

Our ref: JSL4864_771E

02th January 2025

RPS | Consulting UK & Ireland
Lakesbury House
Hiltingbury Road
Hampshire
SO53 5SS
United Kingdom

Arboricultural Method Statement

Land at 99 Hartland Rd, Reading, RG2 8AF

Introduction

Following instruction from MACE, RPS have produced this letter style arboricultural report as a written Arboricultural Method Statement to support the planning application at the above site. This report addresses the best approach to the safe retention and protection of trees located within and adjacent to the property during the proposed construction works.

The site consists of a single residential property, with front and rear gardens. The eastern boundary abuts the John Madejski School Academy. A metal fence and mixed vegetation forms this eastern boundary.

To support this arboricultural report, a comprehensive tree survey was completed in May 2023. This survey adopted the approach required by BS5837:2012 '*Trees in relation to Design, Demolition & Construction*'. See attached Tree Survey Schedule & Tree Survey Plan (Table 1 & Figure 1).

This report should be read alongside the Tree Survey Report and Impact Assessment JSL4864_770.

Proposed Works

The works proposed consist of a two-storey side extension, single storey rear extension and renovation of existing dwelling to create an accessible house, as well as the addition of 2 car bays to the south of the house. The side extension largely replaces an existing lean-to type of extension and hard surfacing.

Expected Arboricultural Impacts

No trees or mature vegetation will require removal to facilitate the scheme. T5 will require its northwestern crown reducing back from the proposed development by 2-3m in order to provide sufficient construction space. Minor 'facing back' pruning of 1-2m will also be required to the immature trees and shrubs which over sail the site boundary to the east (part of G2). These works are minimal, and due to the age and vigour of the trees, no long-term ill affects should be caused to the vegetation. The Eastern face of H1 will also require 'facing back' by 1m in order to allow construction of the proposed car bays.

The proposed extension does lie within a very small portion of T5's radial RPA. The limited extent of the construction incursion (i.e. <10%) and the presence of existing structures and hard surfaces within this zone already will mean that significant root activity within the area is unlikely. Nonetheless, a precautionary approach to excavating the extensions foundation should be taken, and if tree roots >25mm diameter are exposed, advice will be sought from an arboriculturist.

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Impact Mitigation

Construction Exclusion Zone (CEZ)

Prior to the commencement of any works, tree protection fencing is to be erected in accordance with the locations set out in the Tree Protection Plan (see Figure 2).

Once the protective fencing is in place, it must remain in situ throughout the course of the development until the completion of development.

Construction Exclusion Zone (CEZ) (continued)

Within the CEZ there should be:

- No mechanical excavation/ scraping whatsoever.
- No excavation by any other means without arboricultural supervision.
- No lowering of level for any purpose.
- No storage of plant, equipment, or material.
- No pedestrian, vehicular or plant access.
- No fire lighting.
- No handling, discharge or spillage of any chemical substance included cement washings.

Further Restrictions outside the CEZ

Even when outside of the CEZ, no materials that may contaminate the soil such as concrete mixings, diesel oil and vehicle washings shall be discharged within 10m of the stem of any tree.

Fencing Specification (Heras 151 steadfast system)

Either the Heras 151 steadfast system (for high and mid value trees / areas with higher activity anticipated), or a similar and equivalent system, will be used to create the CEZ and is denoted by a Purple dashed line on the Tree Protection Plan (Figure 2).

Tree Pruning

All tree works shall be carried out in accordance with BS3998:2010 and latest arboricultural best practice.

All tree work shall be carried out by suitably qualified, competent and insured arboricultural contractors in accordance with Arboricultural Association Standard Conditions of Contract and Specifications for Tree Works (2008) Edition and BS 3998:2010 Tree Work.

Any tree works required shall be completed prior to any construction and enabling works on the site.

Nesting birds are protected by law and any removal / tree works should not be carried out during the bird nesting season (March-August inclusive).

All green and woody waste generated by the tree works shall be chipped, removed from site and disposed of in an environmentally sustainable manner in line with current Environmental Protection Act 1990 (EPA) guidelines.

