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Arboricultural Survey **Impact Assessment & Method Statement** **Report (BS5837:2012)**

Site

22 Colney Hatch Lane
London
N10 1DU

Client

Dr Michael Ward

Date of Report:

August 2023

Report Reference:

AIA/MF/0163/23

Report Prepared by:

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Contents

1. Instructions
2. Introduction
3. Survey methodology
4. Survey Limitations
5. Tree Survey Summary
6. Arboricultural Impact Assessment
7. Arboricultural Method Statement
8. Communication Monitoring & Compliance
9. Tree Works Schedule

Appendices

- A: Tree Survey*
- B: Tree Survey Plans: T001-T003*
- C: Photographs*
- D: Tree Protection Notice*
- E: Tree Protection Fencing Specifications*
- F: References*

1.0 Instructions

1.1 This report has been commissioned by Dr Michael Ward to survey, assess and provide an Arboricultural Impact Assessment and Method Statement for the trees sited within close proximity of proposed development works at 22 Colney Hatch Lane, London, N10 1DU.

2.0 Introduction

2.1 A site visit was conducted on 21st August 2023 to survey and assess the trees. The weather at the time of inspection was bright with trees in late summer mode.

2.2 The tree survey, report and recommendations have been compiled for the 5 no. trees and 1 no. hedge (T1-T6) surveyed within the site and neighbouring sites where relevant.

2.3 The details of the subject trees are set out in the tree survey table in *Appendix A*. The trees were surveyed on the date and time shown above and the tree survey assessment information for the tree describing size, condition and surroundings are found within this appendix.

2.4 The trees located within the site are shown in tree survey drawings T001-T003, *Appendix B*, and these correspond to the tree survey results table, *Appendix A*. Photographs of the trees can also be found in *Appendix C*.

2.5 This report and the opinions within it have been produced by Marcus Foster, a qualified arboriculturist and Professional Member of the Arboricultural Association with over 20 years experience and holding a National Diploma in Arboriculture, the Arboricultural Association's Technicians Certificate, Professional Tree Inspection Certificate (LANTRA) as well as a degree in History and Society. Work experience within the industry includes work as a Contracts Manager for an Arboricultural Association Approved Company, a Local Authority Tree Preservation Officer and an independent Arboricultural Consultant. As a consultant many of projects undertaken are in the inner London Boroughs of Islington, Hackney, Westminster, Camden, Southwark and RBKC, making Marcus Foster familiar with the most recent requirements of development and constraints on urban trees.

3.0 Survey Details and Scope

3.1 The site survey included the 5 no. trees and 1 no. hedge (T1-T6) as shown in the survey, *Appendix A*, and also highlighted on the site plans, *Appendix B*.

3.2 The trees and hedges were surveyed from ground level from within their site location. The diameter of the trunks have been measured using a DBH tape at 1.5m height. The height of the trees have been estimated.

3.3 The following information was recorded for each tree and is shown in the Tree Schedule included in *Appendix A*:

- Number: an identity number which cross-references locations shown on the plan in *Appendix A* with the schedule in *Appendix B*.
- Species: listed by common names
- Tree Height: height in metres (m)
- Tree Spread: spread in metres (m)
- Stem diameter: measured in millimetres (mm) and taken at 1.5m above ground level
- Age Class: Y (young); EM (early-mature); M (mature); OM (over-mature)
- Vigour: G (good); F (fair); P (poor); D (dead)
- Structural Condition: G (good); F (fair); P (poor); D (dead)
- General Condition Specific comments relating to each tree
- Estimated Remaining Contribution (years)
- BS5837 Category Grading
- Protection Distance m2 Area (where applicable – BS5827: 2012)
- Protection Distance Radius (where applicable – BS5827: 2012)

3.4 Information recorded in the tree survey, *Appendix A* is expanded in the report findings and preliminary recommendations have been made in *Section 5*.

3.5 Findings as shown within *Appendix A* and assessed within *Section 5* are also highlighted within *Appendix B* which incorporates the Tree Constraints Plan (TCP) - drawing T002 addressing areas where arboricultural solutions are required. The Tree Protection Plan (TPP) - drawing T003 provides outline tree protection measures.

4.0 Survey Limitations

4.1 No soil excavations have been carried out.

4.2 This report only considers the trees and conditions at the time of inspection. As the inspection was only visual no guarantee can be given concerning the condition of the wood at present in any of the trees inspected and furthermore that no future problems or deficiencies may arise.

4.3 The survey has been undertaken as a survey of the trees without prior influence of the development and implicating factors.

4.4 No invasive tools were used during this site survey.

4.5 It should be noted that vegetation including shrubs within this / the neighbouring sites have not been included in the survey as none were within close or relevant proximity .

4.6 The survey has been undertaken from within the site and adjacent public highway only.

4.7 No additional documentation unrelated to the property or development has been referred to for the trees or the property for the compilation of this report.

5.0 Tree Survey Summary

5.1 The trees have been surveyed in accordance with BS5837: 2012 'Recommendations for trees in relation to construction' (BS5837: 2012) and have been rated as follows:

Category 'A' trees

Trees of high quality with an estimated remaining life expectancy of at least 40 years. Trees have been categorised as 'A' trees for one of the following reasons:

- Mainly arboricultural qualities
- Mainly landscape qualities
- Mainly cultural values including conservation

Within the Site Plan (Appendix B) those trees rated as 'A' category trees have a **green** outline as denoted within the site plan key / survey.

N/A

Category 'B' trees

Trees of moderate quality with an estimated remaining life expectancy of at least 20 years. Trees have been categorised as 'B' trees for one of the following reasons

- Mainly arboricultural qualities
- Mainly landscape qualities
- Mainly cultural values including conservation

Within the Site Plan (Appendix B) those trees rated as 'B' category trees have a **blue** outline as denoted within the site plan key.

T2

Category 'C' trees

Trees of low quality with an estimated remaining life expectancy of at least 10 years or young trees with a stem diameter below 150mm. Trees have been categorised as 'C' trees for one of the following reasons

- Arboricultural qualities - unremarkable trees of very limited merit
- Mainly landscape qualities
- Trees with no material conservation or cultural value

Within the Site Plan (Appendix B) those trees rated as 'C' category trees have a **grey** outline as denoted within the site plan key.

T1, T3, T4

Category 'U' trees

Trees in such a condition that they cannot realistically be retained as living trees in the context of the current land use for longer than 10 years. Within the Site Plan (Appendix B) those trees rated as 'U' category trees have a **red** outline as denoted within the site plan key.

