Arboricultural Planning Report For:

109 Canfield Gardens London NW6 3DY



Client:	Justin De Wan		
Report Date:	27/04/2025		
Survey Date:	23/04/2025		
Report Ref.:	25 2758 AZ Canfield Gardens		
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BS5837 Arboricultural Planning Report



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Document Details

Site address:	109 Canfield Gardens, London, NW6 3DY	
Ref:	25 2758 AZ Canfield Gardens	
Site visit undertaken by:	Ryan Lloyd ATP, PTI, TechArborA	
Date of site survey:	23/04/2025	
Report prepared by:	Ryan Lloyd ATP, PTI, TechArborA	
TPP Ref:	25 2758 TPP 001	
Revision:	-	

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1 Introduction

1.1 Instructions and Terms of Reference

- 1.1.1 Arb Consultancy Ltd was instructed by Justin De Wan to survey the subject tree(s) in order to assess their general condition and to provide an arboricultural report relating to the proposed development at 109 Canfield Gardens, London, NW6 3DY.
- 1.1.2 The purpose of this arboricultural report is to assess the direct and indirect effects of the proposed development on the surveyed tree(s) and to recommend such measures as are necessary to safeguard them in a sustainable manner.
- 1.1.3 An electronic copy of the existing site layout and proposal was provided and this formed the basis of the Tree Protection Plan.
- 1.1.4 As stated above this Report and Survey is intended for planning purposes only and in no way constitutes a safety inspection of any of the trees onsite. We recommend 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 Documents Used

Topographical Survey/Existing Site Layout: OS 1620.dwg

Proposed Site Layout: ground floor_site proposed*.dwg

1.3 Contact Details

Role	Contact Name	Company
Client	Justin De Wan	J2 Ltd
Architect /Agent	Chris Lloyd	AZ Urban Studio
Project Arboriculturist	Keith Macgregor Dip. Arb(RFS), M. Arbor A	Arb Consultancy Ltd
LPA Tree Officer	Tom Little	London Borough of Camden



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			
BNG	Biodiversity Net Gain			

2 The Site

2.1 Site Appraisal

- 2.1.1 109 Canfield Gardens (the 'site') is a residential dwelling historically split into several flats in a built up residential area.
- 2.1.2 The site was found to be mainly vegetated garden, generally level and with no adverse topographical features.
- 2.1.3 The tree stock was deemed to be of average to high amenity/landscape value, with most trees appearing in average health and vigour at the time of the assessment.
- 2.1.4 It is not always possible to fully assess the trees, e.g.; where access is restricted. For further details please see the Appendix 4 Tree Schedule.



2.1.5 An aerial photograph of the site is included below:



Aerial image of site with indicative red line boundary (© Google Maps 2025)

2.2 Soils

- 2.2.1 Reference to the BGS Geology Viewer (BETA) indicates that the underlying geology of the site forms part of the London Clay Formation.
- 2.2.2 The presence of a clay element within the soil is significant in terms of both tree protection and foundation design.
- 2.2.3 Clay soils are susceptible to significant compaction when wet, which can result in root asphyxiation leading to tree death, often over a period of years after the soil damage has occurred.



- 2.2.4 On this basis it is essential that all recommended tree protection measures are implemented in full and are not relaxed at any point throughout the course of the development.
- 2.2.5 Clay soils can experience substantial volume changes when vegetation extracts moisture from the ground. 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.

