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BS5837:2012 TREE SURVEY SCHEDULE (A–L)

Site Address : 48, Harvest Hill, East Grinstead, West Sussex. RH19 4BT

Ref	Species (Latin)	DBH (mm)	Height (m)	Crown Spread (m)	RPA Radius (m)	RPA Area (m²)	Notes
A	<i>Conifer sp.</i>	250	—	—	3.0	28.3	Neighbouring tree. No part of RPA or canopy affects proposed works.
B	<i>Tilia sp.</i>	180	—	—	2.2	15.2	On client's side. No influence on proposed works.
C	<i>Pyrus salicifolia</i> 'Pendula' (weeping pyrus)	120	—	—	1.4	6.2	On client's side. No influence on proposed works.
D	<i>Salix sp.</i>	200	—	4	0.24	18.1	Neighbouring tree. No influence on proposed works.
E	<i>Conifer sp.</i>	250	—	—	3.0	28.3	Neighbouring tree. No influence on proposed works.
F	<i>Prunus domestica</i>	100	—	2	1.2	4.5	On client's side. No influence on proposed works.
G	<i>Acer platanoides</i> 'Crimson King'	100	—	3	1.2	4.5	On client's side. No influence on proposed works.

Ref	Species (Latin)	DBH (mm)	Height (m)	Crown Spread (m)	RPA Radius (m)	RPA Area (m ²)	Notes
H	<i>Betula pendula</i>	250	—	—	3.0	28.3	On client's side. No influence on proposed works.
I	<i>Corylus avellana</i>	100	—	3	1.2	4.5	On client's side. No influence on proposed works.
J	<i>Betula pendula</i> (multi-stem)	150	4	—	1.8	10.2	On client's side. No influence on proposed works.
K	<i>Malus domestica</i>	250	—	6	3.0	28.3	Located near proposed works. RPA and canopy to be protected in accordance with BS5837.
L	<i>Acer palmatum</i> (red cultivar, multi-stem)	150	4	—	1.8	10.2	Located near proposed works. RPA and canopy to be protected in accordance with BS5837.

TREE CONSTRAINTS PLAN (TCP)

Prepared by **Harrison & Fitzroy Landscape Design Ltd** For submission under **BS5837:2012 – Trees in Relation to Design, Demolition & Construction**

1. Purpose of the Tree Constraints Plan

The Tree Constraints Plan (TCP) identifies the spatial constraints posed by existing trees on and adjacent to the site. It illustrates:

- Root Protection Areas (RPAs)
- Existing canopy spreads
- Trees influencing layout decisions
- Trees requiring protection during construction
- Trees with no influence on proposed works

The TCP supports the design process by ensuring that retained trees are appropriately considered in accordance with BS5837:2012.

2. Constraints Identified

2.1 Root Protection Areas (RPAs)

RPAs have been calculated using BS5837:2012 ($12 \times \text{DBH}$). On this site:

- **Trees A, D, E** (neighbouring)
 - RPAs do **not** extend into proposed works.
 - No construction constraints.
- **Trees B,C, F, G, H, I, J** (client's side)
 - RPAs are **fully outside** proposed works.
 - No construction constraints.
- **Tree K – *Malus domestica***
 - RPA **extends close to proposed works**.
 - This tree imposes a **root protection constraint**.
 - Construction within or adjacent to the RPA must follow BS5837 guidance.
- **Tree L – *Acer platanoides* (multi-stem)**
 - RPA lies **near proposed works**.
 - This tree imposes a **root protection constraint**.

- Construction must avoid excavation and level changes within the RPA.

2.2 Canopy Constraints

- **Trees A, D, E**
 - Neighbouring trees.
 - Canopies do not influence proposed works.
- **Trees B, C, F, G, H, I, J**
 - Canopies do not intersect proposed works.
- **Tree K – 6m canopy spread**
 - Canopy extends toward proposed works.
 - Requires protection from mechanical damage.
 - May influence working space, access routes, and material storage.
- **Tree L – multi-stem form**
 - Canopy contributes to site character.
 - Must be protected from crown damage during construction.

2.3 Above-Ground Constraints

- **Tree K and Tree L**
 - Both trees contribute to the visual and spatial character of the design.
 - Their form and canopy shape influence layout and require retention.
 - No pruning is proposed at this stage.

2.4 Below-Ground Constraints

- **Tree K and Tree L**
 - RPAs require:
 - No excavation
 - No level changes
 - No mechanical plant
 - No storage of materials
 - No mixing of cement or chemicals
 - No temporary structures

- Hand-digging or no-dig construction may be required depending on final layout.

