ARBORICULTURAL CONSULTANTS

METHOD STATEMENT

FOR DEVELOPMENT WORKS AND PROTECTION OF RETAINED TREES

AT

BRILL PLACE (PLOT 7)

LONDON

PREPARED FOR

LBS PROPERTIES

By

ARBORICULTURAL SOLUTIONS LLP

FEBRUARY 2020

REVISION JULY 2020

SUMMARY

This report has been commissioned to provide detail on tree protection measures for a development at Brill Place (Plot 7) as part of the redevelopment of Central Somers Town.

The London Borough of Camden has Conditioned tree protection measures (Condition 48) as part of the full Planning Approval;

" Prior to the commencement of any works for Plot 7, details demonstrating how trees to be retained both on and off site shall be protected during construction work shall be submitted to and approved by the Council in writing. Such details shall follow guidelines and standards set out in BS5837:2012 "Trees in Relation to Construction" and should include details of appropriate working processes in the vicinity of trees, a tree protection plan and details of an auditable system of site monitoring. All trees on the site, or parts of trees growing from adjoining sites, unless shown on the permitted drawings as being removed, shall be retained and protected from damage in accordance with the approved protection details."

This report should be read in conjunction with the original Arboricultural Impact Assessment by Arboricultural Solutions LLP dated November 2015.

Providing all details are followed in this method statement, the development can proceed without causing long-term damage to the retained trees.

1. Introduction

1.1. Instructions

1.1.1. We are instructed by LBS Properties Ltd to provide a method statement for proposed development works at Brill Place (Plot 7), London. We are to report on the trees that may be implicated in the development proposal and provide guidance to ensure the long-term health of the trees.

1.2. Drawings and Documents

1.2.1. We confirm sight of the following documents and drawings:

- Topographic survey of site.
- Central Somers Town Masterplan, Existing Landscape Plan Plot 7 (edited to show Plot 7 hoarding boundary and basement footprint).

2. Report on site visit

2.1. General

2.1.1. The site was initially inspected on 15th July 2015 by F. Critchley and G. Causey of Arboricultural Solutions LLP. A further site visit was made on 11th December 2019 to update the survey for those trees implicated in the development of Plot 7.

3. Background Information

3.1. Development Proposal

3.1.1 The proposal is the first phase of the development requiring the construction of a basement to the proposed new building. The work will require the clearance of the site including some hard landscaping. The construction will include the use of a piling rig and associated plant operating within the site boundary; we are informed that the height of the tallest vehicle will be 4.3m.

4. Arboricultural Impact Assessment

4.1. Summary of impact

Impact	Reason	Low value (Cat C & U) trees	Moderate value (Cat B) trees	High value (Cat A) trees	Potential design & mitigation techniques
Trees to be removed	Building construction and/or surfacing	Trees 113, 114, 205, 206	Tree 208	Tree 108	Replacement planting/landscaping included in the Council's Masterplan
	Arboricultural reasons				
Retained trees to be managed	Enabling works/space for development	Tree 208, 209, 210	Trees 105, 106, 107, 109, 110, 112, 116, 212, 214		Crown reductions and crown lifting required to enable construction/access and reduce potential damage to crowns.
Retained trees that may be damaged	Removal of existing structures				
	Removal of existing surfacing	Trees 209, 210			Removal of any surfacing within the RPAs to be carried out using hand tools only.
	Material storage/washing areas/welfare areas	All trees within site hoarding	All trees within site hoarding		All material storage/washing areas/welfare areas to be located away from RPAs of retained trees. There is space within the site to utilise
	Temporary access to construction areas	Trees 209, 210, 211	Tree 212		Access to construction areas must avoid RPAs where possible. If it is necessary to enter an RPA with vehicles for access, ground protection must be placed beforehand.
	Installation of new structures		Tree 105		There is a minor encroachment into the RPA for the piled foundation. A hand excavated/air spade test trench can determine the extent of roots present to enable severance if applicable
	Installation of new surfacing	N/A	Trees 105, 106, 107		The path diversion is close to retained trees and must be constructed using a no-dig system at existing ground level.
	Excavations or ground level changes	N/A	N/A		No changes in the RPAs of retained trees unless investigations by air spade confirm no significant roots are present
	Installation of services*	N/A	N/A		All new services should be routed outside the RPAs of retained trees
	Landscaping works	N/A	N/A		Landscaping operations are to be carried out later as part of the Council's redevelopment of the area

4.2. Arboricultural Impact Assessment

4.2.1. The proposed construction of the basement impacts on trees within and adjacent to the site boundary (refer to drawing TPP_BRILLPLE_1). The development requires the removal of 6 trees, and this has been approved by the Council. The retained trees are to be protected by this method statement to satisfy Condition 48 of the Planning Approval.

4.2.2. Installation of the piles for the basement will encroach into the RPA of tree T105 (refer to drawing TPP_BRILLPLE_1). The encroachment is only 8.3% of the total RPA and is not considered significant. A test trench excavated by hand prior to works can expose any roots present to allow them to be severed cleanly. There is a smaller encroachment into the RPA of tree T208 and is 3.7% of the total RPA and is considered negligible; a test trench will be carried out as per tree T105.

4.2.3. The removal of the enclosed area of hardstanding may impact on trees T209 and T210 and care will be required when operating within the RPAs; work must be carried out by hand within the RPAs.

4.2.4. The access into the site will be at the southwest corner between the boundary wall (Purchess Street) and tree T209. The access will pass trees T209 and T210 and divert between trees T212 and T211. The trees are to be pruned to provide enough clearance that vehicles will not contact the crowns; ground protection must be installed. There is little space to allow for the installation of protective fencing, but the trunks can be boxed-in to prevent direct damage. Lorries leaving the site will proceed north, adjacent to the Purchess Street boundary and turn onto the road north of street tree T148.

4.2.5. There are three street trees (T148, T149 & T150) along Purchess Street that will be enclosed between the existing boundary wall and the site hoarding. To prevent damage to the trunks of the trees they will be boxed in. As the crowns are small there is little pruning that can be carried out and therefore extra care must be taken if operating close to these trees.

4.2.6. Some of the retained trees will require pruning to facilitate the development (refer to table 6.1. above). The construction of the new building and use of scaffold will require that there is a significant reduction of the crown of tree T105 to provide the necessary clearance. It should be noted that London plane tolerate heavy pruning, and this should not impact on the long-term health of the tree with the crown recovering over time.

4.2.7. Diversion of the existing footpath to allow the construction to proceed will impact on trees T105-T107 inclusive. The path should ensure clearance of at least 1m from the trunk of tree T105 and must be constructed using a no-dig system to ensure there is no damage to the tree roots.

5. Arboricultural Method Statement

5.1. Phase 1: Undertake Approved Tree Works.

5.1.1. All tree works should be undertaken prior to any site works commencing. Motorised vehicles will be restricted to areas of existing compacted/hard surfaces, or where ground protection is in place, and should not be taken onto un-surfaced areas within the root protection areas (as shown on drawing TPP_BRILLPLE_1). Refer to Table 7.2 below for tree works.

5.2 Tree Works

Tree No.	Recommended Works
Tree105	Reduce crown on south side by 3m. Reduce crown on west side by 6m and blend in with remaining crown. Crown lift on west & south sides to 4.5m
Tree106	Reduce crown on south side by 2.5m. Reduce crown on west side by 3.5m. Reduce crown on north side by 4m Reduce crown on east side by 1m, blend in with remaining crown. Crown lift on west & south sides to 4.5m
Tree107	Reduce crown on south side by 4m. Reduce crown on west side by 3m and blend in with remaining crown.
Trees 108, 113, 114, 205, 206, 207	Fell to ground level and remove stumps.
Tree109	Reduce crown on south side by 2m. Reduce crown on west side by 2.5m and blend in with remaining crown.
Tree 110	Reduce crown on south side by 2.8m. Reduce crown on east side by 1.5m and blend with remaining crown. Crown lift all round to 4.5m.
Tree 112	Reduce crown on south side by 2m. Reduce crown on west side by 1.8m. Reduce crown on north side by 2m and blend with remaining crown. Crown lift all round to 4.5m.
Tree 116	Reduce crown on south side by 1m. Reduce crown on west side by 3m and blend with remaining crown.

