BS 5837
Arboricultural Planning Survey & Report
For:

Redacted For Privacy

Client:	Redacted For Privacy
Job Ref.:	Redacted For Privacy
Survey Date:	21/05/2026
Report Date:	21/05/2026
Rev. No.:	-
Checked By:	AA

GraftinGardeners Ltd
45 Swanwick Close
London
SW15 4ES

t: 020 8123 7653
m: 07845 816425
e: info@graftingardeners.co.uk

Contents

Document Details:

Site address:	Redacted For Privacy
Ref:	Redacted For Privacy
Site visit undertaken by:	Joseph Blackwell ND Arb
Date of site survey:	21/05/2026
Report prepared by:	Joseph Blackwell ND Arb
TPP Ref:	26 93856 TPP 001
Revision:	-

The content of this survey, report and accompanying plans are for the exclusive use of the client, their agents and submission to the Local Planning Authority. It may not be sold, lent, hired out or divulged to any third party not directly involved in the subject matter without the written consent of GraftinGardeners Ltd.

This survey, report and accompanying plans are intended for planning purposes only and in no way constitutes a safety inspection of any of the trees on the site. GraftinGardeners Ltd cannot therefore accept any liability associated with tree safety issues that may arise following the BS5837 tree survey associated with this tree report, furthermore the acting arboricultural consultant shall not be required to give testimony, or to attend court in the interest of such matters.

The statements made in this survey, report and any accompanying plans do not take account of the effects of extremes of climate, vandalism, or accident, whether physical, chemical, or fire. GraftinGardeners Ltd cannot therefore accept any liability in connection with these factors, nor where the prescribed work is not carried out in a correct and professional manner in accordance with current best practice. The authority of this survey, report and accompanying plans ceases at any time limit stated within it, or if none stated after one year from the date of the survey or when any site conditions change or pruning or other works unspecified in the survey, report and accompanying plans are carried out to, or affect the subject tree(s), whichever is the sooner.

1 Introduction

1.1 Instruction:

1.1.1 GraftinGardeners Ltd was instructed by Ravneet Saini to undertake a survey of tree(s), and/or vegetation, potentially impacted by the proposed development at Redacted For Privacy.

1.1.2 The survey will identify general condition and retention categories allowing the production of an arboricultural planning report, method statement and tree removal/protection plan.

1.1.3 The arboricultural planning report will seek to assess the direct/indirect effects of the proposed development on the surveyed tree stock and recommend, where necessary, measures aimed at protecting them throughout the development process.

1.1.4 We have been furnished with digital versions of the topographical survey, existing, and proposed site plans, which have been used to form our tree protection plan.

1.1.5 This survey and report have been commissioned for planning purposes only, a full safety inspection of the trees onsite is not within the arboricultural planning survey/report remit.

1.1.6 It is recommended that all trees undergo a full safety inspection to fulfil the owner's duty of care as defined by both civil law and the Occupiers' Liability Acts of 1957 & 1984.

1.2 Plans/Documents Provided:

Location, Existing and Proposed Plans: LOCATION PLAN_ EXISTING AND PROPOSED PLANS-3472493.pdf

1.3 Contact Details:

Role	Contact Name	Company
Client		-
Architect/Agent	-	
Project Arboriculturist	Joseph Blackwell ND Arb	GraftinGardeners Ltd
LPA Tree Officer	Guy Stephens	London borough of Lambeth

1.4 Abbreviations:

The following abbreviations will be used throughout this report:

BS 5837	British Standard – 'BS 5837: 2012 Trees in relation to design, demolition, and construction – Recommendations'
AIA	Arboricultural Implications Assessment
AMS	Arboricultural Method Statement
LPA	Local Planning Authority
VTA	Visual Tree Assessment
RPA	Root Protection Area
TPP	Tree Protection Plan
TPO	Tree Preservation Order
CA	Conservation Area
CEZ	Construction Exclusion Zone
CCS	Cellular Confinement System

2 The Site

2.1 Site Assessment:

2.1.1 78 Mount Nod Road (the site) is occupied by a three-storey detached property with basement. To the front of the property is hard standing to the rear are managed gardens.

2.1.2 The site was found to be rectangular in shape, generally level and with no adverse topographical features.

2.1.3 The surveyed tree was deemed to be of moderate amenity/landscape value and appeared in average health and vigour at the time of the assessment.

2.1.4 Online searches suggest there to be TPO's pertaining to trees/vegetation on or adjacent the site. The searches suggest the property is not located within a CA.

2.1.5 Searches undertaken by GraftinGardeners Ltd, with specific regard to the statutory protection status of trees, are preliminary, and collated using information available publicly obtained from LPA websites.

2.1.6 The information provided is only a guide, as LPA websites are subject to continual change. Should written confirmation be required please contact the respective LPA.

2.1.7 An aerial photograph of the site is included below:

Aerial image of site with indicative red line boundary (© Google Maps 2026)

2.2 Geology/Soils:

2.2.1 Reference to the BGS Geology Viewer (BETA) indicates the underlying soil strata to be part of the London Clay Formation-Clay and silt. No superficial deposits are recorded.

2.2.2 Further reference to the Cranfield Soil and AgriFood Institute Soilscapes viewer identifies that the soil present within the site is likely to have a loamy/clayey texture and slightly acidic pH. Soils are further described as slowly permeable and seasonally wet with above average fertility.

