BLUE FOREST

THE TREEHOUSE PEOPLE

CHILDREN'S PLAYHOUSE

Method Statement

835

JULY 2020

Contents:

1.1 Introduction

DESCRIPTION OF WORKS

This Construction Method Statement (CMS) has been prepared in support of a planning application for a children's timber playhouse to be located within the residential curtilage of Athlone House, Hampstead Lane, London.

Blue Forest is an award winning company, with over 15 years experience in the design and construction of bespoke timber structures. We have a wide experience of delivering projects in sensitive environments and have developed a reputation for high quality designs that blend in with their natural surroundings.

This construction methodology has been developed in consultation with a landscape, ecology and aboricultural consultant and with input from our structural engineers and in compliance with the relevant British Standards. The construction methodology outlined in this document has been employed on many previous projects of a similar nature, including working in ancient woodland, AONB, conservation areas, root protection zones and within listed parkland and registered parks and gardens.

This method statement should be read in conjunction with relevant consultant reports. Where appropriate, monitoring of works on site will be undertaken by the relevant specialist consultants.

Blue Forest's playhouses are bespoke timber framed buildings. Construction techniques vary little from traditional timber framing methods recognised across the UK and the rest of the world. The primary structures are designed to be independent of any trees. The structures will be supported on timber posts which are founded on hand augured ground screws, which require no digging.

Great care and attention is taken throughout the construction process to ensure that there is minimal impact to the trees and surrounding environment.

Sequencing of the construction phase works is summarised as follows:

1. Site preparation.
2. Implementation of temporary site access, ground protection and tree protection.
3. Carry out trial inspections for ground screws (under supervision of arboricultural consultant if required).
4. Installation of ground screw foundations.
5. Construction of deck frames and transfer platforms.
6. Erection of building superstructures.
7. Finishing works.
8. Landscape enhancements.

Image 1 : Precedent image showing similar playhouse supported using solid posts with elevated deck platform (N.B. not actual playhouse)

1.2 Site Preparation & Access

Whenever possible we aim to ensure that minimal landscaping work is required when working in a woodland environment or in and around trees. Blue Forest's structures are designed to fit within a natural clearing amid (but not fixed to) the surrounding trees.

The construction methodology adopted is low impact/light touch. The playhouse and supporting framework is prefabricated off-site to minimise the time and impact on site and to reduce the chance of pollution from dust, spills or debris. No digging and no heavy plant are required during the site works. The playhouse will be finished in natural timber cladding and not painted in order for the playhouse to blend in to the surrounding environment with minimal visual impact.

SITE PREPARATION

We will need to undertake some tree work before the proposed playhouse can be installed.
In particular:

- Remove Holly Trees 2655, 2656, 2657, 2658.
- Raise the low lying canopy on the eastern side of the Cedar 2654 to circa. 3m from ground level to allow for rope walk to pass underneath.
- Remove deadwood from Sycamore 2647
- Mulch area beneath playhouse and surrounding trees to a min depth of c. 50mm

SITE ACCESS / SOIL COMPACTION MITIGATION

Access into the garden will be required to facilitate the installation of the playhouse at Athlone House. The access route has been agreed with the ecologist and will utilise existing pathways to the north of Athlone house. Ground compaction and protection of tree roots is addressed by the installation of temporary trackway or protective ground mats (if ground conditions are wet). (Image A)

Locations for the ground screws are marked out to ensure minimal damage to the existing ground cover and surrounding vegetation. (Image B)

Once the ground protection works are completed and the ground screw foundations installed (no digging or heavy machinery are required), the sub-frame is quickly erected and from this point onwards, the platform of the playhouse becomes the working area. (Image C)

The installation of the prefabricated playhouse is then completed above ground on the raised platform ensuring minimal damage or disruption to the existing ground cover. (Image D)