Tree No.	Recommended Works
Tree 208	Reduce overall crown to leave final crown diameter of 5.5m Crown lift to 4.5m.
Trees 209, 210	Reduce crowns to give a final diameter of 4.5m. Crown lift to 3m all round.
Tree 211	Reduce crown by 1m all round. Crown lift to 3m all round.
Tree 212	Crown lift on north, east and west sides to 4.5m.
Tree 214	Reduce overall crown to leave final crown diameter of 11m. crown lift to 3m.

NB: Several the trees implicated in the current phase of construction are growing in close proximity to each other and the crowns are distorted due to group pressure. The proposed pruning, although primarily to prevent crown damage during works, will result in a more symmetrical crown shape for several the trees. The heavy reduction of tree T106 (London plane) will not impact on its long-term potential as the species is known for its tolerance of heavy pruning.

5.3. Phase 2: Tree protection.

5.3.1. All materials storage and mixing will be confined to areas outside the RPAs of the trees. Where mixing of materials is undertaken close to the RPAs, this should be on an impervious surface with no run-off to prevent chemical contamination of the RPA.

5.3.2. All tree protection measures **must** be in place before any works commence or materials or machinery are brought onto site. An example of the recommended fencing is given in Appendix B figures 1 & 2. It is proposed that trees T110-T112 & T208 have the trunks boxed in by robust fencing to ensure there is no damage to the bark of the trees. Where sections of the RPA are outside of the protective fencing temporary ground protection must be installed, if the existing surface is not hard standing, to prevent soil compaction. Once installed, ground protection **must** not be moved or altered without prior consultation with the arboriculturalist or Local Authority Tree Officer. Protection measures will remain in place throughout the following processes:

- Contractor occupancy
- Plant and materials delivery
- Demolition/construction works
- Installation of utilities
- Completion of development

5.3.3. Refer to drawing TPP_BRILLPLE_1 for locations of areas requiring tree protection. The use of a proprietary ground protection system such as Eve Trakway would be suitable and provides flexibility in positioning panels. The carrying capacity of this system is up to 70 tonnes (TuffTrak) on most terrains and Euromat (up to 30 tonnes and rubber wheeled vehicles only, on

flat terrain). The TuffTrak panels can be bolted together to form a stable surface that prevents heavy plant slipping. The panels are light and can be lifted in place manually so there is no need for plant to enter the RPA for installation. The exact specification of TuffTrak to use will be selected by a suitably qualified structural engineer taking into account prevailing ground conditions and the expected maximum load of any plant operating on site.

5.4. Removal of hard standing

5.4.1. Any excavation/change sin surface work in RPAs **must** be carried out with care as set out in Appendix B sections 1.6 & 1.7. Whilst the volume of roots within the RPA may vary, particularly where there is existing hard surfacing, the indicative RPA must be used to determine where hand tools and supervised excavation are essential. All excavations must be carried out using hand tools (spades, forks and trowels) and taking care not to damage bark and wood of the roots. It is permissible to use a pneumatic hammer to break any hard surface as long as it is not allowed to penetrate below the hard surface. Once the hard surface is removed the remaining excavation must be by hand tools to ensure roots are not damaged; in this case trees T209 & T210 are implicated where the existing enclosed hardstanding is to be removed.

5.4.2. The existing tarmac footpath adjacent to trees T209 -T11 inclusive is to be retained and will aid in ground protection.

5.5. Installation of new path

5.5.1. The existing footpath from Brill Place and running northwest adjacent to trees T105 - T107 is to be diverted to allow the installation of the site hoarding (refer to drawing TPP_BRILLPLE_1). The new route is closer to trees T106 and T105 and will require a no-dig construction to prevent root damage. In this case a 3-D cellular confinement system such as Cell Web or equivalent (Geoweb, Geocell) will be installed at existing ground level as per the manufacturers recommendations for the anticipated loading. As tree roots do not generally occur in the top 50mm of soil, there is potential to carry out minor level adjustments by careful hand excavation of high points under supervision. Any low points can be filled with sharp sand to obtain a level surface for the cellular confinement system. Refer to Appendix B Section 1.8 and Fig 4 for details of path construction; in this case permeable tarmac will be used to match existing paths. In addition, it is recommended that the edges are supported using treated timber edging and pinned in place. If the edge retention needs to be battered down to surrounding ground levels a permeable soil fill will be used.

5.6. Removal of railings

5.6.1. There are iron railings bordering the paths within the site and these will be removed to improve access. Where the railings are fixed within the RPAs of retained trees, they must be removed using hand tools and not forcibly pulled out the ground by digger as this may lead

to root damage. It is permissible to use a pneumatic hammer to break up the concrete around the fixing post to allow removal by hand.

5.7. Installation of Services

5.7.1. Where new services must be installed, they should be routed outside the RPAs of retained trees. Where, by necessity, they must be installed in the RPAs, great care must be taken to minimise any disturbance. Trenchless installation should be the preferred option but if that is not feasible, any excavation must be carried out by hand according to the guidelines in Appendix B section 1.9.

5.8. Piling

5.8.1. The piling rig will operate, as far as possible, within the footprint of the proposed basement. Where, by necessity, the piling rig must work close to retained trees, the work must be supervised by the site manager to ensure there is no damage to the crowns of the trees. If the piling rig must enter the RPA of a retained tree, ground protection must be in place and of suitable specification for the load.

5.8.2. Where there is an encroachment into the RPAs of retained trees, a test trench must be excavated by air spade or carefully by hand to determine what roots are present. The test trench should be sited at least 200mm back from the front face of the proposed foundation. Roots smaller than 25mm diameter can be pruned back, roots greater than 25mm diameter should only be severed following consultation with an arboriculturist. Exposed roots should be covered to prevent desiccation and the wrapping removed prior to backfilling.

5.8.3. Prior to backfilling, roots should be covered in with topsoil or uncompacted sharp sand (not builders' sand due to high salt content) or any other loose inert fill, before soil is replaced. If concrete is being poured the test trench should be lined on the front face with an impermeable membrane to prevent concrete leachate contaminating the roots; if rigid slip liners are used, they would be a barrier to leachates

5.8.4. If the piling process requires the use of a crane, then guidelines in Appendix B section 1.4 must be followed.

5.9. Other tree related site works

5.9.1. **Pre-commencement site visit:** All details of the tree protection measures should be discussed to ensure adherence by all parties during the works. Any modifications to the tree protection measures must be recorded and agreed in writing.

5.9.2. **Site supervision:** Site visits by the project arboriculturist will be required by the local planning authority, particularly where works are proposed within the RPAs of retained

trees. Once the site is active, the project arboriculturist will ensure compliance with arboricultural conditions and advise on tree problems or any modifications that may arise. The developer must ensure that all conditions of the arboricultural method statement and any amendments are known and fully understood by all site personnel.

5.10 General

5.10.1. Limitations of report: This report is intended to highlight the potential for damage to the retained tree population from the proposed development and provide guidance on how to avoid or minimise that potential. The content may require amending as the scheme evolves or as additional information becomes available.

