The Pavilion, Soham

Arboricultural Method Statement

July 2013

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Client: Soham Town Council

David Brown is a Landscape Consultant and Arboriculturist of over thirty years experience. He is a Fellow and Registered Consultant of the Arboricultural Association and regularly advises on tree management issues.

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1 Contents

1	<i>Contents</i>	2
	Proposals	
	Tree Works	
	Schedule	
	Specifications	
	Arboricultural Implications Assessment	
	-	
	Appendix: Definitions	
	Appendix: Fencing	
	Appendix: Temporary Protective Surface	
<i>10</i>	Appendix: Qualifications	V

2 Proposals

2.1 The Proposed Development

- 2.1.1 A pre-development tree survey was carried out by David Brown in December 2011. This determined the arboricultural constraints on the site.
- 2.1.2 Saunders Boston have designed refurbishment and improvements to the existing building and details of the layout and elevational treatment are shown on their drawings, which form the basis of the planning application.
- 2.1.3 This document is to be used on site as it contains specifications for all arboricultural operations required to implement the above scheme. Included are details of restrictions such as site boundaries and access routes. All activities on site must consider these restrictions. All workers and visitors to the site should be made aware of these restrictions.

2.2 Tree Protection Plan

2.2.1 A Tree Protection Plan has been prepared and is to be read in conjunction with this AMS. It is based on the Saunders Boston site layout drawing. The plan shows the development proposed and the protective measures specified below.

3 Tree Works

3.1 Trees to be removed

- 3.1.1 One tree (number 9) a young Beech, category C, requires removal in order to achieve the development proposed.
- 3.1.2 In addition, the following trees were found to be in a condition where removal was necessary regardless of development:
 - Tree 15 and 17
 - n.b. category R as shown in the 2011 survey is now category U in the 2012 edition of BS5837.



3.1.3 The loss of these trees will be mitigated by new planting of 5 new trees. Proposed locations are specified on the Tree Protection Plan. This will secure the long term amenity of the area.

3.2 Tree Works

- 3.2.1 All tree works and felling listed in this document shall be carried out by competent, skilled and experienced tree work operatives prior to the installation of protective measures. All works should be compliant with BS: 3998 "Recommendation for Tree Work" (2010).
- 3.2.2 Works to be completed are:
 - FELL: Tree 9, 15 and 17

4 Schedule

4.1 Site set up

- 4.1.1 Tree works may take place before any protective measures are on site, as these may hamper work. Care should be taken by the contractor to avoid excessive traffic in the root protection areas, heavy equipment should be placed outside this area. Stumps should not be dug or pulled.
- 4.1.2 Protective measures specified in this document, such as fencing and ground protection, should be in place (as shown on the tree protection plan) before construction begins.
- 4.1.3 Access will be achieved by the existing site access until the new access drive is completed.
- 4.1.4 Temporary protection will be required of all 'no-dig' construction areas until the new hard surfaces are installed.
- 4.1.5 'No-dig' sub-base will be employed where shown on the plan.

4.2 Inspections

- 4.2.1 Pre-Start Meeting: prior to the commencement of any work on site, including site clearance and site set up operations, there shall be a pre-contract meeting with the architect, LPA tree officer and arboricultural consultant. The purpose of the meeting is to ensure that all parties are familiar with the requirements for tree protection on this site.
- 4.2.2 Interim Inspections: a programme of site visits by the arboricultural consultant to be carried out during the progress of the construction work to inspect the tree protection measures will be agreed and recorded at the pre-start meeting.
- 4.2.3 Practical Completion: a further site visit by the arboricultural consultant will be carried out at the completion of the contract works.
- 4.2.4 At each site inspection the arboricultural consultant will prepare a brief report and make any recommendations necessary to secure successful tree retention. Copies of the reports shall be sent to the client and to the local planning authority.



5 Specifications

5.1 Construction Exclusion Zone

- 5.1.1 Prior to the commencement of the development, including both demolition and construction phases, a Tree Protection Fence will be installed where shown on the drawing. This will define the Construction Exclusion Zone where no construction use or access is allowed. A 2.4 metres height tree protection fence comprised of steel mesh panels secured by a scaffold pole framework as set out in BS 5837 (2012) Figure 2 shall be installed where shown on the tree protection plan. A diagram showing the detail of the fence is attached. This fence shall be maintained for the duration of the construction contract.
- 5.1.2 Care should be taking when using vehicles that may span above the fencing. At no time should there be contact with existing tree crowns.