2.3 Surveyed Trees:

2.3.1 A total of one individual tree was surveyed as part of the survey/assessment.

2.3.2 The individual tree was considered a moderate quality B category specimen.

2.3.3 Please see Appendix 4 of this report for the tree survey schedule. The trees have been categorised in accordance with BS 5837, summarised in Table 1 below:

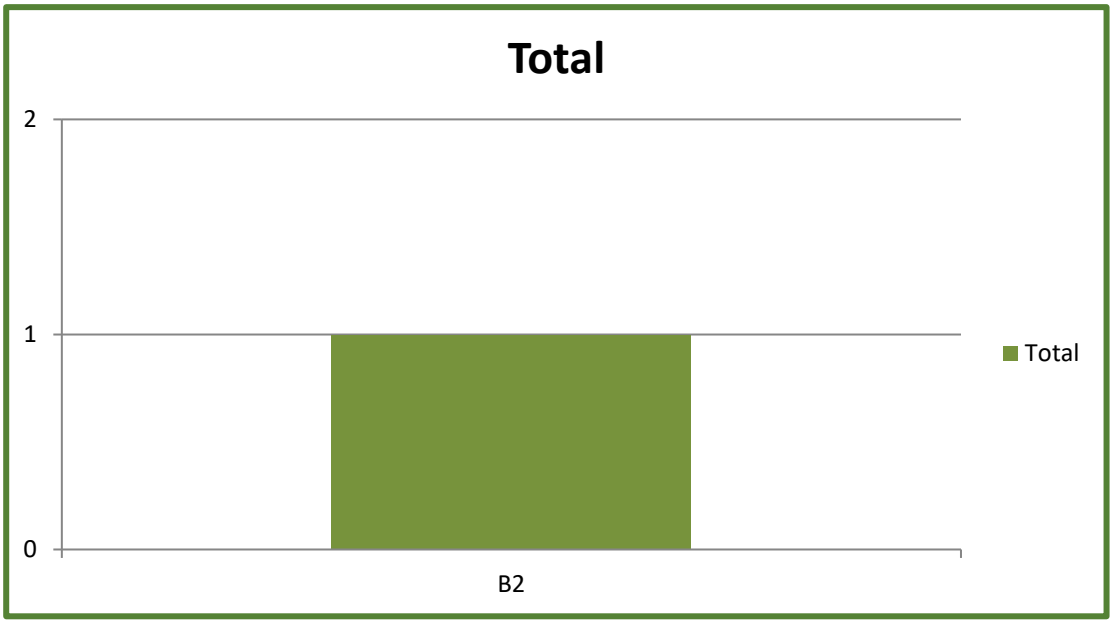


Table 1: Summary of Tree Categories

3 Proposed Development

3.1.1 The proposed development is for the demolition of the existing hard standing to allow construction of new hardstanding finished with loose gravel/resin-bonded gravel.

4 Arboricultural Impact Assessment

4.1 Arboricultural Implications:

4.1.1 A summary of the arboricultural implications associated with this development are provided below and intended to be read in conjunction with the attached Tree Protection Plan.

4.1.2 **AREA OF SUPERVISED HARD STANDING REMOVAL**

Demolition of the existing hard standing within the RPA of T1 will be undertaken entirely by hand/with the use of small low impact machinery and under the direct supervision of the acting arboricultural consultant strictly to method statement requirements.

4.1.3 **PROPOSED HARD FEATURE/HARD STANDING**

The proposal identifies new hard standing within the RPA of T1. To achieve its construction, permanent ground protection will need to be employed within the hard standing design. Inclusion of a permanent ground protection system aims to protect the underlying soil from compaction damage and hence asphyxiation of the roots contained within.

For further detail regarding these works please see section titled, PERMANENT GROUND PROTECTION.

4.1.4 TREE PROTECTION FENCING

Tree protective fencing will be used to protect the retained tree at the recommended specification, and in the location indicated on the TPP.

4.1.5 PERMANENT GROUND PROTECTION

An area of 'no-dig' permanent ground protection will need to be incorporated into the proposed hard standing design where within the RPA of T1 to abate any risk of soil compaction and hence root damage. The system will need to be installed immediately following the removal of existing hard standing.

If this area is exposed at any point during construction for any reason (e.g., the new hard standing area will not be constructed until after all works are complete) then it must be either fenced off as part of the CEZ or protected with temporary ground protection.

4.2 Proposed/Recommended Tree Works:

4.2.1 A schedule of tree works is provided below:

Tree No.	Proposed/Recommended Works	Reason for Works
T1	Crown lift to 4m over site	To facilitate development

Table 2: Recommended Tree Works

4.3 Mitigation

4.3.1 The proposed development does not require the removal of any significant or well-established trees. Therefore, mitigation in the form of replanting is not required.

4.4 Tree Protection Measures

4.4.1 The principle of permitting temporary construction access within the RPA are established in BS 5837 clause 6.2.3. Where the requirement for access is justified then this may be achieved through the setting back of the protective fencing and the use of ground protection measures to protect the underlying soil.

4.4.2 All retained trees will be robustly protected in accordance with BS 5837. Full details of the necessary tree protection measures are provided within the Arboricultural Method Statement which can be found on page 11 of this report. These issues include:

Arboricultural Monitoring and Supervision

General Precautions

Tree Surgery

Tree Protection Fencing

Ground Protection

Removal of Hard Surfacing

New Hard Surfacing

New Hard Surfacing Pre-Installation

New Hard Surfacing Installation

New Underground Services

5 Conclusions

5.1.1 Having considered the arboricultural implications associated with the proposed development, I believe the proposal to be arboriculturally sound.

5.1.2 Subject to full compliance with this report and the TPP, I believe that the retained tree can be adequately protected and will be safeguarded in a sustainable manner.

6 References

Anon., 1981. Wildlife and Countryside Act (Amended). s.l.:HMSO.

Anon., 2000. Countryside and Rights of Way Act 2000 (Amended). s.l.:HMSO.

British Standards Institute, 2010. Tree work - Recommendations. London: BSI.

British Standards Institute, 2012. Trees in relation to design, demolition and construction - Recommendations. London: BSI Standards Ltd.

National House Building Council, 2010. NHBC Standards Chapter 4.2. s.l.:NHBC.

Roberts, J., Jackson, N. & Smith, M., 2006. Tree Roots in the Built Environment. Norwich: The Stationary Office.

The National Joint Utilities Group, 2007. Volume 4 - NJUG Guidelines for the Planning, Installation and Maintenance of Utility Apparatus in Proximity to Trees, s.l.: NJUG Publications.

