



ARBORICULTURAL IMPACT ASSESSMENT

SITE LOCATION

St Mary's University
Waldegrave Rd,
Twickenham
TW1 4SX

ISSUE DATE

29th October 2024

SEED REF

1874-AIA-V1-A

CLIENT

Ridge and Partners LLP

ARBORICULTURAL CONSULTANCY

SEED-ARB.CO.UK

DOCUMENT CONTROL

Date	Author	Checked	Revision
29.10.2024	Sam Hobson <i>BSc (Hons), MICFor (Chartered Arboriculturist), MArborA</i>	SS	Rev A

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LIMITATIONS

The contents of this report are valid at the time of writing. SEED Arboriculture Ltd shall not be liable for any use of this report other than for the purposes for which it was produced. Owing to the dynamic nature of trees, this report is valid for a period of 12 months.

Any alteration to the application site or development proposals could change the current circumstances and may invalidate this report and any recommendations made.

The tree survey was a preliminary assessment from ground level and observations were made solely from visual inspection for the purposes of an assessment relevant to planning and development. This report is not a tree risk assessment and should not be construed as such. While every attempt has been made to provide a realistic and accurate assessment of the trees' condition at the time of inspection, it may have not been appropriate, or possible, to view all parts or all sides of every tree to fulfil the assessment criteria of a tree risk assessment.

This is not an ecological report. The Wildlife and Countryside Act 1981 (as amended) and the Conservation of Species and Habitat Regulations 2017 make it an offence to disturb nesting birds or recklessly endanger a bat or its roost. Where the presence of birds or bats is suspected, a qualified ecologist or Natural England should be contacted for advice.



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Plans

Tree Constraints Plan

Ref: 1874-TCP-001-A Revision: A

Arboricultural Impact Plan

Ref: 1874-AIP-002-A Revision: A

Tree Protection Plan

Ref: 1874-TPP-003-A Revision: A



1. Introduction

Background & Instruction

- 1.1.1. This report has been prepared by Sam Hobson MICFor (Chartered Arboriculturist), BSc (Hons). MArborA, Director at SEED Arboriculture Ltd. Sam is a Professional member of the Institute of Chartered Foresters (Chartered Arboriculturist) and a Professional Member of the Arboricultural Association (AA) and is therefore required to uphold the professional and ethical standards within the ICF and AA Codes of Conduct. Sam holds the LANTRA certificate in Professional Tree Inspection.
- 1.1.2. This Arboricultural Impact Assessment (AIA) has been prepared by SEED Arboriculture Ltd on behalf of Ridge and Partners LLP in support of a planning application for *“Demolition of existing R Block and the erection of a replacement teaching block (Use Class F1) comprising 1419 sqm of floorspace, to provide facilities appropriate for the operation of a new School of Medicine at the Strawberry Hill Campus, with associated landscaping.”* at St Mary’s University, Waldegrave Road, Twickenham, TW1 4SX (hereafter referred to as the ‘site’).
- 1.1.3. The planning application shall be submitted to the London Borough of Richmond upon Thames (the ‘Council’).

Purpose

- 1.1.4. The tree survey and AIA has been carried out in accordance with the recommendations outlined within British Standard BS5837:2012 ‘Trees in relation to design, demolition and construction – Recommendations’.
- 1.1.5. This AIA report:
- Provides the baseline survey data of existing trees, including a Tree Schedule and Tree Constraints Plan (TCP).
 - Evaluates the direct and indirect impacts of the Proposed Development upon the existing trees.
 - Where necessary, provides details of mitigation and tree protection.

Site Description

- 1.1.6. The application site is located on the campus of St Mary’s University, a public university in Strawberry Hill, Southwest London. The site includes car parking spaces, small sections of managed grass, and existing University buildings. Access to the site is provided by the internal campus road network, with the site entrance located the site’s eastern boundary. Mature trees are positioned on grassy areas, typically adjacent to the buildings and within paved surfaces.
- 1.1.7. The indicative application boundary is illustrated on the Site Location Plan (**Appendix 1**).



Reference Documents

1.1.8. **Table 1** provides a summary of documents which provide the basis for this tree survey and AIA.

Table 1 - Reference Documents

Document	Reference Number	Prepared By	Date
Topographical Survey	24730_T	Greenhatch Group	December 2016
Proposed Landscaping Plan	5025779-RDG-XX-00-D-A-010210	Ridge and Partners LLP	October 2023

2. Planning Policy and Legislation

National Planning Policy Framework (NPPF)

2.1.1. The following paragraphs within the NPPF set out policies which guide the planning policy and decision-making process of Local Planning Authorities in relation to trees. These are:

2.1.2. **Paragraph 136**

Trees make an important contribution to the character and quality of urban environments and can also help mitigate and adapt to climate change. Planning policies and decisions should ensure that new streets are tree-lined, that opportunities are taken to incorporate trees elsewhere in developments (such as parks and community orchards), that appropriate measures are in place to secure the long-term maintenance of newly-planted trees, and that existing trees are retained wherever possible. Applicants and local planning authorities should work with highways officers and tree officers to ensure that the right trees are planted in the right places, and solutions are found that are compatible with highways standards and the needs of different users.

2.1.3. **Paragraph 180 (b & d)**

Planning policies and decisions should contribute to and enhance the natural and local environment by:

Recognising the intrinsic character and beauty of the countryside, and the wider benefits from natural capital and ecosystem services – including the economic and other benefits of the best and most versatile agricultural land, and of trees and woodland;

minimising impacts on and providing net gains for biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures;

2.1.4. **Paragraph 186**

When determining planning applications, Local Planning Authority's (LPA) should apply the following principles:

If significant harm to biodiversity resulting from a development cannot be avoided (through locating on an alternate site with less harmful impacts), adequately mitigated, or, as a last resort, compensated for, then planning permission should be refused;

development on land within or outside a Site of Special Scientific Interest, and which is likely to have an adverse effect on it (either individually or in combination with other developments), should not normally be permitted. The only exception is where the benefits of the development in the location proposed clearly outweigh both its likely impact on the features of the site that make it of special scientific interest, and any broader impacts on the national network of Sites of Special Scientific Interest;

Development resulting in the loss or deterioration of irreplaceable habitats (such as ancient woodland and ancient or veteran trees) should be refused unless there are wholly exceptional reasons and a suitable compensation strategy exists.

Development whose primary objective is to conserve or enhance biodiversity should be supported; while opportunities to improve biodiversity in and around developments should be integrated as part of their design, especially where this can secure measurable net gains for biodiversity or enhance public access to nature where this is appropriate.



