

Marcus Foster Arboricultural Design & Consultancy

BA (Hons) | NDArb | Techcert (AA) | MArborA

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

<u>Site</u>

47 Elsworthy Road London NW3 3BS

Client

Greenway Architects

Date of Report:

January 2025

Report Reference:

AIA/MF/006/25

Report Prepared by:

Marcus Foster BA (Hons) NDArb. TechCert (AA) MArborA



Marcus Foster
Arboricultural Design & Consultancy
Tel: + 44 (0) 7812 024 070

mail@marcus-foster.com www.marcus-foster.com

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 Greenway Architects to survey, assess and provide an Arboricultural Impact Assessment and Method Statement for the trees sited within close proximity of proposed development works at 47 Elsworthy Road, London, NW3 3BS.

2.0 Introduction

- 2.1 A site visit was conducted on 13th February 2024 to survey and assess the trees. The weather at the time of inspection was mild and bright with trees in late winter / dormancy mode.
- 2.2 The tree survey, report and recommendations have been compiled for the 8 no. trees (T1-T8) 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 8 no. trees (T1-T8) 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 (overmature)
 - · Vitality: 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 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.

T4

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.

T1, T3, T5

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.

T2, T6, T7, T8

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.

N/A

- 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

6.0 Arboricultural Impact Assessment

Site Overview

6.1 The 8 no. trees (T1-T8) are located within 47 Elsworthy Road, London, NW3 3BS and adjoining properties which is within the London Borough of Camden. The following statutory checks have been made for the site:

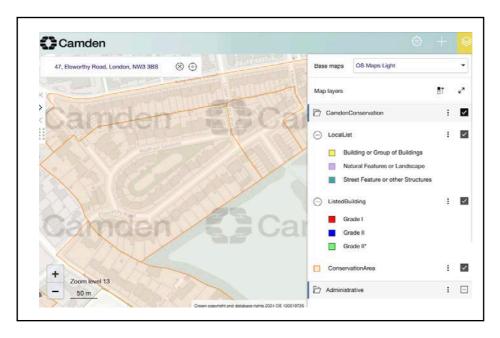
CONSERVATION AREA STATUS

Elsworthy Conservation Area, London Borough of Camden

TREE PRESERVATION ORDER (TPO) STATUS

TPO protection check has not been undertaken. BS5837 does not draw any distinction between trees subject to statutory protection, such as a Tree Preservation Order, and those trees without. This is principally because a detailed planning consent overrides any TPO protection

6.2 Extracted maps confirms site location and absence of statutory protection:



Extract from:

https://opendata.camden.gov.uk/People-Places/Camden-Conservation-Areas-Map/d2m6-mjue

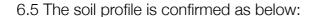
6.3 The trees are sited as follows:

47 Elsworthy Road: Trees T1, T2, T5-T8

49 Elsworthy Road- tree T3

Primrose Hill - tree 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; therefore with potential for volumetric change in the soil post development.





EXTRACT FROM: https://mapapps2.bgs.ac.uk/ukso/home.html

6.6 Any 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 from relative soil conditions which are recommended to be researched specifically to the site.

6.7 For the purposes of this report, reference has been made to the following plans for the proposed development which comprises the proposal for general refurbishment works and a timber garden outbuilding, with associated final landscapes.

ARCHITECTURAL: Greenway Architects - DWG: 2-Proposed Site Layout

STRUCTURAL ENGINEERING: Cooper Associates - DWG:
CA7409 02A Garden Room 47 Elsworthy Rd, NW3 3BS
CA7409 01B Garden Room 47 Elsworthy Rd, NW3 3BS

- 6.8 The summary of arboricultural impact which shall be assessed is as follows:
 - •General development / construction works within close proximity of retained trees
 - •Retention of all trees
 - •Selective ground works in accordance with tree protection measures within the RPA of 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
- 6.9 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) No mitigation for tree loss is required as no trees are proposed for removal

Arboricultural Impact Assessment

6.10 The trees sited within and surrounding the subject site are of the following species:

Aesculus hippocastanum (Horse chestnut)
Cercis canadensis 'Forest Pansy' (Forest pansy)
Crataegus monogyna (Hawthorn)
Hoheria sextylosa (Lacebark)
Prunus lusitanica (Portuguese laurel)
Platanus x acerifolia (London plane)
Sambucus nigra (Elder)