7 Arboricultural Method Statement

7.1 Arboricultural Monitoring and Supervision

7.1.1 Effective tree protection can only be achieved by adherence to a logical sequence of works combined with effective arboricultural supervision and monitoring. Prior to the commencement of any works the site owner/manager will appoint a project arboriculturist to supervise and monitor the approved works.

7.1.2 The project arboriculturist's role is to ensure that all tree protection measures are fit for purpose, are implemented in accordance with the approved details and to the satisfaction of London borough of Lambeth. The owner/manager will be responsible for ensuring that all site personnel are made aware of the requirements of this method statement and that any future amendments are known and understood. Copies of the approved AMS will be available onsite, the requirements of which will be incorporated into all relevant site management documents and site induction procedures.

7.1.3 A pre-commencement site meeting will be held between the site manager, local authority tree officer and the project arboriculturist. The purpose of this meeting will be to ensure that all aspects of the tree protection measures are clear and understood and that any future sequencing and supervisory arrangements are agreed. The details of this meeting will be recorded and will be circulated to all parties in writing. The pre-commencement meeting also provides the opportunity for discussion between all parties as to the practical implications/challenges that may arise in facilitating the proposals in line with the AMS. Should the meeting identify additional constraints, or a sounder arboricultural approach, a variation encompassing these factors will be submitted to the LPA.

7.1.4 Once works commence the project arboriculturist will undertake a programme of monitoring and supervision. This may include phone and email contact with the site manager, regular site visits and direct supervision of sensitive works. The frequency of any monitoring and supervision will be determined by the intensity and proximity of works to trees and will be flexible enough to accommodate changes in the scheduling of tasks as they occur on the site.

7.1.5 The project arboriculturist will maintain a record of all aspects of the arboricultural monitoring and supervision and a copy will be sent to London borough of Lambeth upon completion of the project or as otherwise agreed. This will provide a record of compliance with any agreed tree protection measures and will assist in the efficient discharge of any relevant planning conditions.

7.1.6 A recommended programme of works detailing the necessary arboricultural inputs is included within Table 3 below:

7.2 Table of Arboricultural Supervision

Stage	Action/Operation
1.	Pre-commencement meeting between site manager, project arboriculturist and local authority tree officer. To discuss the precise location and timing of all tree protection measures.
2.	Installation of all tree protective fencing.
3.	Removal of existing hard standing with RPA of T1.
4.	Construction of permanent ground protection i.e., Cellweb (please see method statement section titled New Hard Surfacing for further detail) within RPA of T1.
5.	During all external works which occur within, or immediately adjacent to, the RPA of any retained tree.
6.	Removal of protective fencing.
7.	Sign off by project arboriculturist.

Table 3: Recommended programme of works requiring arboricultural supervision and monitoring

7.3 Importance of Arranging the Pre-commencement Site Meeting

7.3.1 Prior to the importation of machinery, materials, and any commencement of groundworks, we advise that a suitable period be allowed for the arrangement of a pre-commencement site meeting with all relevant parties.

7.3.2 In our experience, this can vary between a few days to a few weeks and has the potential to delay the start of works onsite. Further guidance on this matter should be sought from the respective LPA.

7.4 General Precautions

7.4.1 All trees which are being retained onsite will be protected by protective fencing and/or ground protection as detailed in the following sections. Protective fencing will be erected before any materials or machinery is brought onto the site and before any demolition, development or stripping of soil commences. Once erected fencing will be regarded as sacrosanct and will not be removed or altered without prior recommendation by the project arboriculturist and approval of the LPA.

7.4.2 Care will be taken to avoid damage in the following ways:

7.4.3 Oil, bitumen, cement, or other material likely to be injurious to a tree will not be stored or mixed within 10m of any trunk unless contained within a bunded structure. Concrete mixing will not be carried out within 10m of a tree unless undertaken within a bunded container. Any spillage shall be immediately reported to the project arboriculturist who will determine what mitigation is required.

7.4.4 Fires will not be lit nearer than 5m the limit of the crown spread, will be downwind of the tree and will be prevented from becoming so large as to affect the tree.

7.4.5 Notice boards, telephone cables or other services will not be attached to any part of the tree. Trees to be retained will not be used as anchors for equipment used to remove stumps, roots, other trees or for any other purposes.

7.4.6 Care will be exercised when using cranes or similar equipment near the spread of the canopy of a tree.

7.4.7 It is essential that allowance be made for the slope of the ground so that damaging materials such as concrete washings, mortar or diesel oil cannot run towards trees.

7.4.8 Stumps within the RPA will not be dug or pulled out but are to be ground out. Where possible, and with the agreement of all parties involved, standing stumps and debris should be left as a habitat for wildlife if circumstances allow. (British Standards Institute, 2012) (National House Building Council, 2010) (Wildlife and Countryside Act (Amended), 1981).

7.5 Tree Surgery

7.5.1 Tree works shall be carried out in accordance with BS3998:2010 *Recommendations for tree work* (British Standards Institute, 2010), industry best practice and in line with any works already agreed with London borough of Lambeth.

7.5.2 If during the course of these operations the need for other work becomes apparent, then the advice of the project arboriculturist will be sought. No works other than those detailed within the report will be carried out without the prior written consent of London borough of Lambeth.

7.5.3 Attention is paid to the common law right to prune overhanging trees back to boundaries. Should this be required then all efforts will be made to contact the tree owner prior to the commencement of works and all work will be undertaken without access onto third party land.

7.5.4 The statutory protection afforded by the Wildlife and Countryside Act 1981 (Amended) (Wildlife and Countryside Act (Amended), 1981) and Countryside and Rights of Way Act 2000 (Amended) (Countryside and Rights of Way Act 2000 (Amended), 2000) will also be adhered to. Where there is evidence that bats, nesting birds or other protected species are present then specialist advice will be obtained prior to the commencement of work. Further advice on bats is available from the Bat Conservation Trust (www.bats.org.uk) and on birds from the Royal Society for the Protection of Birds (www.rspb.org.uk).

