

1 ARBORICULTURAL STATEMENT

- 1.1 LandArb Solutions Ltd are instructed to prepare an arboricultural statement to accompany a planning application for or single storey side extensions to Lake House, 178 Bearwood Road, Barkham, Wokingham, RG41 4SH.
- 1.2 A tree survey plan and schedule are in appendix 1.
- 1.3 A tree protection plan for demolition is in appendix 2.
- 1.4 A tree protection plan for construction is in appendix 3.
- 1.5 The site proposals are in appendix 4.
- 1.6 The drainage strategy is in appendix 5.
- 1.7 The relevant trees were surveyed and a tree survey and protection plans produced.
- 1.8 Plans provided;
 - 2525 001 Rev B, Block Plan
 - 19721-D03-C The Lodge, 178 Bearwood Drainage Strategy

Arboricultural Resource

- 1.9 LandArb Solutions Ltd visited the site at 178 Bearwood Road on 7th September 2023 to carry out a tree survey. Individual present on site: David Paginton CMLA, Dip Arb L4, M.Arbor.A. The site was re visited in February 2026 and updates made where required to the survey. The area of interest in this application was the off-site trees beyond the boundary. A tree survey plan and schedule are in appendix 1.
- 1.10 The site relates to the area of land associated with the existing house and access, with gardens to all sides of the existing dwelling.
- 1.11 Trees and tree groups nearest the proposals are all moderate quality.
- 1.12 There are various mature trees located to the north, east and south of the existing house.

1.13 Site photos are set out on the following pages.



Photo 1: View along the access drive.



Photo 2: View west towards the working area.



Photo 3 : View west towards the dwelling and outbuilding.



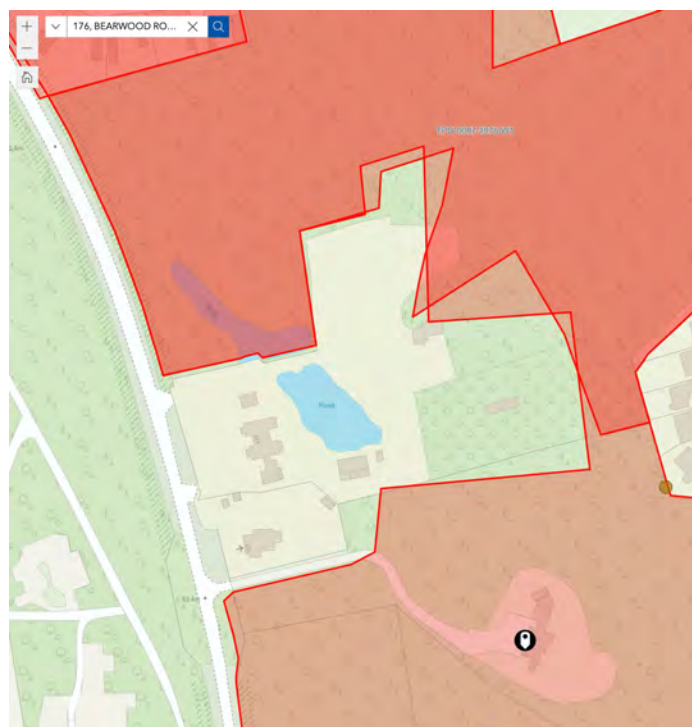
Photo 4: View east along the drive towards the outbuilding.



Photo 5: View west along the access drive.

Statutory Tree Protection

- 1.14 Wokingham Borough Councils online mapping resource shows the area of demolition and the proposals are not within a conservation area. The trees just south and east of the area of activity are covered by a TPO ref: 0087-1978-W1 (accessed 20.02.26).



Proposals (Appendix 4)

- 1.15 The proposals are to demolish the existing outbuildings and build a new side extension to an existing dwelling. Proposals are shown on the architect's plan (Appendix 4). The access will use an existing access point into the site from the south and extend it along where the outbuildings to be demolished.

Tree Works and Removals

- 1.16 The proposals as shown on the site plan do not require any tree removals to facilitate the proposals. The side extensions will require the removal of garden shrubs including laurel and rhododendron.
- 1.17 No tree works are proposed to enable development.

Tree Protection (Appendix 2 and 3)

- 1.18 The proposals include demolition works, and as such the protection demolition plan sets out the alignment of heras barriers which will be erected in advance of demolition works and remain in place until all demolition works and site clearance are completed. There is plenty of space to facilitate such works.
- 1.19 Demolition of the timber outbuildings should adopt a pull down pull back approach where materials are pulled away from the boundary fence.
- 1.20 The protection construction plan shows the alignment of heras barriers which will be erected as shown and remain in place until all construction works are completed.

Access and Services (Appendix 5)

- 1.21 Access will be from the existing site access to the west and south. There is plenty of space internal to the site to store materials, for contractors parking and for deliveries and welfare.
- 1.22 The extension will utilise the existing services at the property.

Overbearing Effects

- 1.23 None anticipated. Proposals are for extension to an existing dwelling.

Protection Measures

- 1.24 The following list of activities that must not occur within any RPAs.
- No soil/turf stripping, raising/lowering of ground levels (apart from the new low bun required for rainwater runoff for flood prevention), deposit or excavation of soil or rubble;
 - Storage of materials.
 - Machinery fuel, chemicals or other materials of any other description must be safely stored if required to be brought to site. There must be equipment to help clean up any spillages that occur, with any chemicals placed on plywood, ground guards or non-permeable sheeting.
 - No parking/use of tracked or wheeled machinery.
 - No fixtures or fittings such as signs, cables or the like being attached to any part of a retained tree;
 - No mixing of cement within RPAs.
- 1.25 The methods of construction set out above are proportionate to the proposals.
- 1.26 Provided the measures suggested are implemented, the proposals can be installed without impact to retained survey items.