H5, T6

5.2 The trees have been surveyed taking into account condition, general health and form without the development process influencing the survey. In addition they have also been surveyed taking account of amenity value that is offered in relation to both the landscape and surrounding buildings and streetscape. This report outlines the impact that the proposed development will have on the overall treescape and landscape; it provides recommendations to ensure that long-term amenity value for the area is retained.

5.3 The report has been written with close reference to the British Standard Guidance, British Standard 5837: 2012 'Recommendations for trees in relation to construction' (BS5837: 2012), which addresses the juxtaposition between trees and structures. The Arboricultural Impact Assessment highlights areas where the trees will require protection which should be addressed within the Arboricultural Method Statement (AMS) and/or Tree Protection Plan (TPP) specific to the site and proposed scheme, and corroborating with all construction and landscape method statements as relevant.

5.4 The report specifies precautions which shall be taken when working close to retained trees. Important terms include:

Root Protection Area (RPA)

The area defined as requiring protection from development from retained trees within BS5837 (2012). Using a calculation provided within BS5837 a radius distance is provided based on a measurement of the main stem taken at 1.5m height.

Construction Exclusion Zone (CEZ)

This is the RPA where no construction activity should occur and damage is prevented by either installing fencing to restrict access or installing ground protection that allows limited access above the ground, while protecting the rooting environment below.

Due to site constraints and the encroaching nature of development for an area within the RPA outside the CEZ where works are proposed, works must be carried out with care to minimise any impact on the tree rooting environment.

Tree Protection Plan (TPP)

The document which defines the extent and methodology of tree protection for the entire development process. This should be referred to AT ALL TIMES by the principal contractor and shall ensure safe protection of all retained trees on site.

Precautionary Area

An area where works must be undertaken with direct consultation with methodology as specified within the AMS report and / or scheme of Arboricultural supervision

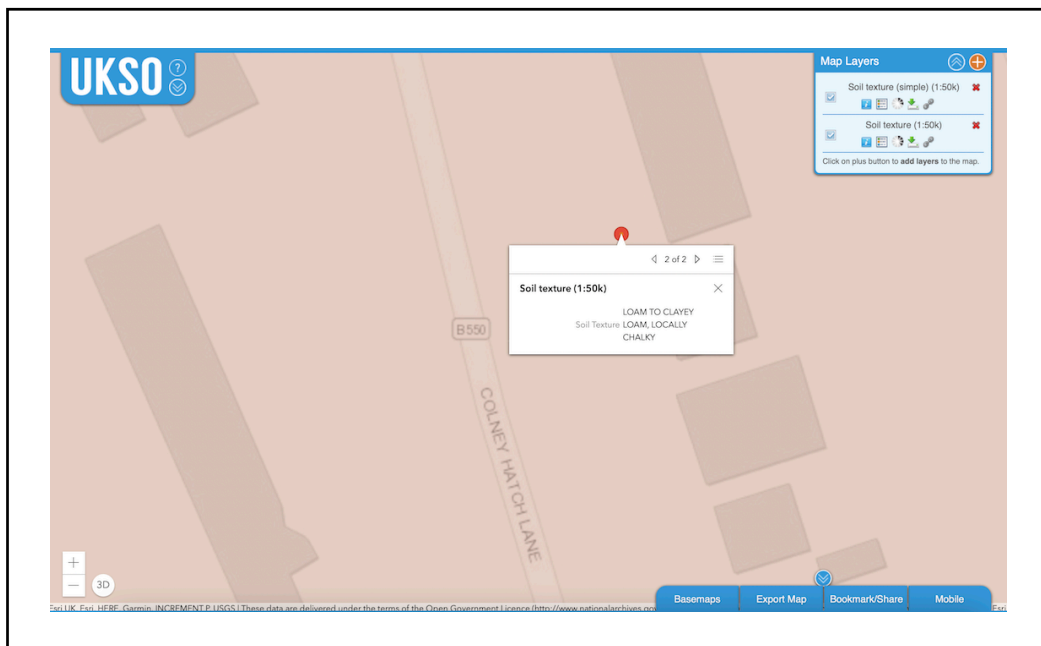
6.3 The trees are sited as follows:

20 Colney Hatch Lane: Tree T1, T2

22 Colney Hatch Lane: Tree, T3, T4, H5, T6

6.4 The underlying soil to this area is classified as 'clayey loam to silty loam' within the UK Soil Observatory (www.ukso.org) - a medium to heavy soil mix. The presence of a clay element within the soil is significant in terms of both tree protection and foundation design. Clay soils can experience substantial volume changes when vegetation extracts moisture from the ground and they are also prone to compaction when wet; the soil is deemed as being of medium to heavy texture with more susceptibility to compaction. Any tree foundations should also be designed in accordance with the recommendations contained within NHBC Chapter 4.2 (National House Building Council, 2010) and should account for the possibility of both subsidence and heave.:

6.5 The soil profile is confirmed as below:



6.6 For the purposes of this report, reference has been made to the following plans for the proposed development:

Peter Brades Architects
100 SITE PLAN WITH SUMMERHOUSE
Design and Access Statement

Site Survey
26921Y_01

6.7 The development proposals are for a summerhouse on existing building out building / greenhouse footprint. summary of arboricultural impact which shall be assessed is as follows:

- Loss of 1 no. 'C' Category trees and 1 no. 'U' Category hedge
- General health of 'U' category tree T6
- Ground works within the RPA of trees retained trees
- Potential compaction and damage of the retained trees in relation to the development and landscape process
- Potential damage to canopies of the retained trees surrounding the site during development and landscape process
- The use of and storage of materials and chemicals on site within close proximity of the trees
- Impact of development upon trees via future occupancy

6.8 The trees and the impact from the proposed development are evaluated within this section to determine overall arboricultural impact from the proposed development. Where trees are retained the Root Protection Area (RPA) for each tree is evaluated in relation to proposed development works. The following is assessed within this section:

- (i) Where tree protection measures are deemed appropriate these are highlighted
- (ii) Mitigation for tree loss where trees are proposed for removal

Arboricultural Impact Assessment

6.9 The trees and shrubs sited within the subject site are of the following species:

English oak (*Quercus robur*)
Sycamore (*Acer pseudoplatanus*)
Monterey cypress (*Cupressus macrocarpa*)
Yew (*Taxus baccata*)
Lawsons cypress (*Chamaecyparis lawsoniana*)

6.10 The main attributes of the trees are as follows:

- (i) Tree T1 and T2 off site to the south comprising lapsed hedging planting for T1 and mature Oak for T2 - 'B' category due to form / vigour and location
- (ii) Tree T2 crown overhangs the site for upper crown only and main stem is directly against brick built boundary wall and root plate within zone of existing out buildings with associated infrastructure / utilities / foundations
- (iii) Tree T3 a developing yew fronting the previous greenhouse / out building - 'C' category due to age and form
- (iv) Tree T4 a developing yew fronting the previous greenhouse / out building - 'C' category due to form and location growing from existing building footprint with congested branch framework
- (v) Hedge H5 is largely dead having been planted for screening - inappropriately sited at front of previous building - rated as 'U' category
- (vi) Tree T6 is a mature Sycamore exhibiting signs of Sooty bark disease and with significant decline / deadwood. Tree has a limited lifespan and alongside H5 is rated as 'U' category

6.11 Summary photographs of the trees are shown within *Appendix C* with full findings within the Tree Survey Schedule - *Appendix A*.