5.2 'No-Dig' Driveway

- 5.2.1 A non-woven geotextile separation fabric, such as 'Terram' shall be laid over existing levels in the area to be the proposed access and car park area. A 'Tensar TriAxe' geogrid shall then be placed over the 'Terram'. Edge restraint along the edges of the new access road shall be achieved by using preserved pressure treated softwood boards affixed by timber pegs. A cellular confinement system, such as 'Cellweb', shall then be opened out and fixed over the geogrid in accordance with the manufacturer's instructions. A sub-base layer of 20-40mm particle size nofines hard road stone shall then be placed in the cellular confinement system over the geogrid to a depth of 250mm, working from completed sections of sub-base at all times.
- 5.2.2 Where the existing drive is to be either re-surfaced or taken out of operation the sub-base shall be retained undisturbed within tree root protection areas. Where reinstated to grass sward the existing wearing course shall be replaced with good quality topsoil and turfed to match existing surrounding levels.

5.3 Levels

5.3.1 No level changes are required within the root protection areas of retained trees.

5.4 Services

- 5.4.1 A plan showing details of services routes should be prepared and submitted to the local planning authority for approval prior to the commencement of any construction on site.
- 5.4.2 These routes will avoid the root protection areas of retained trees.

5.5 Chemicals and Waste

5.5.1 Care should be taken when discharging waste material, such as concrete mixings, diesel oil and vehicle washings. This should not occur within 10m of any tree stem. Allowances should be made for any slope present on site, so waste does not run toward trees.



6 Arboricultural Impact Assessment

6.1 Introduction

6.1.1 This section contains a final assessment of the likely effects of the proposed development on trees after mitigatory measures have been considered.

6.2 Reasons for removals

- 6.2.1 Category C tree tree 9 is in conflict with the development and can readily be replaced elsewhere.
- 6.2.2 Category U trees Trees 15 and 17 are to be removed as not having any useful life expectancy.

6.3 Impacts on retained trees

6.3.1 All the RPAs of retained trees are fully protected following mitigation by tree protection measures and special 'no-dig' construction techniques..

6.4 Visual impact

6.4.1 The proposed tree removals will have no significant effect on local character and amenity.

6.5 Remedial planting

6.5.1 New tree planting of 5 new trees is recommended to maintain amenity and contribute to improved age distribution within the population.

6.6 Assessment

6.6.1 With the mitigation and protection measures set out above there are no residual adverse arboricultural impacts.



7 Appendix: Definitions

7.1 Arboricultural Impact Assessment (AIA)

7.1.1 '... evaluates the direct and indirect effects of the proposed design and where necessary recommends mitigation.' BS5837 p.14, para.5.4.1

7.2 Arboricultural Method Statement (AMS)

7.2.1 'Methodology for the implementation of any aspect of development that is within the root protection area (3.7), or has the potential to result in loss of or damage to a tree to be retained' BS5837 p. 3, para.3.2

7.3 Tree Protection Plan (TPP)

7.3.1 'Scale drawing, informed by descriptive text where necessary, based upon the finalized proposals, showing trees for retention and illustrating the tree and landscape protection measures' BS5837 p.4, para.3.11

7.4 Construction Exclusion Zone

7.4.1 'Area based on the root protection area (3.7) from which access is prohibited for the furation of a project.' BS5837 pp2

7.5 Tree Constraints Plan (TCP)

7.5.1 The tree survey drawing which shows information 'including the material constraints arising from existing trees that merit retention ...'. BS5837 p.5, para.4.4.1.1

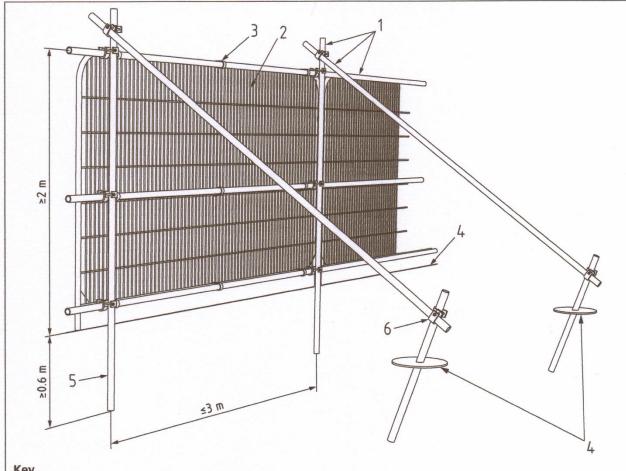
7.6 Root Protection Area (RPA)

7.6.1 'Layout design tool indicating the minimum area around a tree deemed to contain sufficient roots and rooting volume to maintain the tree's viability, and where the protection of the roots and soil structure is treated as a priority.' BS5837 p.4, para.3.7