Permeable surfacing in off-site tree RPAs

- 1.27 Where the driveway is to be re-routed to where the outbuildings are being demolished works will need to be carried out sensitively. The following should be followed:
- Ensure tree protection is in place as per the TPP construction.
 - Demolish outbuildings. Remove any turf to east of the outbuildings using hand tools or lightweight plant. Where using lightweight plant this should operate from atop ground protection.
 - Do not excavate into the ground/soil beneath. The hard surfacing is to be constructed on top of the existing ground i.e. built up.

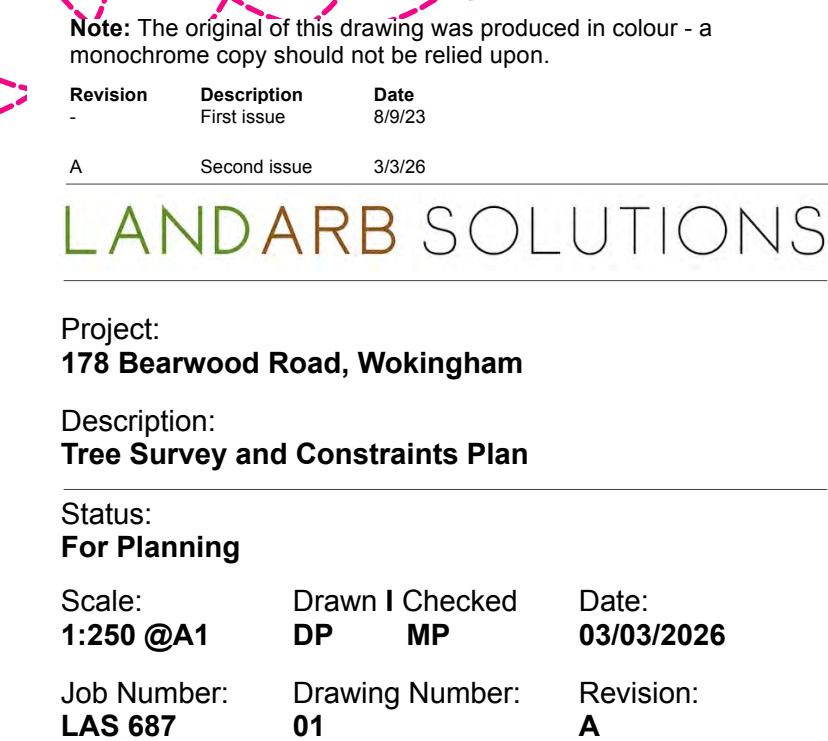
- Any hollows or depressions are to be filled using clean angular stone or sharp sand to ensure level surface.
- Install a geotextile membrane on the prepared ground and then lay permeable gravel (MOT type 3). If a more substantial subbase is required then this must be carried out using a no dig method using a load bearing geocellular confinement system
- The surface finish must be permeable, in this case a local gravel.
- Edge support where in the RPA must avoid excavation and instead use edging set above the ground and pinned in place (such as timber pinned in place using timber or steel pegs).