Tree Retention

6.12 To the rear for proposed outbuilding the tree protection shall be achieved via tree protection measures applied for the following development processes

- (i) Site infrastructure & storage
- (ii) Construction of rear garden building
- (iii) Final landscape works

6.13 For the development there is incursion to the RPA of retained trees as follows:

T2 - 8% incursion to RPA for mature English Oak

Extract from the Design & Access Statement as below clearly demonstrates that the foundations shall not impact the RPA

To avoid damage to tree roots, the walls will be built off of a concrete raft without traditional strip foundations; the raft will be thin and shallow enough not to disturb the root zone.

6.14 Furthermore the previous outbuilding was lowered approximately 400mm below ground level / level of the Oak tree (T2) and therefore this void can be utilised for foundations

6.15 Protection of all trees highlighted for retention is justified based on the following:

- (i) Retention where feasible for the long term only
- (ii) Application of tree protection measures for site updates incorporating
 - Precautionary Area for tree T2
- (iii) Incursion to footprint within RPA of mature Oak tree limited at 8%
- (iv) Incursion within RPA of mature Oak tree are justified by structural engineering methodology within existing void / footprint from previous greenhouse - see above
- (v) Application of tree protection measures for development process

6.16 The retention of the main element of canopy cover from trees within close proximity of the development is retained to secure amenity value for the site, particularly to the boundaries therefore retaining the character of the landscape within the Conservation Area location.

6.17 In relation to future occupancy it is clear that the site shall not be detrimentally impacted from the shading of those trees retained due to historic existence of trees and an outbuilding.

6.18 The following tree protection measures shall be applied as specified within Section 6, AMS and the TPP:

(i) TREE PROTECTION FENCING

Fencing for RPA area exposed to construction works shall be implemented as shown within the AMS & TPP

(ii) GROUND PROTECTION

Ground protection for RPA area exposed to construction works shall be implemented as shown within the AMS & TPP

(iii) PRECAUTIONARY AREA

For the precautionary area / RPA of T2 as outlined within the AMS (Section 6 of this report) & TPP a Precautionary Area shall be applied to protect trees from the development process

(iv) PROTECTION FROM SITE STORAGE, INFRASTRUCTURE & WELFARE

Site storage, mixing of chemicals and site welfare shall be sited outside of the RPA of retained trees

Tree Removal

6.19 The proposed development requires loss of 1 no. 'C' Category tree and 1 no. 'U' category hedge. These trees are as follows:

'C' Category tree T4 - 1 no. Yew

'U' Category hedge: H5 - 1 no. Lawsons cypress

6.20 The loss is justified based on the following:

- Tree and hedge replacement proposals as mitigation
- Trees with poor to limited form being 'C' category or lower
- Retention of trees of greater importance, long term potential
- Mitigation in accordance with Policy G7 of the London Plan¹ with a greater than 1:1 ratio of replacement

¹ London Plan, Chapter 8 Green Infrastructure and Natural Environment - Policy G7 Woodland and Trees (2021)

6.21 To mitigate and enhance the green infrastructure of the site replacement tree proposals shall provide an important landscape feature for the development. Within proposed landscape scheme replacement strategy provides 5 no. trees which are confirmed within architects plans demonstrating a greater than 1:1 ratio of removal: replacement. The species mix shall be confirmed prior to the commencement of planting.

6.22 The replacement planting proposal / plan shall incorporate a species mix in accordance with the following:

- Climate change resilience
- Pest and disease resilience
- Future occupancy consideration for rear gardens
- Implementation scheme to BS8545 (Trees: From Nursery to Independence in the Landscape, 2014)
- Aftercare and establishment programme

6.23 In addition the following should be noted regarding tree T6. To dispense with duty of care significant reduction or removal is recommended to remove the hazard which currently exists; the decline and extensive deadwood means the tree shall require remedial action.

6.24 Whilst no direct tree protection measures are applied for tree T6, generic tree protection measures shall be applied as shown within the TPP for the purposes of protecting the trees until management to dispense with duty of care is secured.

Summary of Arboricultural Impact

6.25 The proposed development requires tree protection measures and mitigation for the implementation of development as follows:

Tree Protection applicable to the following trees:

T1, T2, T3, T6

Mitigation applicable for the removal of the following trees:

T4, H5

The tree protection measures shall ensure that the development does not detrimentally impact the amenity value and canopy cover of the site

6.26 In summary the arboricultural impact as outlined within drawing T003 - Tree Protection Plan (TPP): require the following tree protection measures

- (i) TREE PROTECTION FENCING
- (ii) GROUND PROTECTION
- (iii) PRECAUTIONARY AREA
- (iv) PROTECTION FROM SITE STORAGE, INFRASTRUCTURE & WELFARE

6.27 A landscape scheme with mitigation for loss of removed trees shall include a replacement planting of a minimum of 2 no. trees to provide long term canopy cover; this shall ensure that the development does not detrimentally impact the amenity value and canopy cover of the site but enhances for the long term.

7.0 Arboricultural Method Statement

7.1 The following tree protection measures require close adherence AT ALL TIMES as outlined within this report. The measures are outlined within Tree Protection Plan (TPP) - drawing T003.