5.10.2. Arboricultural Standards: Any tree works should be done in accordance with the British Standard Recommendations for Tree work, BS 3998 as modified by later research. Works should be undertaken by properly qualified and experienced tree contracting company as recommended by a local authority or one approved by the Arboricultural Association. A Register of Contractors is available from:

The Arboricultural Association
The Malthouse
Stroud Green
Standish
Stonehouse
Gloucestershire GL10 3DL
UKTel +44 (0) 1242 522152
Fax +44 (0) 1242 577766
Email: admin@trees.org.uk.

5.10.3. Statutory wildlife implications: Wildlife in this country is afforded protection under the Wildlife and Countryside Act 1981 as amended by the Countryside and Rights of Way Act 2000. Statutory protection is given to birds, bats and other species that inhabit trees. Tree work is governed by these statutes and advice should be sought from an ecologist before undertaking any works that may constitute an offence.

6. Site monitoring

6.1. Site Supervision

6.1.1. Effective tree protection relies on following a logical sequence of events and arboricultural inspection/supervision. BS5837:2012 recommends site supervision at regular intervals and an auditable system of arboricultural supervision by a suitably qualified project arboriculturist.

6.1.2. Works which have the potential to affect trees will be supervised by a suitably qualified and experienced Arboricultural Consultant. Regular inspection visits (monthly) will also be undertaken to ensure that tree protection measures are being adhered to regardless of project activities (refer to table 9.1.1.). The final details of supervision and the frequency of inspection visits will be agreed at the pre-commencement meeting. The project arboriculturist will make a record of visits, which will be attached to the site copy of the Arboricultural Method Statement (AMS) for inspection and communicated in writing to the LPA. An example of the Site Inspection Record is at the end of this document.

6.2. Activities in breach of tree protection

6.2.1. Where activities occur in breach of the tree protection measures, the project arboriculturist will be immediately advised of such and the work halted until the event has been assessed and any mitigation measures recommended have been undertaken.

6.2.2. If the project arboriculturist detects breaches of tree protection measures during the project, the site supervisor and the client agent will be immediately advised. All site activities will cease until any recommended mitigation measures have been undertaken. A record will be made of the event and issued to the LPA.

6.2.3. Where activities have been carried out without adequate tree protection, the site activities will be halted until the project arboriculturist has assessed the event and provided mitigation measures.

6.2.4. Where the above ground parts of the retained trees have been damaged, construction activities will cease until the project arboriculturist has assessed the damage and any mitigation measures recommended have been undertaken.

6.2.5. Where the below ground parts of the retained trees have been damaged (including soil compaction), construction activities will cease until the project arboriculturist has assessed the damage and any mitigation measures recommended have been undertaken.

6.3. Amendments

6.3.1. Issues sometimes arise on development sites which require amendments to the previously agreed tree protection details. Any amendments to this AMS will be discussed with the project arboriculturist and approved in writing by the LPA prior to being implemented. Copies of paperwork relating to any amendments shall be attached to the site copy of the AMS to provide a definitive record of what has been agreed.

6.3.2. It is possible that modifications to the tree protection measures will be required. Where these are acceptable without compromising the health of the retained tree, the modifications will be shown on an updated plan/s & submitted to the LPA for their approval prior to commencement.

7 Works Sequencing and Supervision

7.1. General Supervision schedule for proposed development

7.1.1. Arboricultural input will be required for the following stages:

Brief Action Summary	Person responsible	Trees affected	Date (approximate)	Arboricultural Method Statement reference
Pre-commencement meeting on site to agree tree protection measures. **Must be carried out before any significant site works begin.**	Site Manager, Local Authority Tree Officer and Arboricultural Consultant**. Two weeks' notice required for all parties.**	All retained trees	March 2020 (prior to site start date)	N/A
Tree felling and pruning. Contractor to carry out agreed works.	Client/Developer and nominated tree contractor.	Trees 105, 106, 107, 108, 109, 110, 112, 113, 114, 116, 208, 209, 210, 211, 212, 214	April 2020	**Table 7.2** **Drawing TPP_BRILLPLE_1**
Install fencing. Agreed tree protection measures will be installed as described in the Arboricultural Method Statement. **Must be installed before any significant works.**	Site manager. Inspected by Arboricultural Consultant.	All retained trees	April 2020	**Appendix B 1.2** **Drawing TPP_BRILLPLE_1**
Arboricultural induction – Copies of approved documents retained on site. **Must be delivered to all contractors before any significant works or when new personnel entering site.**	Site manager. All personnel employed in onsite activities must be responsible.	All retained trees	April 2020	**Appendix B (all sections).** **Form to be completed as per Appendix D**
Construction of path diversion following approved AMS.	Site manager. Supervised by Arboricultural Consultant & Local Authority Tree Officer	Trees 105, 106, 107	TBC	**Section 5.5, Appendix B (section 1.7, 1.8 & Fig 4)**

Brief Action Summary	Person responsible	Trees affected	Date (approximate)	Arboricultural Method Statement reference
Inspection by Arboricultural Consultant during removal of hardstanding	Site manager, Arboricultural Consultant.	Trees T209 & T210	April 2020	**Appendix B Section 1.6 & 1.7**
Inspection by Arboricultural Consultant during excavation of test trenches prior to piling	Site manager, Arboricultural Consultant.	Trees T105 & T208	April 2020	**Section 7.7**
Post development inspection of trees & RPAs to determine any mitigation measures - final arboricultural report to LPA	Arboricultural Consultant.	All retained trees	May 2022	N/A
Removing tree protection. Must only be carried out when there is no risk of damage to retained trees.	Arboricultural Consultant to inspect and advise if removal appropriate.	All retained trees	March 2022	N/A

NB: The construction and demolition method statement must be reviewed against this document to ensure there are no conflicts between the two documents.
Any changes in dates must be notified to the project arboriculturist and Councils Tree Officer where operations may impact on the retained trees to ensure the actions in table 7.1.1. are coordinated with the tree protection.

7.2. Roles and Contact details

Position	Name	Address	Telephone No.
Planning Consultant	TBC		
Client	LBS Properties Ltd Hugh Griffiths	7th Floor 2 St. James's Market London SW1Y 4AH	0203 475 4168 Hugh.Griffiths@lbsp.co.uk
Site Manager	TBC		
Landscape Architect	TBC		
Arboricultural Consultant	Graham Causey Arboricultural Solutions LLP	3 Walnut Close Peterborough PE7 1LL	07790427067 grahamcausey@gmail.com
Local Authority Tree Manager	David Houghton	London Borough of Camden	020 7974 1567 David.Houghton@Camden.gov.uk
Head of Green Spaces	Oliver Jones	London Borough of Camden	Oliver.Jones@camden.gov.uk
Tree & Landscape Officers	Nick Bell Tom Little	London Borough of Camden	Nick.Bell@camden.gov.uk Tom.Little@camden.gov.uk

8. Site Monitoring

8.1. Visits by Arboricultural Consultant

8.1.1. The appointed arboricultural consultant will visit the site at the time of specified phases of the development as noted in section 7.1.1 above (dates may be subject to revision). In addition, monthly inspections will be carried out during the development and an inspection sheet completed as shown in Appendix C and returned to the LA Tree Officer; the inspection sheets will include photographic evidence and copies will be returned to the Council's Tree and Planning Officers.

9. General

9.1.1. Limitations of report: Issues sometimes arise on development sites which require amendments to the previously agreed tree protection details. Any amendments to this AMS will be discussed with the project arboriculturist and approved in writing by the LPA prior to being implemented. Copies of paperwork relating to any amendments shall be attached to the site copy of the AMS to provide a definitive record of what has been agreed.