3 The Trees

3.1 Categorisation, Assessment and Summary

3.1.1 A schedule of the surveyed trees is included within Appendix 4 of this report. The trees have been categorised in accordance with BS 5837 and a summary is provided in Table 1 below:

Category	Trees Numbers
В	T4, T6 & G12
С	T1, T2, T3, T5, T7, T8, T9, T10, T11

Table 1: Summary of Tree Categories

3.2 Protection Status

- 3.2.1 Tree Preservation Orders and Conservation Areas (Town and Country Planning Act 1990)
- 3.2.2 An online search was inconclusive as to whether any of the surveyed trees are subject to a TPO, as the London Borough of Camden do not offer an online search facility. However, the site is located within a CA.
- 3.2.3 Further to the above, it must be stated that searches undertaken by Arb Consultancy Ltd with specific regard to the statutory protection status of trees are preliminary in nature and collated with information obtained from the respective LPA website. Such information is only a guide as LPA websites and the information provided within them are subject to continual change.
- 3.2.4 It is therefore strongly advised that information pertaining to the statutory protection status of a tree or trees, on and/or adjacent to development sites be fully investigated by contacting the respective LPA directly. Should a TPO or CA status be confirmed then full details should be obtained in writing from the respective LPA.



4 The Proposal

4.1.1 The proposal relates to the demolition of existing conservatory and terrace and construction of a rear extension and outdoor seating area covering approximately the same footprint as existing. Other works include internal reconfiguration and raising the height of the roofline, neither of these have the potential to impact on existing trees.



5 Arboricultural Impact Assessment

5.1 Arboricultural Implications

5.1.1 A summary list of the arboricultural impacts associated with this development are provided below and intended to be read in conjunction with the attached combined Arboricultural Implications Assessment and Tree Protection Plan ref: 25 2758 TPP 001

5.2 Recommended Tree Works

5.2.1 A schedule of tree works is provided below:

Tree No.	Proposed/Recommended Works	Reason for Works
Т8	Remove	To facilitate demolition and construction of the conservatory/proposed extension and to prevent future conflict with the building in the future.

Table 2: Recommended Tree Works

5.3 Mitigation / Biodiversity Net Gain

- 5.3.1 The proposed development does not require the removal of any significant trees. Therefore, mitigation in the form of replanting is not required.
- 5.3.2 If a biodiversity net gain is required to be demonstrated, then this should be calculated within, and specified as, part of the landscape plan and/or LEMP.
- 5.3.3 Tree numbered T8 requires removal.

5.4 Tree Protection Measures

- 5.4.1 The principle of permitting temporary construction access within the RPA is 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.
- 5.4.2 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 13 of this report. These issues include:

Arboricultural Monitoring and Supervision

General Precautions

Tree Surgery

Tree Protection Fencing

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Demolition of Structures

New Hard Surfacing

Replacement Hard Surfacing

New Underground Services

Soft Landscaping

6 Conclusion

- 6.1.1 The proposals require the removal of a single Category C tree, which is of low quality and is likely to have required removal in the near future regardless of the current proposals due to the proximity to adjacent infrastructure and incremental stem growth.
- 6.1.2 Having considered the arboricultural implications associated with this site, I believe the proposal to be arboriculturally sound.
- 6.1.3 Subject to full compliance with this report and the TPP, I believe that all retained trees can be adequately protected and will be safeguarded in a sustainable manner.

7 Bibliography

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.



8 Arboricultural Method Statement

The Arboricultural Implications Assessment highlights the approaches required to mitigate issues raised by the integration of existing trees into the proposed design. The Arboricultural Method Statement defines the site-specific specifications for tree protection and other details required to implement the recommendations in a realistic manner.

This Arboricultural Method Statement must be read in conjunction with the approved Tree Protection Plan Ref: 25 2758 TPP 001

8.1 Arboricultural Monitoring and Supervision

- 8.1.1 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.
- 8.1.2 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 Camden. 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.
- 8.1.3 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.
- 8.1.4 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.