7.5.5 All operations shall be carefully carried out to avoid damage to the trees being treated or neighbouring trees. No trees to be retained shall be used for anchorage or winching purposes.

7.6 Tree Protection Fencing

7.6.1 Tree protection fencing will be used to prevent access to the RPAs of retained trees and will be erected within the locations shown on TPP ref. 26 93856 TPP 001. Unless agreed in writing by the project arboriculturist and/or London borough of Lambeth the following shall apply:

7.6.2 Protective fencing (shown as a dark blue line on the TPP) will be erected prior to any works onsite including demolition, groundwork or the importation of plant and materials.

7.6.3 Once erected protective fencing shall remain in situ until all construction activities are complete and shall only be varied with the written consent of the project arboriculturist and/or London borough of Lambeth.

7.6.4 The area to the rear of the protective fencing shall be considered to form a CEZ. No construction activities, storage of materials or pedestrian or vehicular access shall take place within the CEZ without the written consent of London borough of Lambeth.

7.6.5 Confirmation that the protective fencing has been correctly installed will be sought from the project arboriculturist prior to the start of any demolition works, construction activities or the importation of any plant or materials.

7.6.6 Protective fencing will comply fully with BS 5837 and will be erected to the standard described in Figure 1. All weather notices will be attached to the protective fencing at suitable intervals, an example of which is given in Figure 2.

7.6.7 Regular daily checks will be carried out by the site manager to ensure that the barriers are still in place and functioning and any damage will be rectified without delay.

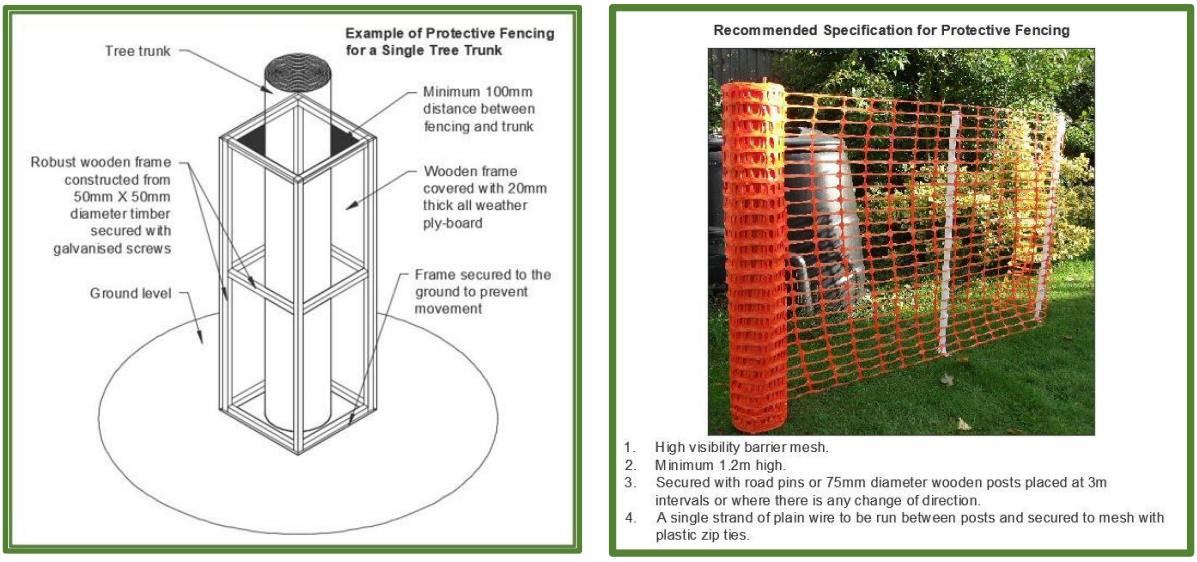


Figure 1: Example of protective fencing specifications 1 & 2 (BS 5837:2012)

Figure 2: Example signage to be securely attached to fencing

7.7 Ground Protection

7.7.1 Ground protection will be used to protect the RPAs of retained trees and will be installed within the locations shown on TPP ref. 26 93856 TPP 001. Unless agreed in writing by the project arboriculturist and/or London borough of Lambeth the following shall apply:

7.7.2 An area of new hard surfacing is to be installed to act as permanent ground protection is highlighted on the TPP with green honeycomb hatching. Hard surfacing within this area shall be formed using a CCS, shall be constructed in accordance with the details provided on page 16 of this report and will be installed as soon as possible unless the area is fenced off. A temporary wearing course may be used to protect the CCS providing that it is permeable and will remain so for the duration of the construction phase.

7.8 Removal of Hard Surfacing

7.8.1 Those areas of existing hard surfacing black cross hatching on TPP ref. 26 93856 TPP 001 will be removed.

7.8.2 Removal shall occur during the initial period of demolition and site preparation.

7.8.3 Removal shall be undertaken in strict accordance with the following methodology:

7.8.4 Any RPAs to be worked within are to be clearly marked out prior to any works. The markings will be suitable to indicate the extent of the RPA throughout the works.

7.8.5 The initial 'breaking up' of any surface may be carried out by low impact pneumatic tools (not breakers attached to diggers or JCBs), or preferably by hand if possible.

7.8.6 Where it is practicable the subsequent removal of debris will be carried out by hand. Should mechanical means be required due to the size of the debris, then a small (1.5ton) digger may be used providing that, when picking up debris, no tines/teeth from the bucket cause any damage to the underlying soil surface. Once left with manageable size pieces, hand removal will be used. Where the digger is employed, it will only travel on the undisturbed hard surface (within the RPA), clearing debris as it progresses out of the RPA.

7.8.7 No reduction in levels of the underlying soil surface will occur.

7.8.8 At no point is any heavy machinery permitted within the RPA, once the underlying soil surface is revealed.

7.8.9 The underlying soil may be levelled by the addition of up to 150mm of good quality topsoil to BS3882:2015 Specification for topsoil and requirements for use. Hand tools only will be used for any levelling works; this work will not disturb the underlying soil.