1.28 A Cellweb detail/manufacturers method statement is included in Appendix 5.

APPENDIX 1: TREE SURVEY SCHEDULE AND SURVEY PLAN

Ref no.	Species	Ht. (m)	Stem				Category Grading	Crown Spread (m)							Life stage	ULE	Physiological Condition	Structural Condition	General notes	Management Recommendations
			Stem Count	Stem dia. (mm)	RPA radius	RPA area		N	E	S	W	Ht. 1st Br. (m)	Est.	1st Br. Direction	Ht. Can. (m)					
G1	Bramble, rhodendron, bamboo, holly	5.0	1	100	1.2	5	C2	As shown				N/A		0.5	M	10+	Fair	Fair	Group of boundary vegetation, dense holly throughout.	None at time of survey.
G2	Blue spruce, Monkey puzzle, magnolia	14.0	1	280	3.4	35	C2	As shown				N/A		1.0	M	10+	Fair	Fair	Three trees in lawn, small shape.	None at time of survey.
T3	Yew	9.0	2	283	3.4	36	C1	0.5	3.0	2.0	2.0	N/A		1.0	M	10+	Fair	Fair	Trimmed to northern side adjacent access.	None at time of survey.
G4	Birch	15.0	1	300	3.6	41	C1	3.0	3.0	3.0	3.0	N/A		7.0	M	10+	Fair	Fair	Several dead trees, limited canopies, deadwood, vegetation at base.	None at time of survey.
T5	Magnolia	9.0	1	430	5.2	84	C1	4.0	4.0	3.0	2.0	N/A		2.0	M	10+	Poor	Fair	Dieback, growing leaves, deadwood.	None at time of survey.
T6	Cypress	12.0	1	540	6.5	132	C1	4.0	4.0	4.0	3.5	N/A		2.0	M	10+	Fair	Fair	Deadwood, thinning canopy.	None at time of survey.
T7	Oak	18.0	1	900	10.8	366	A1	10.0	10.0	10.0	10.0	N/A		2.0	M	40+	Good	Good	Large spreading, minor deadwood, typical of age and species.	None at time of survey.
T8	Yew	7.0	1	372	4.5	63	C1	3.0	3.0	4.0	2.5	N/A		1.5	M	10+	Fair	Fair	Suppressed.	None at time of survey.
T9	Sweet chestnut	7.0	1	200	2.4	18	C1	4.0	4.0	4.0	0.5	N/A		1.5	SM	10+	Fair	Fair	Small tree, suppressed to west.	None at time of survey.
T10	Norway maple	15.0	1	530	6.4	127	B1	4.0	4.0	4.0	4.0	N/A		1.0	M	20+	Fair	Fair	Kinked stem, minor deadwood, fused branches.	None at time of survey.
G11	Birch	9.0	1	100	1.2	5	C1	As shown				N/A		1.0	Y	10+	Fair	Fair	Small cluster of trees in pond edge.	None at time of survey.
T12	Fir	10.0	1	200	2.4	18	B1	2.5	2.5	2.5	2.5	N/A		1.5	EM	20+	Good	Good	Good shape, uniform crown.	None at time of survey.
T13	Pear	11.0	1	310	3.7	43	C1	3.5	2.0	2.0	2.0	N/A		3.0	M	10+	Fair	Fair	Thinning canopy, minor deadwood.	None at time of survey.
G14	Pear	9.5	1	260	3.1	31	C1	As shown				N/A		1.5	M	10+	Fair	Fair	Group aligning north side of outbuilding, minor deadwood.	None at time of survey.
T15	Oak	17.0	1	510	6.1	118	B1	5.0	4.0	5.0	7.0	N/A		1.0	M	20+	Fair	Fair	Moderate abscised branches and deadwood in eastern canopy, lower canopy pruned.	None at time of survey.
T16	Pine	17.0	1	580	7.0	152	B1	4.0	4.0	4.0	4.0	N/A		7.0	M	20+	Fair	Fair	High canopy, good shape. Minor deadwood.	None at time of survey.
T17	Red oak	17.0	1	490	5.9	109	B1	5.5	5.0	3.5	6.0	N/A		1.5	M	20+	Fair	Fair	Kinked stem, canopy favours north west, minor deadwood, included wound north side.	None at time of survey.
T18	Oak	12.0	1	250	3.0	28	C1	1.5	3.0	2.0	4.0	N/A		1.0	EM	10+	Fair	Fair	Minor deadwood, suppressed.	None at time of survey.
T19	Oak	16.0	1	460	5.5	96	C1	2.0	5.0	9.0	5.0	N/A		8.0	M	20+	Fair	Fair	Leaning south, canopy favours south.	None at time of survey.
T20	Oak	16.0	1	270	3.2	33	C1	1.5	3.0	3.0	1.5	N/A		9.0	M	<10	Fair	Fair	Drawn up form, limited canopy.	None at time of survey.
G21	Oak,sweet chestnut, spruce	17.0	1	350	4.2	55	B1	As shown				N/A		5.0	M	20+	Fair	Fair	Group of trees in lawn, minor deadwood. Lower canopies pruned.	None at time of survey.
G22	Oak	17.0	1	470	5.6	100	B1	As shown				N/A		8.0	M	20+	Fair	Fair	Two trees, high canopies, minor deadwood.	None at time of survey.
T23	Oak	20.0	1	680	8.2	209	B1	6.0	6.0	9.0	8.0	N/A		1.0	M	20+	Fair	Fair	Abscised branches, canopy suppression north east, minor deadwood.	None at time of survey.
T24	Oak	20.0	1	760	9.1	261	B1	9.0	6.0	5.0	7.0	N/A		2.0	M	20+	Fair	Fair	Minor deadwood, wide spreading, climbing equipment attached to stem.	None at time of survey.
G25	Mixed fruit apple and damson	5.0	1	125	1.5	7	C1	As shown				N/A		1.0	M	10+	Fair	Fair	Mixed fruit trees, some leaning, minor deadwood.	None at time of survey.

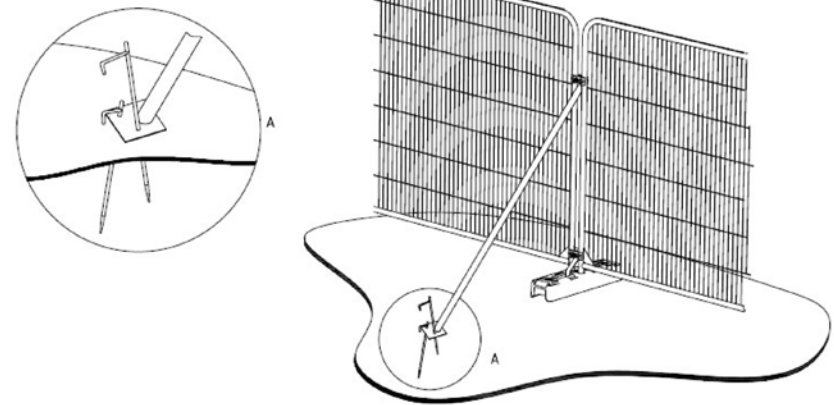
- Tree Category A - High Quality
- A Category - Hedgerow, Group, Woodland
- Tree Category B - Moderate Quality
- B Category - Hedgerow, Group, Woodland
- Tree Category C - Low Quality
- C Category - Hedgerow, Group, Woodland
- Tree Category U - Unsuitable for Retention
- Default Root Protection Area to BS:5837:2012
- Adjusted Root Protection Area to BS:5837:2012
- Shrub Mass / Offsite Tree