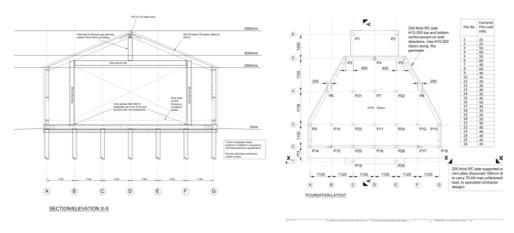
- 6.11 The main attributes of the trees are as follows:
 - (i) Tree T1, mature form London plane tree reduced form having been pollarded 'B' category
 - (ii) Tree T2 & T5 'C' category ornamental trees
 - (iii) Tree T3 off site Horse chestnut 'B' category with mature form no overhang to site
 - (iv) Tree T4 mature form London plane tree, off site within Primrose Hill with overhang at elevated height only
 - (v) T6-T8, 'C' category ornamental trees / large shrubs

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

- 6.12 To the rear of the property the potential impacts for individual trees are as follows:
 - Ground works within RPA of T1, T2, T4
 - Future occupancy of structure within close proximity of retained trees
 - Site infrastructure including storage of materials, chemicals, site welfare associated with development process i
- 6.13 For the development there is incursion to the RPA of retained trees as follows for the garden building:
 - T1 6% incursion to western RPA for 12.7m RPA radius
 - T2 4% incursion to southern RPA for 1.2m RPA radius
 - T4 nominal sub 1% incursion to eastern RPA for 12.0m RPA radius

- 6.14 Protection of all trees highlighted for retention is justified based on the following:
 - (i) Limited RPA incursion for retained trees. The incursion shall be for an area subject to selective groundworks via structural engineering methodology of mini piles (200 thick RC slab supported on mini piles (Assumed 160mm diameter to carry 75 kN max unfactored load) which shall not impact the tree's root system with tree protection measures applied
 - (ii) Application of tree protection measures incorporating
 - Precautionary Area for trees T1, T2, T4
 - Temporary tree protection fencing for trees surrounding subject site
 - Off site location for T3 & T4 affording protection to the main stems / majority of root plate of trees
 - (iii) Limited extent of landscape works
 - (iv) No tree works required for implementation of development
- 6.15 In relation to the mini pile system in particular the works required for these incursions are mitigated within the RPA of T1, T2, T4 as follows:
 - Excavations for ground works within area of piles only as proof digs to ensure no major root severance
 - Loading of structure above RPA
 - Rainwater discharge beneath structure within RPA which will retain capacity for gaseous exchange
 - Limited use of concrete and chemicals
 - No grading of existing topography for works including minor landscape works only due to level garden

Reference can be made to structural details as follows:



Extract from CA7409 02A Garden Room 47 Elsworthy Rd, NW3 3BS

Extract from CA7409 01B Garden Room 47 Elsworthy Rd, NW3 3BS

- 6.16 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 the garden building with its limited size.
- 6.17 The following tree protection measures shall be applied as specified within Section 6, AMS and the TPP which shall mitigate against any potential damage ensuring all trees remain protected:

(i) TREE PROTECTION FENCING

Fencing for areas exposed to construction works shall be implemented as shown within the AMS & TPP - shall provide a comprehensive barrier from the trees and are specified as temporary in form due to temporary nature of works

(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 T1, T2, T4 as outlined within the AMS (Section 7 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

Summary of Arboricultural Impact

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

Tree Protection applicable to the following trees: T1 - T8

Mitigation applicable for the removal of the following trees: N/A

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

- 6.19 In summary the arboricultural impact as outlined within drawing T003 Tree Protection Plan (TPP) shall require the following tree protection measures
 - (i) TREE PROTECTION FENCING
 - (ii) GROUND PROTECTION
 - (iii) PRECAUTIONARY AREA (T1, T2, T4 only)
 - (iv) PROTECTION FROM SITE STORAGE, INFRASTRUCTURE & WELFARE

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 No tree works are required as confirmed within Schedule of Works - Section 9.