Local Planning Policy

2.1.5. This AIA has considered the relevant Local Planning Policy, as detailed below:

- **London Borough of Richmond upon Thames Local Plan (2018)**

Policy LP 15: Biodiversity

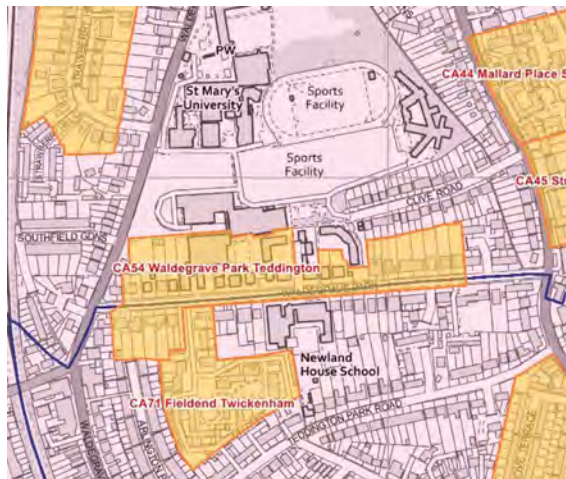
Policy LP 16: Trees, Woodlands and Landscape

Statutory Tree Protection & Designations

2.1.6. A number of the trees detailed within this AIA are protected by a Tree Preservation Order (TPO), namely G4 of London Borough of Richmond upon Thames TPO No. 497.

2.1.7. The site is partially within the CA54 Waldegrave Park, Teddington Conservation Area with some trees positioned within the designation.

Figure 1: Orange hatch shows Conservation Area designation



2.1.8. No Ancient Woodland¹ designations are present upon or adjacent to the site.

Felling Licence

2.1.9. Tree felling is restricted under the Forestry Act 1967. Under this act, there is an exemption from the need for a felling licence for “Felling trees immediately required for the purpose of carrying out development authorised by planning permission (granted under the Town and Country Planning Act 1990)”

2.1.10. If full planning permission is granted, then any trees which require felling to implement the approved plans are exempt from this statutory protection. Outline planning permission does not provide an exemption to the regulations that control tree felling in the Forestry Act 1967.

2.1.11. **All statutory controls must be reviewed in detail ahead of undertaking any tree works relevant to this arboricultural report.**

¹ Ancient woods are areas of woodland that have persisted since 1600 in England and Wales, and 1750 in Scotland. The Magic Maps website (<https://magic.defra.gov.uk/MagicMap.aspx>) has been used to search for ancient woodland on or adjacent to a site.

3. Baseline Tree Survey

- 3.1.1. The tree assessment was undertaken by Sebastian Onslow *FdSc Arb. MArborA. MICFor (Chartered Arboriculturist)* on 27th September 2024.
- 3.1.2. The tree survey was undertaken in accordance with the methodology outlined within BS5837:2012.
- 3.1.3. The locations of the trees surveyed are illustrated on the Tree Constraints Plan (TCP) (**Appendix 3**) together with details of the constraints to new development in accordance with BS5837, including Tree Retention Category, Root Protection Areas (RPAs) and Tree Canopy Spreads.
- 3.1.4. Details for each of the trees surveyed are provided in the Tree Schedule (**Appendix 2**), including; reference numbers, species, tree dimensions, life stage, physiological and structural condition, and retention category.

Tree Survey Summary

Trees

- 3.1.5. The survey recorded 14no. individual trees including 1no. A category, 5no. B category and 8no. C category retention value.
- 3.1.6. T1 (Pedunculate oak) is a category A tree, standing out as a prominent, high-quality specimen on the site and standing in close proximity to the existing building. The other trees present are an even mix of moderate to low arboricultural quality. Two trees, T4 (common lime) and T13 (false acacia) have been recommended for a detailed decay assessment due to the presence of basal cavities and signs of decay.

Figure 1: View of T1, looking southeast



Figure 3 - View of T1 looking south-east



Figure 4 - View of T9 & T10. Trees positioned between buildings



4. Impact Assessment

4.1.1. The impact of the Proposed Development upon existing trees is illustrated on the Arboricultural Impact Plan (**Appendix 3**).

4.1.2. **No tree removal will be necessary to implement the proposed development.**

Root Protection Areas (RPAs)

4.1.3. The RPA is an area equivalent to a circle with a radius 12 times the diameter of the trees measured at 1.5 metres for single stemmed trees. For trees with more than one stem, one of two calculation methods should be used. In all cases, the stem diameter(s) should be measured in accordance with Annex C, and the RPA should be guided from Annex D of BS5837:2012.

4.1.4. The RPA is an area in which no ground works should be undertaken without due care in relation to the retained tree(s), to avoid soil compaction, changes in levels or soil contamination which could alter the trees condition and/or stability. The shape of the RPA and its exact location will depend upon arboricultural considerations and ground conditions.

4.1.5. The RPA for the trees has been calculated as prescribed by BS5837:2012 and are shown in relation to the Proposed Development on the Arboricultural Impact Plan at **Appendix 3**.

RPA Adjustments

4.1.6. As per the recommendations and in accordance with Paragraph 4.6.3 of BS5837:2012, the RPA of several trees has been updated to reflect the presence of the existing building and obstruction to root development caused by foundations and structures.

Working within the RPAs – Existing Surface Alterations

4.1.7. There will be a requirement to undertake works to surfacing within the RPA of T1 (pedunculate oak) and T2 (common lime). These works will include:

- Removal and replacement of existing hard-surfaces.
- Removal of existing hard-surfaces and replacement with soft landscaping.

4.1.8. Both trees currently have extensive hard-surfacing within the RPAs, including paving, tarmac access road and parking.

4.1.9. The surface works proposed within the RPAs will not be of a detrimental impact to the health and vitality of these retained trees, provided the recommended mitigation measures are adhered to.

4.1.10. The removal of existing surfacing within the RPAs will be undertaken using hand-tools / pedestrian operated equipment under arboricultural supervision. This will ensure that foreseeable damage does not occur during this phase of the development.

4.1.11. Tree Protection Fencing should be in place during the removal of the existing surfacing and moved accordingly to protect any exposed ground as the removal progresses.

4.1.12. Where new surfacing is to be laid, the existing sub-base should be retained and augmented as required.

New RPA incursions

- 4.1.13. In order to create a new escape ramp to the rear of the building, there will be a new incursion within the RPA of one tree, as detailed below:
- T9 (crab apple) – 4m² new incursion within 34m² RPA = 11% new incursion.
- 4.1.14. The proposed RPA incursion falls within the tolerance limits as detailed within Section 7.4.2 of BS5837:2012 which states that new permanent hard surfacing should not exceed 20% of any existing unsurfaced ground within the RPA.
- 4.1.15. The removal of the existing hard surfacing / surface vegetation within the RPA must be undertaken using hand-tools only under the direct supervision/guidance of the Project Arboriculturist.

Utilities and Services

- 4.1.16. No service details have been provided at this early stage. However, traditional trench excavated utilities should principally be routed outside of tree RPAs. Where this is not possible, it is preferable to keep apparatus together in common ducts or apply trenchless insertion methods within RPAs. In all cases, working shall be drawn up in conjunction with the project arboriculturist and comply with The National Joint Utilities Group (NJUG) Publication (NJUG 10, Volume 4, 2007).