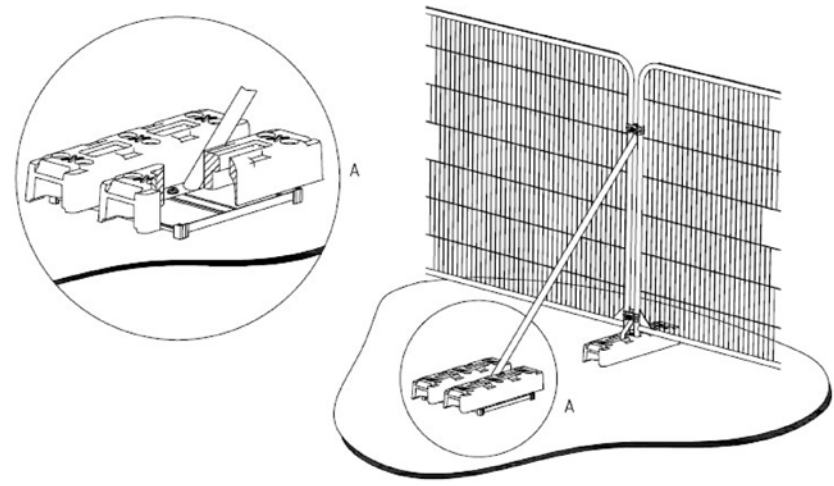
APPENDIX 2: TREE PROTECTION PLAN - DEMOLITION

Job Number: **LAS 687** Drawing Number: **07** Revision: **-**

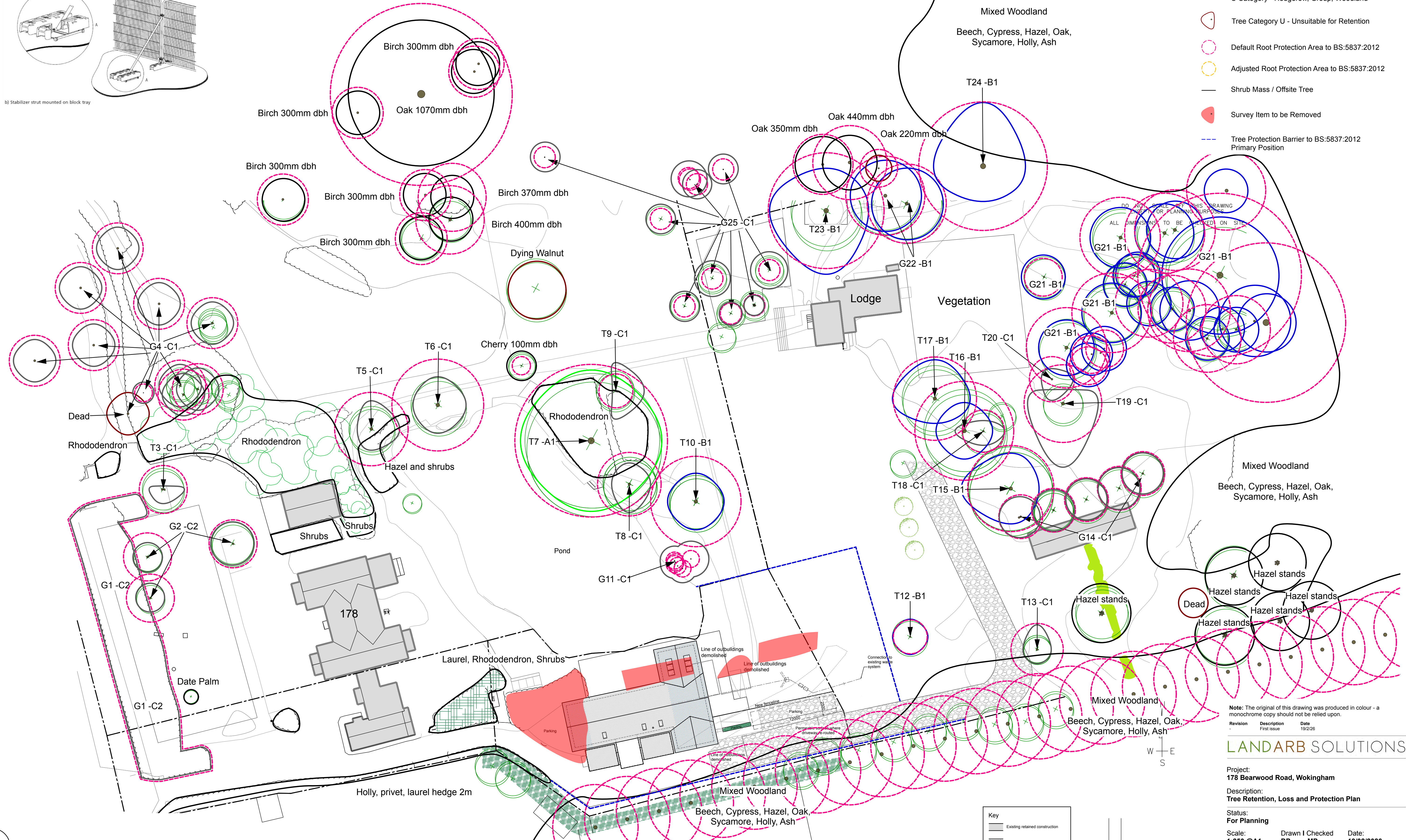
APPENDIX 3: TREE PROTECTION PLAN - CONSTRUCTION



a) Stabilizer strut with base plate secured with ground pins



b) Stabilizer strut mounted on block tray



KEY - BS 5837 : 2012 Categories

- Tree Category A - High Quality
- A Category - Hedgerow, Group, Woodland
- Tree Category B - Moderate Quality
- B Category - Hedgerow, Group, Woodland
- Tree Category C - Low Quality
- C Category - Hedgerow, Group, Woodland
- Tree Category U - Unsuitable for Retention
- Default Root Protection Area to BS:5837:2012
- Adjusted Root Protection Area to BS:5837:2012
- Shrub Mass / Offsite Tree
- Survey Item to be Removed
- Tree Protection Barrier to BS:5837:2012 Primary Position

Note: The original of this drawing was produced in colour - a monochrome copy should not be relied upon.

Revision	Description	Date
1	First issue	19/02/20

LANDARB SOLUTIONS

Project:
178 Bearwood Road, Wokingham

Description:
Tree Retention, Loss and Protection Plan

Status:
For Planning

Scale:
1:250 @A1

Job Number:
LAS 687

Drawn I Checked
DP MP

Date:
19/02/2026

Revision:
-

APPENDIX 4: SITE PLAN

DO NOT SCALE OFF THIS DRAWING
EXCEPT FOR PLANNING PURPOSES
ALL DIMENSIONS TO BE CHECKED ON SITE



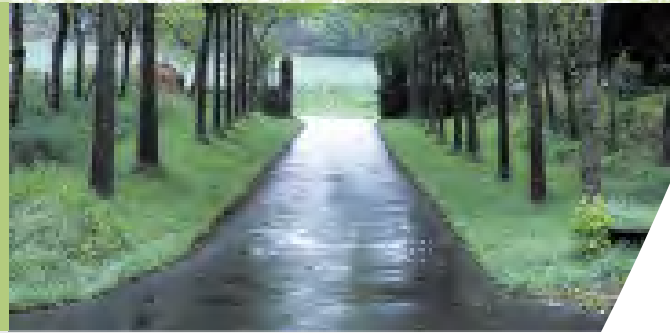
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Project: Extension		
for		
Mary & Chris Kay		
at		
Lake House		
178 Bearwood Road		
Barkham		
Wokingham		
RG41 4SH		
Contact: Michael Austin R/BA		
E-mail: project@austinlebbon.co.uk		
Web: www.austinlebbon.co.uk		
Phone: 01730 887559		
Dwg Ref: 2525 [PL] 001	Rev: B	Date: December 2025