- 8.1.5 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 Camden 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.
- 8.1.6 A recommended programme of works detailing the necessary arboricultural inputs is included within Table below:

8.2 Table of Arboricultural Supervision

	Prior to any Demolition, Site Preparation or Construction Works Onsite				
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.	Completion of approved tree works.				
3.	Installation of all protective fencing and ground protection measures.				
	After any Demolition and During any Site Preparation or Construction Works Onsite				
Stage	Action/Operation				
4.	Demolition of existing structures and hard standing within RPAs of T10, T11 & G12.				
5.	Replace hard surfacing within the RPAs of T10.				
6.	Soft landscape within the RPAs of T10, T11 & G12.				
	Once All Construction Activities are Complete				
Stage	Action/Operation				
7.	Removal of all protective fencing and ground protection measures.				
8.	Soft and hard landscaping works.				
9.	Sign off by project arboriculturist.				

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

8.3 Importance of Arranging the Pre-commencement Site Meeting

8.3.1 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 precommencement site meeting with all relevant parties.

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8.3.2 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



8.4 General Precautions

- 8.4.1 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.
- 8.4.2 Care will be taken to avoid damage in the following ways:
- 8.4.3 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.
- 8.4.4 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.
- 8.4.5 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.
- 8.4.6 Care will be exercised when using cranes or similar equipment near the spread of the canopy of a tree.
- 8.4.7 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.
- 8.4.8 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).

8.5 Tree Surgery

- 8.5.1 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 Camden.
- 8.5.2 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 Camden.
- 8.5.3 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.
- 8.5.4 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).
- 8.5.5 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.

8.6 Tree Protection Fencing

- 8.6.1 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. 25 2758 TPP 001. Unless agreed in writing by the project arboriculturist and/or London Borough of Camden the following shall apply:
- 8.6.2 Protective fencing (shown as a magenta line on the TPP) will be erected prior to any works onsite including demolition, groundwork or the importation of plant and materials.
- 8.6.3 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 Camden.
- 8.6.4 Secondary protection 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. This fencing will only be removed immediately prior to removal of existing hard surfacing, which will largely be replaced by turf.
- 8.6.5 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 Camden.



- 8.6.6 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.
- 8.6.7 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.
- 8.6.8 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.

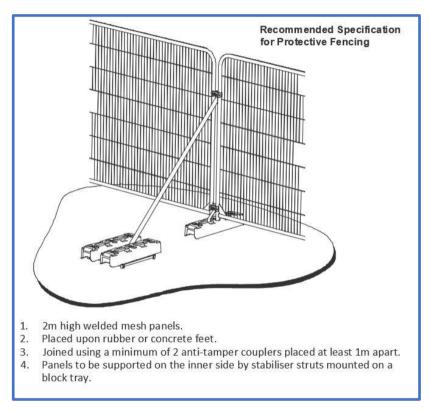


Figure 1: Example of protective fencing (BS 5837:2012)





Figure 2: Example signage to be securely attached to fencing

8.7 Demolition of Structures

- 8.7.1 Access facilitation pruning as specified in Table 2: Recommended Tree Works of this report, will be carried out prior to the commencement of any demolition works.
- 8.7.2 Demolition works associated with the removal of the T8 will be undertaken with due regard to nearby trees. No demolition works shall commence until the tree protection measures detailed in TPP ref. 25 2758 TPP 001 have been erected and approved by the project arboriculturist.
- 8.7.3 All plant and vehicles engaged in demolition works should either operate outside the RPA or should run on an existing or temporary surface designed to protect the structure of the underlying soil.
- 8.7.4 The conservatory shall be demolished inwards into the footprint of the existing building (often referred to as "top down, pull back").
- 8.7.5 Floor slabs shall be either broken up using hand tools and removed or shall be lifted mechanically and deposited outside the RPA for further processing and disposal.



8.7.6 In some instances, it may be appropriate to leave part of the foundation in situ and landscape on top, or complete removal may also be appropriate. The methodology employed should be determined on site during the supervised foundation removal.