9.1.2. It is possible that modifications to the tree protection measures shown, will be required. Where these are arboriculturally acceptable, the modifications will be shown on an updated plan/s & submitted to the LPA for their approval prior to commencement.

Graham Causey *B. Sc (Hons), F. Arbor.A. R.F.S Cert Arb. Lantra accredited professional tree Inspector*

APPENDIX A TREE SCHEDULE

Tree No.	Species	Height (m)	DBH (mm)	Crown radius (m)				FSB & direction	Lower crown height (m)	Life stage	General observations	Est. Rem'ing contrib'n	BS Cat	RPA-R (m)
				N	E	S	W							
T102	Ash	18	470(1)	4	6	9.5	6	3(S)	7	EM	Drawn form Stem divides above 1.5m Decay pockets present in crown Light deadwood Unbalanced crown shape	20+	**B2**	5.6
T105	London Plane	17	560(1)	10	6	7.5	10.2	2.3(E)	2.5	EM	Light deadwood Full healthy crown Long-term potential	40+	**B2**	6.7
T106	London Plane	18	460(1)	4.5	5.7	8.5	9.8	2(W)	6	EM	Decay pocket Stem divides above 1.5m Multiple stems above 1.5m Light deadwood Crown distorted due to group pressure Long-term potential	40+	**B2**	5.5
T107	Ash	18	420(1)	3	1	7.6	5.3	3(W)	6	EM	Decay pocket Stem divides above 1.5m Multiple stems above 1.5m Light deadwood Crown distorted due to group pressure Long-term potential	20+	**B2**	5
T108	London Plane	16	590(1)	8	10	10	8	2.5(W)	1.5	EM	Drawn form Decay present on stem Decay pocket Major bark wounding on stem Stem divides above 1.5m Multiple stems above 1.5m Light deadwood Unbalanced crown shape Crown distorted due to group pressure	40+	**A2**	7.1
T109	Ash	14	340(1)	6	5.5	6	8	3(S)	1.5	EM	Stem divides above 1.5m Multiple stems above 1.5m Light deadwood Long-term potential Prominent	20+	**B2**	4.1

Tree No.	Species	Height (m)	DBH (mm)	Crown radius (m)				FSB & direction	Lower crown height (m)	Life stage	General observations	Est. Rem'ing contrib'n	BS Cat	RPA-R (m)
				N	E	S	W							
T110	Norway Maple	13	300(1)	3	4.6	6	2.4	2.5(E)	3	EM	Surface roots sustained bark damage Stem divides above 1.5m Multiple stems above 1.5m Decay pockets present in crown Light deadwood Raywood Minor bark wounds Surface root action to 3m from trunk	20+	**B2**	3.6
T111	Ash	12	270(1)	7.1	6	3.5	3.1	2.5(E)	4.5	EM	Decay present on stem Decay pocket Major bark wounding on stem Decay pockets present in crown Light deadwood Crown distorted due to group pressure Surface root action	20+	**B2**	3.2
T112	Ash	14	340(1)	6.2	2	6.9	6.1	3(W)	2.5	EM	Poor shape & form Surface roots sustained bark damage Decay present on stem Decay pocket Major bark wounding on stem Stem divides above 1.5m Decay pockets present in crown Light deadwood Crown distorted due to group pressure	20+	**B2**	4.1
T113	Swedish Whitebeam	7	210(1)	3	1	3	3	2.5(W)	3	EM	Surface roots sustained bark damage Stem divides above 1.5m Multiple stems above 1.5m Decay pockets present in crown Light deadwood Crown distorted due to group pressure Raywood and previous	20+	**C2**	2.5

Tree No.	Species	Height (m)	DBH (mm)	Crown radius (m)				FSB & direction	Lower crown height (m)	Life stage	General observations	Est. Rem'ing contrib'n	BS Cat	RPA-R (m)
				N	E	S	W							
T114	Swedish Whitebeam	9	280(1)	3	2	3.5	4	3(S)	2.5	EM	Decay present on stem Major bark wounding on stem Stem divides above 1.5m Multiple stems above 1.5m Decay pockets present in crown Light deadwood Crown distorted due to group pressure Large occluding trunk wound - heartwood exposed and decayed	20+	**C2**	3.4
T115	Norway Maple	15	390(1)	4	6.5	6.5	3	2.5(E)	4	EM	Decay present on stem Stem divides above 1.5m Light deadwood Unbalanced crown shape Constriction base of trunk Minor bark wounds	20+	**B2**	4.7
T116	Norway Maple	14	380(1)	5	1	6.5	8.5	2.5(W)	3	EM	Surface roots sustained bark damage Stem divides above 1.5m Light deadwood Crown distorted due to group pressure Occluded trunk wound	20+	**B2**	4.6
T117	Norway Maple	13	290(1)	4	6.2	3	3	4(E)	4	EM	Leaning West Surface roots sustained bark damage Stem divides above 1.5m Light deadwood Unbalanced crown shape Crown distorted due to group pressure Occluded trunk wound.	20+	**C2**	3.5
T118	Ash	15	430(1)	6	8	4.5	7	4(S)	5	EM	Decay present on stem Major bark wounding on stem Light deadwood Unbalanced crown shape Trunk wound ground level - 2m occluding	20+	**B2**	5.2
T147	Tulip Tree	4	70(1)	1.5	1.5	1.5	1.5	2(S)	1.5	Y	Tree located within hard surface area Low branches over road footpath Long-term potential	40+	**C2**	0.8
T148	Tulip Tree	5	70(1)	1.5	1.5	1.5	1.5	2(S)	1.5	Y	Tree located within hard surface area Long-term potential	40+	**C2**	0.8

Tree No.	Species	Height (m)	DBH (mm)	Crown radius (m)				FSB & direction	Lower crown height (m)	Life stage	General observations	Est. Rem'ing contrib'n	BS Cat	RPA-R (m)
				N	E	S	W							
T149	Tulip Tree	5	70(1)	1.5	1.5	1.5	1.5	2(S)	1.5	Y	Tree located within hard surface area Long-term potential	40+	**C2**	0.8
T150	Silver Birch	4	70(1)	1	1	1	1	2	1.5	Y	Tree located within hard surface area Long-term potential	40+	**C2**	0.8
T208	Norway maple	9	290(1)	4.8	2.6	4	4.4	2.5(NW)	4	EM	Normal vigour Average condition Stem divides above 1.5m Crown distorted due to group pressure Light deadwood in crown Contributes to general amenity of area Surface roots sustained bark damage Occluded wounds on trunk Possible trunk constriction at 0.2m	20+	**C2**	3.5
T209	Bastard service tree	6	270(1)	2.5	3.5	2.9	3		2.5	EM	Normal vigour Average condition Part of linear group Bark wounds on surface roots Root spread restricted Occluded wounds on trunk Bark wounds present Crown distorted due to group pressure Light deadwood in crown Contributes to general amenity of area Contributes to low level screening	20+	**C2**	3.2
T210	Bastard service tree	6	240(1)	3.5	3.5	3	3	3(W)	2	EM	Normal vigour Average condition Part of linear group Bark wounds on surface roots Root spread restricted Occluded wounds on trunk Bark wounds present Crown distorted due to group pressure Low branches over road/footpath Light deadwood in crown Contributes to general amenity of area Contributes to low level screening	20+	**C2**	2.8