APPENDIX 5: CELLWEB GUIDE



CellWeb TRP®



Tree Root Protection Guaranteed



Geosynthetics

www.geosyn.co.uk

CellWeb TRP® System

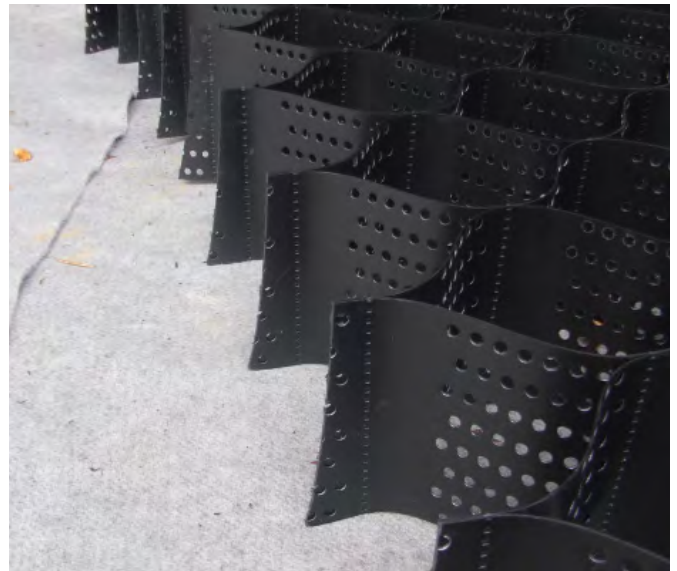
Tree Root Protection System



The Consequences Of Tree Root Damage During Construction

It is an offence to cut down, lop, uproot, top, wilfully damage or destroy a protected tree without authorisation. Trees can be protected under the Town and Country Planning Act 1990 and the Town and Country Planning (Trees) Regulations 1999. Trees are protected when they are the subject of Tree Preservation Orders (T.P.O) or within Conservation Areas, subject to certain exemptions. Retention and protection of trees on development sites is also secured through the use of planning conditions.

On a construction site all trees with a Tree Preservation Orders need to be managed in accordance with BS5837 2012 (Trees in relation to construction); failure to comply with these orders can be a costly affair as many parties have discovered.



Fishponds, Ketton

There are two offences which apply equally to trees protected by Tree Preservation Orders and those within Conservation Areas:

- Firstly, anyone who cuts down, uproots or wilfully destroys a tree, or who lops, tops or wilfully damages it in a way that is likely to destroy it is liable, if convicted in the Magistrates Court, to pay a fine of up to £20,000. If the person is committed for trial in the Crown Court, they are liable on conviction to an unlimited fine. The Courts have held that it is not necessary for a tree to be obliterated for it to be “destroyed” for the purposes of the legislation. It is sufficient for the tree to have been rendered useless as an amenity.
- Secondly, anyone who carries out works on a tree that are not likely to destroy it is liable, if convicted in the Magistrates Court, to a fine of up to £2,500. In addition to directly carrying out unauthorised works on protected trees, it is an offence to cause or permit such works.

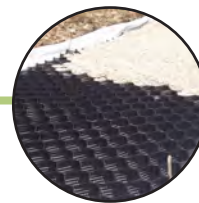
Developers and building contractors are often completely unaware that ‘compaction of soils within the Root Protection Area (RPA)’ constitutes wilful damage to the tree. When vehicular or pedestrian access within the RPA is necessary, either for the construction operation or final site access, the effects of this activity must be addressed and the ground must be protected. When tracked or wheeled traffic movements are involved, the ground protection system should be designed by an engineer and take into account the loading involved.



Shelton Road, Shewsbury

The Solution:

Geosynthetics CellWeb TRP® System



The Solution According to BS 5837:2012

“Appropriate sub-base options for new hard surfacing include three-dimensional cellular confinement systems

(BS 5837 2012 section 7.4.2 Note 1)

The CellWeb TRP® Solution

CellWeb TRP® is the market leader in the United Kingdom and Ireland for tree root protection. CellWeb TRP® cellular confinement system protects tree roots from the damaging effects of compaction and desiccation, while creating a stable, load bearing surface for vehicular traffic. CellWeb TRP® complies with BS 5837:2012 and APN 12. It provides a no-dig solution, is tried and tested having been used successfully since 1998. It is the only tree root protection system which has been independently tested and it is the only tree root protection system which is guaranteed for 20 years. See page 6 for the full terms and conditions of the guarantee.



Fishponds, Ketton

Field Trials

Geosynthetics Limited are the only company in the UK and Ireland to carry out live, completely independent field tests on the performance of a 3 dimensional cellular confinement system when used in a no-dig tree root protection system application. The results prove that CellWeb TRP® significantly reduces the compaction of sub-soils within the root growth limiting parameters established by K D Coder, 'Soil damage from compaction'. University of Georgia. July 2000. A copy of the report is available upon request.

CellWeb TRP® Product Guarantee

Geosynthetics Limited prides itself on a providing a reliable, consistent service; including technical advice, on site support and installation guidance. Geosynthetics Limited provides a 20 year guarantee for the CellWeb TRP® tree root protection system. This guarantee gives the client, the tree officer and arboricultural consultant the confidence that the designed system will perform as intended without damaging the health of the tree.

