Arboricultural Method Statement

13A Crossfield Road
London
NW3 4NS

22nd March 2018

PJC ref: 4815/18-03 Rev -

This report has been prepared by

PJC Consultancy Ltd

on behalf of

Ms J Ladwig

Prepared by	**Peter Davies FdSc Arboriculture M.Arbor.A** Peter has a Foundation Degree in Arboriculture from the University of Brighton and is a professional member of the Arboricultural Association. He has over ten years experience in the arboricultural industry, originally working as a groundsman and feller, and progressing into consultancy. He is a Lantra accredited professional tree inspector.
Checked by	**Nick Betts HND For M.Arbor.A** Nick has attained an HND in forestry management and is a professional member of both the Arboricultural Association and the Consulting Arborists Society. He has worked in the arboricultural and forestry industries for 17 years. He started his career as a forestry worker before qualifying as a tree surgeon, working in both the private and commercial sectors. He has been a practising consultant since 2004. He is a Lantra accredited professional tree inspector.

Sussex office:
Chapter House, Priesthawes Farm
Hailsham Road, Polegate
East Sussex, BN26 6QU
Tel: 01323 832120

E: contact@pjcconsultancy.com

Kent office:
Unit 1, Hanover Mill,
Mersham, Ashford,
Kent, TN25 6NU
Tel: 01233 225365

W: www.pjcconsultancy.com

PJC Consultancy
Arboricultural, Ecological & Landscape Consultancy

PJC Consultancy
Arboricultural, Ecological & Landscape Consultancy

CONTENTS

1 Introduction

2 Arboricultural method statement

Appendices:

1. Tree Protection Plan
2. Tree Protection Fencing Specification
3. Example Protective Fencing Signs

1 INTRODUCTION

1.1 This method statement is written in conjunction with arboricultural survey ref. PJC/4815/18-01 and arboricultural impact assessment ref. PJC/4815/18-02.

1.2 **Instruction:** PJC Consultancy has been instructed by Ms J Ladgwig to provide an arboricultural method statement in accordance with BS5837: 2012 '*Trees in relation to design, demolition and construction – Recommendations*', for proposed construction works at 13A Crossfield Road in Camden.

1.3 **Objective of this report:** In order to safeguard retained trees on site during development works it is necessary to implement a tree protection strategy. The objective of the following arboricultural method statement is to provide protection methodology for retained trees throughout the proposed development, including the above ground and below ground parts of the trees as well as their rooting medium. This report is concerned with the protection of all retained trees at the site including trees around the curtilage with the potential to be impacted by the construction works.

1.4 **Limitations of report:** This document is based on the information available on the date of the report. Updates to the arboricultural method statement and Tree Protection Plan may be required following detailed design stage of development including the routing of services and formation of a construction management plan.

1.5 **Contents of report:** This report includes the following:

- Arboricultural Method Statement
- Tree Protection Plan

2 ARBORICULTURAL METHOD STATEMENT

2.1 **General requirements:** The arboricultural method statement and Tree Protection Plan shall remain on site for the duration of construction and landscaping works and be available to site operatives at all times. All operatives at the site shall be briefed about tree related factors as part of their site induction.

2.2 Any variation from the methodology described in this method statement shall be discussed with the supervising arboriculturalist and agreed with the local authority arboricultural officer.

2.3 **Tree protection barriers:** The root protection areas of retained trees must be left free from disturbance, and protected from contamination or compaction during the proposed works. Protection shall comprise a combination of tree protection fencing and temporary ground protection.

2.4 The tree protection fencing shall be installed in the location shown on the Tree Protection Plan. The specification for fencing is included in Appendix 2. Signs shall be affixed to the fencing as shown in Appendix 3 to explain its purpose. The signs shall be affixed at a reasonable size and frequency to ensure they are easily visible to operatives at the site.

2.5 To create a usable workspace between the tree protection fencing and the basement excavation, a 2.5m strip of temporary ground protection shall be installed in the location shown on the Tree Protection Plan. The specification for ground protection shall be a single thickness of scaffold boards (or equivalent boards), on a compressible layer (150mm woodchip or sharp sand), spread across a geotextile membrane. This specification is designed to support loads of up to 2 tons. If larger loads need to be supported, a more robust ground protection specification shall be agreed with the project arboriculturalist.

