



# Connick Tree Consultants

## TREE DEVELOPMENT REPORT

(BS5837:2012 ARBORICULTURAL IMPACT ASSESSMENT  
AND ARBORICULTURAL METHOD STATEMENT)

<b>OUR REFERENCE</b>	165008/PRO
<b>CLIENT</b>	Picfare Homes Ltd
<b>PLANNING AUTHORITY</b>	Southwark Borough Council
<b>SITE</b>	39 Consort Road, London, SE15 2PR
<b>SURVEY &amp; REPORT BY</b>	Paul Roberts
<b>DATE</b>	25 <sup>th</sup> April 2019

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## 1 INTRODUCTION

### 1.1 INSTRUCTION

Connick Tree Consultants were instructed by Picfare Homes Ltd to produce an Arboricultural Impact Assessment and Method Statement of the proposed development works at 39 Consort Road, London. This is for the demolition of the existing two storey building and the construction of six houses, four flats and three work units. These works will be completed in accordance with BS5837: 2012 Trees in relation to design, demolition and construction - Recommendations.

### 1.2 SCOPE OF REPORT

This Arboricultural Impact Assessment and Method Statement has been based on the tree survey data obtained during our site visit on the 5<sup>th</sup> March 2019. Details of all trees within and adjacent to the site can be found in the tree survey schedule attached as Appendix I. Their locations are shown within the Tree Constraints Plan (165008/TCP) attached as Appendix II.

The tree information recorded relates to the tree condition, age, safe useful life expectancy, location, canopy spread, canopy height and tree height and direction of first significant branch as well as any work that is required. Where trees are located within neighbouring third-party properties, the assessment in relation to their condition has been made upon the visible parts of the tree and all measurements estimated.

No information in regard to soil assessment was provided and no investigation was taken on site.

No topographical survey was provided. Any features present have been plotted by hand, no liability is accepted for the accuracy of these drawings, and they should not be scaled from.

The report and recommendations relate to the condition of the trees and their surroundings at the time of inspection only. Trees are living organisms whose health and condition can change rapidly and all trees even healthy ones, are at risk from unpredictable climatic and man-made events. This report and recommendations relate to the condition of the trees and their surroundings at the time of inspection only.

### 1.3 DOCUMENTATION

I have been provided with the following information in regard to the development:

- Topographical Survey – Drawing ref. S16/5621/01
- Plans and Elevations Proposed- 628 - P01-P07 Plans and Elevations 08,04,19



## 1.4 QUALIFICATIONS AND EXPERIENCE

I have based this report on my site observations and investigations and I have come to conclusions in the light of my qualifications gained and experience obtained whilst working in the field of arboriculture. I have qualifications and practical experience in arboriculture and list the details of this in Appendix V.

## 1.5 LIMITATIONS AND USE OF COPYRIGHT

All rights in this report are reserved. No part of it may be reproduced or transmitted, in any form or by any means without our written permission. Its contents and format are for the exclusive use of the person, firm or company to whom it is addressed (and that of any other person, firm or company whose interest was disclosed to us prior to its preparation). It may not be sold, lent out or divulged to any third party not directly involved in this situation without the written consent of Connick Tree Care.

**DISCLAIMER:** I have no connection with any of the parties involved in this situation that could influence the opinions expressed in this report.



## **2 SITE VISIT AND OBSERVATIONS**

### **2.1 SITE VISIT**

A site visit was undertaken on the 5<sup>th</sup> April 2019 by the author of this report; Mr P. Roberts who is a qualified arboriculturist. The weather at the time of inspections was cold and clear with good visibility.

### **2.2 GENERAL OBSERVATIONS AND BACKGROUND**

The site of the proposed development is at 39b Consort Road, London SE15 2PR and consist of a two-storey industrial unit and open storage space.

The site is situated to the south of a rail embankment, which the current building abuts. To the east and south of the site is residential properties and to the west commercial properties located within railway arches.