8.8 Removal of Hard Surfacing

- 8.8.1 Those areas of existing hard surfacing black cross hatching on TPP ref. 25 2758 TPP 001 will be removed.
- 8.8.2 Removal will only occur once all other demolition and construction activities are complete. The protective fencing will then be moved to its secondary location shown on TPP ref. 25 2758 TPP 001.
- 8.8.3 Removal shall be undertaken in strict accordance with the following methodology:
- 8.8.4 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.
- 8.8.5 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.
- 8.8.6 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.
- 8.8.7 No reduction in levels of the underlying soil surface will occur.
- 8.8.8 At no point is any heavy machinery permitted within the RPA, once the underlying soil surface is revealed.
- 8.8.9 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.

8.9 Replacement Hard Surfacing

- 8.9.1 Existing hard surfacing within the RPAs of T10, T11 & G12 on TPP ref. 25 2758 TPP 001 is to be replaced. This will be undertaken in accordance with the following methodology:
- 8.9.2 The RPAs of all nearby trees are to be marked out using water-soluble marker paint.
- 8.9.3 All staff involved will be made aware of this working methodology.

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- 8.9.4 The existing hard surfacing will be removed using hand tools taking care not to disturb the underlying sub-base. The sub-base may be reinforced if necessary, providing that this can be accomplished without disturbance or compaction of the underlying soil.
- 8.9.5 A new wearing course will be laid directly onto the retained sub-base. This may consist of bonded gravel, tarmac, block pavers or similar as advised by a builder or professional paving expert.
- 8.9.6 Any new edging will be installed without the need for excavation. Examples of suitable edging include wooden boards secured with wooden pegs, sleepers secured with steel pins or drilled concrete kerb stones again secured with pins.

8.10 New Underground Services

- 8.10.1 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 Camden.
- 8.10.2 Wherever possible services will be grouped together, will utilise common ducts and have all inspection chambers located outside of the RPA.
- 8.10.3 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.
- 8.10.4 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.
- 8.10.5 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.
- 8.10.6 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.



BRITISH STANDARD BS 5837:2012

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.

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 3: BS5837:2012 section 7.7

B) Maximum subterranean length.

⁹ 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.

⁶⁾ Substantial inverse relationship between accuracy and distance.

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



8.11 Soft Landscaping - General Precautions within RPA's

- 8.11.1 After development soft landscaping operations have the capacity to cause damage to retained trees if not carried out correctly. In order to avoid unacceptable damage to trees it is essential that all works within the RPA of trees T10, T11 & G12 is planned and executed in accordance with the following guidelines:
- 8.11.2 Ground preparation will be carried out sensitively to ensure root damage is mitigated as much as is practicable and at no time will heavy machinery or a rotavator be used within any RPA.
- 8.11.3 There shall be no excavation or lowering of soil levels within any RPA.
- 8.11.4 Depressions may be levelled through infilling with a maximum depth of 150mm of loosely compressed good quality topsoil or other porous material.
- 8.11.5 Herbicide applications should be restricted to the use of translocated products such as glyphosate. These will be applied according to the manufacturer's instructions and drift onto non-target plants avoided.
- 8.11.6 Existing vegetation will be removed by hand. Turf will be removed using a mechanical turf stripper where necessary.
- 8.11.7 Compacted areas of soil will be broken up by inserting a garden fork into the soil to a depth of 300mm and gently moving it back and forth. This will be carried out only when the soil is dry and friable and in a manner which avoids damage to any underlying tree roots.
- 8.11.8 No works will be carried out within any RPAs if the soil moisture is of a level likely to allow compaction.

8.12 Soft Landscaping - General Specifications

- 8.12.1 All native species shall be certified as being of local provenance (Forestry Commission Practice Note 8).
- 8.12.2 Unless otherwise stated all planting stock shall comply with the Horticultural Trade Association National Plant Specification where applicable.
- 8.12.3 All plants will be supplied, handled, planted and maintained in accordance with CPSE 'Code for Handling and Establishing Landscape Plants' unless stated otherwise.
- 8.12.4 All existing trees and hedges shall be protected in accordance with BS 5837 for the duration of the works.