7.9 New Hard Surfacing

7.9.1 The construction of a traditional hard surface generally requires excavation and the creation of a compacted sub-base. Excavation and the compaction of underlying soil can be very damaging to tree roots and can have a significant detrimental impact on the health and stability of trees. When constructing hard surfacing within the RPA of any tree it is essential that this is achieved without either excavation or compaction.

7.9.2 This can be accomplished through the use of a geotextile membrane and a CCS which is laid directly onto the soil within the RPA.

7.9.3 In order to ensure that the CCS is installed without detriment to trees, and to ensure that any associated conditions can be signed off on completion of the project, installation will adhere to the following guidelines:

7.10 New Hard Surfacing Pre-Installation

7.10.1 The RPAs of all nearby trees are to be marked out using water-soluble marker paint.

7.10.2 All staff involved will be made aware of this working methodology.

7.10.3 Non-woody vegetation shall be removed through the use of a translocated herbicide such as glyphosate.

7.10.4 This will be applied according to the manufacturer's instructions and drift onto non-target plants shall be avoided. Woody vegetation will be removed using hand tools and turf may be removed using a mechanical turf stripper where necessary.

7.10.5 The levelling of minor soil undulations will be achieved through infilling with a granular material which does not inhibit vertical gaseous diffusion. Examples of the materials which may be used include no-fines gravel, washed aggregate, or cobbles.

7.11 New Hard Surfacing Installation

7.11.1 Install a permeable geotextile membrane (e.g., Treetex) directly on top of the finished soil grade level.

7.11.2 Lay out the CCS and ensure edges are anchored open during the infill process.

7.11.3 Install kerbs and edgings directly on top of existing soil grade level. For light structures a treated peg and board will be used and for more substantial structures engineer approved items such as railway sleepers, drilled kerbstones or gabions will be utilised and held in place with track or road pins.

7.11.4 Fill the CCS ensuring that any machinery works only on the already filled areas of the CCS, whilst all remaining areas are filled. Typical infill consists of no fines angular granular material 20-40mm with a neutral pH.

7.11.5 Install a second layer of geotextile separator over the top of the filled CCS.

7.11.6 A temporary wearing course may now be installed if required. The temporary wearing course will consist of compacted Type 1 aggregate with holes left at 2m intervals to ensure permeability and gaseous exchange. The temporary wearing course will be removed once construction activities are complete and will be replaced with the porous finished surface.

7.11.7 Install final permeable and gas-porous finished surface. This may consist of permeable block paving, porous tarmac or resin-bonded gravel as agreed in any associated condition or approved documentation.

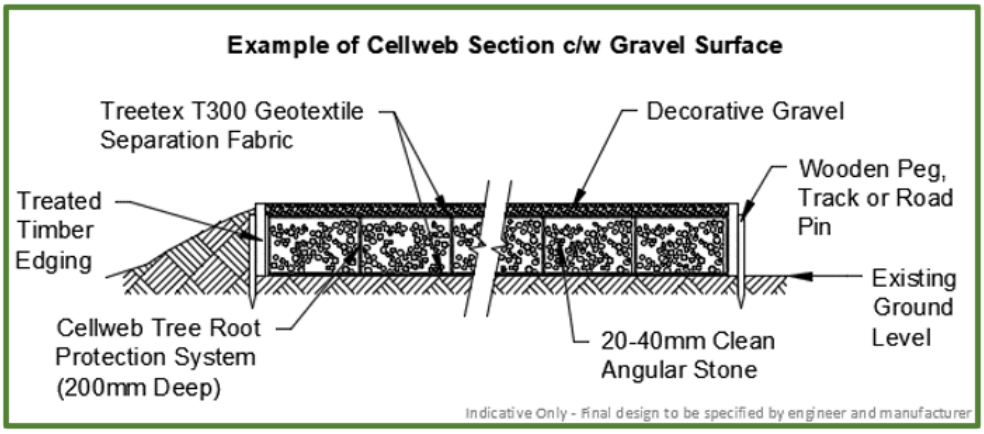


Figure 3: Illustrative example of the final surface with a gravel wearing course (Image used with the kind permission of Geosynthetics Ltd 01455 617139, www.geosyn.co.uk)

7.12 New Underground Services

7.12.1 Wherever possible any underground services shall be located outside the RPA of any retained tree. Underground services shall only be routed through the RPA of a retained tree with the written consent of the project arboriculturist and/or London borough of Lambeth.

7.12.2 Wherever possible services will be grouped together, will utilise common ducts and have all inspection chambers located outside of the RPA.

7.12.3 In situations where services must pass through the RPA of a retained tree then trenchless techniques will be used wherever possible. Receptor pits will be located outside the RPA and potentially toxic external lubricants will not be used.

7.12.4 In situations where trenchless techniques are impractical then the use of open trenches will only be considered if they can be excavated without the need for shoring of the sides. The method of excavation will be through the use of an ‘air-spade’ or similar to ensure that soil can be removed from around the tree roots whilst causing only minimal damage.

7.12.5 Any new services installed within the zone of influence (not just the RPA) of any proposed, or retained, tree will incorporate sealed and flexible joints and be sufficiently robust to avoid damage due to differential soil movement.

7.12.6 Both the installation of new services and the renovation of existing services must be carried out in accordance with NJUG Volume 4 (The National Joint Utilities Group, 2007), BS 5837:2012 Clause 7.7 and any other relevant best practice guidance relating to trees.

7.7 Underground and above-ground utility apparatus

7.7.1 Mechanical trenching for the installation of underground apparatus and drainage severs any roots present and can change the local soil hydrology in a way that adversely affects the health of the tree. For this reason, particular care should be taken in the routeing and methods of installation of all underground apparatus. Wherever possible, apparatus should be routed outside RPAs. Where this is not possible, it is preferable to keep apparatus together in common ducts. Inspection chambers should be sited outside the RPA.