See page 6 for the full terms and conditions of the guarantee.

CellWeb TRP® System

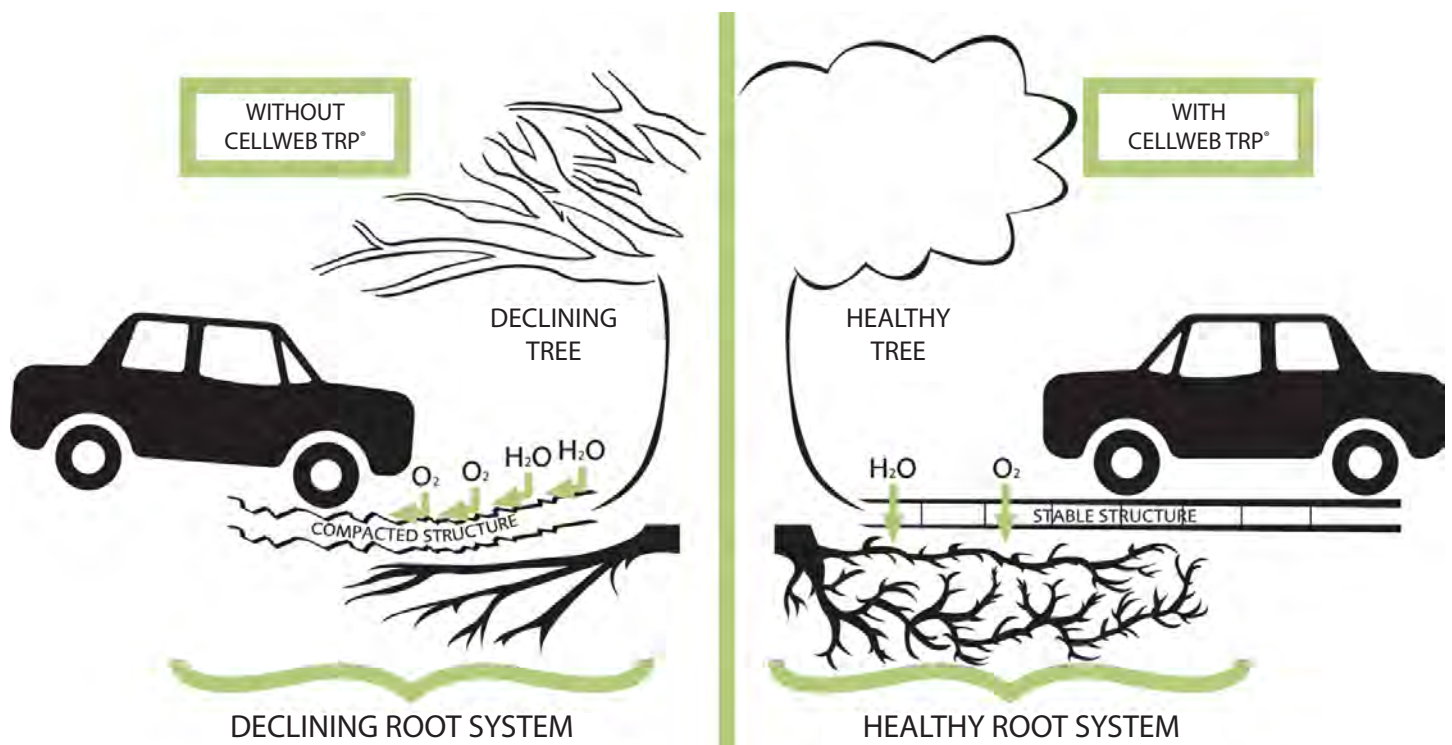
How the System Works



How CellWeb TRP® Works

CellWeb TRP® is a cellular confinement system that confines aggregate materials and makes them stronger, thus increasing the bearing capacity of the sub base materials. Research shows that CellWeb TRP® acts as a stiff raft to distribute wheel loads and reduce their magnitude at the base of the construction, thus maintaining the soil bulk density at levels that are suitable for tree root growth.

CellWeb TRP® is used around the world to provide cost effective hard surface construction over tree roots and is the system of choice for Tree Officers and Arboriculturists. For more information on this subject see CellWeb TRP® Fact Sheet No 1.



Water and Oxygen Transfer Through the CellWeb TRP® System

The CellWeb TRP® system is constructed using open aggregate infill and CellWeb TRP® has perforated cell walls. The pore spaces between the aggregate particles are greater than 0.1mm in diameter. This open structure is far more permeable than typical soils and allows the free movement of water and oxygen so that supplies to trees are maintained.

For more information on this subject see CellWeb TRP® Fact Sheet No 2.

CellWeb TRP® and Pollution

How CellWeb TRP® Deals With Catastrophic Oil Spills



How CellWeb TRP® Deals With Pollution

Where possible a permeable pavement system should always be constructed above the CellWeb TRP® system. The effective removal of pollution from runoff by permeable pavements is well known. Worldwide research has shown runoff that has passed through permeable pavements has low concentrations of pollutants.

Small spills of oil will be dealt with within the joints between the paving blocks and in the aggregate used within the system. However, large catastrophic spills are a different matter.

For more information on this subject see CellWeb TRP® Fact Sheet No 3.



Castle Gardens



Ambleside Lake District



Harcourt Aboretum

The Treetex® geotextile used in the CellWeb TRP® system has two functions. Treetex® separates the sub base aggregates from the soil beneath and it traps oil within its structure and allows it to degrade aerobically within the pavement construction. The structure, thickness and weight of Treetex® creates the perfect environment for this to happen. Most importantly tests prove that Treetex® will absorb 1.7 litres of oil per square metre, this is 4 times more effective than standard geotextiles.

Treetex® is an intrinsic part of the CellWeb TRP® system; and must be in conjunction with the CellWeb TRP® in order to guarantee the success of the system.