Tree Canopies & Shade

- 4.1.17. The distribution of tree canopy cover on and within influencing distance of the site is illustrated on the TCP (**Appendix 3**). The Tree Schedule lists the vertical clearance from site ground level to significant tree branching of individual trees. This measurement informs the impacts of accessibility and development beneath tree canopies.
- 4.1.18. If considered appropriate the principal tree shadow constraints can be shown on the TCP and are plotted in accordance with BS5837 using the current height of surveyed trees.
- 4.1.19. Where shading is unavoidable, the potential adverse impact of shadowing should also be reviewed on balance with the positive aspects of retaining a degree of canopy shade. BS5837:2012 (para. 5.3.4, a) NOTE 1) states that “shading can be desirable to reduce glare or excessive solar heating, or to provide comfort during hot weather. The combination of shading, wind speed/turbulence reduction and evapotranspiration effects of trees can be utilised in conjunction with the design of buildings and spaces to provide local microclimatic benefits”.
- 4.1.20. Due to the location of the proposed building, the impact from the tree canopy and shading is not considered to be significant or negative. The proposed building will provide a greater offset from the tree canopies than the current building, therefore it is anticipated that future pruning requirements will be minimised.

Facilitation Tree Pruning

- 4.1.21. To allow adequate clearance for demolition and construction of the proposed building, it is likely that some minor facilitation pruning will be required, as detailed below:
- T1 (pedunculate oak) – Raise lower canopy over building to provide required clearance for construction. Will require removal of minor, small diameter branches only.



- 4.1.22. A final specification for facilitation tree pruning should be determined by the Project Arboriculturist following a pre-commencement site meeting with the appointed contractor.
- 4.1.23. Further requirements for facilitation pruning may be identified during the course of construction and should be addressed by ongoing liaison with the Project Arboriculturist.
- 4.1.24. Any arboricultural works shall be carried out by suitably qualified, insured, and experienced professionals working to BS3998:2010 Tree Works Recommendations. A directory of Arboricultural Association approved tree surgeons can be found at www.trees.org.uk.

Future Growth

- 4.1.25. Damage can occur between trees and adjacent structures where branches encroach onto the fabric of buildings.
- 4.1.26. The future growth of trees is not considered to present an issue to the Proposed Development, as proposals provide a suitable offset between the building and existing trees.
- 4.1.27. Where future interference between tree branches and built structures could occur, this can be addressed by targeted reduction pruning and crown lifting to allow appropriate clearance.

5. Tree Protection

- 5.1.1. An overview of the recommended tree protection measures has been provided within this AIA. A draft Tree Protection Plan (TPP) is provided at **Appendix 3**.
- 5.1.2. Full details of tree protection measures including construction methods, schedule of arboricultural supervision and specific forms of tree protection should be provided within a detailed Arboricultural Method Statement following planning approval.
- 5.1.3. To ensure all tree protection measures are implemented, arboricultural supervision should be undertaken by an appointed Project Arboriculturist (PA). The PA will be a suitably qualified arboriculturist appointed by the client / contractor / other party responsible for implementation of tree protection measures.

Tree Protection Fencing

- 5.1.4. The principal protection for the retained trees is provided by Tree Protection Fencing (TPF) positioned to form a Construction Exclusion Zone (CEZ) around retained trees. No access should be allowed to the other than for operations specified in the approved documents or those agreed with the LPA later.
- 5.1.5. The indicative location of Tree Protection Fencing (TPF) is illustrated on the Draft Tree Protection Plans at **Appendix 3**.
- 5.1.6. The CEZ must be in place prior to the commencement of construction work on site. The TPF must not be moved or relocated without approval from the Project Arboriculturist and, where necessary, approval from the Local Planning Authority.
- 5.1.7. The TPF specification should be fit for the purpose of excluding construction activity and appropriate to the degree and proximity of work taking place around the retained trees.
- 5.1.8. The most common specification as illustrated in BS5837:2012 Figure 3b (**Appendix 4**) comprises welded mesh panels (Heras Fencing) on rubber or concrete feet, the panels should be joined together using a minimum of two anti-tamper couplers, installed so that they can only be removed from within the fence. The distance between fence couplers should be at least 1m and should be uniform throughout the fence. The panels should be supported on the inner side by stabilizer struts, which should normally be attached to a base plate secured with ground pins. Where the fencing is to be erected on retained hard surfacing or it is otherwise unfeasible to use ground pins, e.g. due to the presence of underground services, the stabilizer struts should be mounted on a block tray.
- 5.1.9. Weatherproof signage (rigid plastic or Foamex foamboard) will be attached to the fencing with words such as 'Construction Exclusion Zone – No Access' (signage example at **Appendix 4**).
- 5.1.10. At the end of the project the fence will be removed only after confirmation by the Project Arboriculturist and the Council that this is appropriate.

Tree Trunk Protection

- 5.1.11. Due to the proximity of works to trees T1 and T2 and requirement to work within the RPAs and close to the tree trunks, Tree Trunk Protection has been recommended.