Appendix: Fencing

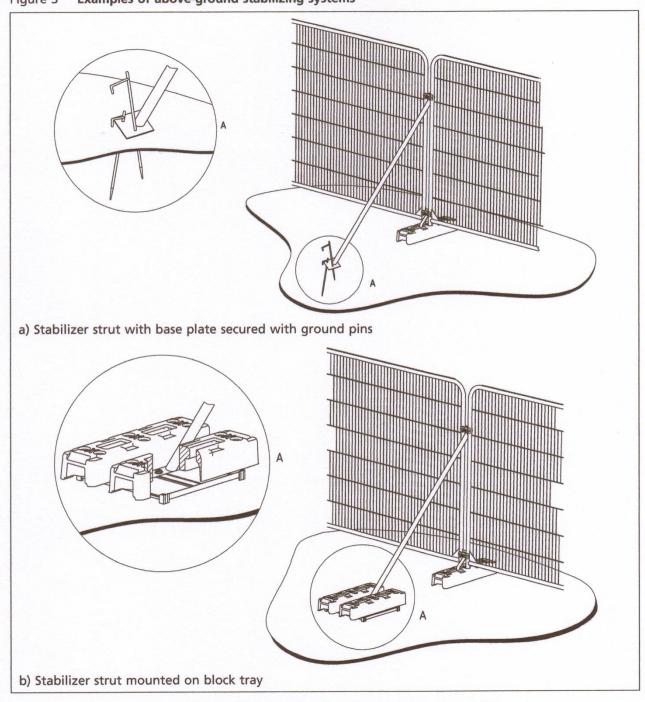
Figure 2 Default specification for protective barrier



Key

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

Figure 3 **Examples of above-ground stabilizing systems**





9 Appendix: Temporary Protective Surface

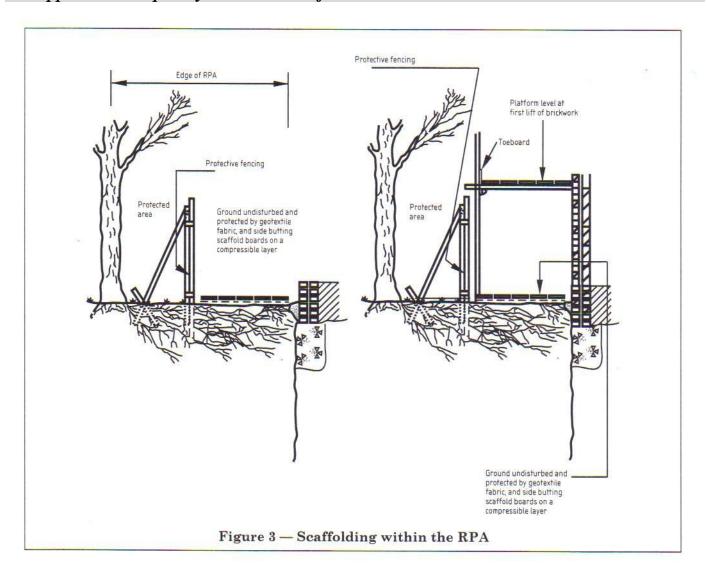


Figure 3 from BS5837 (2005) provides a specification for how to combine a tree protection fence with temporary surface protection, including an option for attaching to scaffolding. Although this diagram is not included in the 2012 revision, the principles remain relevant and appropriate.

10 Appendix: Qualifications

- 10.1.1 I am an Arboricultural Consultant in private practice as a Director of David Brown Landscape Design Limited.
- 10.1.2 I hold a special Honours degree in Landscape Design and Plant Science (1985) along with a Master of Arts degree and Diploma in Landscape Design (1988) from Sheffield University. I also hold the degree of Doctor of Philosophy in Landscape History from the University of East Anglia (2001). I am a part-time Landscape History tutor for the University of Cambridge.
- 10.1.3 I am a Fellow (1994) and Registered Consultant (1995) of the Arboricultural Association, and a Corporate Member of the Institute of Horticulture (1985). I have worked in the arboricultural and landscape sector since 1972. I attended Writtle College from 1973-1976, where I studied Amenity Horticulture (with Arboriculture specialism). I was awarded an OND (Credit) in 1976, carrying out my first extensive tree survey in the same year. I am a drafting panel member for a forthcoming British Standard dealing with tree planting, BS8545.
- 10.1.4 Since establishing my practice in 1988, I have advised both private and public sector clients on arboricultural matters. I have wide-ranging experience in the application of this technical knowledge to legal matters and regularly present expert evidence in court cases and planning appeals. I am aware of my responsibility to the Court to provide impartial professional evidence.