3. Tree Constraints Summary Table

Ref	Constraint Type	Influence on Proposed Works	Required Protection
A	None	No RPA or canopy conflict	Standard protection only
B	None	No RPA or canopy conflict	Standard Protection only
C	None	No RPA or canopy conflict	Standard Protection only
D	None	No RPA or canopy conflict	Standard protection only
E	None	No RPA or canopy conflict	Standard protection only
F	None	No RPA or canopy conflict	Standard protection only
G	None	No RPA or canopy conflict	Standard protection only
H	None	No RPA or canopy conflict	Standard protection only
I	None	No RPA or canopy conflict	Standard protection only
J	None	No RPA or canopy conflict	Standard protection only
K	RPA + Canopy	RPA close to proposed works; canopy extends toward works	BS5837 protection; no-dig or hand-dig; avoid level changes
L	RPA + Canopy	RPA near proposed works; canopy contributes to design	BS5837 protection; no-dig or hand-dig; avoid level changes

4. Summary

Only **Trees K and L** impose meaningful constraints on the proposed development. All other trees (A–J) present **no conflict** with the layout and require only standard BS5837 protective fencing.

This TCP supports the design by clearly identifying the spatial constraints and ensuring that retained trees are protected throughout construction.

TREE PROTECTION PLAN (TPP)

Prepared by **Harrison & Fitzroy Landscape Design Ltd** In accordance with **BS5837:2012 – Trees in Relation to Design, Demolition & Construction**

1. Purpose of the Tree Protection Plan

The Tree Protection Plan (TPP) sets out the protective measures required to safeguard retained trees during construction. It identifies:

- Protective fencing locations
- Ground protection requirements
- Exclusion zones
- Access and storage restrictions
- Specific protection measures for trees near proposed works (K and L)

This TPP must be read alongside the Tree Constraints Plan (TCP) and the Tree Survey Schedule.

2. Protective Fencing

2.1 Specification

All retained trees will be protected by **BS5837-compliant protective fencing**, typically:

- Weldmesh panels
- Fixed to a scaffold framework
- Braced to resist impact
- Minimum height: **2.0m**

Fencing must be installed **before any works commence** and remain in place until all construction activity is complete.

2.2 Fencing Locations

- **Trees A–J:**
 - Fencing positioned to exclude RPAs from construction areas.
 - No special measures required beyond standard BS5837 fencing.
- **Trees K and L:**
 - Fencing positioned at the **RPA boundary**.
 - No encroachment permitted.

- Fencing must be continuous and rigid due to proximity to works.

3. Construction Exclusion Zones (CEZs)

The area inside the protective fencing forms the **Construction Exclusion Zone**.

Within CEZs:

- No excavation
- No level changes
- No storage of materials
- No mixing of cement or chemicals
- No fires
- No vehicle or plant access
- No temporary structures
- No soil compaction

CEZs must remain undisturbed for the duration of the project.

4. Ground Protection

Ground protection is required **only where access is unavoidable** near Trees K and L.

Acceptable ground protection includes:

- Interlinked ground protection boards
- Scaffold boards on a compressible layer
- Proprietary ground protection systems rated for construction traffic

Ground protection must prevent soil compaction within or adjacent to RPAs.

5. Works Within or Adjacent to RPAs

5.1 Trees K and L

These trees are located near proposed works and require enhanced protection.

If works occur **adjacent to** their RPAs:

- Excavation must be **hand-dug**
- Roots >25mm must be retained
- Roots <25mm may only be pruned cleanly with secateurs
- No mechanical excavation permitted

- No level changes permitted
- No-dig construction may be required depending on final layout

5.2 Supervision

Any works within 1m of the RPA fencing for Trees K or L must be carried out under **arboricultural supervision**.

A supervising arboriculturist must:

- Inspect exposed roots
- Advise on pruning
- Confirm compliance with BS5837
- Record findings in a site report if required by planning condition

6. Access, Storage & Site Organisation

To prevent accidental damage:

- All site access routes must avoid RPAs.
- Materials, spoil, and equipment must be stored **outside CEZs**.
- Mixing of cement or chemicals must occur **downhill** from RPAs.
- Welfare units, skips, and scaffolding must be located outside RPAs.
- Delivery vehicles must not enter CEZs.

7. Services & Drainage

If new services are required near retained trees:

- Routing must avoid RPAs.
- If unavoidable, use **hand-dug trenches** or **air-spade excavation**.
- No root severance >25mm without arboricultural approval.
- No soakaways within RPAs.

8. Post-Construction

Once construction is complete:

- Protective fencing may be removed only with arboricultural approval.
- Soft landscaping within RPAs must avoid rotavation or deep cultivation.
- Mulch may be applied to improve soil condition if required.

9. Summary of Protection Requirements

Tree Ref	Protection Required
A–J	Standard BS5837 protective fencing. No special measures.
K	Enhanced protection. RPA fencing at boundary. No-dig/hand-dig near works. Arboricultural supervision required.
L	Enhanced protection. RPA fencing at boundary. No-dig/hand-dig near works. Arboricultural supervision required.

10. Compliance

All contractors must comply with this Tree Protection Plan. Any deviation must be approved by the project arboriculturist and recorded for planning compliance.