7.2 Tree Works

7.2.1 Tree Works included within Schedule of Works - Section 9 - shall be undertaken at pre-commencement stage.

7.3 Tree Protection Fencing

7.3.1 Protection of the trees highlighted for retention must be implemented as explained below and as specified within the TPP - drawing T003:

To provide Construction Exclusion Zone (CEZ). Specified as
(i) *Figure 2 fencing - see TPP & Appendix E*

7.3.2 These measures must remain for the entire construction process in order to provide a comprehensive barrier from the trees

- The area surrounding the trees must be surrounded by protective fencing as outlined in TPP - T003
- The protective fencing used must be suitable for the purpose of excluding construction activity and appropriate to the degree and proximity of work taking place around the retained trees.
- This barrier must remain rigid and complete during the entire construction process. Protection is not required surrounding entire trees where boundary treatments intervene in RPA's as the remainder of the root plate will remain unaffected by virtue of being located within the neighbouring properties
- The type of fencing used must be that as described in the current British Standard 5837: 2012 'Recommendations for trees in relation to construction'. This consists of a scaffold framework as outlined in the British Standard, comprising a vertical and horizontal framework, well braced to resist impacts, with the vertical tubes spaced at a maximum of 3m. A weldmesh panel should be securely fixed with wire or scaffold clamps to the framework.

- Once the Exclusion Zone has been protected by fencing all weather notices as included in *Appendix D* must be put onto the barrier warning that the area is a construction exclusion zone.
- No heavy plant shall come into contact with any part of the canopies of the trees.
- No building materials or chemicals shall be stored within the tree protection zone as indicated on the TPP

7.4 Ground Protection

7.4.1 Where tree protection fencing requires adjustment for any reason (only where approved by the Local Authority Tree Officer or Consulting Arboriculturist) ground protection must be applied with the following fully adhered to:

- Implementation of 75mm bark mulch layer overlapped with minimum 15mm plyboard surface or load bearing ground protection boards to provide ground protection for development process
- No storage of spoil within this area
- No storage of chemicals within this area

7.3.2 Where applied, ground protection shall be removed for final landscapes works within the RPA of retained trees.

7.5 Storage of Construction site related materials, plant and spoil / Site Welfare & Site Office

7.5.1 A designated storage area / site welfare & office must be confirmed at pre-commencement stage which is located outside of the RPA of retained trees and within existing hard standing. Strict adherence to this area must be made to this area and any amendment would require written consent from the tree officer.

7.5.2 Site welfare and the site office must be confirmed at pre-commencement stage which is located outside of the RPA of retained trees. Strict adherence to this area must be made to this area and any amendment would require written consent from the tree officer.

7.6 Precautionary Area

7.6.1 For the 'Precautionary Area' / incursion within RPA of retained trees Precautionary Areas denoted within the TPP highlight where the following works are required:

- (i) RAFT FOUNDATIONS (within RPA of T2)
No excavations / ground works associated with the garden building shall be required as per specifications within this AMS

The Precautionary Area highlights area where no excavations shall be required. For removal of any ground features BS5837 (2012) does make provision for undertaking excavations in RPAs, explaining that all excavation must be carried out carefully using spades, forks and trowels, It is important not to damage the bark and wood of any roots. For this area, these tools should be used with no machinery used for the preliminary works.

7.6.3 For undertaking excavations within the precautionary area guidance is applicable with arboricultural supervision applied and documented at all times with findings submitted to the tree officer.

Tree Root Severance Guidance

The contractors must be aware of tree protection guidance in relation to tree roots which must be applied as follows:

- The severance of any tree roots encountered larger than 25mm in diameter MUST NOT occur without prior consultation with the Local Authority Tree Officer or appointed Arboricultural Consultant.
- If at any point it is deemed not possible to continue with excavations without having to damage very significant tree roots, the Local Authority Tree Officer and / or the appointed Arboricultural Consultant must be contacted.

The following tools shall be applicable for such works:



7.7 Final Landscape Works

7.7.1 For final landscaping works the following must apply where carried out within the RPA of retained trees

- No reduction in levels of the underlying soil surface will occur during final landscaping works within the RPA of retained trees
- Close adherence with detailed root protections specifications as outlined within this report
- No compaction of soils for establishing level base

7.7.2 No soakaway shall be sited within the RPA of retained trees

7.8 Installation of utility services

7.8.1 The installation and/or amendment of utility services within the RPA of retained trees is not required as the existing garden building has services connected. However where an amendment is required and utilities are required within the RPA of any retained tree the consulting arboriculturist and Local Authority must be notified prior to any ground tree protection / fencing and barrier removal and the following details adhered to:

- Trenching for the installation of underground services severs any tree roots present and can have a detrimental impact on the structural integrity of affected trees. When services are required to pass through a Tree Protection Area / CEZ, detailed plans showing proposed routes should be drawn up in conjunction with the consulting arboriculturist to avoid long term problems for related trees.
- The preferable method for trenching is to use a 'Air Spade' or similar to remove soil with compressed air, therefore minimising damage to roots in the process. Should hand dug excavations be required within the RPA this shall only be undertaken with arboricultural supervision.

7.8.2 Further reference can be made to National Joint Utilities Group (Volume 4, Issue 2) for guidance but any approach must be approved by both the consulting arboriculturist and Local Authority tree officer.

8.0 Communication, Monitoring and Compliance

8.1 In ensuring that all Tree Protections Specifications as highlighted within this AMS are closely adhered to at all times, it is important to set out for the long term of the development, communication details for key individuals and tasks that require monitoring.

8.2 For all tree protection measures these must be considered as sacrosanct and should not be removed or altered without prior written consent from the Local Authority tree officer and/or consulting arboriculturist.

8.3 The local authority arboriculturist will have free access to the site and forward any concerns / recommendations directly to the consulting arboriculturist.

8.4 The following individuals and organisations are central to the delivery of the scheme in relation to the tree protection measures it requires:

CONSULTING ARBORICULTURIST

Name - Marcus Foster MArborA

Telephone - 07812024070

Contact - Marcus Foster

Email - mail@marcus-foster.com

LONDON BOROUGH OF HARINGEY - TREE OFFICER

Name - Tree Officer - Planning

Telephone - /

Contact - Daniel Monk

Email - daniel.monk@haringey.gov.uk

9.0 Tree Works Schedule

9.1 Any tree work shall be carried out to BS 3998; 2010 Recommendations for Tree Work.

9.2 Tree works to be undertaken at pre-commencement stage.

TREE WORKS SCHEDULE: 22 Colney Hatch Lane, London, N10 1DU				
Tree No.	Common Name	BS5837 Category	Tree Works	Reasons for works
T4	Yew	C	Fell to ground level and grind out stump	To facilitate development
H5	Lawsons cypress	U	Fell to ground level and grind out stump	To facilitate development

NOTE: Wildlife & Habitat Protection Guidelines

The tree work specifications included within this report do not provide an exemption from the requirements to comply with the Wildlife and Countryside Act 1981, the Habitats Regulations 1994 and the Countryside and Rights of Way Act 2000, or any acts offering protection to wildlife. Of particular note is the protection offered to bats, birds and their nests, whilst being built or in use. It must be noted that failure to comply with the Acts may result in a criminal prosecution.