Tree No.	Species	Height (m)	DBH (mm)	Crown radius (m)				FSB & direction	Lower crown height (m)	Life stage	General observations	Est. Rem'ing contrib'n	BS Cat	RPA-R (m)
				N	E	S	W							
T211	Bastard service tree	5	300(1)	3.7	3.7	4.1	3.5		2	EM	Normal vigour Average condition Part of linear group Root spread restricted Occluded wounds on trunk Trunk decay present Bark wounds present Low branches over road/footpath Light deadwood in crown Contributes to general amenity of area Girdling roots.	20+	**C2**	3.6
T212	London Plane	17	530(1)	7	8	9	7	2.5(S)	1.7	EM	Normal vigour Average condition Root spread restricted Low branches over road/footpath Light deadwood in crown Contributes to general amenity of area Appropriate to location Screen value.	40+	**B2**	6.4
T213	Norway Maple	13	380(1)	7	6.7	4	7	3(W)	3	EM	Normal vigour Average condition Bark wounds present Stem divides above 1.5m Crown distorted due to group pressure Branches restricting highway light Light deadwood in crown Contributes to general amenity of area Extensive bark removal between 0.4 & 2.3m height on north side Some wound-wood development around wound.	20+	**C2**	4.6

Tree No.	Species	Height (m)	DBH (mm)	Crown radius (m)				FSB & direction	Lower crown height (m)	Life stage	General observations	Est. Rem'ing contrib'n	BS Cat	RPA-R (m)
				N	E	S	W							
T214	Norway Maple	13	450(1)	5.5	8	7.2	7.5	3(E)	1.7	EM	Normal vigour Average condition Occluded wounds on trunk Bark wounds present Stem divides above 1.5m Unbalanced crown shape Crown distorted due to group pressure Light deadwood in crown Contributes to general amenity of area.	20+	**B2**	5.4

KEY

Y = Young
SM = Semi-mature
EM = Early-mature
M = Mature
OM = Over-mature
V = Veteran

H = Hedge
G = Group
B = Shrubs
K = Small tree
W = Woodland
RPA-R (m) = RPA of radius x metres

TREE QUALITY ASSESSMENT CASCADE CHART

Category and definition	Criteria (including subcategories where appropriate)		
Trees unsuitable for retention Category U	Those in such a condition that they cannot realistically be retained as living trees in the context of the current land use for longer than 10 years	• Trees that have a serious, irremediable, structural defect, such that their early loss is expected due to collapse, including those that will become unviable after removal of other category U trees (e.g. where, for whatever reason, the loss of companion shelter cannot be mitigated by pruning) • Trees that are dead or are showing signs of significant, immediate, and irreversible overall decline • Trees infected with pathogens of significance to the health and/or safety of other trees nearby, or very low-quality trees suppressing adjacent trees of better quality *NOTE Category U trees can have existing or potential conservation value which it might be desirable to preserve*	
Trees to be considered for retention	**1 Mainly arboricultural qualities**	**2 Mainly landscape qualities**	**3 Mainly cultural values, including conservation**
Category A Trees of high quality with an estimated remaining life expectancy of at least 40 years	Trees that are particularly good examples of their species, especially if rare or unusual; or those that are essential components of groups or formal or semi-formal arboricultural features (e.g. the dominant and/or principal trees within an avenue)	Trees, groups or woodlands of particular visual importance as arboricultural and/or landscape features	Trees, groups or woodlands of significant conservation, historical, commemorative or other value (e.g. veteran trees or wood-pasture)
Category B Trees of moderate quality with an estimated remaining life expectancy of at least 20 years	Trees that might be included in category A, but are downgraded because of impaired condition (e.g. presence of significant though remediable defects, including unsympathetic past management and storm damage), such that they are unlikely to be suitable for retention for beyond 40 years; or trees lacking the special quality necessary to merit the category A designation	Trees present in numbers, usually growing as groups or woodlands, such that they attract a higher collective rating than they might as individuals; or trees occurring as collectives but situated so as to make little visual contribution to the wider locality	Trees with material conservation or other cultural value
Category C Trees of low quality with an estimated remaining life expectancy of at least 10 years, or young trees with a stem diameter below 150 mm	Unremarkable trees of very limited merit or such impaired condition that they do not qualify in higher categories	Trees present in groups or woodlands, but without this conferring on them significantly greater collective landscape value; and/or trees offering low or only temporary/transient landscape benefits	Trees with no material conservation or other cultural value

APPENDIX B TREE PROTECTION

1.1. Pre-commencement site meeting.

1.1.1. A pre-commencement site meeting is advised prior to any works commencing on site, to agree all the approved processes with the relevant concerned parties.

1.2. Protective fencing and ground protection.

1.2.1. All trees to be retained on site should be protected by barriers and ground protection where applicable. Barriers should be in place before any materials or machinery is brought onto site. Once in place, barriers and ground protection should be considered sacrosanct and should not be altered or removed without prior recommendation by an arboriculturist and approval of the local planning authority. Barriers should be fit for excluding construction activity and appropriate to the degree and proximity of work taking place around the retained tree(s). Barriers should be maintained to ensure that they remain rigid and complete.

1.2.2. The protective fencing is to be erected prior to any site works or demolition works.

1.2.3. The barrier is to comprise of a vertical and horizontal framework (Figure 1 below), well braced to resist impacts, with vertical tubes spaced at a maximum interval of 3m. Weldmesh panels, such as Heras, should be securely fixed with wire or scaffold clamps to this framework. Weldmesh panels on rubber or concrete feet are not resistant to impact and should not be used. Care should be exercised when locating the vertical poles to avoid underground services and, in the case of the bracing poles, also to avoid contact with structural roots. If the presence of underground services precludes the use of driven poles, an alternative specification should be prepared in conjunction with the project arboriculturist that provides an equal level of protection. Such alternatives could include the attachment of the panels to a freestanding scaffold support framework.

1.2.4. Where retained trees are near the existing buildings, a higher specification hoarding will be required to prevent damage from falling rubble. In place of the weldmesh, panels solid hoarding should be used, for example, scaffold boards.

1.2.5. Where the site circumstances and associated risk of damaging incursion into the RPA do not necessitate the default level of protection, an alternative specification should be prepared by the project arboriculturist and, where relevant, agreed with the local planning authority. For example, 2 m tall welded mesh panels on rubber or concrete feet might provide an adequate level of protection from cars, vans, pedestrians and manually operated plant. In such cases, the fence panels should be joined using a minimum of two anti-tamper couplers, installed so that they can only be removed from inside the fence. The distance between the fence couplers should be at least 1 m 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 (Figure 2 below). 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

1.2.6. It is advised that a plan be pinned up on site in highly visible areas such as in the site huts, so that all ground staff involved in the demolition and construction works have a point of reference for tree protection issues. All demolition and construction workers should be briefed on the importance of tree protection prior to works commencing. Special attention must be paid to ensure that protective fencing remains rigid and complete during all works.

1.2.7. Where it is agreed that vehicular or pedestrian access for construction purposes is necessary within the RPA, ground protection measure will be required to prevent damage to the soil structure within the RPA.

1.2.8. For pedestrian access within the RPA, the installation of ground protection in the form of a single thickness of scaffold boards over a compressible layer laid onto a geotextile, or supported by scaffold, is likely to be acceptable.

1.2.9. For wheeled or tracked vehicle, access within the RPA the ground protection should be designed by an engineer to accommodate the likely loading and may involve the use of proprietary systems or reinforced concrete slabs. The structure must use a no dig design (see methodology described in 1.7 below) to prevent root severance and must prevent localised soil compaction by distributing the load across the track width. Such a system may include the use of three-dimensional cellular confinement systems (CCS) as a component of the sub-base, to act as a load suspension layer.

1.2.10. New permanent hard surfacing should not cover more than 20% of the RPA or be wider than 3m within it; it should be constructed to be permeable to moisture and gas.

1.3. Construction exclusion zone

1.3.1. Once the construction exclusion zone (CEZ) has been protected by barriers and/or ground protection, demolition/construction can take place.