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.
- 7.3.2 These measures must remain for the entire construction process in order to provide a comprehensive barrier from the trees and are specified as temporary in form due to temporary nature of works
 - •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
 - *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 shall be 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 shall be 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 T1, T2, T4 Precautionary Area denoted within the TPP highlight where the following works are required:

(i) MINI PILES

All excavations / ground works associated with the garden building shall be applied as per specifications within this AMS

7.6.2 The application of selective foundations shall require very limited extent of excavations - only those to determine correct pile locations. Within BS5837 (2012) the Standard makes provision for undertaking excavations in RPAs, explaining that all excavation must be carried out carefully using spades, forks

15

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 this area the following shall apply:

- All works within Precautionary Area highlighted within 'Toolbox Talk'
- With all below ground level works for determining suitable locations for selective foundations for this area undertaken by hand, the severance of any larger roots encountered up to 25mm diameter should then be undertaken by the supervising arboricultural consultant to ensure clean severance
- The supervising arboriculturist shall provide guidance and consultation during this stage of the ground works AT ALL TIMES

7.6.4 For undertaking excavations within the precautionary area guidance is applicable

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 Mini Pile (or similar) structural Methodology

7.7.1 For the precautionary areas / RPA of retained trees in relation to proposed structural works the following methodology with tree protection measures shall be applied at all times:

GROUND WORKS SEQUENCE

PRECAUTIONARY WORKS AREA IDENTIFIED

A Precautionary area is an area where tree protection for excavations and Helical screw pile works require implementation within RPA of retained trees.



All works within precautionary area highlighted within 'Toolbox Talk'



Initial hand dug locations 300mm (w) x 300mm (w) x 500mm (depth) of proposed pile locations to be undertaken in accordance with AMS tree protection measures to ensure no severance of major roots.



The exact location of each pile location and evidence of no tree root damage must then be documented

7.8 Final Landscape Works

- 7.8.1 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 for installation of pergola and shed
 - No compaction of soils for establishing level base
- 7.8.2 No soakaway shall be sited within the RPA of retained trees.

7.9 Installation of utility services

- 7.9.1 The installation and/or amendment of utility services within the RPA of retained trees must be via air spading method only within the RPA.
- 7.9.2 Air spade techniques must be operated by qualified contractors with all work and findings documented. Air spades utilise a two-tool air compressor and hand-held lance to dislodge soil, using highly pressurised jets of air. This allows trenches to be excavated without causing the significant root damage associated with the use of conventional digging techniques such as, spade or excavator buckets. Example imagery is shown below:





Example imagery of air spade use for implementing utilities beneath root plate (existing)

7.9.3 Reputable companies providing this service include as follows (list not exhaustive):

https://www.ruskins.co.uk/airspade

http://www.dfclark.co.uk/bionomique-service/air-spade-investigation-and-remediation/

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 CAMDEN - TREE OFFICER

Name - Arboricultural Services - London Borough of Camden Telephone - 020 7974 5939

Contact - Nick Bell - Tree Officer

Email - nick.bell@camden.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: 47 Elsworthy Road, London, NW3 3BS										
Tree No.	Common Name	BS5837 Category	Tree Works	Reasons for works						
		No action	required							

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)

47 Elsworthy Road London, NW3 3BS

Colour Key: BS5837: 2012 (see Section 3.6)



Tree Survey Key: BS5837: 2012

- · 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 (e) denotes estimate due to limited access and/ or off site location
- 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)

BS5837:2012 TREE SURVEY SITE: 47 Elsworthy Road, London, NW3 3BS | SURVEY DATE: 13th February 2024