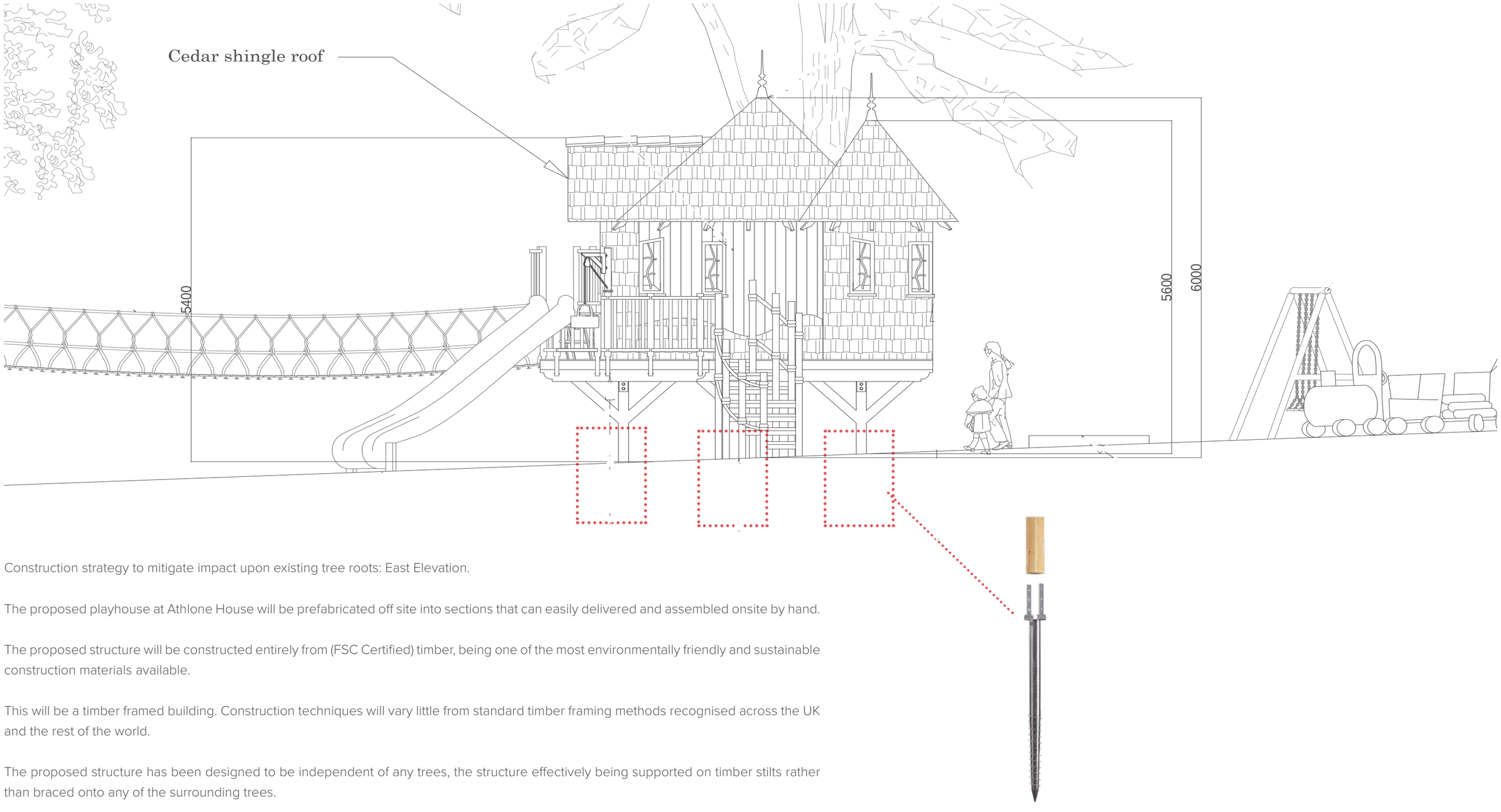
A. Temporary ground protection (if wet)

B. Setting out ground screw locations

C. Erection of Playhouse platform

D. Playhouse installed

2.1 Construction



Construction strategy to mitigate impact upon existing tree roots: East Elevation.