Appendices

Appendix A

Tree Survey Schedule (BS5837:2012)

22 Colney Hatch Lane
London
N10 1DU

Colour Key: BS5837: 2012 (see Section 3.6)

-  Category A
-  Category B
-  Category C
-  Category U

BS5837:2012 TREE SURVEY
SITE: 22 Colney Hatch Lane, London, N10 1DU | SURVEY DATE: 21st August 2023

Tree No	Species	Height (m)	DBH (mm)	Spread (m) N/E/S/W	Age	Structural Condition	Vitality	BS5837 (2012) Rating	Remaining Contribution (years)	Comments / Structural Condition	First branch height (m)	First canopy height (m)	Root Protection Area (RPA) m2	Root Protection Area (RPA) Radius (m)
T1	Monterey cypress	10	200 (e)	4 3 4 4	SM	F	F	C1	10+	Off site to south. Lapsed hedging / screening planting. Overhang to site of 2m branch lengths at 5-7m height	4	5	18.1	2.4
T2	English oak	16	850 (e)	5 7 7 6	M	F	F	B1	20+	Off site to south. Abutting boundary wall and causing damage / cracking. RPA within footprint of existing greenhouse (partially lowered) and historic gas heating system. Main extent of greenhouse approx 500mm below ground level of garden / tree. Overhanging crown at mid-upper crown only	8	8	326.89	10.2
T3	Yew	7	M/s 150	3 1 3 2	SM	F	F	C1	10+	Multi-stem developing form	1	1	10.18	1.8
T4	Yew	10	M/s 380	4 1 4 3	SM	P	G	C1	10+	Multi-stem form. Congested at base with poor union. Tree growing from base of existing greenhouse structure (to east)	2	2	65.33	4.6
H5	Lawsons cypress	12	m/s 200	6 2 6 3	EM	F	P	U	Less than 10 years	Lapsed screening hedge - largely dead. Lapsed managed. Hazardous selectively. Growing on line of existing greenhouse structure (to east)	2	1	/	/
T6	Sycamore	15	620	7 6 5 5	M	F	P	U	Less than 10 years	Previously crown lifted to 5m height with large pruning wounds - partially occluded. Northern crown dead / dying. Some bark disfiguring - small leaf size; signs of Sooty bark disease. Limited lifespan	5	5	/	/

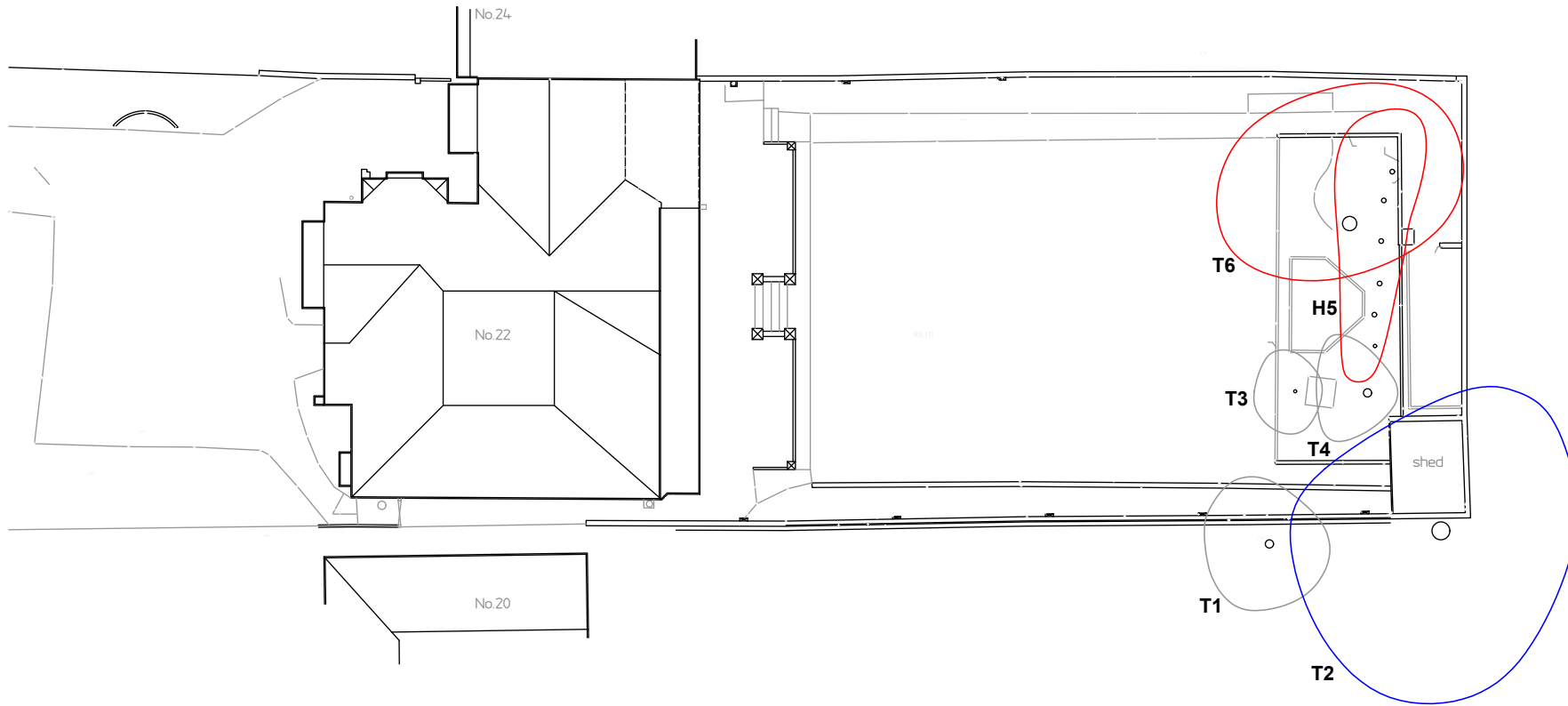
Appendix B

Existing Tree Survey (T001)
Tree Constraints Plan (T002)
Tree Protection Plan (T003)
(BS5837:2012)

37 Stormont Road
London
N6 4NR

Colour Key: BS5837: 2012 (see Section 3.6)

-  Category A
-  Category B
-  Category C
-  Category U



KEY

	CATEGORY A
	CATEGORY B
	CATEGORY C
	CATEGORY U
	TREES REMOVED
	RPA
	RPA INCURSION
	SHADING ARC

BS5837 (2012) Tree Survey Notes

1. In accordance with BS5837(2012) this drawing is a colour coded schedule and should not be read in black and white

2. If received electronically it is the recipients responsibility to print this drawing to correct scale. Only written dimensions should be used where not printed to scale.