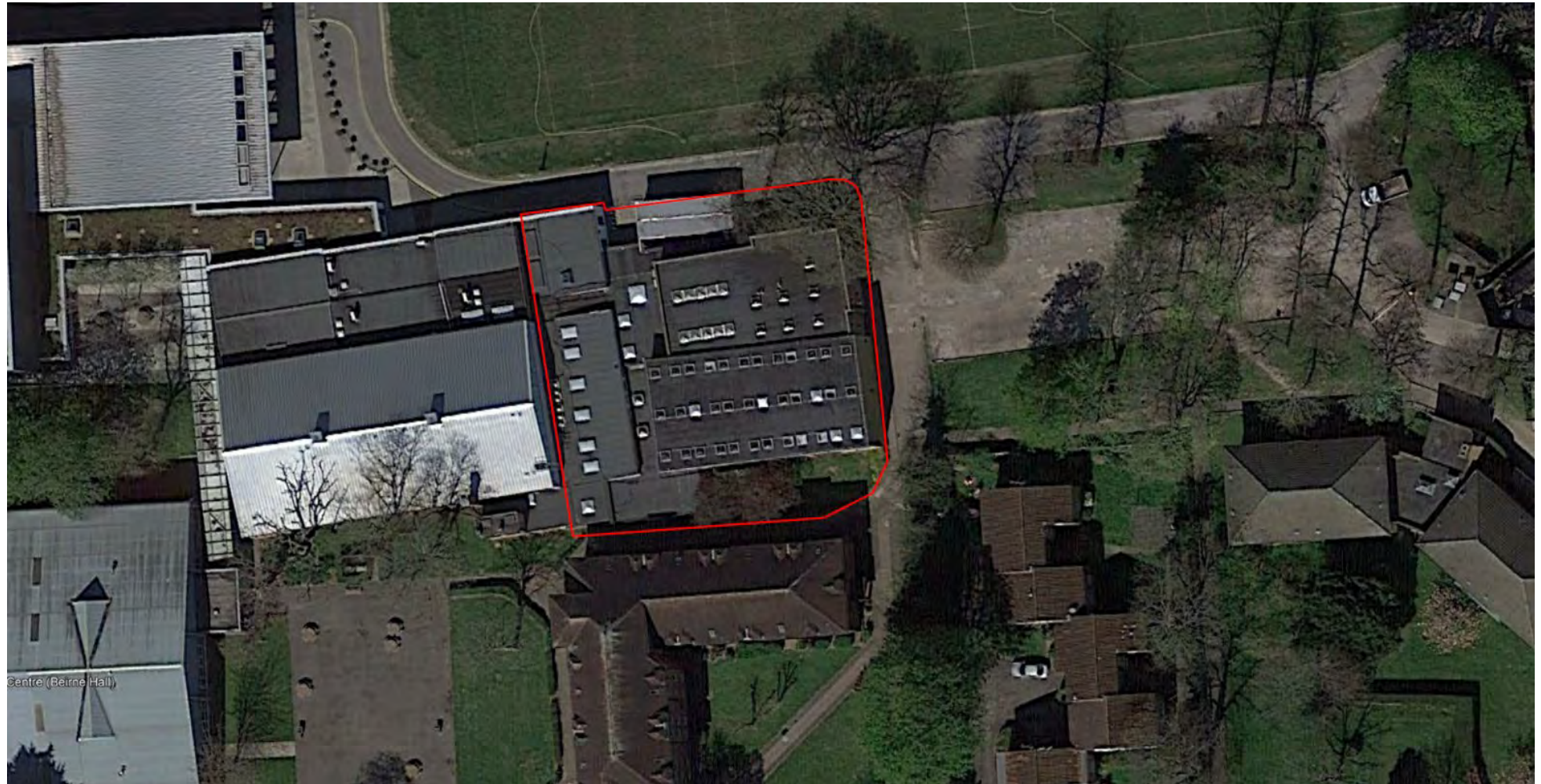


- 5.1.12. The Tree Protection plan provides an example of a timber structure, however, purpose made products are available for use. Final details of this protection will be provided in a detailed Arboricultural Method Statement following planning approval.

6. References

- 6.1.1. British Standard 5837:2012 'Trees in Relation to Design, Demolition and Construction - Recommendation'
- 6.1.2. British Standard 3998:2010 'Tree work – Recommendations'
- 6.1.3. BS8545:2014 Trees: from nursery to independence in the landscape – Recommendations
- 6.1.4. National Planning Policy Framework (NPPF) 2024
- 6.1.5. The Forestry Act 1967
- 6.1.6. The Town and Country Planning Act 1990
- 6.1.7. The Town and Country Planning (Tree Preservation) (England) Regulations 2012.

Appendix 1 – Site Location Plan



Appendix 2 – Tree Schedule

BS5837:2012 TREE SCHEDULE

SURVEY DATE: 27/09/2024

CLIENT: Ridge and Partners LLP

SITE: St Mary's University, Waldegrave Road, Twickenham, TW1 4SX

REFERENCE: 1874-TS-V1-A

Tree No.	Common Name	Botanical Name	Height (m)	Stem Dia (mm)	Crown Spread (m)				Height of Crown Clearance (m)	Age Class	Phys Con	Struc Con	Additional notes	Preliminary recommendations	BS5837 Retention Category	RPA (m ²)	RPA Radius (m)
					N	E	S	W									
T1	Pedunculate oak	<i>Quercus robur</i>	17	890	8	8	11	10	2.5	Mat	Good	Fair	Located to northeast of building. Large mature oak positioned within planting pit adjacent to footpath, internal road and carpark entrance. Stands 3.2metres from building northeast corner elevation. Single-stemmed. Main structural canopy divides from 6metres. Stem leans south slightly towards building. Dense, wide-spreading canopy encroaching onto flat roof of building. Prominent, high value specimen.	Raise low southwest side canopy to allow a 1-1.5metre clearance over roof of adjacent building.	A1, 2	366	10.80
T2	Common lime	<i>Tilia x europaea</i>	15	705	4	3	5	4	1.5	Mat	Good	Fair	Located north of building. Large mature lime establishes from planting border between parking spaces, internal road and footpath. Stands 2.8metres from building. Basal epicormic. Single-stemmed. Main stem epicormic. Several large previous pruning wounds to stem. Slender form. Tree previously pollarded with many years regrowth. South side canopy partial extends over building. East side canopy slightly suppressed by neighbouring large oak. Prominent specimen. Moderate arboricultural quality.	No works required.	B1, 2	222	8.40
T3	Common lime	<i>Tilia x europaea</i>	16	580	5	5	5	4	1.5	Mat	Good	Fair	Located east of building. Large mature specimen positioned within narrow grass verge bordering carpark and internal road. Basal epicormic. Single-stemmed. Large previous pruning wounds to stem. Stem epicormic. Slender form. Tree previously pollarded with several years regrowth. Dense foliage. Prominent specimen. Moderate arboricultural quality.	No works required.	B1, 2	150	6.90

BS5837:2012 TREE SCHEDULE

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CLIENT: Ridge and Partners LLP

SITE: St Mary's University, Waldegrave Road, Twickenham, TW1 4SX

REFERENCE: 1874-TS-V1-A

Tree No.	Common Name	Botanical Name	Height (m)	Stem Dia (mm)	Crown Spread (m)				Height of Crown Clearance (m)	Age Class	Phys Con	Struc Con	Additional notes	Preliminary recommendations	BS5837 Retention Category	RPA (m ²)	RPA Radius (m)
					N	E	S	W									
T4	Common lime	<i>Tilia x europaea</i>	19	610	5	6	5	4	1.6	Mat	Good	Fair	Located east of building. Large mature lime positioned within grass verge between carparking bays. Single-stemmed. Limited basal taper. Resonance test indicates potential underlying decay to lower northeast side stem base. Tree previously pollarded and more recently a higher reduction has been undertaken. Dense foliage cover. Prominent specimen. Basal decay limited future structural longevity.	Carry out detailed decay assessment of stem base to quantify extent of decay and strength of the remaining timber.	C1,2	163	7.20
T5	Horse chestnut	<i>Aesculus hippocastanum</i>	16	915	5	5	7	4	3	Mat	Fair	Fair	Located east of building. Large mature chestnut positioned upon sloping grass verge south of carpark and adjacent to internal footpath. Single-stemmed. Lower stem epicormic. Evidence of horse chestnut bleeding canker. Canopy height and lateral branch spread previously heavily reduced. Moderate regrowth. Leaf miner attributed to foliage. Large prominent specimen. Impaired structural condition. Moderate arboricultural quality.	No works required.	B1, 2	387	11.10
T6	False acacia	<i>Robinia pseudoacacia</i>	10	170	3	3	4	2	2	Yng	Good	Fair	Located beyond southern boundary fence line. Young golden robinia. Main stem bifurcates from 1.7metres. Canopy quite suppressed by larger adjacent sycamore. Small ornamental specimen.	No works required.	C1, 2	14	2.10
T7	Sycamore	<i>Acer pseudoplatanus</i>	12	407	4	4	5	4	2	S/Mat	Good	Fair	Located within planting verge south of building and carpark. Positioned 5.8metres from southeast corner building elevation. Stands within wider group immediately adjacent to boundary fence. Twin-stemmed from base. Dense radial canopy. Low arboricultural merit. Boundary screening contribution.	No works required.	C1, 2	72	4.80

