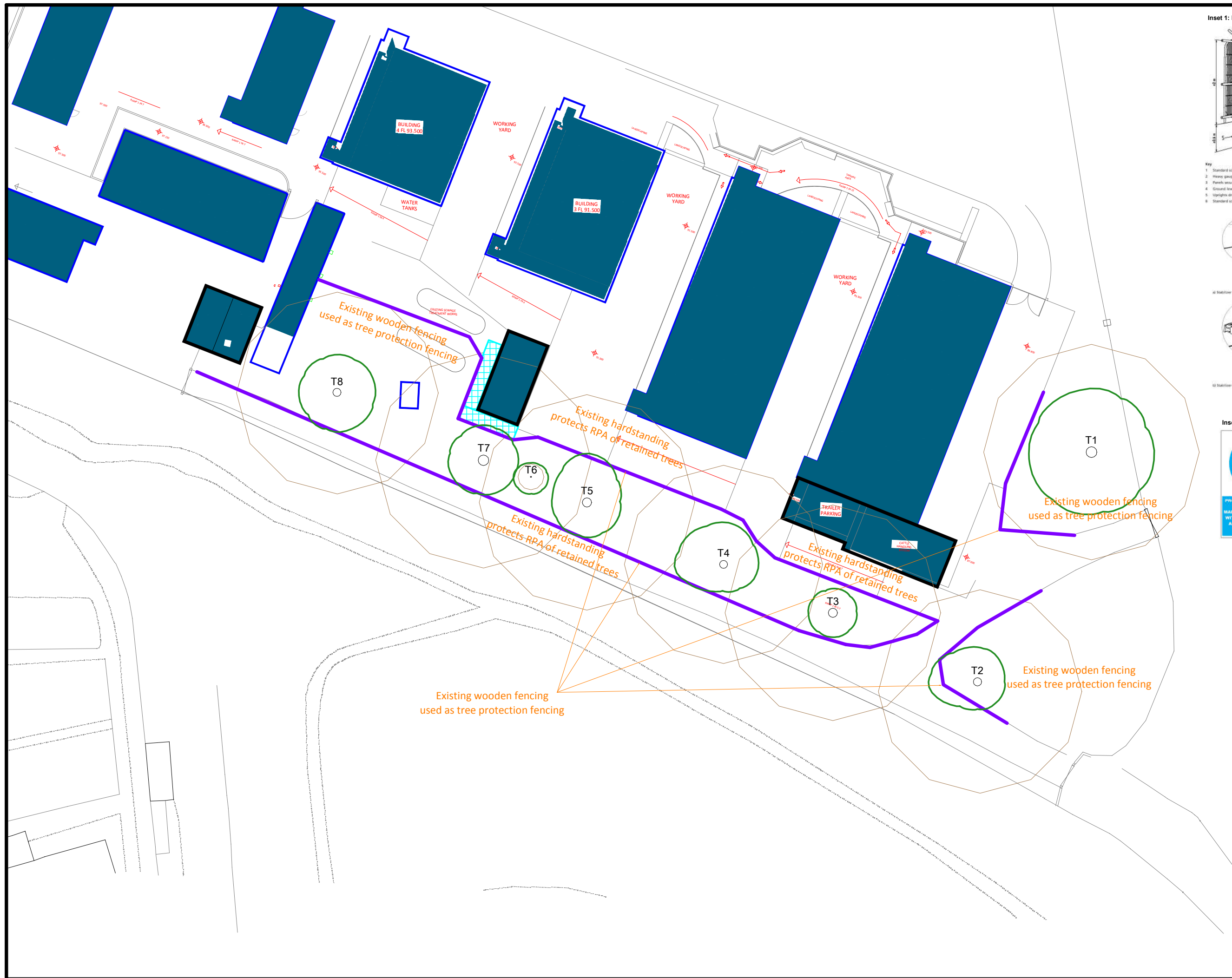
Appendix 2: Relevant Contact Details

Contact Name	Organisation/ Details	Contact Number	Contact E-mail
Malcolm Walker	Walker Associates Architects LLP	01484 303800	enquiries@waarchitects.info
Adam Winson	AWA Tree Consultants Ltd	0114 272 1124	adam@awatrees.com
Edward Jowett	Barnsley Tree Officer	01226 772557	edwardjowett@barnsley.gov.uk