2.6 The tree protection fencing and temporary ground protection shall be installed prior to construction traffic entering the site or commencement of any soil stripping. They shall remain in place until the basement and conservatory are complete, at which point they shall be dismantled to allow construction of the new patio.

2.7 The areas highlighted yellow on the Tree Protection Plan shall be referred to as the construction exclusion zones. The following actions shall be prohibited within the construction exclusion zones:

- Vehicular access.
- Regular pedestrian access unless on suitable ground protection following prior consultation with the project arboriculturalist.
- Storage of construction materials.
- Storage or handling of harmful chemicals.
- Any change in ground level unless undertaken under the supervision of the project arboriculturalist.
- Construction activities including installation of new permanent hard surfacing unless otherwise stated in this report.

2.8 Access to the rear garden where the excavation works for the basement will occur will be along the side path, within the root protection area of T5. The existing hard standing on this path shall be retained throughout the development as ground protection, with a ramp installed above to allow wheel barrows and other wheeled equipment to access the steps.

2.9 **Storage and handling of harmful chemicals:** Provision needs to be made to avoid the storage and handling of harmful chemicals in proximity to trees. Harmful chemicals include fuels, oils, builder's sand (which has a high salt content) and cement. Provision shall also be made to prevent fuelling or the handling of cement from occurring in areas proposed for further planting.

2.10 Cement mixing shall only occur where there is no potential for cement washings to leech into a root protection area. The temporary ground protection installed within the root protection area of T1 may be permeable, therefore unsuitable for cement mixing. Cement mixing and storage must instead occur on the side path, or adjacent to the basement but outside the root protection area of T1.

2.11 **Excavation of basement level:** Prior to commencement of the basement excavation piles shall be installed around the basement footprint in order to prevent any over-dig or the need to batter the banks of the excavation. These shall be installed by a small, mobile piling rig, which shall access the garden along the side path and shall be operated from within the basement footprint.

2.12 Roots conflicting with these piles would be torn, potentially resulting in rough wounds. Prior to installation of the piles, a preliminary trench shall be excavated in the location highlighted orange on the Tree Protection Plan. The trench shall be hand excavated to a depth of 600mm as it is to this depth where the majority of root growth is usually found. Roots revealed shall be cleanly pruned using secateurs to leave the smallest feasible pruning wounds. Small clean pruning wounds require less energy from the tree to heal and reduce the chance of infection from tree pathogens. The roots shall be pruned 150mm back from the line of the piles.

2.13 A significant amount of soil shall be removed when excavating the basement. This can temporarily be stockpiled in small amounts on the temporary ground protection, but no more than 2 tons at a time as that is the maximum load the ground protection is designed to support.

2.14 **Constructing new patio within the root protection area of T1:** Within the root protection area of T1, the new surfaces shall be constructed to the basic specification described in the arboricultural impact assessment. The detailed specification shall be provided by an engineer but shall be reviewed by the project arboriculturalist to ensure compliance with arboricultural requirements.

2.15 Prior to construction of the patio, the existing surface vegetation shall be removed by using either a suitable herbicide (to be provided by a specialist to ensure it does not harm retained tree roots) or by using controlled hand tools such as a spade or turf cutter. Plant machinery shall not be used to scape the grass within root protection area.

2.16 If access is required onto the cellular confinement system before the final top wearing course is installed, a temporary sacrificial surface shall be installed above a the Treetex Geotextile separation fabric to prevent soil and other building debris blocking the airspaces in the cellular confinement system, which could otherwise reduce the porosity of the completed patio.

2.17 The finished level of the no-dig surface will be higher than the surrounding un-surfaced ground. To mitigate this, either clean screened top soil (to BS3882: 2015) or an inert, permeable aggregate with a layer of soil above (depending on the level difference) may be banked on the edge of the patio.