Services

Where practicable, all new services will be outside of RPAs, but where existing services within RPAs require upgrading or new provision is required, trenchless installation will be the preferred option.

If this option is not feasible, any excavation will be carried out by hand in accordance with the guidelines set out in NJUG Volume 4 – Guidelines for the Planning, Installation and Maintenance of Utility Apparatus in Proximity to Trees.

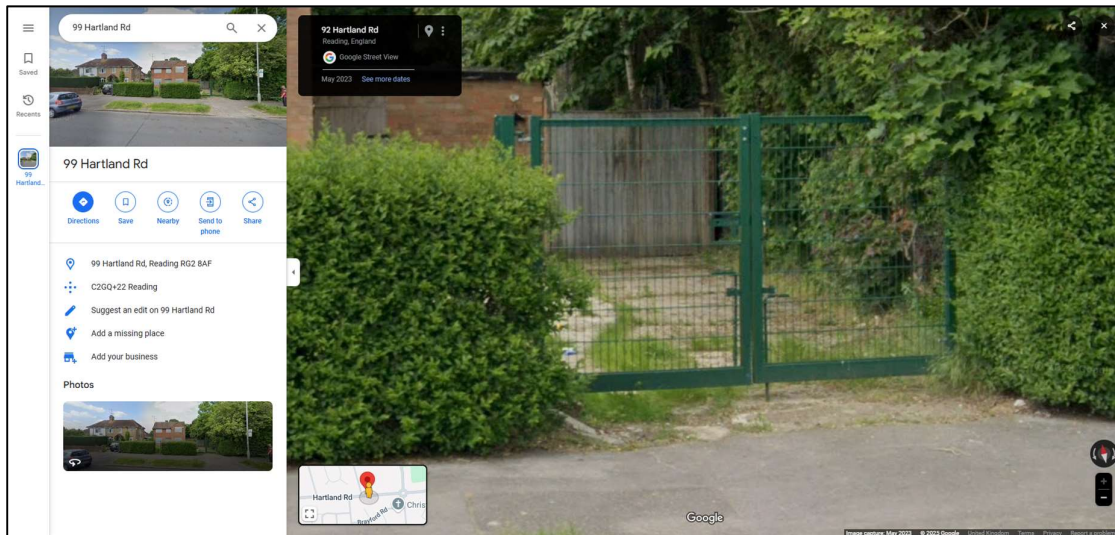
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Root Pruning

It is possible that roots of retained trees may extend further than their RPAs. Where roots are encountered, those smaller than 25mm diameter may be pruned back using a sharp and clean cutting tool such as secateurs or handsaws. Roots larger than 25mm should only be cut having first consulted the project Arboriculturist and/or the Local Tree Officer as the roots may be essential to the tree's health and stability.

Removal of Existing Hard Standing

The proposed works includes the installation of two new car bays in an area that is currently covered by a thin concrete hardstanding. This is a poorly installed thin concrete pad, shown in the Google Maps screenshot below, that will need removing:



This hardstanding shall be manually broken up and removed from the RPA using appropriate hand tools e.g. pneumatic breaker, crowbar, sledgehammer, pick, mattock, shovel, spade, trowel and wheelbarrow.

Where possible, the use of machines with a long reach should be favoured, if they can work from outside of the RPA's.

Removal of the surface shall occur in strips working from the undisturbed surface, working in a retreating manner away from the retained trees. No reduction in levels of the underlying soil surface shall occur with RPA's. This work should also be carried out under an Arboricultural watching brief, to ensure any encountered roots are dealt with appropriately.

Excavation

When within any RPA excavation shall be undertaken by hand or, if machinery is to be utilised, it is to be under an Arboricultural watching brief by the project Arboricultural Consultant.

Where machinery is to be used it shall be as lightweight as possible to complete the task and, the ground from which the machine is working from should be outside of any RPA.

Where roots are found during any excavation, they shall not be left exposed for longer than 24hrs without sufficient root protection e.g. roots wrapped in wet hessian and faces of trenches covered with polyethylene material pinned down to the ground - especially important in hot and dry conditions. Hessian and any polyethylene shall be removed on backfilling of the trench.