3. This drawing should be read in conjunction with all other relevant drawings and specifications

4. Marcus Foster Arboricultural Design & Consultancy accepts no liability for any use of this document other than by its client and only for the purposes for which it was prepared and provided

5. Off site trees have been plotted based on site visit survey and locations are not based upon topographical survey

NOTE: Tree survey locations based on previous undertaken topographical surveys for design issue and additional GIS mapping has not been undertaken for the purposes of this survey
All off site trees where not plotted within topographic survey information are plotted using on site survey tools from within the site only.

Revisions

Rev.	Date	Checked
1	28.08.2023	MF

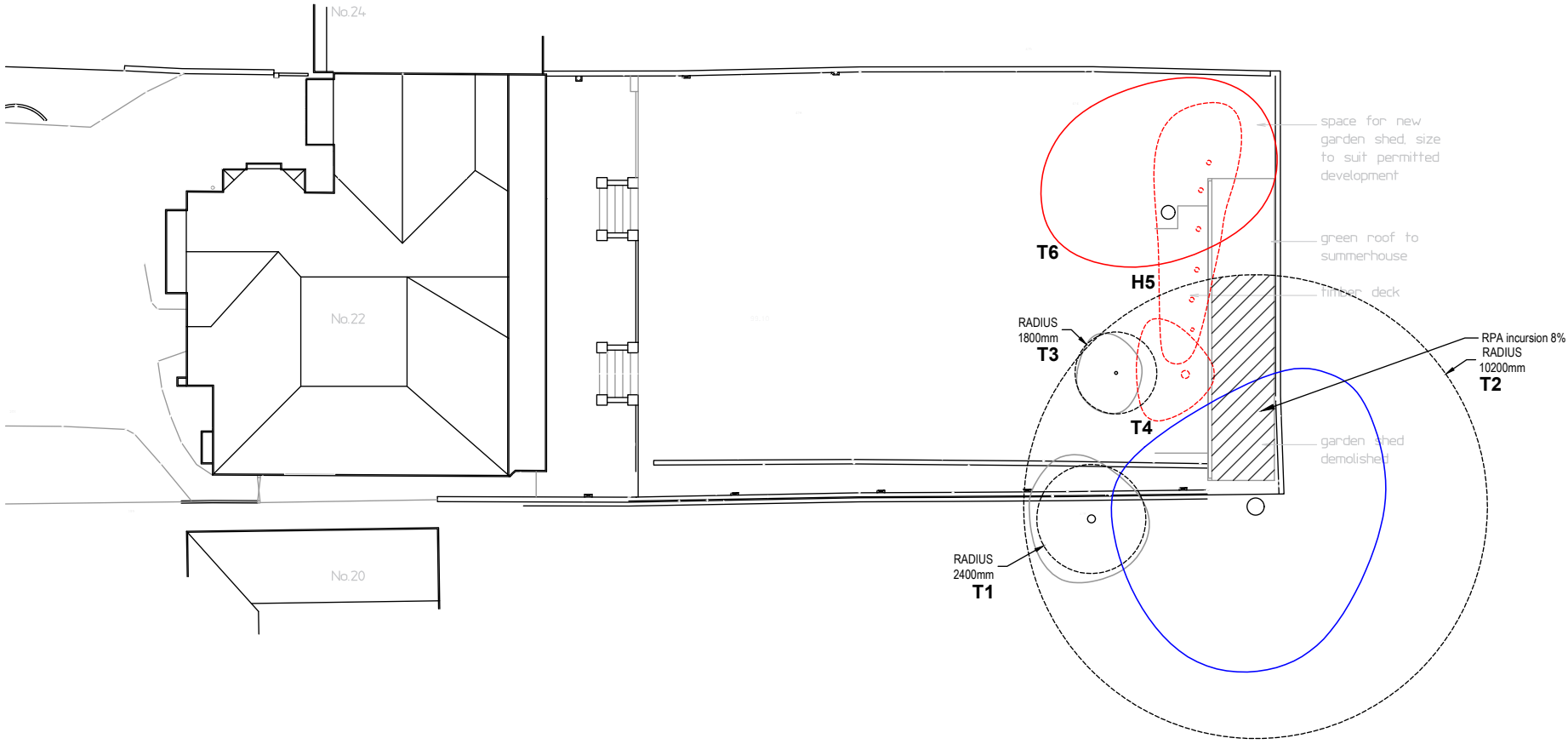
SITE 22 Colney Hatch Lane,
London, N10 1DU
CLIENT Dr Michael Ward

DWG TITLE Existing Tree Survey Plan

SCALE 1:200 @ A3 DATE AUG 2023

JOB NO AIA/MF/0163/23 DWG NO T001

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Marcus Foster
TREE CONSULTANCY



KEY

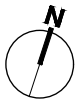
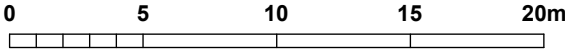
	CATEGORY A
	CATEGORY B
	CATEGORY C
	CATEGORY U
	TREES REMOVED
	RPA
	RPA INCURSION
	SHADING ARC

BS5837 (2012) Tree Survey Notes

1. In accordance with BS5837(2012) this drawing is a colour coded schedule and should not be read in black and white
2. If received electronically it is the recipients responsibility to print this drawing to correct scale. Only written dimensions should be used where not printed to scale.
3. This drawing should be read in conjunction with all other relevant drawings and specifications
4. Marcus Foster Arboricultural Design & Consultancy accepts no liability for any use of this document other than by its client and only for the purposes for which it was prepared and provided
5. Off site trees have been plotted based on site visit survey and locations are not based upon topographical survey