2.18 **Arboricultural supervision:** Arboricultural supervision will be required for the following stages of development:

- Prior to commencement of works, the project arboriculturalist shall review and where necessary provide input into the construction management plan. Where necessary, this arboricultural method statement and tree protection plan shall be updated to accommodate the construction management plan.
- Prior to commencement of works, the project arboriculturalist shall review the routing of new or amended services and provide guidance on best practice for installation where necessary.
- A pre-commencement meeting shall be held between the contractors and the project arboriculturalist. The local authority arboricultural officer shall be given reasonable notice of the pre-commencement meeting so they may also attend if it is deemed necessary. The purpose of the pre-commencement meeting shall be:

    1. To clarify the tree protection methodology.
    2. To mark out locations for the tree protection barriers.
    3. To discuss the phasing of works.
    4. To agree locations for contractor facilities if not already specified in a construction management plan.

- The project arboriculturalist sign off that the tree protection barriers have been installed in the correct locations and to the agreed specification.
- The project arboriculturalist shall sign off that the prescribed methodology is followed for excavating the basement within the root protection area of T1.
- The project arboriculturalist shall review the detailed specification for the patio to ensure compliance with recommendations in the arboricultural impact assessment and sign off that installation complies with this method statement.

2.19 In addition to the above, a system and programme of onsite monitoring by the appointed arboricultural consultant should be agreed with the Local Authority Arboricultural Officer, if it is deemed necessary. The form and frequency of site monitoring shall be agreed at the pre-commencement meeting.

2.20 If significant root growth is disturbed during construction activities that are not within the scope of this report, the work shall cease until the project arboriculturalist has been consulted. Roots greater than 25mm in diameter or dense/matted fibrous roots shall be considered significant root growth. It should be remembered that whilst root protection areas are part of industry best practice, tree root growth is influenced by a number of factors and may not conform to expected ideals.

2.21 If at anytime during the construction process, damage is inadvertently caused to a tree, the project arboriculturalist shall be notified to assess the likely implications and to prescribe potential remedial measures to be implemented. Damage can be in the form of chemical or fuel spillage, mechanical damage to either the above ground parts of the tree or the roots, fire or any other unforeseen circumstance.

2.22 The supervising arboriculturalist shall be appointed by the contractor. It will be necessary for the arboriculturalist to report to the local planning authority on the outcome of the site visits as well as any unforeseen tree related issues.

PJC Consultancy
Arboricultural, Ecological & Landscape Consultancy

Contact details

Sussex office:
Chapter House
Priesthawes Farm
Hailsham Road
Polegate
East Sussex
BN26 6QU