7.7.2 Where underground apparatus is to pass within the RPA, detailed plans showing the proposed routeing should be drawn up in conjunction with the project arboriculturist. In such cases, trenchless insertion methods should be used (see Table 3), with entry and retrieval pits being sited outside the RPA. Provided that roots can be retained and protected in accordance with **7.2.2**, excavation using hand-held tools (see **7.2.1**) might be acceptable for shallow service runs.

NOTE The suitability of these for differing applications is summarized in Table 3.

Table 3 Trenchless solutions for differing utility apparatus installation requirements

Method	Accuracy	Bore dia. [A]	Max. sub. [B] length	Applications	Not suitable for
	mm	mm	m		
Microtunnelling	<20	100 to 300	40	Gravity-fall pipes, deep apparatus, watercourse/ roadway undercrossings	Low-cost projects due to relative expense
Surface-launched directional drilling	≈100	25 to 1 200	150	Pressure pipes, cables including fibre optic	Gravity-fall pipes, e.g. drains and sewers [C]
Pipe ramming	≈150	150 to 2 000	70	Any large-bore pipes and ducts	Rocky and other heavily obstructed soils
Impact moling [D]	≈50 [E]	30 to 180 [F]	40	Gas, water and cable connections, e.g. from street to property	Any application that requires accuracy over distances in excess of 5 m

[A] Dependent on strata encountered.

[B] Maximum subterranean length.

[C] Pit-launched directional drilling can be used for gravity fall pipes up to 20 m subterranean length.

[D] Impact moling (also known as thrust-bore) generally requires soft, cohesive soils.

[E] Substantial inverse relationship between accuracy and distance.

[F] Figures given relate to single pass: up to 300 mm bore achievable with multiple passes.

7.7.3 Above-ground apparatus (including CCTV cameras and lighting) should be sited to avoid the need for detrimental tree pruning. In this regard, the current and future crown size of the tree should be assessed. Tree branches can be pruned back with care to provide space, though it is not appropriate for repetitive and significant tree work to be an initial design solution unless this is a suitable management outcome for the tree. Pruning should be undertaken in accordance with BS 3998:2010.

Figure 4: BS5837:2012 section 7.7

Appendices

Appendix 1 Site Photographs

Photograph 1: T1, viewed from the northwest

Photograph 2: Buttress roots with decay, viewed from the south

Appendix 2 Glossary of Terms and Abbreviations

TO (Tree Officer)	Representative officer of the LPA for tree related matters within the area of the authority.
LPA (Local Planning Authority)	The local government body that deals with all planning related issues within the area of the authority.
RPA (Root Protection Area)	Layout design tool indicating the area surrounding a tree that contains sufficient rooting volume to ensure the survival of the tree, shown in plan form in m^2.
TPP (Tree Protection Plan)	Scale drawing prepared by an arboriculturist showing the finalised layout proposals, tree retention and tree and landscape protection measures detailed within the AMS, which can be shown graphically.
CEZ (Construction Exclusion Zone)	Area based on the RPA (in m2), identified by an arboriculturist, to be protected during development, including demolition and construction work, by the use of barriers and/or ground protection, fit for purpose to ensure the successful long-term retention of a tree.
AIA (Arboricultural Implications/Impacts Assessment)	Study, undertaken by an arboriculturist, to identify, evaluate and possibly mitigate the extent of direct and indirect impacts on existing trees that may arise as a result of the implementation of any site layout proposal.
AMS (Arboricultural Method Statement)	Methodology for the implementation of any aspect of development that has the potential to result in loss of or damage to a tree.
TPO (Tree Preservation Order)	A TPO is an order made by the LPA in respect of trees or woodlands. The principal effect of a TPO is to prohibit the: • cutting down, • uprooting, • topping, • lopping, • wilful damage, or • wilful destruction of trees without the LPAs consent. The cutting of roots, although not expressly covered in (1) – (4) above, is potentially damaging and so, in the Secretary of State's view, requires the LPAs consent.
CA (Conservation Area)	The law relating to CAs is in Part II of the Planning (Listed Buildings and Conservation Areas) Act 1990. CAs are areas of special architectural or historical interest the character or appearance of which it is desirable to preserve or enhance. They are designated by LPAs and are centred on listed buildings. Other buildings and landscape features, including trees, may also contribute to the special character of a CA.
NJUG (Nation Joint Utilities Group)	Trade Association for street works issues. Promotes best practice, self-regulation and a two-way relationship with Government and other relevant stake holders.

Appendix 3 Tree Survey

Scope and Method of Survey

- The report is concerned with the arboricultural aspects of the site only.
- The survey has been carried out in accordance with BS 5837: 2012 T*rees in relation to design, demolition, and construction - Recommendations*.
- The reference numbers of surveyed trees and tree groups are shown on the TCP/TPP, which is based on the scale drawings supplied.
- The tree survey was carried out from ground level only.
- No tissue samples were taken nor was any internal investigation of the subject trees undertaken.
- Tree heights were estimated to the nearest 1m.
- Trunk diameters have been measured in accordance with Annex C of BS 5837: 2012. Diameters of single stem trees on level ground have been measured at 1.5m above ground level. The diameters of other commonly encountered stems have been measured where most appropriate and this is recorded within the schedule.
- The combined stem diameters for multi-stemmed trees have been calculated in accordance with BS 5837: 2012 paragraph 4.6.1. RPAs are calculated as an area equivalent to a circle with a radius 12 times the stem diameter.
- Tree canopies have been measured either by use of a laser range finder, tape measure or estimated where access has not been possible.
- No access was made onto third party property. Dimensions for trees on adjacent property, and those that at the time of the survey were inaccessible due to dense vegetation or adverse topography, have been estimated.
- The positions of trees not included on a topographical survey have been measured as accurately as possible. These positions must be considered approximate only. If the position of these trees is of critical importance, then a surveyor should be engaged to accurately record their location.
- This report in no way constitutes a health and safety survey. Where concerns for tree health and safety exist the necessary and appropriate tree inspections should be carried out.