Appendices



Appendix 1 Site Photographs



Photograph 1: T9, T1 & T3



Photograph 2: T2





Photograph 3: T4, T5 & T6



Photograph 4: T7





Photograph 5: T8



Photograph 6: T10, T11 & G12



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 Trees 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

Tree	s 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.
Tree	s to be considered for retention
Α	Trees of high quality with an estimated remaining life expectancy of at least 40 years. Identified by light green colouration on the TCP/TPP.
В	Trees of moderate quality with an estimated remaining life expectancy of at least 20 years. Identified by mid blue colouration on the TCP/TPP.
С	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: M	ainly 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: M	ainly 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: M	ainly cultural values, including conservation
А3	Trees, groups, or woods of significant conservation, historical, commemorative, or other value (e.g., veteran trees or wood-pasture).
В3	Trees with material conservation or other cultural value.
СЗ	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).
	MA Middle aged (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, taking into account 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: 109 Canfield Gardens Surveyor: Ryan Lloyd ATP, PTI, TechArborA Date of Survey: 23/04/2025

TREE NO	TYPE	SPECIES	НЕІСНТ	DIAMETER AT 1.5m or arf (mm)	ESTIMATED?	NO. OF STEMS	N	E	S	w	LOWEST CROWN HEIGHT	LCH ORIENTATION	LOWEST BRANCH HEIGHT	LOWEST BRANCH ORIENTATION	AGE CLASS	PHYSIOLOGICAL CONDITION	STRUCTURAL CONDITION	PRELIMINARY MANAGEMENT RECOMMENDATIONS	ESTIMATED REMAINING CONTRIBUTION	CATEGORY	NOTES
1	Т	Acer palmatum (Japanese Maple)	6	150,90	Z	2	2	1	1.5	2.5	1	Z	1	N	Early Mature	Good	Good	No works	20+	C2	Multi-stemmed from 0.5m. Historically topped at 5.5.m, with good levels of regrowth from cut points. Crown suppressed to east by adjacent tree.
2	Т	Cornus mas (Cornelian Cherry)	5	190	N	1	2.5	1.5	1	2.5	1	E	1	E	Early Mature	Good	Good	No works	20+	C2	Two large unoccluded wounds on southern aspect of stem at 1m and 1.5m. Historically topped at 3.5m, with strong regrowth from cut points.
3	Т	Pyrus (Pear)	8.5	220,200,200	Y	3	2	3.5	5	1.5	2.5	W	2.5	w	Mature	Good	Good	No works	20+	C2	Situated in adjacent garden, with no access to tree or visibility below 2.5m; measurements estimated. High levels of epicormic growth throughout crown, with tree having undergone historic pruning.



TREE NO	ТҮРЕ	SPECIES	неіднт	DIAMETER AT 1.5m or arf (mm)	ESTIMATED?	NO. OF STEMS	N	E	S	w	LOWEST CROWN HEIGHT	LCH ORIENTATION	LOWEST BRANCH HEIGHT	LOWEST BRANCH ORIENTATION	AGE CLASS	PHYSIOLOGICAL CONDITION	STRUCTURAL CONDITION	PRELIMINARY MANAGEMENT RECOMMENDATIONS	ESTIMATED REMAINING CONTRIBUTION	CATEGORY	NOTES
4	Т	Thuja plicata (Western Red Cedar)	13	300	Υ	1	2.5	2.5	2.5	2.5	2.5	E	2.5	E	Early Mature	Good	Good	No works	20+	B2	Situated in adjacent garden, with no access or visibility below 2.5m; measurements estimated. No topo information, so location approximated.
5	Т	Acer pseudoplatanus (Sycamore)	15	340	Υ	1	5.5	2.5	6	5.5	4	N	4	N	Early Mature	Good	Good	No works	20+	C2	Situated in adjacent garden, with no access or visibility below 2.5m; measurements estimated. No topo information so location approximated.
6	Т	Acer pseudoplatanus (Sycamore)	16	580	Υ	1	5.5	6	5.5	6	8	S	8	S	Mature	Good	Good	Remove/ sever ivy	40+	B2	Situated in adjacent garden with no access, 300mm from boundary wall; DBH estimated. Significant ivy cover from base through to mid to upper crown, heavily restricting visibility of stem and primary framework.
7	Т	Trachycarpus fortunei (Chusan Palm)	6	250	Υ	1	1.5	1.5	1.5	1.5	2.5	N	2.5	N	Early Mature	Good	Good	No works	20+	C2	Situated in adjacent garden, with no access of visibility below 2.5m; measurements estimated. No major defects noted.