Inside the Construction Exclusion Zone (CEZ) of the protective fencing, the following prohibitions shall apply:

- No mechanical digging or scraping
- No hand digging
- No storage of plant, equipment or materials
- No vehicular or plant access
- No fire lighting
- No washing down of vehicles or machinery
- No handling, discharge or spillage of any chemical substance, including cement washings
- No action likely to cause localised waterlogging

- No change in ground levels
- No construction of a hard surface
- No earthworks

1.3.3. To inform site personnel of the purpose of the fencing, information notices shall be fixed to the fencing at 5m intervals. These notices shall be of all-weather construction and shall be in the form of the example provided at Figure 4 below and replaced as and when necessary.

1.3.4. In addition to the above, further precautions are necessary adjacent to trees outside the CEZ:

- Materials that will contaminate the soil, e.g. concrete mixing, diesel soil and vehicle washings, should not be discharged within 10 metres of the tree stem. This should take into consideration the topography of the site and slopes to avoid materials such as concrete washings running towards trees.

- Fires should 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.

- Notice boards, telephone cables or other services should not be attached to any part of the tree.

1.4. Avoiding damage to stems and branches

1.4.1. Site operations should be planned to ensure that wide or tall loads or plant with booms, jibs and counterweights, could operate without coming into contact with retained trees. Mechanical damage from large plant can be significant and make their safe retention impossible. Any transit or traverse of plant near trees should be conducted under the supervision of a banksman to ensure adequate clearance from trees is always maintained .

1.4.2. If the use of a tower crane is necessary, its location will be predetermined and agreed in writing by the Local Planning Authority, and its operation and movements supported by a detailed Method Statement.

1.5. Reporting damage to trees and protective fencing

1.5.1. In the event of any damage to trees scheduled for retention, the damage should be reported to the site agent immediately. The site agent shall report up the chain of responsibility to the project arboriculturist or in the absence of such an appointment to an appropriately qualified arboriculturist, to enable remedial measures to be carried out immediately and if possible.

1.5.2. Should protective fencing be damaged to impair its function, all work shall cease near the damage until the fence has been returned to standard.

1.6. Excavating in RPAs

1.6.1. All excavations must be carried out using hand tools (spades, forks and trowels) and taking care not to damage bark and wood of the roots. It is acceptable to use a pneumatic hammer carefully to break up any existing hard surface for removal. Specialist tools (air spade) may be suitable in certain situations to remove soil from around the roots. All soil removal must be undertaken with care to minimise the disturbance of roots beyond the immediate area of the excavation. Where a mass of flexible roots is encountered, it may be possible either to displace the roots to another location temporarily or permanently to avoid areas of excavation. Exposed roots to be removed should be cut cleanly with sharp saw or secateurs approximately 20cm back from the face of the final excavation. Roots that are exposed temporarily should be protected from drying out, direct sunlight and extremes of temperature by suitable covering. Roots greater than 2.5cm diameter should be retained where possible; roots up to 10cm diameter should only be cut in exceptional circumstances and roots greater than 10cm should only be cut after consultation with the appropriate supervising officer.

1.6.2. Working within RPAs requires a high level of care to ensure the long-term potential of the trees. Qualified supervision is vital to minimise the risk of misinterpretation. Site personnel must be properly briefed before work commences and ongoing work should be regularly inspected by an arboriculturist to confirm compliance by the contractor.

1.7. Removing Surfacing in RPAs

1.7.1. Roots are frequently found beneath or adjacent to existing surfacing or built structures and care is needed. Damage to the roots may be by direct physical damage or compaction of the soil from the weight of plant and machinery or repeated pedestrian movement. This is generally not a problem whilst surfacing is in place as the load is spread and additional protection is not required. However, once the existing surface is removed and the soil below exposed significant damage can occur to the soil structure and directly to the roots in a very short time. The following rules must be followed:

1. No vehicular activity or repeated pedestrian access into the RPAs unless on existing hard surfacing or custom designed ground protection, this must be designed for anticipated loads.
2. Regular vehicle and pedestrian access routes must be protected from compaction by temporary ground protection.
3. RPAs exposed by the works must be protected as set out in BS 5837:2012 until there is no risk of damage from construction activity

Appropriate tools for manually removing debris may include a pneumatic breaker/drill, crowbar, sledgehammer, pick, mattock, shovel, spade, trowel, fork and wheelbarrow. Secateurs and a bow saw must be available to deal with any exposed roots that have to be cut. Machines with a long reach may be used if they can work from outside RPAs or

from areas protected by ground protection designed for the loading within the RPA. Debris to be removed from RPAs manually must be moved across existing hard surfacing or temporary ground protection to prevent compaction damage. If possible, leaving below ground structures in place should be considered if their removal may cause excess root disturbance.

1.8. Installation of new Surfacing in RPAs

1.8.1. New surfacing is potentially damaging to trees as it may require changes to existing levels, result in localised soil structure damage and disrupt the exchange of water and gases in and out of the soil. Mature or older trees are more sensitive to this type of damage than younger trees. Potential adverse impacts on the trees can be minimised by limiting the extent of these changes. The most suitable surface will be porous to allow the relatively free movement of gas and water and load spreading to limit compaction damage. The actual specification is an engineering issue that must be considered in the context of the load-bearing capacity of the soil; this element requires specialised input from the appropriate professional.

1.8.2. The actual location and depth of roots is unpredictable and will only become clear once excavation starts and following the guidance in section 1.7 above. Ideally, all new surfacing in the RPAs will be no dig, but this is rarely possible on undulating surfaces. New surfacing generally requires an evenly graded sub-base which can be made up to any high points with granular, permeable fills such as crushed stone or sharp sand; this sub-base must not be compacted as in a normal installation. Some limited excavation is usually necessary to achieve this and need not be damaging to the tree if carried out with care and avoiding cutting large roots. Tree roots generally do not occupy the top 5cm of soil, so the removal of a turf layer need not cause root damage. It may be possible to dig to a greater depth with care and dependant on local conditions. On undulating surfaces, finished levels must be carefully planned and flexible enough to allow on-site adjustment if excavations reveal large roots. Roots of 2.5cm diameter and less can normally be cut without a significant impact on the tree and the minimal 5cm depth can be used. If roots larger than 2.5cm diameter are encountered and it is considered inappropriate to cut them by a suitably qualified professional, the surrounding levels must be adjusted to consider the high points by infilling with a suitable material.

1.8.3. Generally, the construction of hard surface access within the root protection area is to be that of a 'no-dig' design to avoid root loss due to excavation. In addition, the structure of the hard surface should be designed to avoid localised compaction, evenly distributing the carried weight over the track width and wheelbase of any vehicles that will use the access. The design will be based on a cellular confinement system as an integral component of the sub-base, to act as a load suspension layer.

1.8.4. The finished surface will be either a granular material, permeable and gas-porous finished surface (wearing course) to allow moisture infiltration and gaseous diffusion. It is essential to maintain adequate supplies of water and oxygen for trees through the soil.

Porosity is important particularly where the new hard surface covers an area of previously unmade ground, under which tree roots may have developed preferentially.

1.8.5. No-fines granular materials should be used wherever fill or a sub-base is required to help to ensure adequate gaseous diffusion. Excess water in the root protection area should be avoided, particularly on clay soils where water logging can occur. In these cases, the hard surface should slope away from the tree to avoid ponding. Provided surface water is not liable to be contaminated by salt or toxic run-off from oil or petrol, a permeable surface should be employed.