Please see page 6 for full details of the guarantee.

Geosynthetics CellWeb TRP® System:

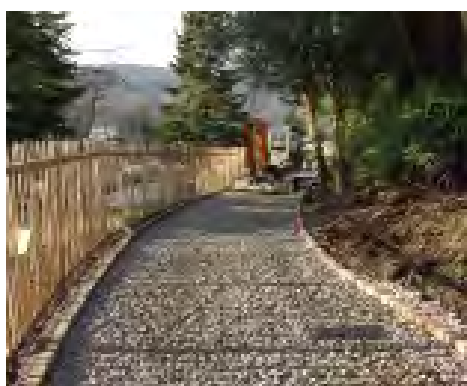
A Proven No Dig Solution



Advice, Design and Product Selection

Geosynthetics Limited has been supplying the CellWeb TRP® system since 1998 and has vast experience in its application. No two contracts are the same and we understand the factors that need to be taken into account to specify the correct CellWeb TRP® product.

We provide a free consultation, design and advisory service to find the solution that is most cost effective and beneficial for your site. Our service includes product selection, engineering calculations, CAD drawings and full instructions to help you from project conception to completion.



*Fallbarrow Park, Windermere:
Prior to CellWeb TRP® Installation*



*Fallbarrow Park, Windermere:
CellWeb TRP® Installation*



*Fallbarrow Park, Windermere:
Completed CellWeb TRP® Installation*

Final Surfacing

The benefits of the CellWeb TRP® system can only be maintained if a suitably porous final surface is selected. An ideal surfacing is the Golpla grass reinforcement and gravel retention system, a visually attractive surface that has the advantage of being fully porous. Alternatives include block paviors, porous asphalts and loose or bonded gravel.

Always Use CellWeb TRP®

The CellWeb TRP® system is the only research backed system of its kind in the UK with a 100% success rate. CellWeb TRP® has been specifically developed for the Tree Root Protection market. The system is supported by 15 years of data and thousands of installations making it the system of choice for the majority of Tree Officers and Arboriculturists in the UK.

CellWeb TRP® is uniquely identifiable. It is manufactured with a bright green panel on each side. When installed the green panels are laid adjacent, creating a green band across the construction.



Woodcock Hall, Yorkshire

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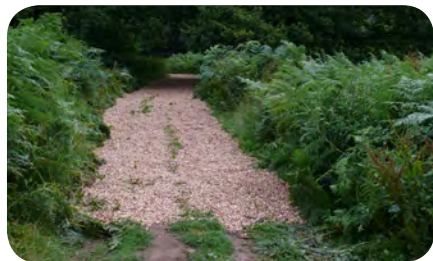
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Cellweb® TRP Installation Guide



Step 1: Prepare Surface



Step 2: Lay out Treetex™



Step 3: Lay out Cellweb® TRP

- Cellweb® TRP is a NO DIG tree root protection measure and it is recommended that no excavation be performed without prior approval and guidance from the Local Authority Arboricultural Officer.
- Soil compaction from vehicles, machinery and materials is to be strictly prohibited during construction within Root Protection Areas (RPAs).
- Approval must be obtained from the Local Authority that the design and the method of construction is acceptable.
- Further information is available from the following two documents;
 - British Standard BS5837: 'Trees in Relation to Design, Demolition and Construction' (2012).
 - Arboricultural Advisory and Information Service: Practice note 12 – 'Through the Trees to Development' (APN12).

Installation Method

1. Prepare the Surface

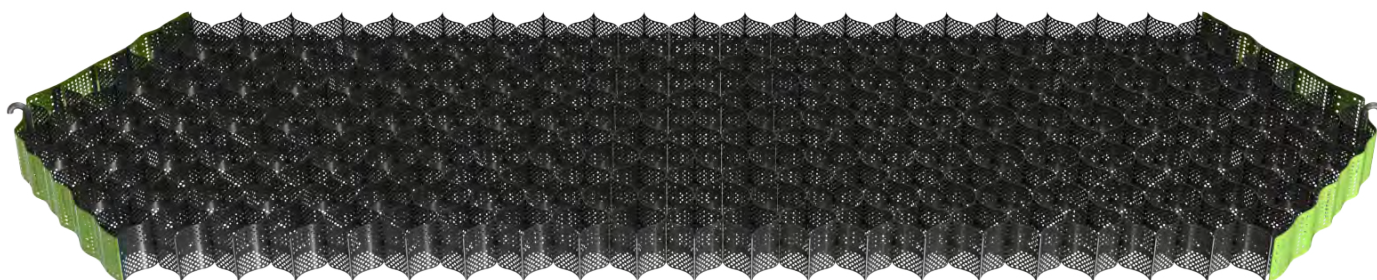
- Remove the surface vegetation using appropriate hand held tools or herbicide (see Note 1).
- Remove any surface rocks, debris and organic material.
- Do not level off high spots or compact the soil through rolling.

2. Lay out the Treetex™ Pollution Control Geotextile

- Lay out the Treetex™ over the prepared area, overlaying the edges of the required area by 300mm.
- Overlap any joins by 300mm minimum or more, depending on soil structure (see Note 2).
- Create a level surface by filling any hollows with clean angular stone or sharp sand.

3. Lay out the Cellweb® TRP Cellular Confinement System

- Lay out the collapsed Cellweb® TRP on-top of the Treetex™.
- Place one of the supplied J pins into the centre cell at the end of the panel and secure into the ground.