Summary of Categories BS 5837:2012

Trees unsuitable for retention	
U	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. Identified by dark red colouration on the TCP/TPP. These trees should not be a consideration in the planning process.
Trees to be considered for retention	
A	Trees of high quality with an estimated remaining life expectancy of at least 40 years. Identified by light green colouration on the TCP/TPP.
B	Trees of moderate quality with an estimated remaining life expectancy of at least 20 years. Identified by mid blue colouration on the TCP/TPP.
C	Trees of low quality with an estimated remaining life expectancy of at least 10 years, or young trees with a stem diameter below 150mm. Identified by grey colouration on the TCP/TPP. The following subcategories are applied. Trees may be allocated more than one subcategory, but this will not increase their overall value.
1: Mainly arboricultural values	
A1	Trees that are of particularly good examples of their species, especially if rare or unusual; or those that are essential components of groups, or of formal or semi-formal arboricultural features (e.g., the dominant and/or principal tree within an avenue).
B1	Trees that might be included in category A, but are downgraded because of impaired condition (e.g., the presence of significant though remediable defects including unsympathetic past management and storm damage), such that they are unlikely to be suitable for retention beyond 40 years; or trees lacking the special quality necessary to merit category A designation.
C1	Unremarkable trees of very limited merit or of such impaired condition that they do not qualify in higher categories.
2: Mainly landscape values	
A2	Trees, groups, or woodlands of particular visual importance as arboricultural and/or landscape features.
B2	Trees present in numbers, usually as groups or woodlands, such that they attract a higher collective rating than they might as individuals; or trees occurring as collectives but situated so as to make little visual contribution to the wider locality.
C2	Trees present in groups or woodlands, but without this conferring on them significantly greater collective landscape value; and/or trees offering low or only temporary/transient landscape benefits.
3: Mainly cultural values, including conservation	
A3	Trees, groups, or woods of significant conservation, historical, commemorative, or other value (e.g., veteran trees or wood-pasture).
B3	Trees with material conservation or other cultural value.
C3	Trees with no material conservation or other cultural value.

Table 4: Categories and descriptions as described in BS 5837:2012 Table 1

Explanation of Tree Survey Schedule

TREE No:	Allocated tree number, this may or may not be tagged onsite.
HEIGHT:	Height of tree in metres.
DBH:	Diameter of the tree at 1.5m from ground level or as otherwise described within Annex C of BS 5837:2012.
CROWN SPREAD:	Shown as compass points N, E, S, W.
CROWN HEIGHT:	Height of lowest branch foliage.
FIRST SIGNIFICANT BRANCH:	Height above ground level of lowest significantly sized branch.
AGE CLASS:	Y Young (less than 1/3 through life expectancy). SM Semi-mature (more than 1/3 through life expectancy). EM Early-mature (from 1/3 to 2/3 through life expectancy). M Mature (over 2/3 through life expectancy). OM Over-mature (beyond average life expectancy). V Veteran (of biological, cultural, or aesthetic value, usually beyond typical age range).
ESTIMATED REMAINING CONTRIBUTION:	The estimated number of years the tree will continue to make a safe and useful contribution to its surroundings, considering its current age and physiological and structural condition. (NB. This assumes that there will be no physical changes to its immediate environment).
BS CATEGORY:	(Please refer to the BS 5837:2012 Table 1 for detailed descriptions) U: Trees unsuitable for retention – those 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. A: Trees of high quality – with an estimated remaining life expectancy of at least 40 years. B: Trees of moderate quality – with an estimated remaining life expectancy of at least 20 years. C: Trees of low quality – with an estimated remaining life expectancy of at least 10 years, or young trees with a stem diameter below 150mm.
PHYSIOLOGY, STRUCTURE, WORKS REQUIRED:	Description of general form, including presence of physical defects, disease or decay and other appropriate details based on health, vitality, and overall structural integrity.
ESTIMATED:	Y/N (Estimated stem dimension).

Table 5: Explanation of Tree Survey Schedule

Appendix 4 Tree Schedule

Site: Redacted For Privacy

Surveyor: Joseph Blackwell ND Arb

Date of Survey: 21/05/2026

TREE NO	TYPE	SPECIES	HEIGHT(m)	DIAMETER AT 1.5m or arf (mm)	ESTIMATED? (Y/N)	NO. OF STEMS	N	E	S	W	LOWEST CROWN HEIGHT (m)	LCH ORIENTATION	LOWEST BRANCH HEIGHT (m)	LOWEST BRANCH ORIENTATION	AGE CLASS	PHYSIOLOGICAL CONDITION	STRUCTURAL CONDITION	PRELIMINARY MANAGEMENT RECOMMENDATIONS	ESTIMATED REMAINING CONTRIBUTION	CATEGORY	OBSERVATIONS/NOTES
1	T	Copper Beech	10	800	Y	1	4.5	4.5	4.5	4.5	3	E	3	E	Mature	Fair	Fair	Crown lift to 4m over site	20+	B2	A tree of moderate amenity/landscape value. Heavily reduced in the past, tight forks, natural branch/stem graft, basal decay, hard standing over entire rooting zone.

