



Fallen&Found Arboriculture®

Fallen&Found Arboriculture Ltd

34

Havant Rd

Emsworth

Hampshire

PO10 7JG

T: 01243 967808

M: 07564 346560

E: info@fallenandfound.co.uk

W: www.fallenandfound.co.uk

To: Mr Lee Mandiwall

34

Havant Rd

Emsworth

Hampshire

PO10 7JG

FAO: Mrs Lesley Wells (Case Officer) & Ms Sarah Roberts (Critchley Architects and Design Ltd)

Date: Friday, 01 April 2022

Application Reference Number: APP/21/00774

Proposal: Alterations to driveway alignment, extension of driveway surface (located within the RPA of retained tree, T6) and hard and soft landscaping within the front driveway area.

Dear Mr Mandiwall,

Thank you for taking the time to meet me on site this week (01/04/22) to discuss the particulars of the project. As discussed, it is proposed to enlarge and change the alignment of the existing driveway at the front of the property (34 Havant Rd). You have also expressed your desire to plant an additional London Plane (*Platanus x acerifolia*) tree close to the front boundary of the driveway where it meets Havant Road.

I have previously conducted a *BS 5837:2012 Trees in relation to design, demolition and construction – Recommendations* compliant tree survey and provided you with a report to support your planning application. As such, this letter is to function as an addendum to the existing planning application (Decided). I will use the previously existing data and the plans provided to me by yourself and your architect (Sarah Roberts). I will prepare a Tree Protection Plan and Arboricultural Method Statement to ensure the proposed works required for the formation of the parking spaces is carried out in an arboriculturally sensitive manner.

After reviewing the revised hard and soft landscaping drawing provided to me by your architect on the (16/03/2022) it is apparent that three of the proposed driveway extension is to be located within the northern portion of the retained tree identified as T6 on the accompanying tree protection plan (34HavantRd\Driveway\TPP_V1). The subject tree is a large and prominent Copper Beech tree which is growing close to the eastern edge of the existing driveway edge.



In order for the driveway to be formed in this location, a three-dimensional cellular confinement system such as CellWeb¹ or Geoweb² shall be employed to form the base of the driveway.

It is imperative that no significant excavation takes place within the root protection areas of the retained tree. The use of a three-dimensional cellular confinement system will allow a load-bearing surface to be constructed within the root protection area of the retained tree without the requirement for significant excavation. The use of this system will allow for the safe passage of traffic whilst resisting compaction of the underlying soil horizons and allowing for the free movement of water and oxygen. I have assessed the juxtaposition of the proposed new surfacing and the root protection area of the retained tree (T6). The proposed new surfacing does not exceed the 20% threshold of new surfacing within the root protection area as defined by the British standards.

The vegetation layer which currently covers the site will require removal prior to the installation of the geomembrane layer on which the three-dimensional cellular system is constructed. Tree and Grass roots rarely share the same soil horizon. Subsequently, a 10cm deep excavation to remove any turf layer is usually considered as acceptable. It may be possible to excavate deeper than this in certain situations, depending on local conditions. Any undulations may be filled with a clean, no-fines, angular fill such as crushed stone or sharp sand to create a level surface. Filled materials will not be compacted. Any excavations at the site will be conducted using hand tools rather than employing the use of heavy machinery. Further appraisal of excavation depths and the use of filling material may be made during site supervision by the Arboricultural Consultant.

The selection of appropriate product thickness is an engineering matter. However, in principle Geosynthetics, 150mm or 200mm Cellweb® are rated for use as protection in areas with normal vehicular traffic. The product will be installed according to the manufacturer's instructions in the locations indicated on the Tree Protection Plan³ contained within the appendices of this document. Any machinery used during the filling of the cells will work backwards across the product without entering unprotected ground or the root protection areas of the retained trees.

There are multiple options for edge restraints and wearing courses which may be used in conjunction with the three-dimensional cellular confinement system. In this instance, a brick herringbone wearing course will be used. Edge restraints may consist of wooden sleepers, preformed metal edging or wooden gravel boards. Edge restraints will be installed without the requirement for excavation and held in place using either wooden or metal ground pins.

A no-dig solution system has been prescribed. This method of construction will provide appropriate protection to the retained tree whilst allowing for the proposal to be formed in an acceptable manner. The retained Copper Beech tree has normal vitality. Subsequently, I perceive the tree to have the ability to adapt to the change in the rooting environment brought about by the installation of the driveway extension. In my professional opinion, I perceive there to be a low risk of long-term detriment to the tree brought about by the proposal.

¹ <http://www.geosyn.co.uk/product/cellweb-tree-root-protection>

² http://greenfix.co.uk/product/geoweb-tree-root-protection-system/?gclid=CjwKCAjwgabeBRBuEiwACD4R5hMtJxSPWjR6X7B_4QVfz0xlaMjas_M9QLGa2DeR4--xnYUSL4OZTRoCielQAvD_BwE

³ Appendix A, Tree Protection Plan (34HavantRd\Driveway\TPP_V1) indicated as a square hatched yellow area.



Further details regarding the installation of the cell web and formation of the carparking spaces within the root protection area of the retained tree is detailed in the following Method Statement.

1.1. Installation of the no-dig three-dimensional cellular confinement system

Arboricultural Supervision Required

In order for the proposed driveway extension to be formed in an arboriculturally acceptable manner, a three-dimensional cellular confinement system is to be used. The installation of products varies slightly and should be installed according to the manufacturer's instructions. However, in the instance that this is not available, the following methodology should be followed.

The location of the driveway extension shall be marked out using biodegradable spray paint or string lines and pegs. The location of the driveway extension will be investigated for the presence of underground utilities. Any underground utilities which are located should be also marked out in the same way.