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If roots are to be cut, the appointed Arboricultural Consultant must first be consulted prior to the severance of any roots over 25mm in diameter.

Any roots encountered that are under 25mm in diameter shall be cut cleanly with a sharp saw or secateurs leaving the smallest possible diameter cut surface possible.

'No Dig' Construction

Where proposed patio and car bay works fall within the RPA of retained trees, works shall adopt a 'No-Dig' "No dig" methodology. The Tree Protection Plan (Figure 2) shows the minimum extent of "No dig" surfacing required, to limit impact to the tree's rooting system.

'No-dig' areas denoted with a Red "cross" hatch will also act as ground protection for the parts of the RPAs that are outside the protective barriers and will need to be installed before any other construction activity occurs on site.

'No-dig' areas denoted with a Orange hatch will be constructed after the main works are completed, as part of landscaping works, using light/ hand tools only.

The use of cellular confinement system is suggested in BS5837(2012) as one appropriate way to achieve hard surfacing over tree roots, and the following guidance is based on this principle as well as Arboricultural Association Guidance Note 12 – Cellular Confinement Systems¹. However, before implementation, the following specifications and guidance will need to be reviewed by an engineering specialist to ensure that the final construction is appropriate from an engineering viewpoint and suitable for the purpose intended.

Installation

Any required changes in topography will be accomplished by raising levels rather than lowering, reducing the likelihood of significant root disturbance. To attain a flat surface in areas outside of the existing hardstanding, it may be necessary to remove the top layer of vegetation by no more than 50mm. If any additional excavation of ground level is required, it shall be assessed by the project Arboriculturist and possibly the Councils' Tree Officer.

In the unlikely event that roots are encountered, those smaller than 25mm diameter may be pruned back using a sharp and clean cutting tool such as secateurs or handsaws. Roots larger than 25mm should only be cut having first consulted the project Arborist and/or the Local Tree Officer as the roots may be essential to the tree's health and stability.

Sub-base and final wearing courses

Once a level surface has been formed, the cellular load spreading confinement system can be installed on top of a geotextile membrane that has been laid on top of the ground surface. The infill shall be crushed stone (20-40mm, clean angular stone), with no fines. This is to ensure that moisture is allowed to penetrate the surface as well as to facilitate gaseous exchange.

During the construction phase a temporary wearing course of tarmac and or aggregate, separated by a geotextile membrane is likely to be the most appropriate way of providing a suitable ground protection/working surface. At the final stages of the project, the temporary wearing course shall be removed, and the final permeable tarmac surfacing will be installed.

¹ https://www.trees.org.uk/Trees.org.uk/media/Trees-org.uk/Misc%20images/Bookshop/AA_GuidanceNote12_CellularConfinementSystems-Web.pdf

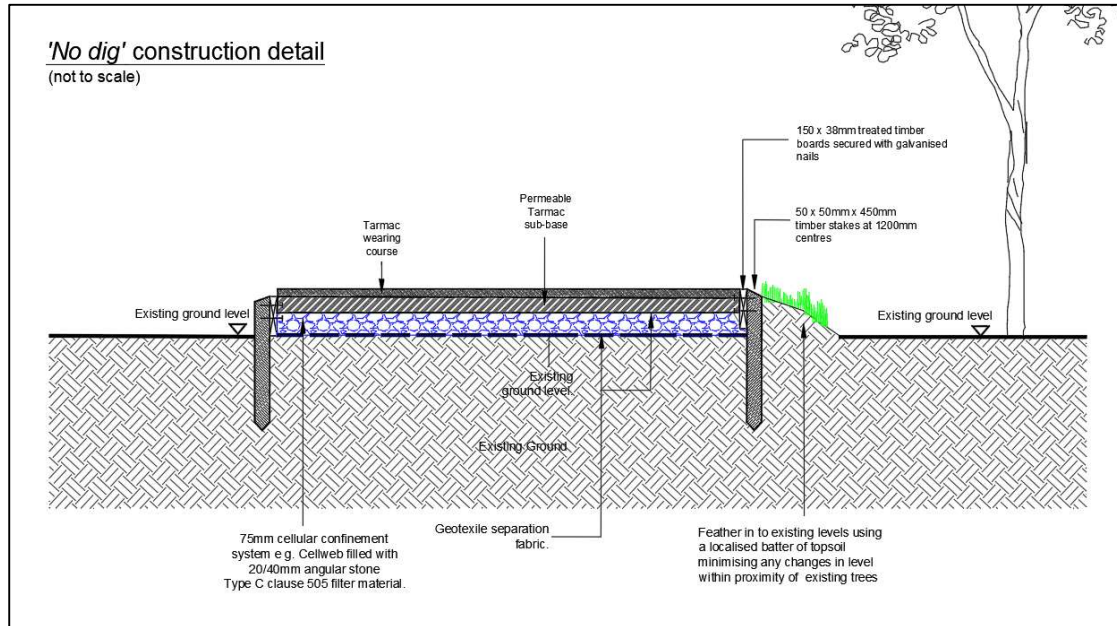
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Edge retention