Tel: 01323 832120

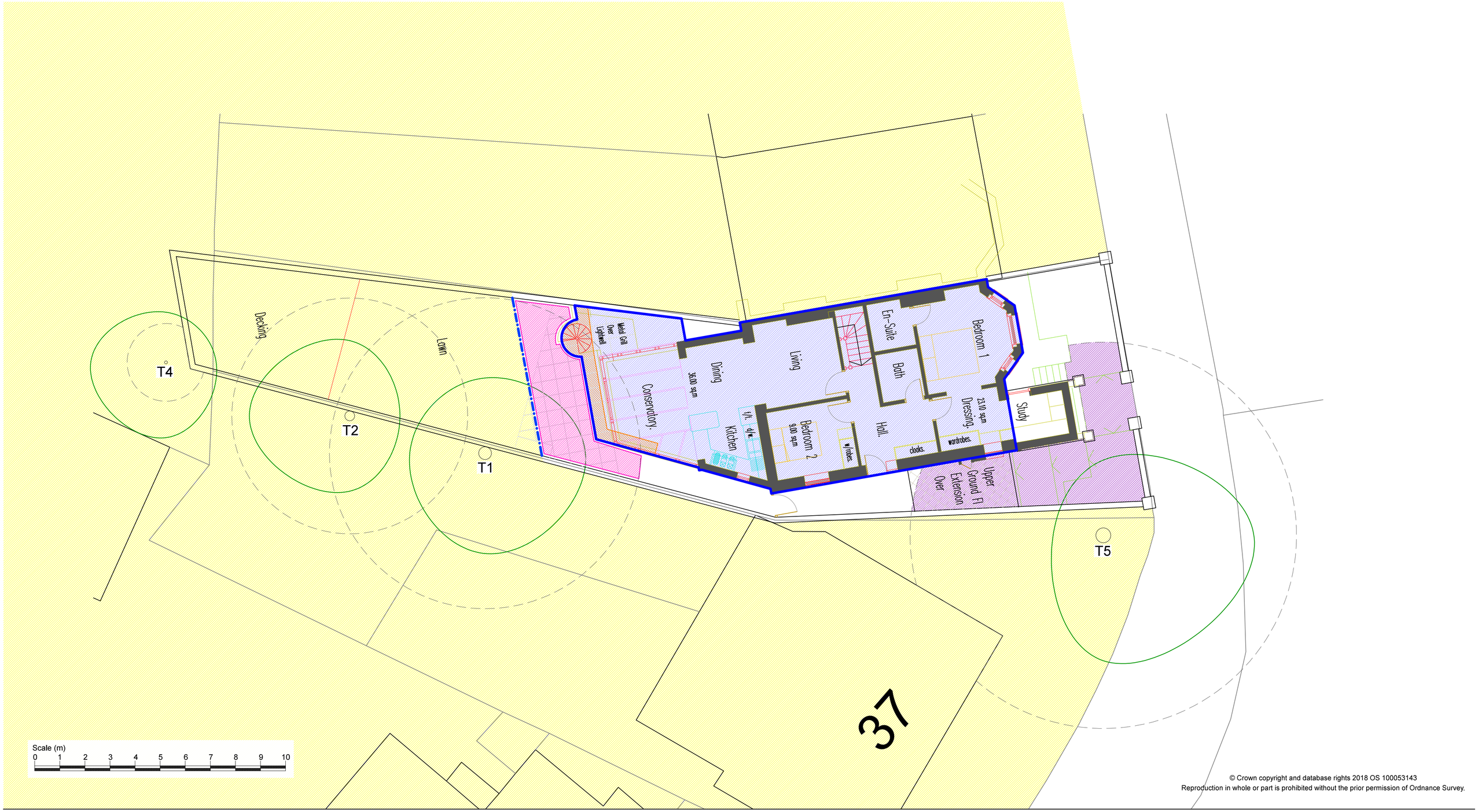
Author: Peter Davies

Date: 22nd March 2018

E-mail: pete@pjcconsultancy.com

PJC Consultancy
Arboricultural, Ecological & Landscape Consultancy

APPENDIX 1
Tree Protection Plan



Appendix 2, (Tree Survey Schedule) contained within the arboricultural report ref. PJC/4815/18-02 contains further information for each tree.

This drawing should be viewed in colour.

All tree positions on this drawing were approximately measured during the initial tree survey but should be checked on site before setting out tree protection measures.

Key:

- RPA for tree to be retained
- Canopy of tree to be retained
- Tree protection fencing
- Temporary ground protection
- Existing hard standing retained as ground protection
- Construction exclusion zone
- Footprint of basement
- Area to be hand excavated