BS5837:2012 TREE SCHEDULE

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REFERENCE: 1874-TS-V1-A

Tree No.	Common Name	Botanical Name	Height (m)	Stem Dia (mm)	Crown Spread (m)				Height of Crown Clearance (m)	Age Class	Phys Con	Struc Con	Additional notes	Preliminary recommendations	BS5837 Retention Category	RPA (m ²)	RPA Radius (m)
					N	E	S	W									
T8	Silver birch	<i>Betula pendula</i>	10	160	2	3	2	4	2.8	S/Mat	Good	Fair	Located within planting verge south of building and carpark. Stands 8.2metres from southeast corner elevation of building. Forms from within wider boundary tree group close to boundary fence line. Planting stake at base. Single-stemmed. Stem kinks at 5metres. Shares cohesive canopy with adjacent trees. Limited individual merit. Screening value as part of wider group feature positioned beyond scope of assessment.	No works required.	C1, 2	10	1.80
T9	Crab apple	<i>Malus sylvestris</i>	8	265	3	4	5	5	3	E/Mat	Fair	Fair	Purple crab apple variety. Located within grass verge 3.3metres south of building. Stands close to timer storage building. Single-stemmed. Wide lateral canopy continuous with adjacent plum. Several dead branches and longitudinal bark wounds/cracks to structural limbs. Previous reduction pruning. Fair health and vitality. Limited future long-term site contribution. Ornamental value to landscaped grounds of campus.	No works required.	C1, 2	34	3.30
T10	Myrobalan Plum	<i>Prunus cerasifera</i>	7	195	4	4	3	3	2.2	E/Mat	Good	Fair	Purple plum. Located within grass verge 5.2metres south of building. Stands close to timer storage building, 1.8metres east of timber flat roof extension, rear of building. Single-stemmed. Main stem leans north. Previous reduction pruning. Fair health and vitality. Gummy/ resinous stem exudate consistent with bacterial canker. Canopy continuous with adjacent apple. Limited future long-term site contribution. Ornamental value to landscaped grounds of campus.	No works required.	C1,2	18	2.40
T11	Sycamore	<i>Acer pseudoplatanus</i>	15	525	6	5	4	5	3.5	Mat	Fair	Good	Located southwest of building. Stands within lawned area adjacent to neighbouring Cronin Hall. Individual sycamore. Single-stemmed. Small occlusion pockets forming from previous pruning wounds. Relatively radial canopy. Prominent specimen. Moderate arboricultural value.	No works required.	B1, 2	125	6.30

BS5837:2012 TREE SCHEDULE

SURVEY DATE: 27/09/2024

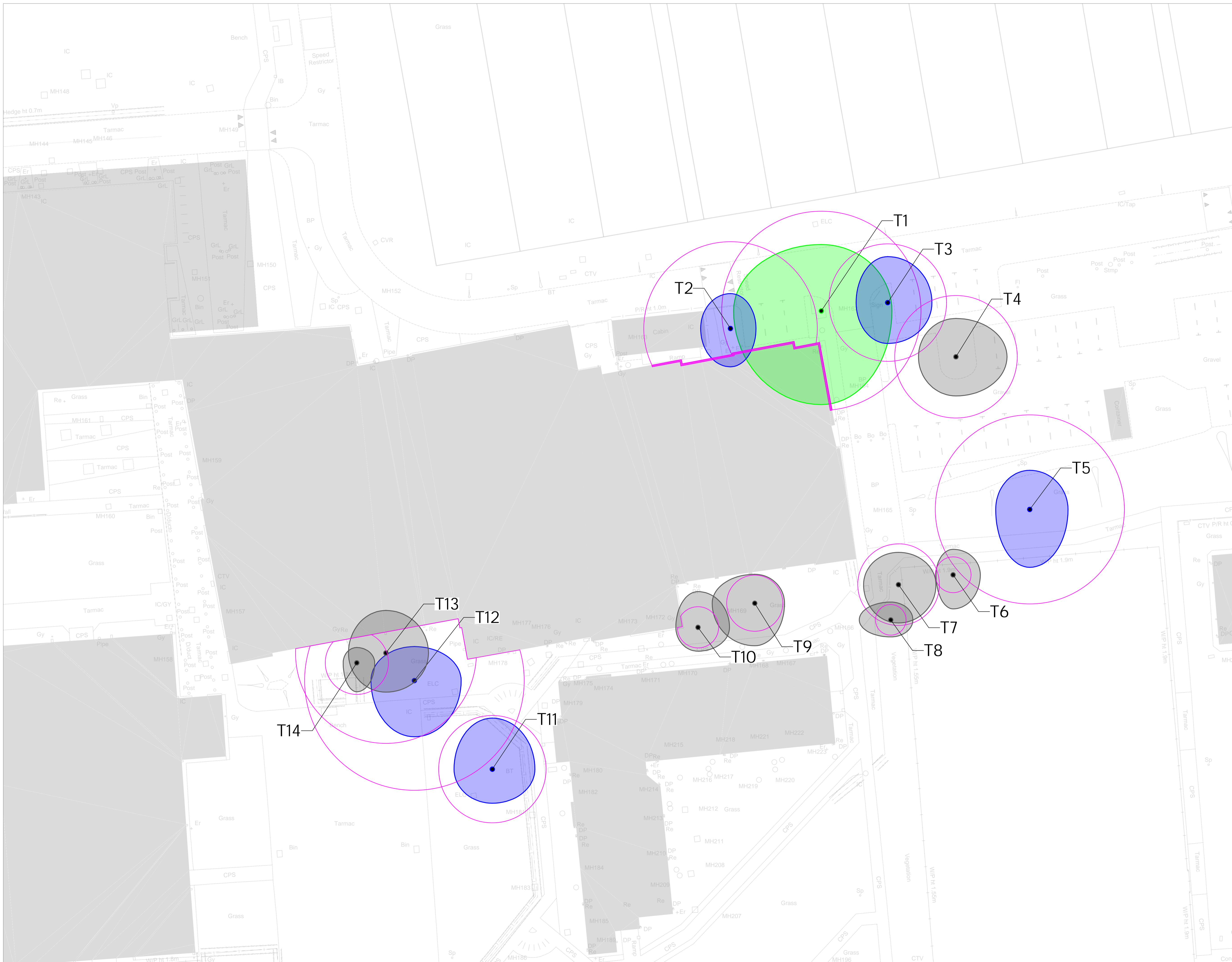
CLIENT: Ridge and Partners LLP

SITE: St Mary's University, Waldegrave Road, Twickenham, TW1 4SX

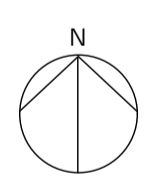
REFERENCE: 1874-TS-V1-A

Tree No.	Common Name	Botanical Name	Height (m)	Stem Dia (mm)	Crown Spread (m)				Height of Crown Clearance (m)	Age Class	Phys Con	Struc Con	Additional notes	Preliminary recommendations	BS5837 Retention Category	RPA (m ²)	RPA Radius (m)
					N	E	S	W									
T12	False acacia	<i>Robinia pseudoacacia</i>	22	932	4	6	7	5	5	Mat	Good	Fair	Located further southwest of subject building. Very large, mature robinia positioned within grass verge between building and internal footpath. Stands 5.5metres south of neighbouring building. Forms pair with adjacent similar specimen. Twin-stemmed from base with narrow acute union. Previous heavy reduction pruning to canopy height and lateral branch growth. Highly prominent tree. Extensive previous canopy management. Moderate arboricultural quality.	No works required.	B1, 2	387	11.10
T13	False acacia	<i>Robinia pseudoacacia</i>	21	695	5	5	5	4	8.5	Mat	Good	Poor	Located further southwest of subject building. Very large, mature robinia positioned within grass verge between building and internal footpath. Stands 1.9metres south of neighbouring building. Forms pair with adjacent similar specimen. Single-stemmed. Resonance test indicates internal basal cavity northeast side. Previous heavy reduction pruning to canopy height and lateral branch growth. Highly prominent tree. Poor structural condition. Extensive previous canopy management. Moderate arboricultural quality.	Carry out detailed decay assessment of stem base to quantify extent of decay and strength of the remaining timber.	C1, 2	222	8.40
T14	Common pear	<i>Pyrus communis</i>	6	300	2	2	3	2	2.5	Mat	Fair	Fair	Located further southwest of subject building. Stands 2.8metres south of neighbouring building. Mature pear. Single-stemmed. Main stem bifurcates from codominant union at 1.7metres. Small decay pockets form from previous pruning wounds. Subordinate canopy. Previous branch failures and removals, particularly west side. Dense foliage. Canopy bias to south. Limited individual quality.	No works required.	C1,2	41	3.60