Wooden boards will be used as effective edge supports in RPAs secured by wooden pegs. This will be used to minimise any adverse risk of impact on trees. No trench type foundation shall be used without prior consultation with the project arboriculturist and/or the Local Authority Tree Officer.

Detailed specifications

See figure below for full “No-dig” construction detail.



Conclusion

If the above methodologies are followed, the proposed development shall have a minimal impact upon the retained trees.

Should, however, any unexpected arboricultural issues become apparent during the works the site manager should immediately contact the Arboricultural Consultant or the Council's Tree Officer for advice upon how to proceed.

If you require further information on the above, please don't hesitate to contact me.

Yours sincerely
For and on behalf of RPS

Ross Carthew

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Senior Arboriculturist
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Appendices:

Table 1: Tree Schedule

Figure 1: Tree Survey Plan

Figure 2: Tree Protection Plan

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Tree Survey Schedule

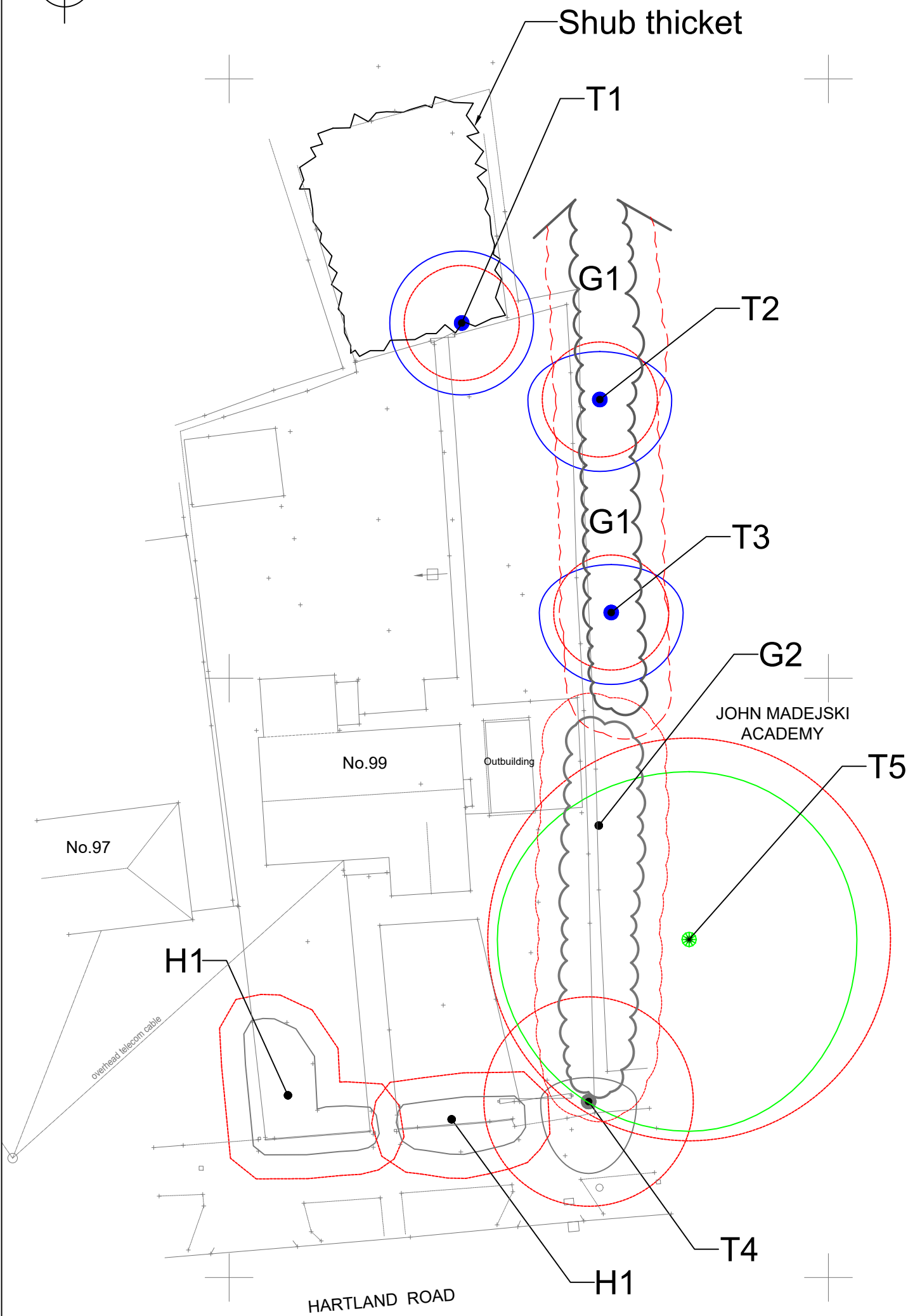
Site 99 Hartland Rd, Reading
Project schedule ref: JSL4864_750
Drawing reference: JSL4864_700
Survey date: 26/05/2023