1.8.6. Washed gravel. Washed gravel retains its porosity unless excessively consolidated, and is particularly useful where changes of level occur, or an irregular shape is needed around the stem of a tree. Gravel is easily renewed or topped up. Although weeds may become established, they can be controlled by chemical or mechanical means. However, gravel is rarely suitable for use where there is vehicle or pedestrian traffic for example, in residential areas. Materials with high fines content, such as binding gravels or hogging, should not be used due to their almost impermeable texture when consolidated.

1.8.7. Paving slabs and block pavers. Paving slabs and block pavers are available with built in infiltration spaces between the slabs or blocks. These are ideal, though they should be laid dry-jointed on a sharp sand foundation to allow air and moisture to penetrate to the rooting area.

1.8.8. Graded Soil. Sufficient spoil shall be placed along the edge of the area to receive Geoweb, suitably graded away from the works in order that it may be pulled in later. This eliminates the need to transport soil over the finished surface. The spoil (E.g. Heicom sand) shall be graded into the finished structure at the end of the scheme.

1.8.9. Construction. Refer to Fig 4 for a general overview of a typical installation with porous tarmac (illustration courtesy of Geosynthetics Ltd). The depth of CellWeb will be dependent on the expected loads and should be based on the manufacturer's recommendation.

1.9. New Services

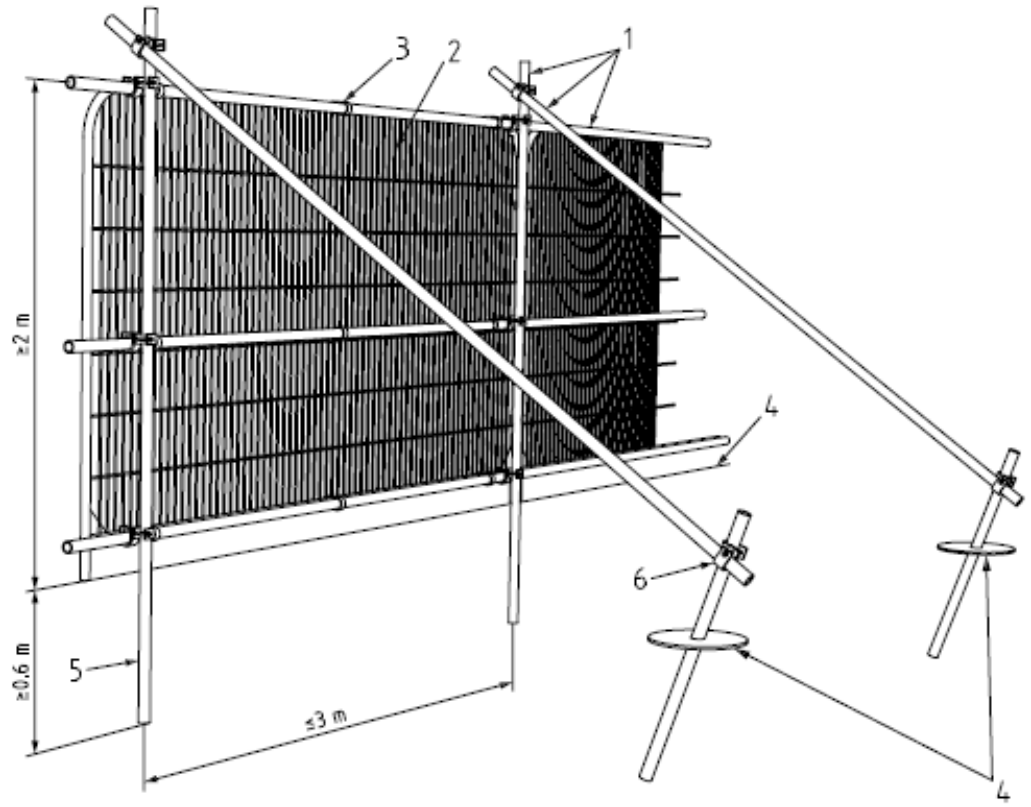
1.9.1. **Service connections:** The location of all new service routes should ideally be outside of the root protection zones of the trees to be retained to avoid damage to tree roots. All proposed service installations should be carried out in accordance with the guidelines set out in NJUG Publication No.10, and Section 11.3.5 and 11.7 of BS5837:2005. Great care should be taken to preserve and work around roots greater than 25mm in diameter, and clusters of smaller roots avoiding damage to bark. Where it is necessary to sever roots greater than 25mm in diameter, arboricultural advice must be sought. Where smaller roots must be severed, they should be cut back cleanly using secateurs or a sharp pruning saw. Where possible, services laid through protected areas need to be installed at a depth preferably not less than 750mm deep to preserve the maximum

number of roots and avoid conflicts between the tree roots and the utility service run. The trench should be kept as narrow as possible to reduce the potential amount of root severance. Backfilling of trenches should be carried out using the excavated soil, which should be worked in around roots and lightly "tamped" not compacted and preserving the original soil profile. The backfill should be left proud of surrounding levels to allow for settlement. Trenches must not be left open overnight, and arboricultural supervision should be provided during excavation of trenches through protected zones. If the trench is to remain open for any period during the day to prevent the roots from drying out, it is advised that moist Hessian sacking be wrapped around the exposed roots, and/or trench to prevent desiccation from occurring. All existing site services that are already within the root protection areas that are to be made redundant will still need to comply with the above to prevent any damage to roots within these areas.

1.10. Soft Landscaping

1.10.1. Soft landscaping includes the re-profiling of existing soil levels and covering the soil surface with new plants or an organic covering (mulch). It does not include the construction/installation of solid structures or compacted surfacing. No significant excavation or cultivation, especially by rotovators, should be carried out within the RPAs. Where new designs require levels to be increased to tie in with new structures or the removal of an existing structure has left a void below the surrounding ground level, good quality and relatively permeable topsoil should be used for the fill. It should be firmed into place but not over compacted in preparation for turfing or careful shrub planting.

Figure 1: Tree Protective fencing



Key

1 Standard scaffold poles
2 Heavy gauge 2 m tall galvanized tube and welded mesh infill panels
3 Panels secured to uprights and cross-members with wire ties
4 Ground level
5 Uprights driven into the ground until secure (minimum depth 0.6 m)
6 Standard scaffold clamps

Figure 2: Tree Protective fencing (alternative)