TREE NO	TYPE	SPECIES	НЕІСНТ	DIAMETER AT 1.5m or arf (mm)	ESTIMATED?	NO. OF STEMS	N	E	S	w	LOWEST CROWN HEIGHT	LCH ORIENTATION	LOWEST BRANCH HEIGHT	LOWEST BRANCH ORIENTATION	AGE CLASS	PHYSIOLOGICAL CONDITION	STRUCTURAL CONDITION	PRELIMINARY MANAGEMENT RECOMMENDATIONS	ESTIMATED REMAINING CONTRIBUTION	CATEGORY	NOTES
8	Т	Laurus nobilis (Bay)	4	120,100, 90,90	N	4	1.5	0.5	2.5	0.5	1	S	1	S	Early Mature	Fair	Fair	Tree to be removed to facilitate development	10+	C2	Multi-stemmed from base. 200mm from retaining wall for raised terrace area and in contact with conservatory. Pruned in pleached form. Unlikely to be a suitable long term location due to incremental stem growth.
9	Т	Cupressus macrocarpa 'Goldcrest' (Monterey Cypress ' Goldcrest')	3.5	100	N	1	1.5	1.5	1.5	1.5	0.5	N	0.5	N	Young	Fair	Fair	No works	10+	C2	Regularly pruned as a shrub at 3.5m.
10	Т	Tilia X europaea (Common Lime)	6	290	N	1	2	2	2	1	2	N	2	N	Early Mature	Good	Good	No works	40+	C2	150mm from front boundary wall. Pollarded at 4m, with strong regrowth in crown and epicormic growth on main stem. Provides good visual screen from Canfield Gardens. Likely to conflict with boundary wall in the longer term due to incremental stem growth.