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) (Where over hang from off site)	First canopy height (m) (Where over hang from off site)	Root Protection Area (RPA) m2	Root Protection Area (RPA) Radius (m)
T1	London plane	20	1060	5 5 5 5	М	F	G	B1	20+	Mature tree sited to south west boundary, Large limb removed to north at 3m / east at 6m. Mature crown diminished to high pollard at 8-16m height. Crown reduction lapsed 1-2 years	8	8	508.37	12.7
T2	Hawthorn	6	100	3 2 2 2	SM	F	F	C1	10+	Ornamental; crown dominant to north; supressed	2	2	4.52	1.2
тз	Horse chestnut	16	500 (e)	5 2 4 4	М	F	G	B1	20+	Off site. No overhanging crown. Pollarded at 5-10m height; lapsed 3-4 years	/	/	113.11	6.0
Т4	London plane	27	1000 (e)	9 9 9	М	G	G	A1	40+	Off site. No overhanging crown. Mature and spreading tree. Sited within public realm 1.5m level below with retaining wall between tree and site	/	/	452.45	12.0
T 5	Lacebark	8	M/s 160	2 3 2 3	EM	G	G	B1	20+	Ornamental; mature form for species. Excellent form	2	2	11.58	1.9
Т6	Portugues e laurel	8	280	3 3 3 3	М	F	F	C1	10+	Large shrub with developed form. Tight union at 2m height	2	2	35.47	3.4
Т7	Forest pansy	7	180	3 5 3 1	EM	F	F	C1	10+	Mature form. Lean to east. Light propped; crown supressed to east	1.5	2	14.66	2.2
Т8	Elder	6	M/s 100	2 2 2 2	М	F	F	C1	10+	Multi-stem large shrub / small tree. Compact height / spread	2	2	4.52	1.2

AlA/MF/006/25: BS5837:2012 Tree Report Site: 47 Elsworthy Road, London, NW3 Prepared for: Greenway Architects Date: January 2025

Appendix B

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

47 Elsworthy Road London, NW3 3BS

Colour Key: BS5837: 2012 (see Section 3.6)