Surveyor: David Cox
Status:
Revision: .
Notes:



Ref. no.	Species	Height (m)	Crown spread (m)				Stem dia. (m)	Stem no. at 1.5m	Height of crown clearance (m)	Dir/ height	Age class	Structural condition	Physiological condition	General observations Management recommendations	Estimated remaining contribution (years)	Tree Quality Category (BS5837)
			N	E	S	W										
1	Acer platanoides Norway Maple	7.0	3.0	3.0	3.0	3.0	0.20	1.00	2.50	S	Y	Good	Good	Set adjacent fence. Some potential.	+ 40	B2
2	Tilia sp. Lime	5.0	2.0	3.0	3.0	3.0	0.20	1.00	2.50	W	Y	Good	Good	Set off site, adjacent fence. Some potential.	+ 40	B2
3	Tilia sp. Lime	5.0	2.0	3.0	3.0	3.0	0.20	1.00	2.50	W	Y	Good	Good	Set off site, adjacent fence. Some potential.	+ 40	B2
4	Sambucus nigra Elder	4.0	1.0	2.0	3.0	2.0	0.20 0.25	2.00	2.00	S	M	Fair	Fair	Mature elder. Bias to south.	+ 10	C3
5	Fraxinus excelsior Common Ash	12.0	7.0	7.0	8.0	8.0	0.70	1.00	4.50	W	M	Good	Good	Off site. Fine Ash, in good current vigour. Broad form.	+ 20	A2
G1	Acer campestre, Crataegus monogyna, Sambucus nigra, Acer platanoides Field Maple, Common Hawthorn, Elder, Norway Maple	3.0	See plan				<0.10	Var	0.00	-	Y	Fair	Good	Off site shrubbery/planting.	+ 20	C2
G2	Acer platanoides, Sambucus nigra, Crataegus monogyna, Prunus avium, Acer campestre Norway Maple, Elder, Common Hawthorn, Wild Cherry, Field Maple	6.0	See plan				Up to 0.10	Var	2.50	W	Y	Fair	Good	Off site shrubbery, oversails boundary fence. Maple and Cherry larger trees.	+ 20	C2
H1	Ligustrum ovalifolium Oval-leaved Privet	1.5	See plan				<0.05	Var	0.00	-	M	Good	Good	Clipped hedge.	+ 10	C2

Note: This survey is based on a brief visual inspection from the ground.
It is not intended as a full arboricultural inspection.
- Indicates estimated tree. * - Indicates off site tree.