The proposed playhouse at Athlone House will be prefabricated off site into sections that can easily delivered and assembled onsite by hand.

The proposed structure will be constructed entirely from (FSC Certified) timber, being one of the most environmentally friendly and sustainable construction materials available.

This will be a timber framed building. Construction techniques will vary little from standard timber framing methods recognised across the UK and the rest of the world.

The proposed structure has been designed to be independent of any trees, the structure effectively being supported on timber stilts rather than braced onto any of the surrounding trees.

2.2 Material Storage & Waste:

FOUNDATION & MATERIAL STORAGE

Once delivered to site, materials will be stored securely within a defined material storage area near the cottage at the entrance to the property from Hampstead Lane. Ordinarily, the majority of the materials required will be delivered to the construction site in stages to avoid large amounts of materials being stored on site at any one time. Materials will be inspected each morning to identify the presence of any ecology that may have migrated overnight.

Waste materials will be stored within designated area away from the site (near cottage) and will be disposed of with the use of skips placed in the material storage area on site.

Pedestrian routes within the working site will be clearly marked and cordoned off to avoid disturbance or damage to the surrounding environment and lined with scaffold boards where necessary compaction.

FOUNDATIONS

Blue Forest's playhouses are designed to be independent of any trees. The timber support posts are supported on custom designed steel post anchors which in turn attach to the top of the galvanised ground screws.

GROUND SCREWS

The installation of ground screws, circa 900mm (L) x 70mm (W), will not be carried out until the installation team is satisfied that the undertaking can be managed safely. Permits will be sought out and signed and underground services will be located, identified (where possible) and marked out to ensure avoidance.

Appropriate measures will be in place to ensure that the works do not present a hazard to any other person. This will be through establishing an exclusion zone or physically bounding-off the work area and will be carried out in accordance with the site management team.

The screw piles can be installed by hand or by using a hand held torque driver as illustrated in the photos to the right.

TYPICAL PLAYHOUSE POST SUPPORT INSTALLED

GROUND SCREW PILE FOUNDATION

3.1 Tree Protection Measures

TREE PROTECTION MEASURES

Of critical importance is the need to provide protection for the trees during the construction period due to the location within the woodland.

The proposed playhouse at Athlone House is to be located within root protection areas of the nearby trees hence specific measures are to be taken during construction to protect the trees and their rooting environment. Refer to Drawing 102 Site Plan.

All tree works will be carried out in line with the Arboricultural Method Statement (AMS) prepared for the project. When considering the obstruction caused by branches, the approach is to retain the branch and temporarily support it away from harm. This can be achieved by the use of webbed straps to avoid harm to the branch. Such straps will be removed as soon as they can be following the works.

No materials, equipment or fuel will be stored within any of the barriered areas and no chemicals, petrol or diesel will be allowed to spill where they may contaminate the root protection areas of retained trees.

All machinery, and delivery vehicles shall be excluded from the areas demarcated for protection on the Tree Protection Plan and shall operate only upon areas of ground protection or access routes agreed with the ecologist.

GROUND AND TREE PROTECTION

Temporary barriers will be erected around the site boundary. The specification for these barriers will be in accordance with the recommendations given in BS5837:2012. These will comprise 2.0m mesh barriers (Heras type panels) attached to a scaffold framework. If required, scaffolds will be attached to the framework as necessary at an angle of 45 degrees on the side of the trees and anchored by further scaffold poles carefully firmed into the ground.

Clear signs will be attached at 6 metre intervals along the line of barriers stating 'Tree Protection Area – No Access'.

The barriers shall remain in place until soft landscape operations require its full or partial removal. No other construction activity will take place within those areas formerly protected by the fence.