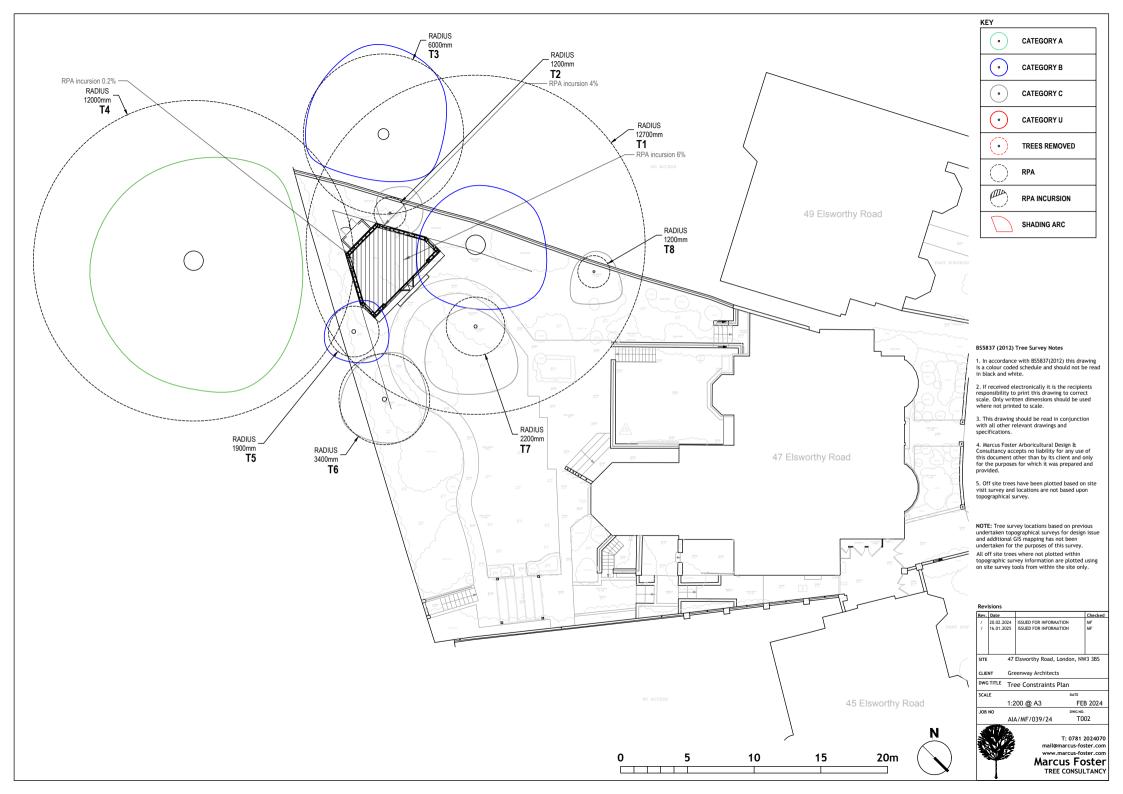
Category A

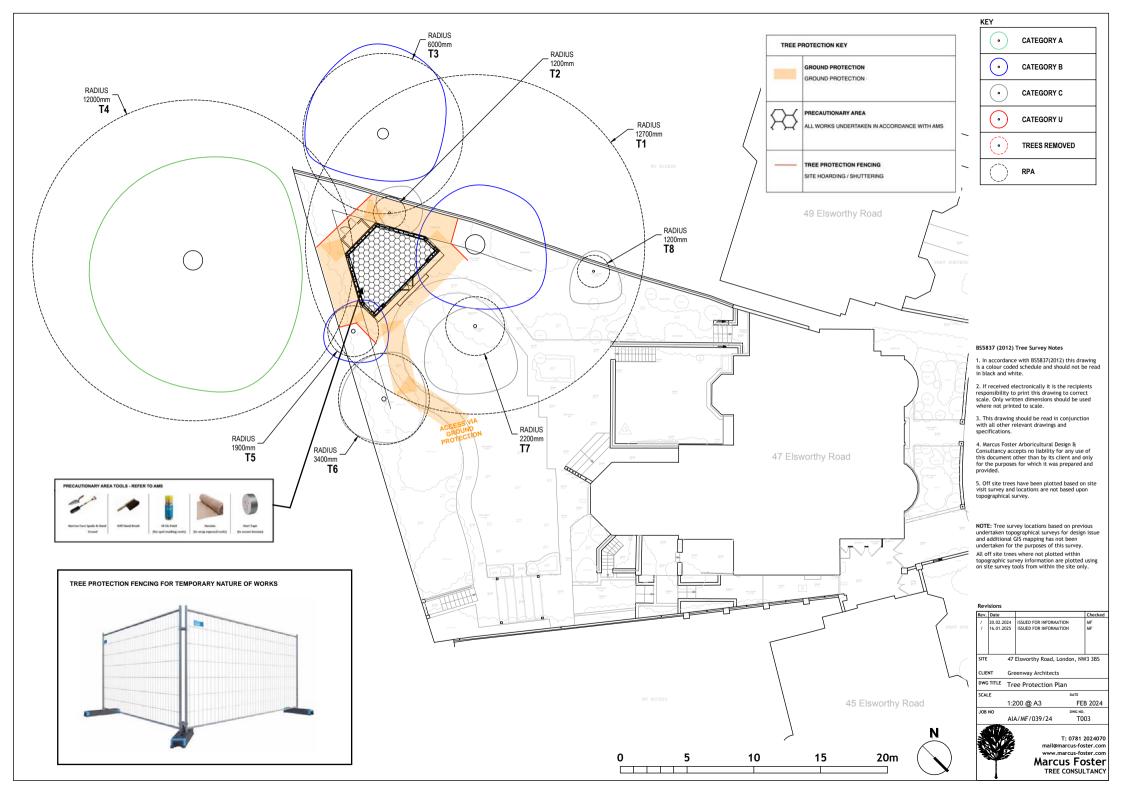
Category B

Category C

Category U







Appendix C: Tree Survey Photographs

47 Elsworthy Road London, NW3 3BS

Taken by M Foster - February 2024

Tree Survey Photographs







T3 - T7 viewed to south



Overview of site viewed to south



Trees T5 & T6 viewed to east



Overview of site viewed to south



Tree T4 viewed to south

Ala/MF/006/25: BS5837:2012 Tree Report Site: 47 Elsworthy Road, London, NW3 Prepared for: Greenway Architects Date: January 2025

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 (BASAL SHUTTERING)



Appendix F: References

- 1. BS5837: British Standard: Trees in relation to design, demolition and 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 III 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)

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