Appendix 5 Tree Protection Plan

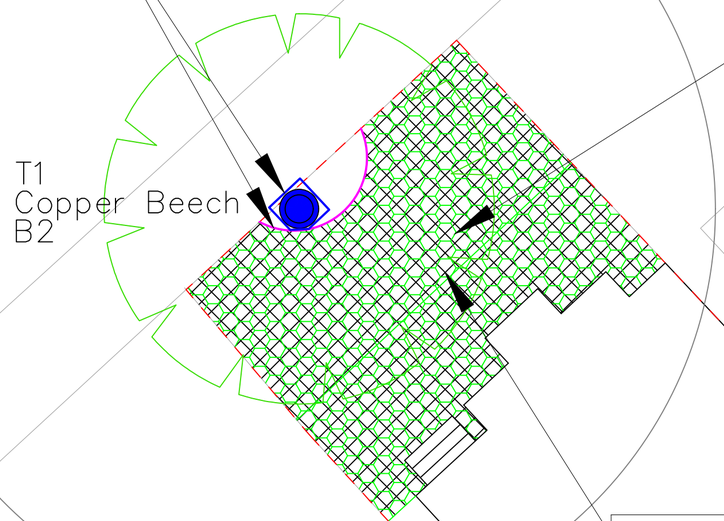
General Precautions

All trees which are being retained onsite will be protected by protective fencing and/or ground protection as detailed in the following sections. Protective fencing will be erected before any materials or machinery is brought onto the site and before any demolition, development or stripping of soil commences. Once erected fencing will be regarded as sacrosanct and will not be removed or altered without prior recommendation by the project arboriculturist and approval of the Local Planning Authority.

Care will be taken to avoid damage in the following ways:

- Oil, bitumen, cement or other material likely to be injurious to a tree will not be stored or mixed within 10m of any trunk unless contained within a bunded structure.
- Concrete mixing will not be carried out within 10m of a tree unless undertaken within a bunded container. Any spillage shall be immediately reported to the project arboriculturist who will determine what mitigation is required.
- Fires will not be lit nearer than 5m to the limit of the crown spread, will be down-wind of the tree and will be prevented from becoming so large as to affect the tree.
- Notice boards, telephone cables or other services will not be attached to any part of the tree. Trees to be retained will not be used as anchors for equipment used to remove stumps, roots, other trees or for any other purposes.
- Care will be exercised when using cranes or similar equipment near the spread of the canopy of a tree.
- It is essential that allowance be made for the slope of the ground so that damaging materials such as concrete washings, mortar or diesel oil cannot run towards trees.
- Stumps within the RPA will not be dug or pulled out but are to be ground out. Where possible, and with the agreement of all parties involved, standing stumps and debris should be left as a habitat for wildlife if circumstances allow. (British Standards Institute, 2012) (National House Building Council, 2010) (Anon., 1981).

Tree protective fencing to be installed & signed off prior to any onsite works.



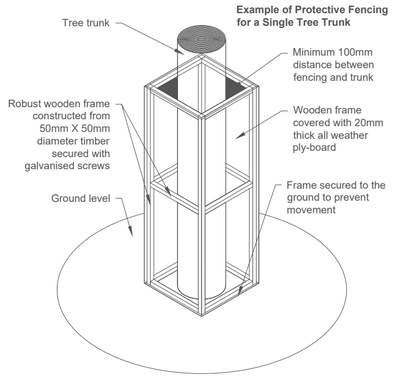
Permanent ground protection to be employed in hard standing construction. 'No-Dig' system designed for above ground installation only, surrounding levels may be affected. Engineer review & approval recommended.

Existing hard standing to be removed as advised to allow installation of permanent ground protection.

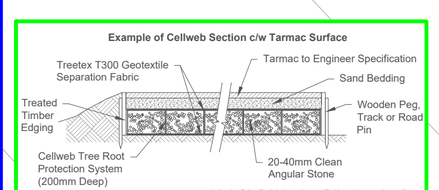
Recommended Specification for Protective Fencing

1. High visibility barrier mesh.
2. Minimum 1.2m high.
3. Secured with road pins or 75mm diameter wooden posts placed at 3m intervals or where there is any change of direction.
4. A single strand of plain wire to be run between posts and secured to mesh with plastic zip ties.

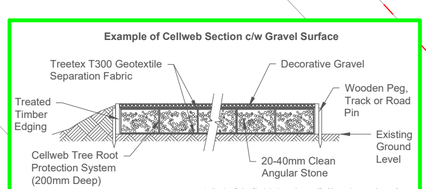
Example of Protective Fencing for a Single Tree Trunk



Example of Cellweb Section c/w Tarmac Surface



Example of Cellweb Section c/w Gravel Surface



Graftin Gardeners

GraftinGardeners Ltd
45 Swanwick Close
London
SW15 4ES

T: 0208 123 7653
M: 07845 816 425
E: info@graftingardeners.co.uk

Client

Site

Drawing Title
Tree Protection Plan

Rev. Details Date

PRINT IN COLOUR ON A2 PAPER

Project No	26 93856	Surveyed by	JB
Drawn by	JB	Checked by	AA
Date	21/05/2026	Scale	1:100@A2
Drawing Number	26 93856 TPP 001	Rev	----

Approximate North

0m 1 2 3 4 5m
Metres

KEY

- CATEGORY 'A' TREE
- CATEGORY 'B' TREE
- CATEGORY 'C' TREE
- CATEGORY 'U' TREE
- THEORETICAL CIRCULAR ROOT PROTECTION AREA(S) DEPICTING APPROXIMATE AREA(S) CONTAINING ROOTS
- RETAINED/PROTECTED TREE(S)
- RETAINED/PROTECTED TREE GROUP(S)
- RECOMMENDED TREE REMOVAL
- BASE PLAN/TOPOGRAPHICAL SURVEY DETAIL
- INDICATIVE SITE BOUNDARY
- EXISTING BUILDING(S)/HARD FEATURE(S) TO BE RETAINED
- AREA OF SUPERVISED HARD STANDING REMOVAL
- PROPOSED HARD STANDING/FEATURE(S)
- TREE PROTECTION FENCING SPECIFICATION 1
- TREE PROTECTION FENCING SPECIFICATION 2
- PERMANENT GROUND PROTECTION

Drawing Notes:

Drawing is based upon LOCATION PLAN EXISTING AND PROPOSED PLANS-3472493

This drawing must be read in conjunction with Arboricultrual Report Ref. 26 93856

AP = Approximate Position

PRINT IN COLOUR ON A2 PAPER
All measurements in millimeters