The locations of all trees included in the survey are shown within the Tree Constraints Plan details attached as Appendix II.

### **2.3 SOIL TYPE**

No on-site soil analysis was undertaken. Reference has been made to the British Geological Survey maps for an indicative guide to underlying soil characteristics. The online BGS 1:50,000 scale map for the area indicated the property is located on Lambeth Group - Clay, Silt and Sand.

Lambeth Group - Clay, Silt and Sand which is susceptible to undergoing volumetric change in relation to changes in soil moisture and is described within the BRE Digest 240 Low-rise buildings on shrinkable clay soils: part 1 as having a high volumetric change potential. As such it is recommended that a structural engineer is consulted to ensure the property is constructed in such a manner to avoid the risk of indirect damage though subsidence or heave.

### 3 TREE SURVEY

In total 27 arboricultural features were recorded during the survey process, within or adjacent to the site. This consists of 25 individual trees and 2 groups. Attached as Appendix I is a schedule summarising the information obtained within the survey process.

The trees surveyed have been assessed and categorised in accordance with the Cascade chart in section 4 of the BS5837:2012. This has identified that there are the following within or adjacent to the site:

No 'A' grade trees of high quality and value, which are worthy of retention and a high level of protection were identified within the site.

2 Individual and 1 group of 'B' grade trees of moderate quality and value, which are worthy of retention and protection. Trees of 'B' grade should be retained where possible within the proposed development and where necessary designs altered to accommodate them.

23 individual and 1 group 'C' grade trees of low quality and value. Trees of 'C' grade should be retained where they do not pose a constraint on the development. Where retained they will require tree protection.

No 'U' grade trees of such a condition that they are recommended to be removed for reasons of sound arboricultural management.

The location of the trees is shown on the Tree Constraints Plan attached as Appendix II. All trees surveyed have been given a unique identification number and are identified on the schedules and plans by a 'T' prefix for individual trees.

#### 3.1 TREES SUBJECT TO STATUTORY CONTROLS

A desktop assessment via Southwark Borough Council's online mapping system accessed at <https://www.southwark.gov.uk/environment/trees/tree-preservation-orders-and-conservation-areas> was undertaken and identified that trees within and adjacent to the site are not subjected Tree Preservation Order or Conservation Area.

### 4 SUMMARY

On completion of the site survey and report it is concluded that the proposed development will have an impact upon the trees adjacent to the site.

The main impact is the removal of 1 Group of Category C sycamore trees, 1 Category B Sycamore tree and part removal of 1 Group of Category B Sycamore trees located within the network rail embankment.

The development will also impact upon 1 individual category 'B' tree, a section of a Category 'B' group and 1 individual Category 'C' tree. These are identified as T1, G3 and T4. To minimise these impacts engineering solutions have been recommended.

The full details of the impacts identified, and the proposed engineering solutions are provided in detail within this report.

## 5 TREE CONSTRAINTS

### 5.1 ROOT PROTECTION AREA

In order to avoid damage to the tree roots or rooting environment, a minimum area in m<sup>2</sup> should be left undisturbed around each retained tree (category A, B and C trees).

The root protection area's (RPA's) of the trees recorded within the survey are shown in the Tree Constraints Plan (Appendix II).

The root protection area has been calculated using the formula specified within section 4.6 of the BS5837:2012 standard and should initially be plotted as a circle centred on the base of the stem.

The RPA can be modified where pre-existing site conditions or other factors indicate that rooting has occurred asymmetrically. Any deviation in the RPA from the original circular plot should reflect soundly based arboricultural assessment of potential root disturbance and take into account the following factors, whilst still providing adequate protection for the root system.

- The morphology and disposition of the roots, when influenced by past or existing site conditions (e.g. the presence of roads, structures and underground services).
- Topography and drainage.
- The soil type and structure.
- The likely tolerance of the tree to root disturbance or damage, based on factors such as species, age, condition and past management.