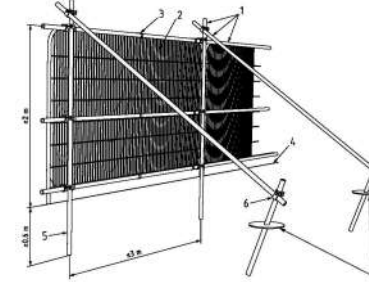
Appendix 3: Tree Data

	Tree Species		Measurements					Crown (m)				Tree Condition								Value		Management
Tree ID	Common Name	Latin Name	Maturity	Height (m)	Stems	Stem Dia (mm)	Estimated	Ave Height	N	E	S	W	Roots	Stem	Crown	Comments	Physiological	Structural	Life Expectancy	Amenity	Category	Works
T1	Oak	Quercus robur	Mature	16	1	1550	No	2.5	9	9	9	9	Soil compaction, Damage to buttress roots	Old pruning wounds, Minor cavities	No visual defects	Veteran tree	Good	Fair	>40 yrs	High	A	No works required
T2	Lime	Tilia x europaea	Mature	21	1	1180	No	4	5	4	4	7	Soil compaction	Old pruning wounds, Bark wounds, Minor cavities	Minor deadwood	Stem damage from animal browsing	Fair	Fair	>40 yrs	High	A	No works required
T3	Lime	Tilia x europaea	Mature	19	1	1310	No	4	3.5	3.5	3.5	3.5	Soil compaction	Old pruning wounds, Bark wounds, Minor cavities, Epicormic growths, Minor stem damage from animal browsing	Minor dieback, Major deadwood	Veteran characteristics. Ganoderma fungal fruiting body at base.	Fair	Fair	>40 yrs	High	A	No works required
T4	Lime	Tilia x europaea	Mature	19	1	1150	No	1.5	6	5	4	7	No visual defects	Old pruning wounds, Bark wounds, Minor cavities, Epicormic growths	Minor dieback	Veteran characteristics. Minor old stem damage from animal browsing.	Fair	Good	>40 yrs	High	A	No works required
T5	Lime	Tilia x europaea	Mature	18	1	1320	No	1.5	7	5	5	5	Fungus or decay	Old pruning wounds, Bark wounds, Epicormic growths	Minor deadwood	Veteran characteristics. Minor old stem damage from animal browsing.	Fair	Good	>40 yrs	High	A	No works required

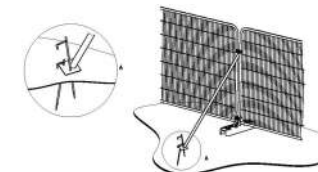
Tree ID	Tree Species		Measurements					Crown (m)					Tree Condition							Value		Management
	Common Name	Latin Name	Maturity	Height (m)	Stems	Stem Dia (mm)	Estimated	Ave Height	N	E	S	W	Roots	Stem	Crown	Comments	Physiological	Structural	Life Expectancy	Amenity	Category	Works
T6	Lime	<i>Tilia x europaea</i>	Semi-mature	8	1	150	No	1.5	2	2.5	2.5	2.5	Soil compaction, Soil erosion, Damage to buttress roots	Old pruning wounds, Bark wounds, Minor cavities	Minor deadwood	Steel cage damaging stem and base	Good	Good	>40 yrs	Low	C	No works required
T7	Lime	<i>Tilia x europaea</i>	Mature	18	1	1510	No	1.5	5	5	5	5	Soil compaction, Soil erosion, Adjacent ground works	Old pruning wounds, Bark wounds, Minor cavities, Epicormic growths	Minor deadwood	Veteran characteristics. Minor old stem damage from animal browsing.	Fair	Good	>40 yrs	High	A	No works required
T8	Lime	<i>Tilia x europaea</i>	Mature	20	1	1170	No	1.5	5.5	5.5	5.5	5.5	Soil compaction, Soil erosion, Damage to buttress roots, Adjacent ground works	Old pruning wounds, Bark wounds, Minor cavities, Epicormic growths	Minor deadwood	Veteran characteristics. Minor old stem damage from animal browsing.	Fair	Good	>40 yrs	High	A	No works required



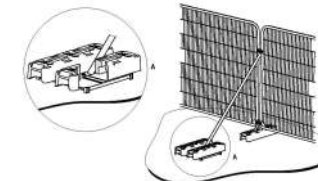
Inset 1: Examples of tree protection fencing



- Key
- 1 Standard scaffold poles
 - 2 Heavy gauge 2 m 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 0.6 m)
 - 6 Standard scaffold clamps

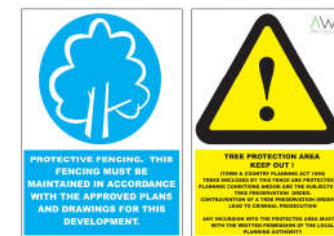


(a) Stabilizer strut with base plate secured with ground pins



(b) Stabilizer strut mounted on block tray

Inset 2: Example warning sign for fencing





Appendix 4:
Tree Protection Plan

Cannon Hall Farm
Ref: AWA2560

BRITISH STANDARD 5837:2012
SCALE: 1:500 PAPER: A3

	TREES TO BE RETAINED
	TREES FOR REMOVAL
	TREE STEM
	TREE STEM TO REMOVE
	TREE PROTECTION FENCING
	INTERLINKED GROUND PROTECTION BOARDS
	RPA: ROOT PROTECTION AREA