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Notes

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Key



Tree with numbered reference.
Canopy spread and BS5837:2012 tree quality category as shown below.



Vegetation group with numbered reference.
Canopy extents and BS5837:2012 tree quality category as shown below.



Hedge with numbered reference.
Width and BS5837:2012 tree quality category as shown below.

BS 5837:2012 Tree Quality Categories - Table 1

- Category A - High quality
- Category B - Moderate quality
- Category C - Low quality
- Category U - Unsuitable for retention



Root protection area (RPA)
Calculated in accordance with Section 4.6 - BS5837:2012

NOTES:

- Refer to RPS Tree Survey Report & Schedule for further details.
- Survey based on a visual inspection from the ground and is not intended as a full arboricultural inspection.
- Plan produced in accordance with recommendations set out in BS 5837:2012 - 'Trees in Relation to design, demolition and construction'.
- Due to the legal protection afforded to breeding birds vegetation removal should not take place during the bird nesting period; generally, although not restricted to, March - August inclusive.
- Survey based upon topographic survey produced by Steline Geomatic Surveyors in Eastleigh, November 2022.

Rev	Description	By	CB	Date
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Client MACE

Project Hartland Road
Reading

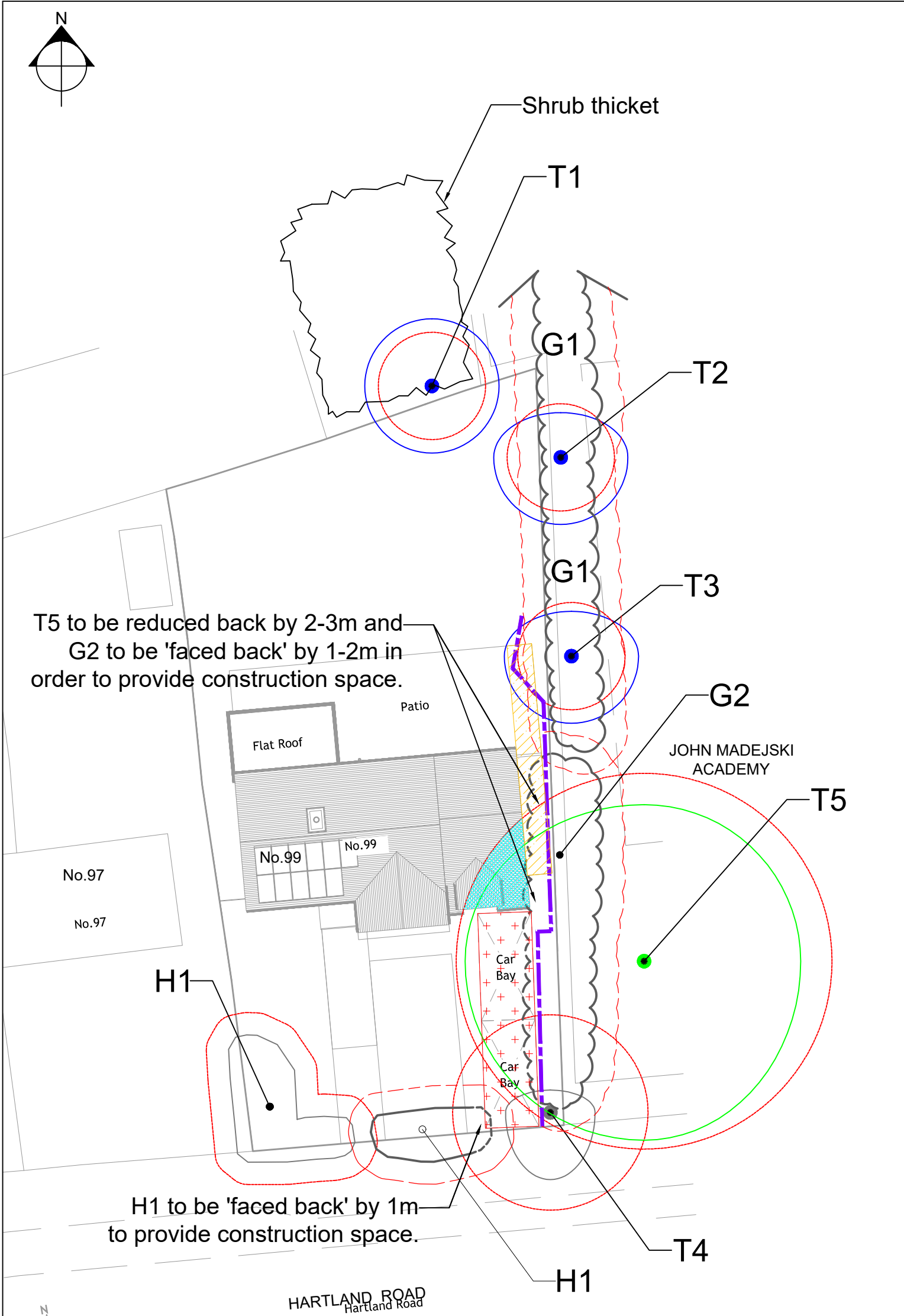
Title Tree Survey

Status For information
Drawn By JMB
PM/Checked by DC

Job Ref JSL4864
Scale @ A3 1:200
Date Created May 2023

RPS Drawing / Figure Number 700
Rev -

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Key

- Tree with numbered reference. Canopy spread and BS5837:2012 tree quality category as shown below.
- Tree (location estimated) with numbered reference. Canopy spread and BS5837:2012 tree quality category.
- Tree off-site with numbered reference. Canopy spread and BS5837:2012 tree quality category.
- Vegetation group with numbered reference. Canopy extents and BS5837:2012 tree quality category as shown below.
- Hedge with numbered reference. Width and BS5837:2012 tree quality category as shown below.

- BS 5837:2012 Tree Quality Categories - Table 1
- Category A - High quality
 - Category B - Moderate quality
 - Category C - Low quality
 - Category U - Unsuitable for retention