Drawing no: PJC/4815/18/C **Rev:** - **Sheet number:** 1 of 1

Client and site:
Ms J Ladwig

13A Crossfield Road
London
NW3 4NS

Drawing title: Tree Protection Plan

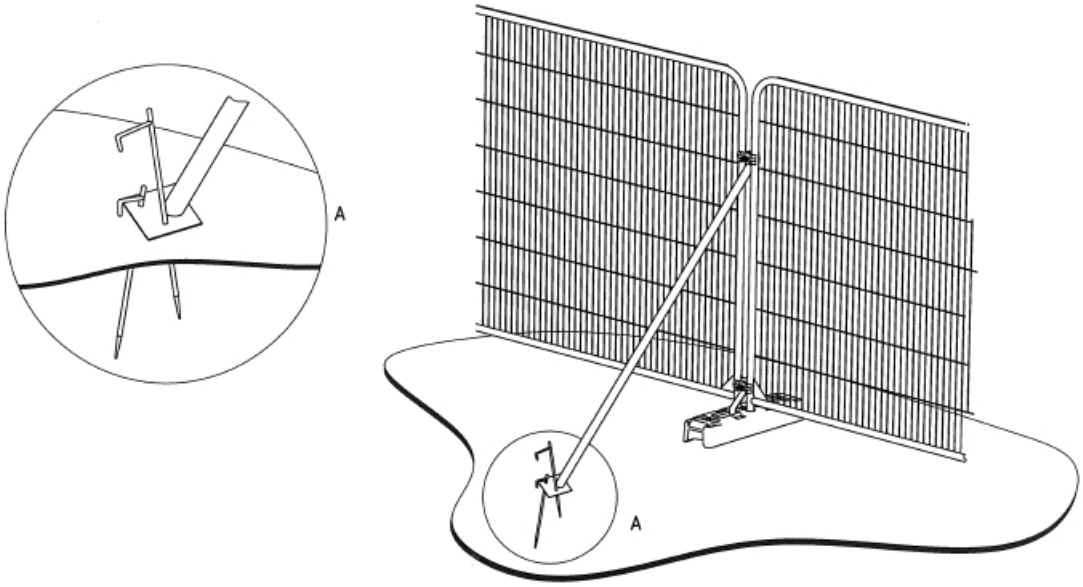
Date drawn: 22/03/2018

Scale: 1:100 at A2

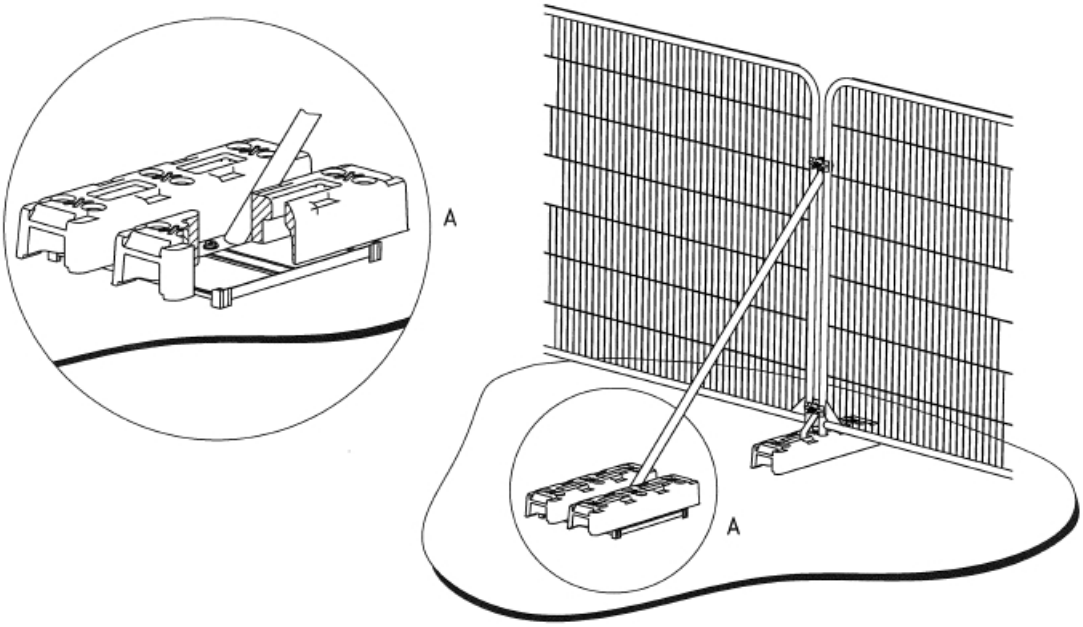
Drawn by: PD **Checked by:** NB

PJC Consultancy
Chapter House, Priesthawes Farm, Hailsham Road, Polegate, East Sussex, BN26 6QU.
t: 01323 832120
e: contact@pjcconsultancy.com
w: www.pjcconsultancy.com

APPENDIX 2
Tree Protection Fencing Specification



a) Stabilizer strut with base plate secured with ground pins



b) Stabilizer strut mounted on block tray

PJC Consultancy
Arboricultural, Ecological & Landscape Consultancy

APPENDIX 3
Example Protective Fencing Signs