The existing turf layer and any other vegetation shall be carefully removed using a turf iron, shovel or spade. Due to the size of the area to be stripped, it may be appropriate to employ the use of a small mechanical turf cutter. No excavations during this process are to exceed a maximum depth of 100mm. All turves/sod and other cut vegetation is to be removed by hand and removed from the site.

Any undulations, ruts and high spots shall be assessed by the project Arboricultural Consultant. High spots may be reduced by hand if deemed appropriate by the Arboricultural Consultant. Deep ruts and undulations shall be made up to any high spots using granular, permeable fills such as crushed stone or sharp sand to achieve a level surface. Any materials used for filling shall be brought onto the site using wheelbarrows and levelled using hand tools. No mechanical compaction of the fill or exposed ground is to take place.

The exposed ground will be covered by a layer of geotextile membrane or another permeable membrane in accordance with the manufacturer's recommendations. The geotextile layer shall be pinned in place retaining an overlap of 300mm. Ground pins, plastic pins or wooden stakes shall be used to hold the geotextile in place.

Prior to the installation of the cellular confinement system, it may be appropriate to fill deep undulations or ruts with sections of cellular confinement system. In these areas the system should be cut to size, layered and filled with appropriate granular fill to create a level finished surface. The second layer of geotextile separation fabric must then be stretched across the first layer to stop the migration of fills between the layers. This layer should be fixed in place using the same pins and cut to shape accordingly.

The cellular confinement system shall be installed and fixed in place in accordance with manufacturers guidelines. The edges of the cellular confinement system shall be defined using either timber boards or railway sleepers laid at ground level. No excavations are to be undertaken during the installation of the edging. The edging may be fixed in place using steel pins or wooden stakes.

Once installed, the cellular confinement system will be filled using clean granular aggregate as specified by the manufacturer. Angular stone chips with a nominal size of 20-40mm are the usual fills appropriate for filling the cells of the system. It is imperative that the granular fill does not contain fines (binding material), soluble materials or limestone.

Filling of the cellular confinement system may be undertaken using machinery. The machinery employed during this operation must operate from the existing hard surfacing working backwards across the cellular confinement system sections. It is important to ensure all of the cells have been filled to capacity. A landscaping rake or shovel should be used to ensure the edges of the product are fully filled.

Once the cellular confinement system has been filled with aggregate it should be rolled using hand rollers or a small, mechanised roller.



A layer of geotextile membrane shall be laid over the filled cellular confinement system in accordance with manufacturers guidelines. A final wearing course which remains porous shall then be installed across the cellular confinement system. It is imperative that this final layer remains porous to allow the percolation of water, nutrients and gaseous exchange between the soil and atmosphere.

Any deviation on works being conducted within the RPA of any retained tree at the site will require the consultation of the Arboricultural Consultant.

I am happy to provide additional advice/guidance if required. I wish you every success with your project.

Yours sincerely



Oliver Lower ND Arb L3, Dip Arb L4, Dip Arb L6

Director & Principal Arboricultural Consultant



Appendix A

Tree Survey Schedule

Tree Protection Plan (34HavantRd\Driveway\TPP_V1)

BS5837:2012 Tree Survey

Fallen&Found Arboriculture Ltd

Client: Critchley Architecture & Design
 Project: Q0138 34 Havant Rd 2021
 Survey Date: 08/06/2021
 Surveyor: Oliver Lower



Fallen&Found
Arboriculture

34
 Havant Road
 Emsworth
 Hampshire
 PO10 7JG
 Phone: 01243 967808

Tree and Tag No Species	Hght (m)	Stems		Crown		Age	RP A (m²) R (m)	Phys Condition	Structural Condition	Preliminary Recommendations Survey Comment	Cat ERC
		No	Ø (mm)	Spread (m)	Clear (m)						
T6											
Copper Beech <i>Fagus sylvatica 'Purpurea'</i>	24.1	1	940	N 9.6 E 7 S 8 W 8.6	8.89 4.5 6.5 7.15	M	A: 399.8 R: 11.28	Good	C: Fair S: Good B: Good	Protection :: Erect protection barriers <i>Erect protection barriers along driveway edge. Retain driveway surface within RPA as ground protection.</i> Large prominent tree with normal vitality and form consistent with species and past management practices.	B.2 20 to 40 yrs

Age Classifications:	N	Newly planted	EM	Early Mature	Condition:	C	Crown	Stems:	Ø	Diameter
	Y	Young	M	Mature		S	Stem		(Eq)	Equivalent stem diameter using BS5837:2012 definition
	SM	Semi-mature	OM	Over Mature		B	Basal area		ERC:	Estimated Remaining Contributio



allen&Found Arboriculture Ltd
Havant Road
Isleworth Hants PO10 7JG
T: 07564346560
Email: Oliver@fallenandfound.co.uk

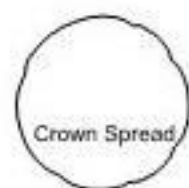
34 Havant Rd, Driveway Tree Protection Plan

SCALE :
1 : 200 @ A3 DATE :
01/04/2022



MAP FILENAME :
34HavantRdDriveway\TPP_V1

Map data shown may contain Ordnance Survey © products supplied by
Pear Technology Services Ltd. Email: info@peartechnology.co.uk
© Crown Copyright and database rights from data shown above
Ordnance Survey © licence number 100023148



Category 'A'

Category 'B'

Category 'C'

Category 'U'

0 15m

X2 Extra Heavy Standard London Plane
Trees (*Platanus x acerifolia*) 14-16cm/4-5m.

bt

New Driveway aligned centrally

Existing Surface to remain and be extended

Cellweb 3d cellular confinement system

T6
B

mb

Legend

Cell Web

Car Parking Spaces

New Trees

Driveway