Appendix 3 – Plans



- KEY:**
- Trees / Groups
 - Canopy Spread
 - Tree Stem
 - Root Protection Area
 - A Category Tree (High quality / retention value)
 - B Category Tree (Moderate quality / retention value)
 - C Category Tree (Low quality / retention value)
 - U Category Tree (No remaining retention value)
 - Hedgerows (Not assigned BS5837:2012 category)
 - Existing building within RPA
RPAs adjusted to reflect obstruction to roots



Rev A	Issue to client	30.09.2024
Rev	Description	Date



PROJECT St Mary's University, Twickenham	
TITLE Tree Constraints Plan	
DRAWING REF 1874-TCP-001-A	DRAWING NO 001
SCALE 1:200 @ A1	REVISION Rev A



- KEY:**
- Trees / Groups
 - Canopy Spread
 - Tree Stem
 - Root Protection Area
 - A Category Tree (High quality / retention value)
 - B Category Tree (Moderate quality / retention value)
 - C Category Tree (Low quality / retention value)
 - U Category Tree (No remaining retention value)
 - Hedgerows (Not assigned BS5837:2012 category)

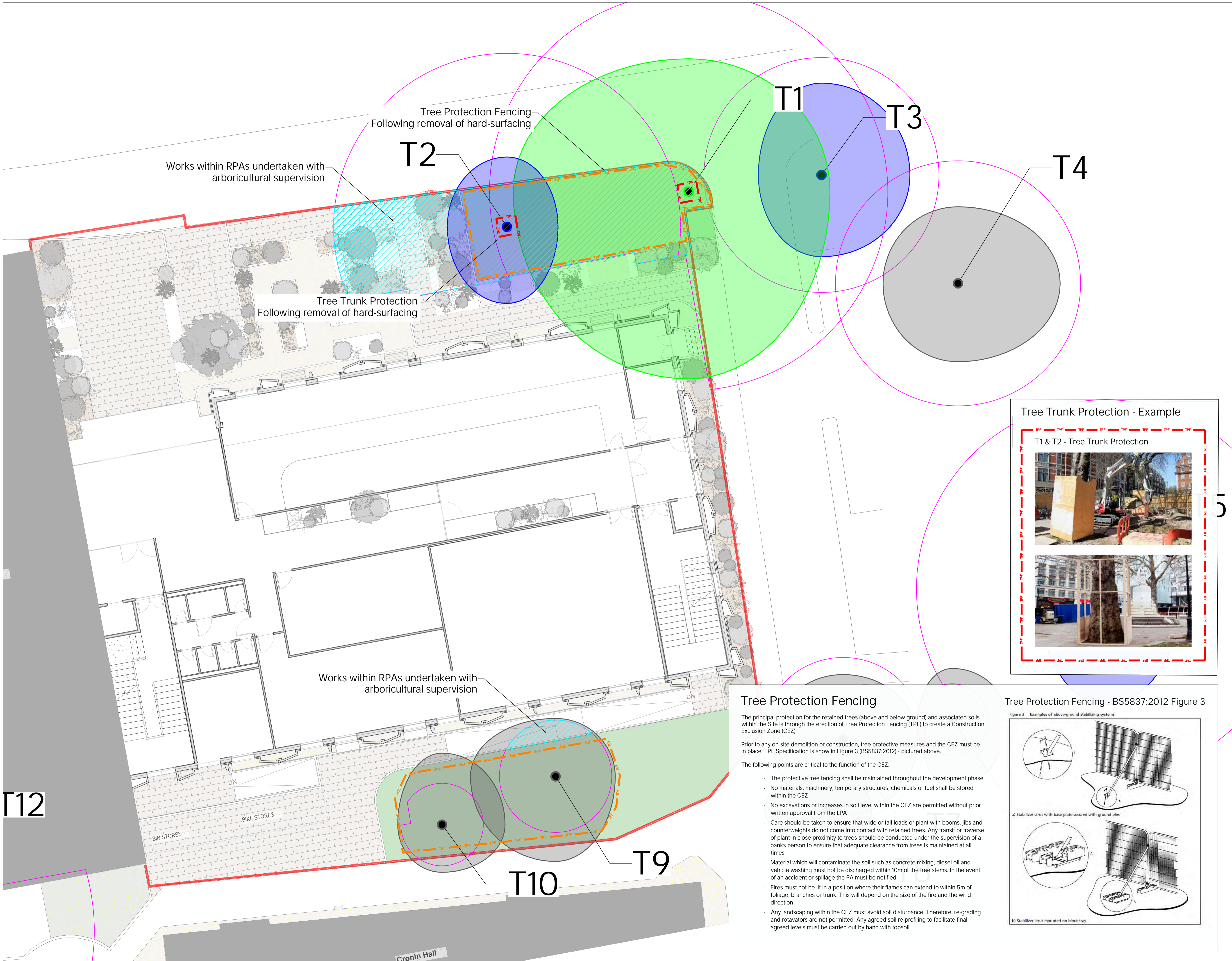
- ARBORICULTURAL IMPACT**
- Existing building within RPA
RPAs adjusted to reflect obstruction to roots
 - New RPA Incursion
 - Existing Hard Surfacing within RPA
To be resurfaced
 - Existing Hard Surfacing within RPA
To be replaced by soft landscaping
 - Existing planting pit
To be incorporated into soft landscaping



Rev A	Issue to client	29.10.2024
Rev	Description	Date



PROJECT St Mary's University, Twickenham	
TITLE Arboricultural Impact Plan	
DRAWING REF 1874-AIP-002-A	DRAWING NO 002
SCALE 1:100 @ A1	REVISION Rev A