- Root protection area (RPA) Calculated in accordance with Section 4.6 - BS5837:2012
- Tree to be removed with numbered reference. Canopy spread and BS5837:2012 tree quality category.
- Vegetation group or hedge to be removed with numbered reference. Canopy spread and BS5837:2012 tree quality category.
- Temporary protective fencing in accordance with Section 6.2 - BS5837:2012. See inset details for example barriers.
- Excavation to be completed by hand, any required root pruning to be in accordance with BS 3998. Pruning of roots over 25mmØ to be monitored by arboriculturalist, with ongoing monitoring of trees condition by an arboriculturalist being recommended.
- Above ground construction requiring "No-dig" design principles in accordance with APN12.
- Above ground construction requiring "No-dig" design principles in accordance with APN12. Works to be completed as part of landscape works after main construction works have been completed, using light/ hand tools only.

- NOTES:**
- Refer to RPS Tree Survey Report & Schedule for further details.
 - Survey based on a visual inspection from the ground and is not intended as a full arboricultural inspection.
 - Plan produced in accordance with recommendations set out in BS 5837:2012 - 'Trees in Relation to design, demolition and construction'.
 - Due to the legal protection afforded to breeding birds vegetation removal should not take place during the bird nesting period; generally, although not restricted to, March - August inclusive.
 - Survey based upon topographic survey produced by Siteline Geomatic Surveyors in Eastleigh, November 2022.
 - Pedestrian/ vehicular emergency access routes to be maintained at all times.
 - All protective fencing to be completed and approved by LPA / CA prior to commencement of any site works.
 - All works to conform with requirements of:
BS 3998:2010 - Tree Works
BS 5837:2012 - Trees in relation to design, demolition and construction

C	Minor amends	RC	DC	25.09.24
B	Layout Update	RC	DC	29.08.24
A	Minor amends	RC	DC	31.08.23
Rev	Description	By	CB	Date



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Client **MACE**

Project **Hartland Road Reading**

Title **Tree Protection Plan**

Status **For information** Drawn By **JMB** PM/Checked by **DC**

Job Ref **JSL4864** Scale @ A3 **1:200** Date Created **May 2023**

RPS Drawing / Figure Number **701** Rev **C**

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