Ground protection shall remain in place throughout the construction process, if ground conditions are wet, and will only be removed to facilitate soft landscape works on completion of the construction works.

Areas designated and protected with ground protection may be utilised for the storage of non-contaminating materials.

SEQUENCING OF WORKS

A logical sequence of events is to be observed as follows:

Stage 1: Pre-construction stage, detailed design and pre-commencement meetings.

Stage 2: Undertake tree work pruning in accordance with the schedule of work (if required).

Stage 3: Erect protective barriers and lay ground protection (if wet) and establish site compound. Lay mulch c. 50mm deep.

Stage 4: Implement 'no-dig' zones.

Stage 5: Hand augured ground screws.

Stage 6: Erect scaffolding (if required).

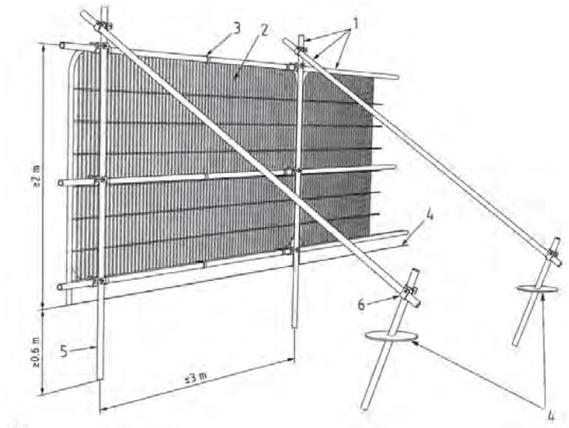
Stage 7: Construct playhouse platforms and access.

Stage 8: Erect playhouse wall panels and form roofs.

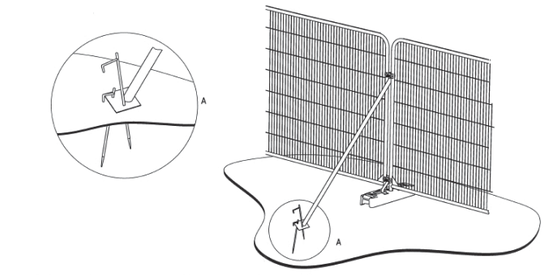
Stage 9: Complete all other site works.

Stage 10: Take down protective barriers, uplift ground protection and complete soft landscape works.

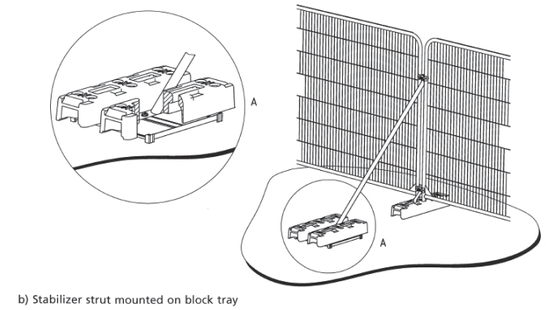
TREE PROTECTION FENCING SPECIFICATION



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

Please refer to the Arboricultural Statement alongside this Method Statement for further detail.

4.1 About Blue Forest

Blue Forest is an award winning company. We have taken a pioneering approach in the design and construction of sustainable and environmentally friendly buildings and have developed a reputation as the world's leading luxury treehouse builder.

The Blue Forest team, which includes directors Andy Payne, Simon Payne and Ben Lutyens (shown below), are passionate about the well-being of the environment and are keen to promote sustainable principles and ethics throughout the design and construction process. The majority of the timber used in our buildings is FSC / PEFC certified or sourced from sustainably managed forests where there is an active strategy of replanting and habitat regeneration.

Blue Forest's passion for the environment has led to the design and implementation of many revolutionary green technology solutions for our clients.

Our uniquely tailored service provides a turnkey solution, where everything from design and planning to construction and commissioning comes in an easy, reliable and professional package.

ANDY

SIMON

BEN

Precedent Image, not proposed playhouse.

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