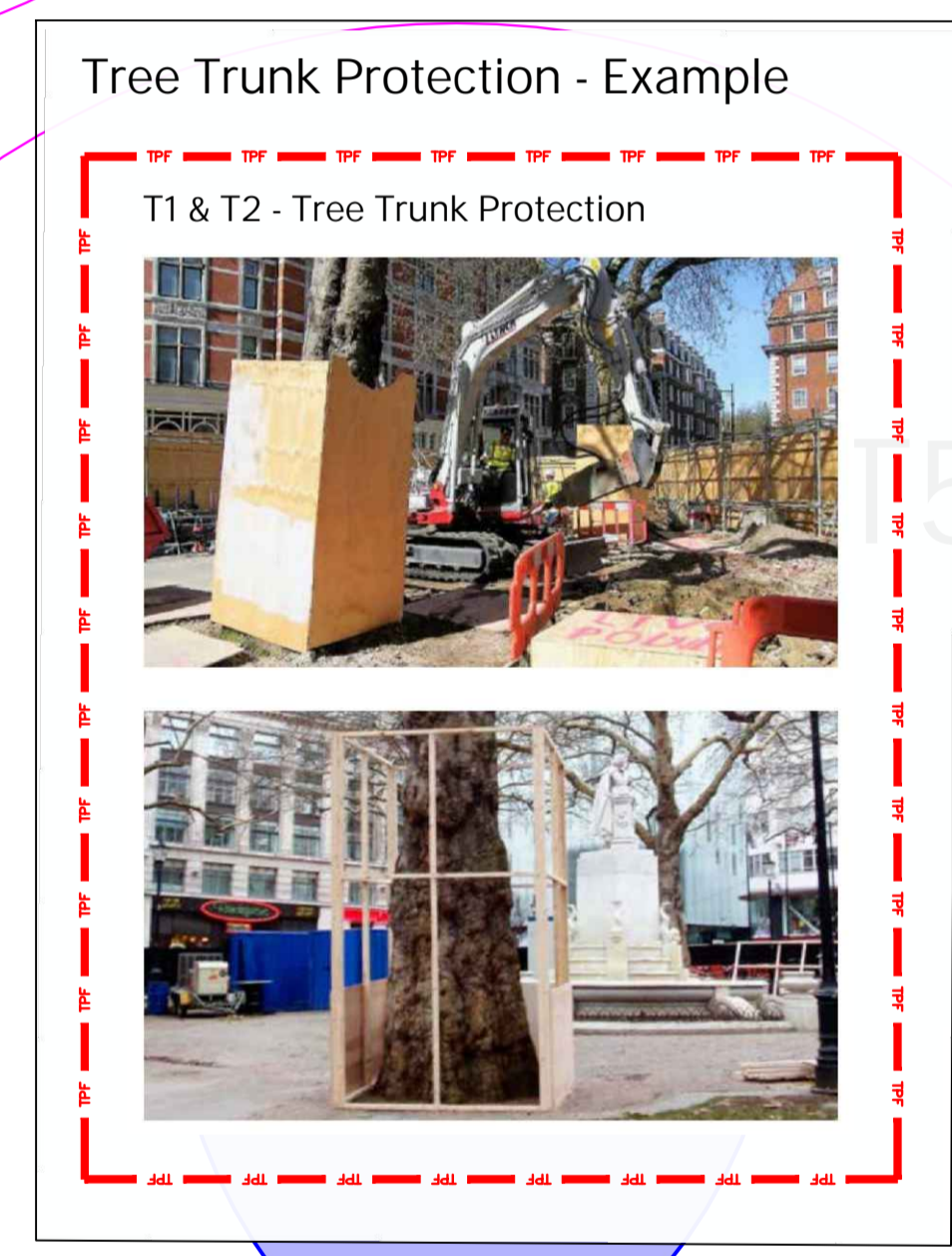


KEY:

- Trees / Groups
 - Canopy Spread
 - Tree Stem
 - Root Protection Area
- A Category Tree (High quality / retention value)
- B Category Tree (Moderate quality / retention value)
- C Category Tree (Low quality / retention value)
- U Category Tree (No remaining retention value)
- Hedgerows (Not assigned BS5837:2012 category)

TREE PROTECTION

- TPF Tree Protection Fencing
- TPF Tree Trunk Protection
- Works within RPAs Carried out under arboricultural supervision



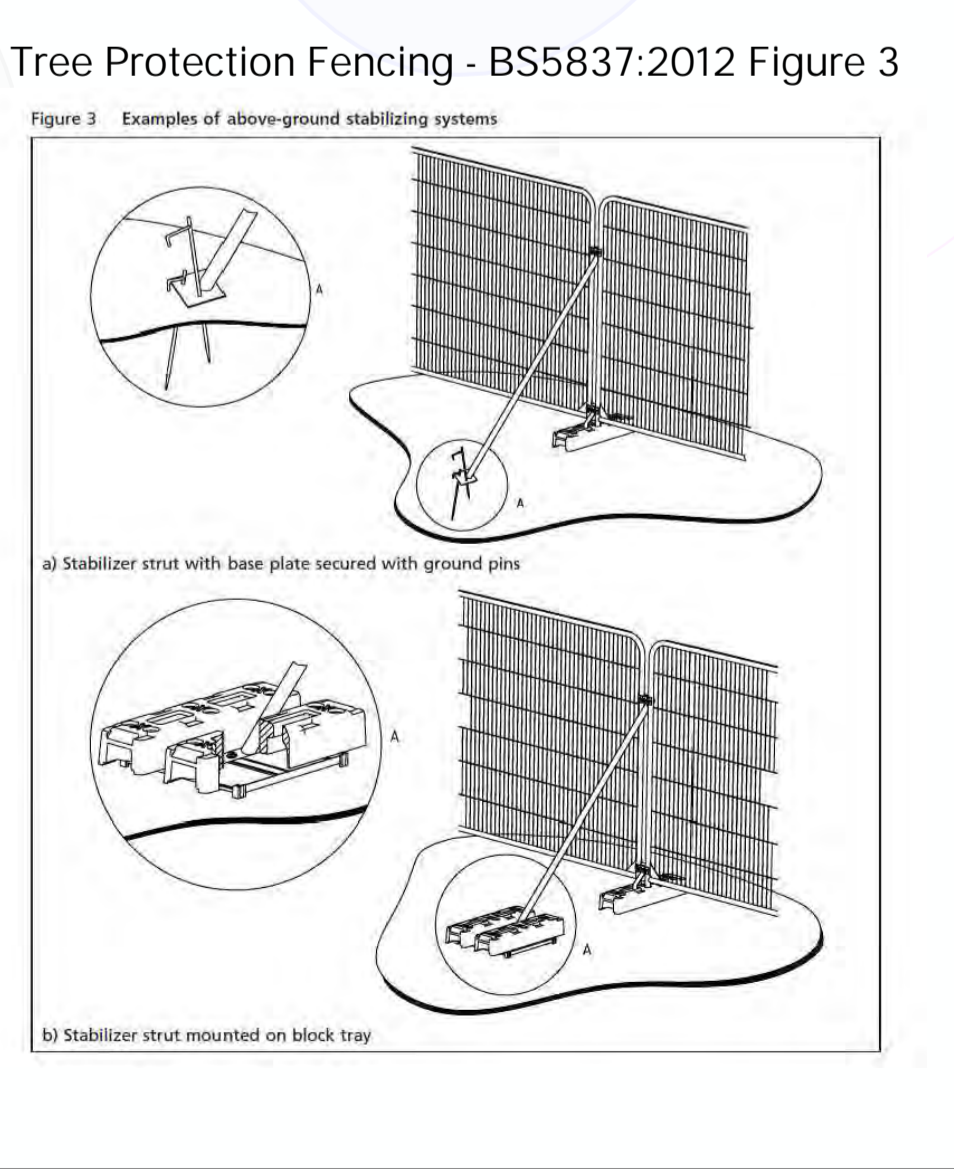
Tree Protection Fencing

The principal protection for the retained trees (above and below ground) and associated soils within the Site is through the erection of Tree Protection Fencing (TPF) to create a Construction Exclusion Zone (CEZ).