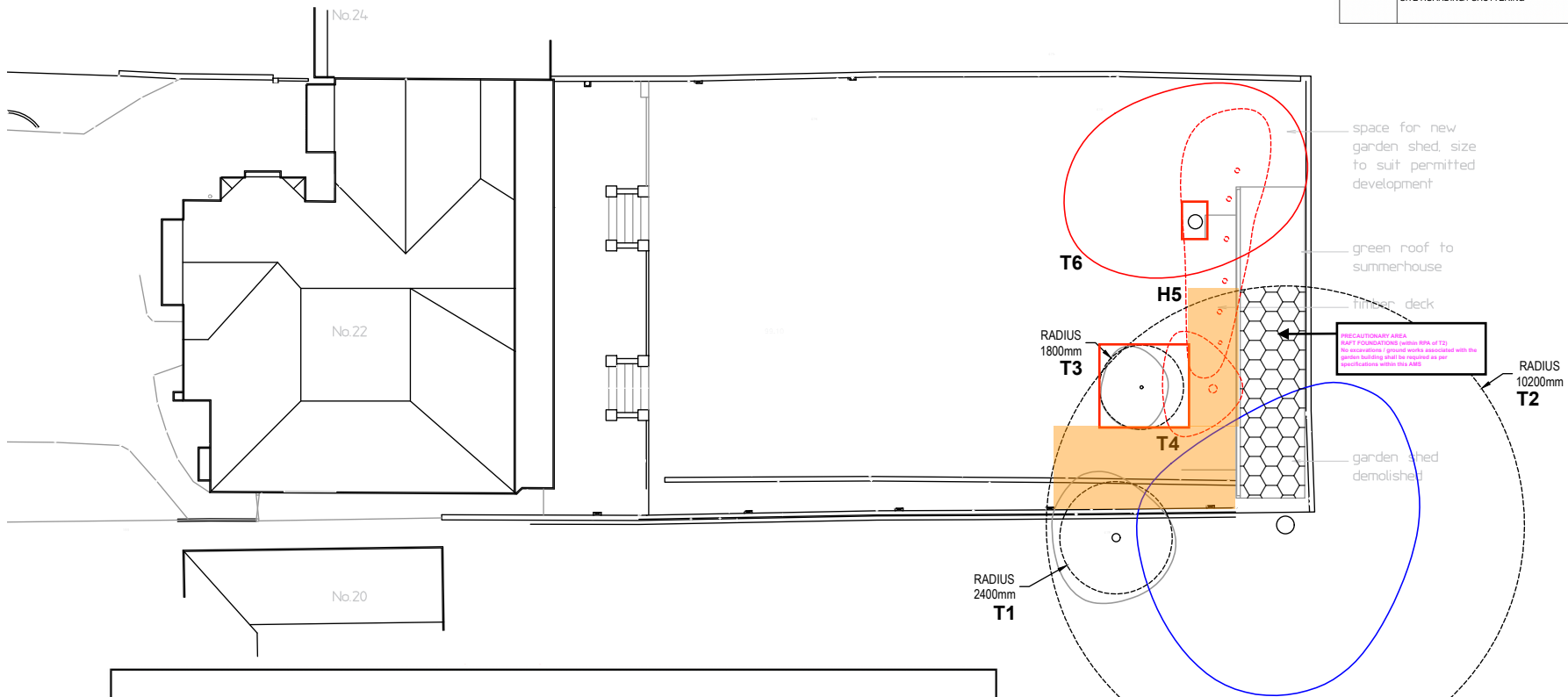
NOTE: Tree survey locations based on previous undertaken topographical surveys for design issue and additional GIS mapping has not been undertaken for the purposes of this survey
All off site trees where not plotted within topographic survey information are plotted using on site survey tools from within the site only.

Revisions		
Rev.	Date	Checked
1	28.08.2023	MF
ISSUED FOR INFORMATION		
SITE 22 Colney Hatch Lane, London, N10 1DU		
CLIENT Dr Michael Ward		
DWG TITLE Tree Constraints Plan		
SCALE 1:200 @ A3	DATE AUG 2023	
JOB NO AIA/MF/0163/23	DWG NO T002	



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Marcus Foster
TREE CONSULTANCY



TREE PROTECTION KEY	
	GROUND PROTECTION GROUND PROTECTION
	PRECAUTIONARY AREA ALL WORKS UNDERTAKEN IN ACCORDANCE WITH AMS
	TREE PROTECTION FENCING SITE HOARDING / SHUTTERING

KEY	
	CATEGORY A
	CATEGORY B
	CATEGORY C
	CATEGORY U
	TREES REMOVED
	RPA
	RPA INCURSION
	SHADING ARC

BS5837 (2012) Tree Survey Notes

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- Off site trees have been plotted based on site visit survey and locations are not based upon topographical survey

NOTE: Tree survey locations based on previous undertaken topographical surveys for design issue and additional GIS mapping has not been undertaken for the purposes of this survey
All off site trees where not plotted within topographic survey information are plotted using on site survey tools from within the site only.

Revisions			
Rev.	Date		Checked
1	28.08.2023	ISSUED FOR INFORMATION	MF
SITE		22 Colney Hatch Lane, London, N10 1DU	
CLIENT		Dr Michael Ward	
DWG TITLE			
Tree Protection Plan			
SCALE		DATE	
1:200 @ A3		AUG 2023	
JOB NO		DWG NO.	
AIA/MF/0163/23		T003	
			
T: 0781 2024070 mail@marcus-foster.com www.marcus-foster.com Marcus Foster TREE CONSULTANCY			

BASAL SHUTTERING SPECIFICATION - EXAMPLE SPECIFICATION

KEY

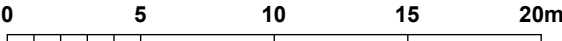
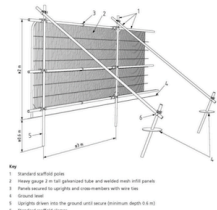
The fencing must fully enclose the main stem and initial buttress roots of the tree by being constructed as a self supporting structure to the following specifications:

Minimum height: 2.4m
Plywood Specification: 25mm thickness, external grade
Supporting Structure: 4" x 2" softwood timbers to form structure within shuttering
NOTE - No ground supports permitted
- Structural integrity of structure to be determined by building contractor and approved by supervising

TREE PROTECTION NOTICE



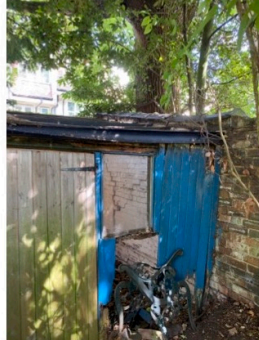
FIGURE 2 FENCING



Appendix C: **Tree Survey Photographs**



Tree T1 - T6 viewed to east showing rear boundary overview



Tree T2 to south of brick built wall and garden building



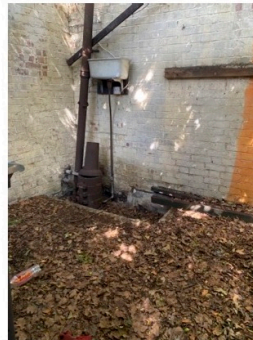
Boundary wall to southern boundary (to north of T1)



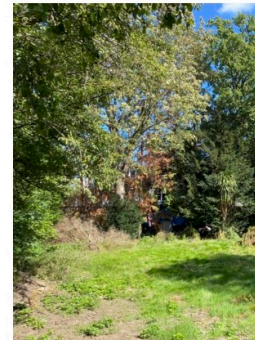
Sunken form (up to 500mm) of previous garden building / greenhouse