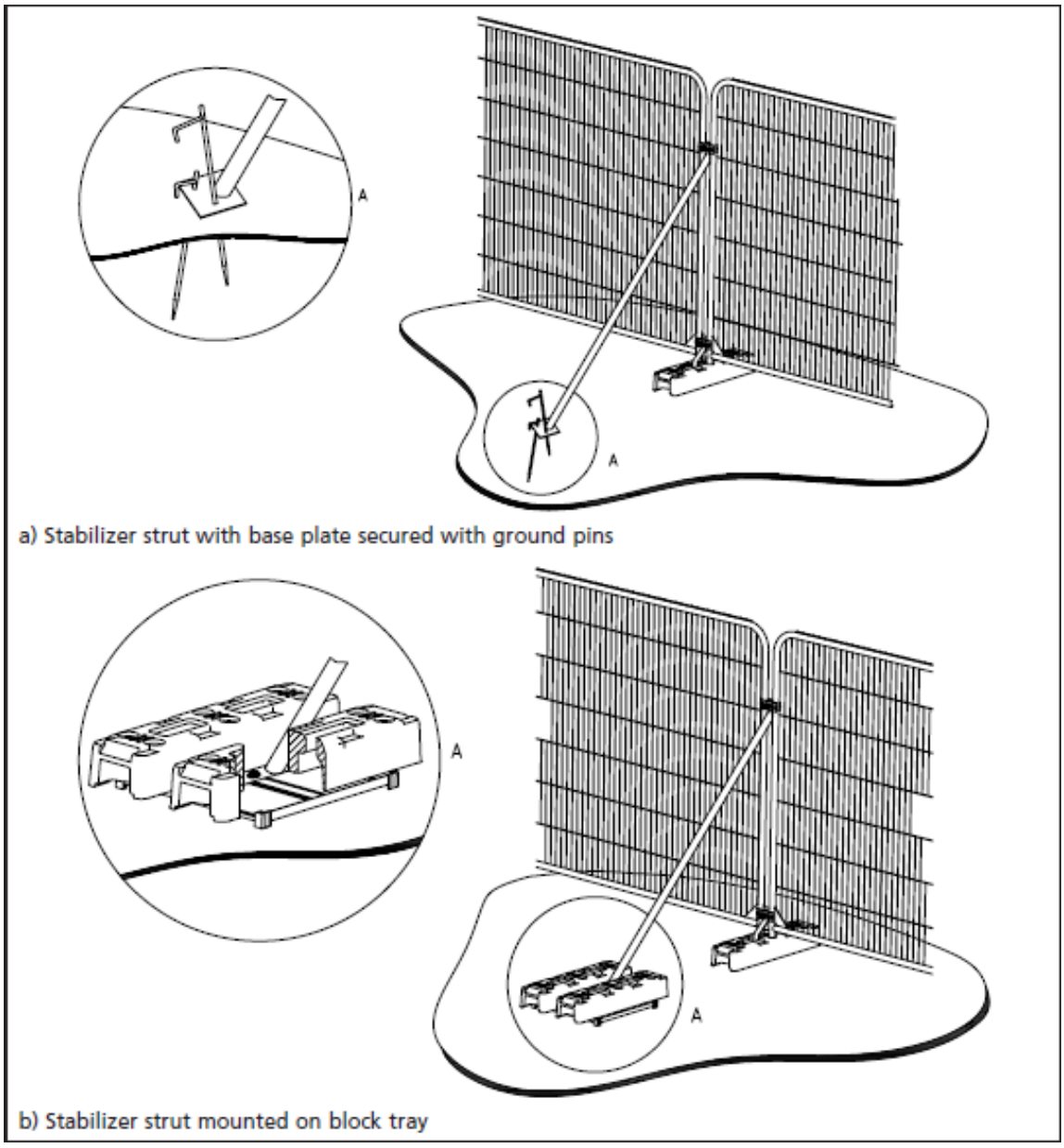
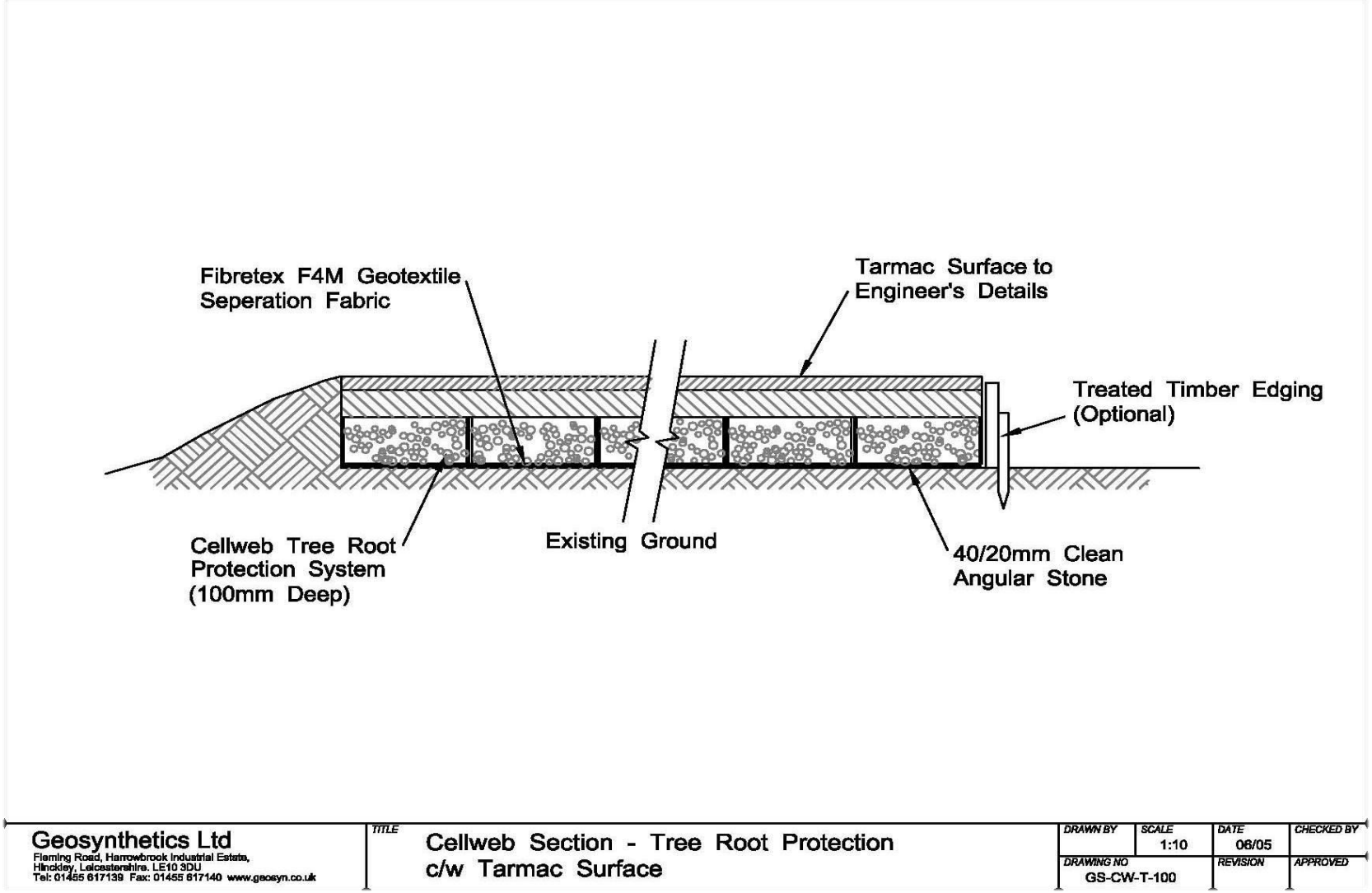


Figure 3: Example of warning notice

Figure 4: Cellular Confinement System



APPENDIX C: Example site supervision inspection sheet

Check List	Comments
Site address	
Date of visit **Time of visit**	
Consultant **Site manager**	
Are tree protection measures in place?	
Has method statement been complied with?	
Are any amendments required?	
Has any damage occurred to the trees?	
Notes / details including mitigation measures if required:	

NB: Photographic evidence must be attached

Site visits to be carried out once per calendar month and during specific operations within or adjacent to the tree Root Protection Areas

Signed (Consultant): _____

Signed (site manager): _____

APPENDIX D: Example of Induction Form for all Site Personnel

Site Name: _____

Date: _____

Statement	Tick to confirm statement
I have had explained to me by the Site Manager the key implications of the Arboricultural Method Statement relating to the development at the above site.	
I have had explained to me & have understood that there are some working practices that are prohibited on this site, to protect the retained trees. I have understood where these relate to my role as a contractor.	
I understand that certain operations must be supervised by the appointed Arboricultural Consultant and that these operations must not start until the consultant is present or has given approval.	
I confirm that I will bring any concerns about potential damage to trees to the attention of the Site Manager.	
I am aware that I must not cause damage to any of the retained trees on or adjacent to the site. Damage may be caused by direct means (i.e. physical damage caused to roots or the trunk/branches of the tree) or by indirect means (e.g. by fire or toxic materials entering the rooting environment of the tree).	

Print Name: _____

Signature: _____