Prior to any on-site demolition or construction, tree protective measures and the CEZ must be in place. TPF Specification is shown in Figure 3 (BS5837:2012) - pictured above.

The following points are critical to the function of the CEZ:

- The protective tree fencing shall be maintained throughout the development phase
- No materials, machinery, temporary structures, chemicals or fuel shall be stored within the CEZ
- No excavations or increases in soil level within the CEZ are permitted without prior written approval from the LPA
- Care should be taken to ensure that wide or tall loads or plant with booms, jibs and counterweights do not come into contact with retained trees. Any transit or traverse of plant in close proximity to trees should be conducted under the supervision of a banks person to ensure that adequate clearance from trees is maintained at all times
- Material which will contaminate the soil such as concrete mixing, diesel oil and vehicle washing must not be discharged within 10m of the tree stems. In the event of an accident or spillage the PA must be notified
- Fires must not be lit in a position where their flames can extend to within 5m of foliage, branches or trunk. This will depend on the size of the fire and the wind direction
- Any landscaping within the CEZ must avoid soil disturbance. Therefore, re-grading and rotavators are not permitted. Any agreed soil re-profiling to facilitate final agreed levels must be carried out by hand with topsoil.



Rev A Issue to client
Rev Description

29.10.2024 Date

SEED
SEED Arboriculture Ltd
Suite F6.1, Adelphi Mill, Bollington, Cheshire, SK10 5JB
www.seed-arb.co.uk

PROJECT
St Mary's University, Twickenham

TITLE
Tree Protection Plan

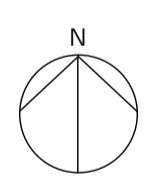
DRAWING REF
1874-TPP-003-A

DRAWING NO
003

SCALE
1:100 @ A1

REVISION
Rev A

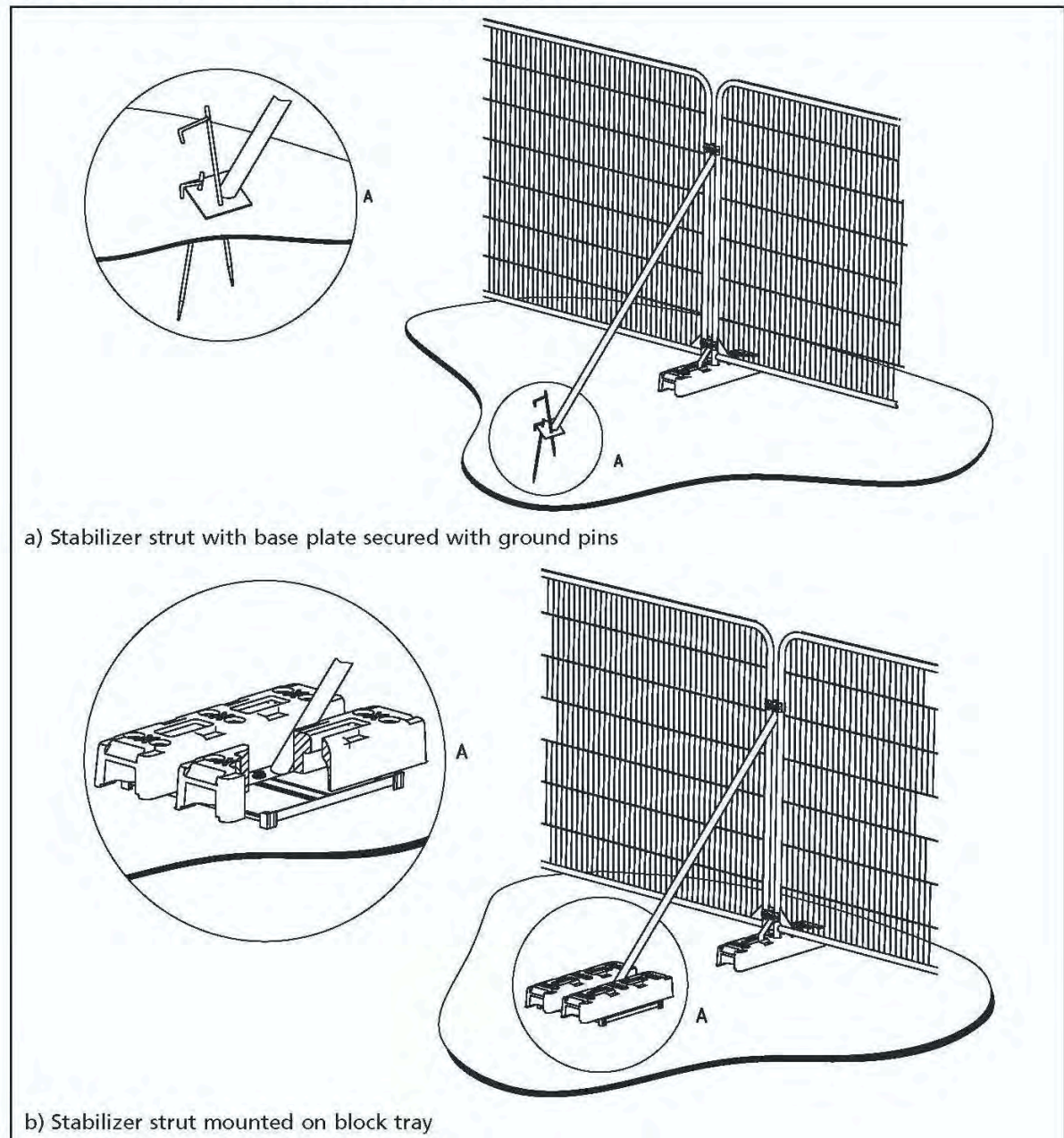
T12



Appendix 4 – Tree Protective Fencing

BS5837:2012 – Figure 3

Figure 3 Examples of above-ground stabilizing systems



TREE PROTECTION AREA



NO ACCESS - TREE PROTECTION AREA

- NO MATERIALS, MACHINERY, TEMPORARY STRUCTURES OR CHEMICALS SHALL ENTER OR BE STORED WITHIN THIS AREA
- FENCING WILL NOT BE ALTERED OR MOVED WITHOUT PRIOR AGREEMENT OF THE PROJECT ARBORICULTURIST.



TREE PROTECTION FENCING

- TREES ENCLOSED BY THIS FENCE ARE PROTECTED BY PLANNING CONDITIONS AND/OR ARE THE SUBJECTS OF A TREE PRESERVATION ORDER.
- UNAUTHORISED DAMAGE TO PROTECTED TREES IS A CRIMINAL OFFENCE AND COULD LEAD TO ENFORCEMENT ACTION.



ARBORICULTURAL CONSULTANTS

For any issues relating to this Tree Protection Fencing or other guidance with any arboricultural matters on this development, please contact **Seed Arboriculture Ltd.**

www.seed-arb.co.uk

- info@seed-arb.co.uk

- 01625 460 252