Cellweb® TRP - Installation Guide

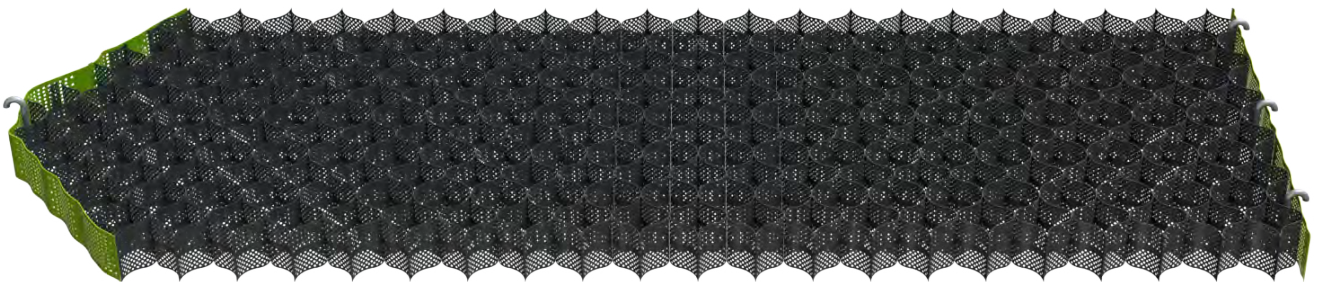


Step 3: Pinning Cellweb® TRP

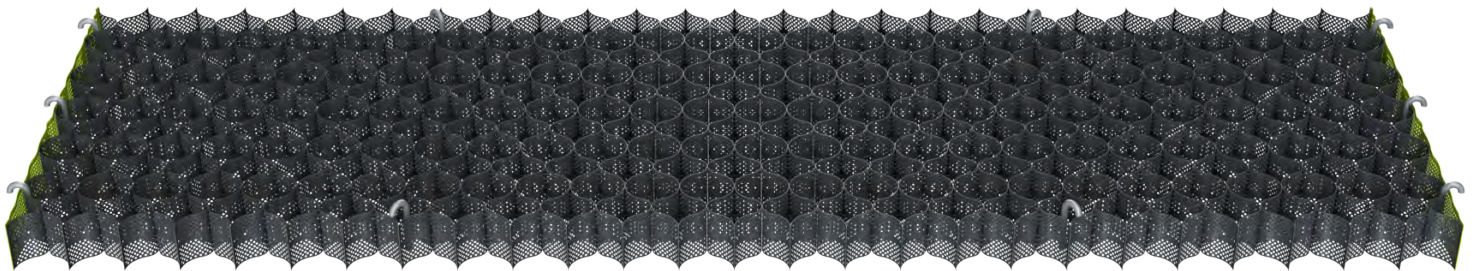


Step 3: Stapling Cellweb® TRP

- Pull out the Cellweb® TRP to its full 8.1m length and secure its length with another J pin.



- Now measure its width to 2.56m and secure in each of the corners with the J pins.
- Use 10 pins per panel to create a panel measuring 8.1m x 2.56m.



- This will produce a cell size of 259mm x 224mm which is the required cell aperture. Each cell must be fully extended and under tension.
- Staple adjacent panels together at each cell (see Note 3).
- If a curved path or shape is required, this should be cut when the Cellweb® TRP panel is pinned out to 8.1 x 2.56m, ensuring complete cells remain. Do not try to curve or bend the Cellweb® TRP panels into place.
- When cutting Cellweb® TRP, please bear in mind that you will lose two internal cells per cut. Across a 8.1m long panel, this equates to a loss of 0.224m x 2 along the length or 0.259m x 2 across the width.

Cellweb® TRP - Installation Guide



Step 4: Clean Angular Stone



Step 5: Edge Restraints



Step 6: Surface Options

4. Infill the Clean Angular Stone

- The infill material must be a clean angular stone Type 4/20mm (see Note 4).
- Do not use M.O.T type 1 or crushed stone with fines for tree root protection.
- Infill the Cellweb® TRP cells with the clean angular stone, working towards the tree and using the infilled panels as a platform.
- Minimum 25mm overfill of clean angular stone when used in conjunction with a hard surface.
- No compaction is required of the infill. Do not use a whacker plate or other means of compaction.
- Encourage settlement of the stone with the use of a light roller or with 2-3 passes of the construction plant used for installation.
- If the clean angular stone is being used as the final surface; regular maintenance will be required to ensure a minimum overfill of 50mm.

5. Edge restraints

- Excavations for kerbs and edgings should be avoided within the RPAs.
- Where edging is required for footpath and light structures, a peg and treated timber board edging is acceptable
- Other options include wooden sleepers, kerb edging constructed on-top of the Cellweb® TRP system, plastic and metal edging etc.

6. Surface options

- All surfaces in Root Protection Areas must be porous. Surfaces can include porous block paving, porous asphalt, loose gravel, grass and gravel retention systems (e.g Golpla), resin bound gravel, concrete and astro turf.

NOTES

- 1. Herbicide:** According to BS5837:2012 "The use of herbicides in the vicinity of existing trees should be appropriate for the type of vegetation to be killed, and all instructions, warnings and other relevant information from the manufacturers should be strictly observed and followed. Care should be taken to avoid any damaging effects upon existing plants and trees to be retained, species to be introduced, and existing sensitive habitats, particularly those associated with aquatic or drainage features."
- 2. Geotextile:** We recommend the installation of a Treetex™ under the Cellweb® TRP, or under the sub-base, if installed. The overlapping between adjacent rolls of Geotextile should be: CBR > 3%: 300mm minimum, CBR between 1% and 3%: 500mm minimum. CBR ≤ 1%: 750mm minimum.
- 3. Staples:** Number of staples per join: 200mm: 5 staples. 150mm: 4 staples. 100mm: 3 staples. 75mm: 3 staples.
- 4. Granular Fill:** Open graded sub-base, clean angular stone Type 4/20 or Type 20/40. Please refer to BS7533-13:2009 and to the Design Manual for Roads and Bridges (DMRB), Volume 4 Geotechnics and Drainage, Section 1 Earthworks, HA44/91, Volume 7 – IAN 73/06 Design Guidance for road pavement foundations and Manual of Contract Documents for Highway Works (MCHW), Volume 1 Specification for Highway Works for the construction and maintenance of the fill material.