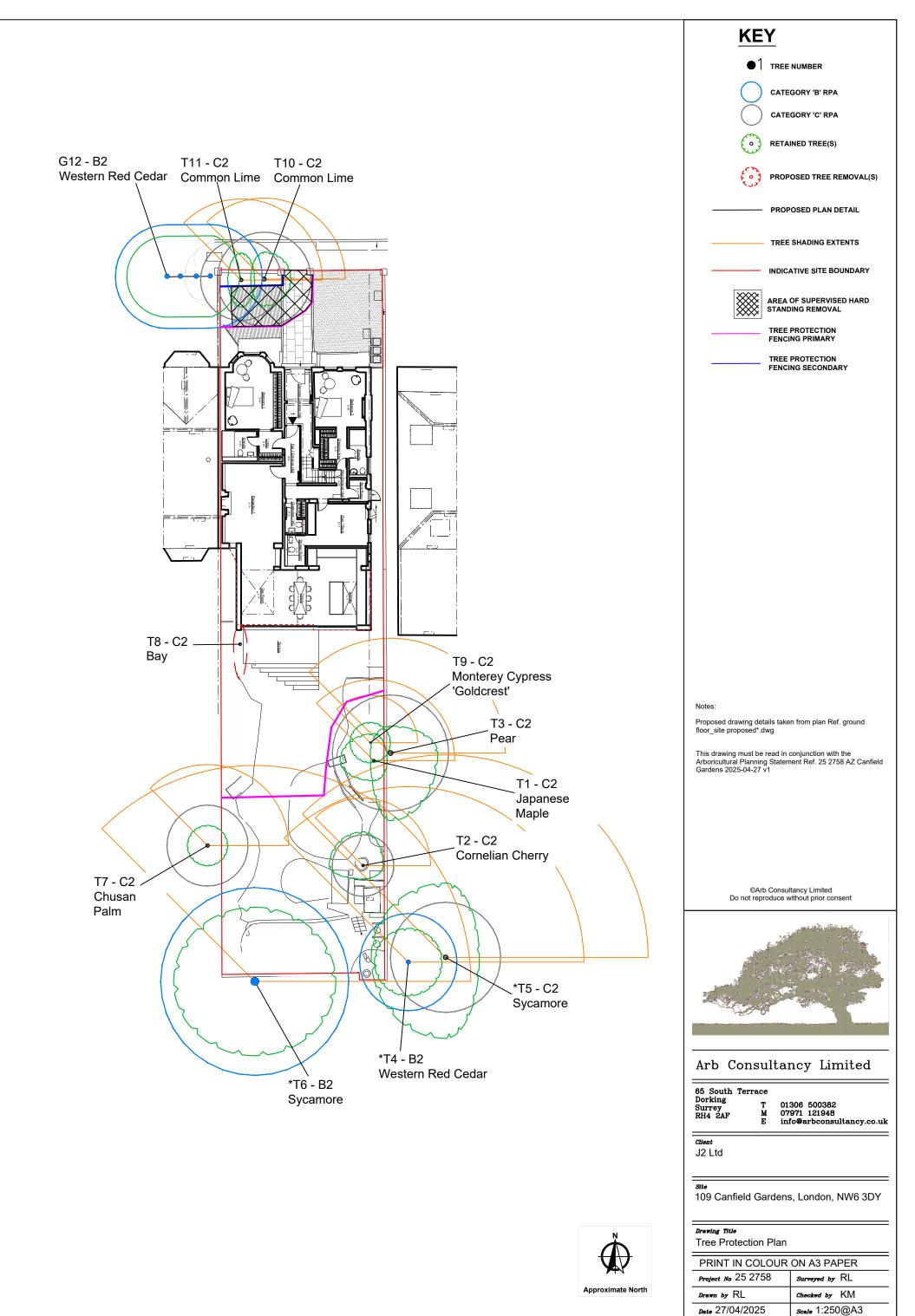


TREE NO	ТУРЕ	SPECIES	неіднт	DIAMETER AT 1.5m or arf (mm)	ESTIMATED?	NO. OF STEMS	N	E	S	w	LOWEST CROWN HEIGHT	LCH ORIENTATION	LOWEST BRANCH HEIGHT	LOWEST BRANCH ORIENTATION	AGE CLASS	PHYSIOLOGICAL CONDITION	STRUCTURAL CONDITION	PRELIMINARY MANAGEMENT RECOMMENDATIONS	ESTIMATED REMAINING CONTRIBUTION	CATEGORY	NOTES
11	Т	Tilia X europaea (Common Lime)	6	250	N	1	2	1	2	1	2	N	2	N	Early Mature	Good	Good	No works	40+	C2	200mm from front boundary wall. Pollarded at 4m, with strong regrowth in crown and epicormic growth on main stem. Provides good visual screen from Canfield Gardens. Likely to conflict with boundary wall in the longer term due to incremental stem growth.
12	G	Thuja plicata (Western Red Cedar)	12	320	Y	1	3	3	3	3	1	S	1	S	Early Mature	Good	Good	No works	20+	B2	Situated in adjacent garden, 100mm from front boundary wall. Four trees with a single closed crown. Provides good screening from Canfield Gardens. Likely to conflict with walls in the near future due to incremental stem growth. Only the location of easternmost tree included on topo, with locations of other trees approximated.

BS5837 Arboricultural Planning Report



Appendix 5 Tree Protection Plan



Drawing Number 25 2758 TPP 001 Rev -