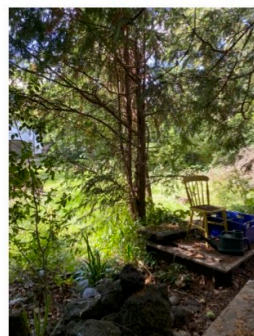
Sunken form (up to 500mm) of previous garden building / greenhouse



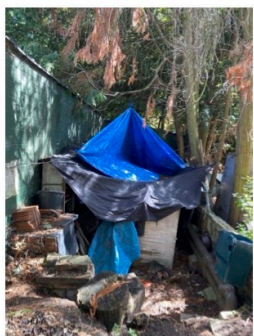
Boundary wall to southern boundary (to north of T1)



Tree T1 - T6 viewed to south east showing rear boundary overview



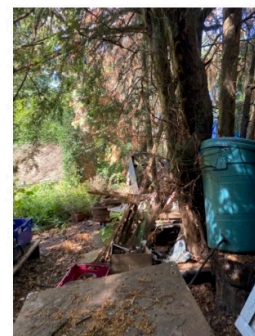
Tree T3 viewed to north



Hedge H5 viewed to south



Hedge H5 and T6 viewed to south



Tree T4 viewed to north

Appendix D: **Tree Protection Notice**

Generic Tree Protection Notice
(BS5837: 2012):

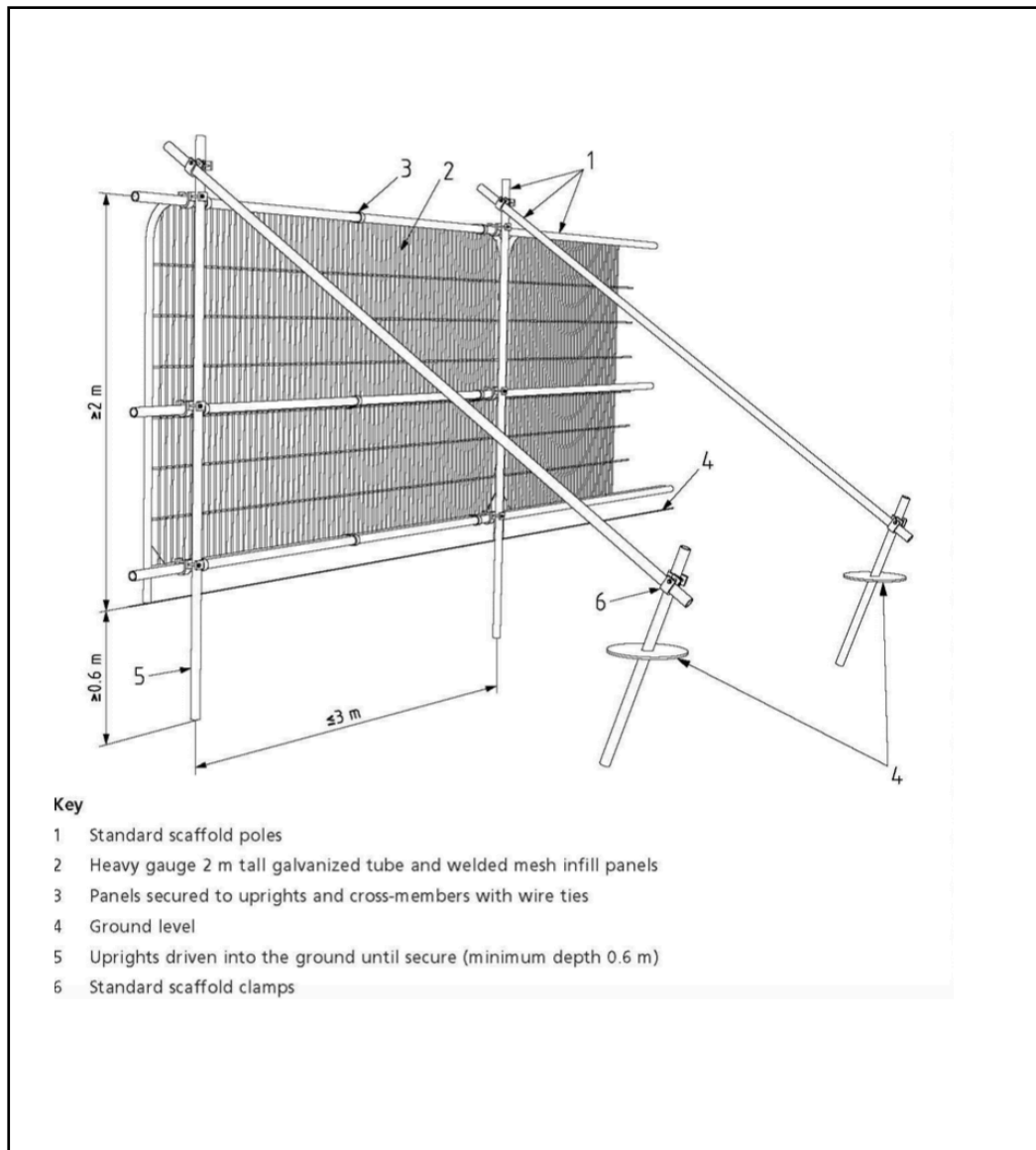
*Notice to be clearly shown on site where
fencing constructed
AT ALL TIMES*



Appendix E

Tree Protection Fencing Specifications

TREE PROTECTION FENCING SPECIFICATION **(FIGURE 2)**



Appendix F: References

1. BS5837: British Standard: Trees in relation to construction - Recommendations, British Standard (2012)
2. Principles of Tree Hazard Assessment and Management, Lonsdale, D. (Department for Transport, Local Government and the Regions, 1999)
3. The Body Language of Trees, Mattheck, C. and Breloer, H. (HMSO, 1994)
4. Trees in Britain, Philips, R. (Pan Books, 1978).
5. Diagnosis of Ill Health in Trees, Strouts, R. and Winter, (TSO, 1994)
6. National Planning Policy Framework February 2019 Ministry of Housing, Communities and Local Government
7. NJUG Guidelines for the Planning, Installation and Maintenance of Utility Apparatus in Proximity to Trees (Issue 2), (November 2007)
8. London Plan, Chapter 8 Green Infrastructure and Natural Environment - Policy G7 Woodland and Trees (2021)

PREPARED BY MARCUS FOSTER MArborA
END OF REPORT _ Page 31/31