The calculated RPA should be capped at 707m<sup>2</sup>, which is equivalent to a circle with a radius of 15m or a square with approximately 26m sides (BS 5837:2012 Trees in relation to design, demolition and construction).

The RPA of trees T8 to T25 have been amended to take into account the impact the existing building would have had on root growth to the south.

### 5.2 CONSTRUCTION EXCLUSION ZONE

The Construction Exclusion Zone (CEZ) required by the current edition (2012) of BS 5837 Trees in Relation to Design, Demolition and Construction relates to the stem diameter of each tree when measured at a height of 1.5m from ground level. The CEZs are to be afforded protection at all times and will be protected by a combination of fencing and ground protection measures.

### 5.3 ABOVE GROUND CONSTRAINTS

The current height and canopy spread of the trees is an important factor which needs to be considered when deciding the layout of a proposed development. The shading of trees, and/or their size can cause anxiety to residents, leading to pressure for pruning or removal. However, most trees within the site lay to the north and will formal minimal shading.

It is recommended that selective removal and pruning works is undertaken to provide clearance between the new development and any retained trees.



## 6 ARBORICULTURAL IMPACT ASSESSMENT

The following Arboricultural Impact assessment has been made in relation to the proposed development details provided by our client, this is for the demolition of the existing two storey building and construct four new residential houses and six flats and three work units with associated landscaping. An approximate location of the foot print of the proposed development has been included within the attached Tree Retention and Protection Plan.

### 6.1 SIGNIFICANT TREES

The survey identified that there are 2 individual and 1 group of 'B' grade trees of moderate quality and value, which are worthy of retention and protection.

The category 'B' trees are identified as T1, T2 and G3 which are all Sycamore trees located within the Network Rail embankment. Full details of the trees can be found within the attached Tree Survey Schedule as appendix I.

### 6.2 TREE REMOVAL FOR REASONS OF SOUND ARBORICULTUAL MANAGEMENT

The survey process has identified that no trees require removal due to reasons of sound arboricultural management.

### 6.3 TREE LOSS

Consideration has been given to retaining all the trees. However, ultimately their removal is dependent on their condition and proximity to the development. This survey has identified that the following trees or groups of trees require removal to facilitate the development:

**Table 1: Identifying trees to be removed.**

Tree Id	Category	Species
T2	B	Sycamore ( <i>Acer pseudoplatanus</i> )
G3 (part)	B	Sycamore ( <i>Acer pseudoplatanus</i> )
T8	C	Sycamore ( <i>Acer pseudoplatanus</i> )
T12	C	Sycamore ( <i>Acer pseudoplatanus</i> )
T15	C	Sycamore ( <i>Acer pseudoplatanus</i> )
T16	C	Sycamore ( <i>Acer pseudoplatanus</i> )
G18	C	Sycamore ( <i>Acer pseudoplatanus</i> )
T21	C	Sycamore ( <i>Acer pseudoplatanus</i> )
T22	C	Sycamore ( <i>Acer pseudoplatanus</i> )
T23	C	Sycamore ( <i>Acer pseudoplatanus</i> )
T25	C	Sycamore ( <i>Acer pseudoplatanus</i> )

## 6.4 IDENTIFIED IMPACTS

The survey process and the Tree Retention and Protection Plans (Appendix III) have indicated the extent of the theoretical Root Protection Areas (RPA) of the surveyed trees and identifies the potential impacts resulting from the proposed development. The details of the impacts are identified within table 1 below:

Table 2: Identifying impact upon retained trees.

Tree No.	Total RPA m <sup>2</sup>	Development encroachment on RPA m <sup>2</sup>	Development Section	Impact of proposed development.
T1	399.7	60.9	Construction new flats	The proposed development will impact upon 60.9m <sup>2</sup> of this trees RPA, equating up to 15.2% of the trees minimum root protection area.
G3	68.8	5	Construction new flats	The proposed development will impact upon approximately 5m <sup>2</sup> of the RPA of the remaining tree of G3, equating up to 21% of the trees minimum root protection area. This is less than the previous consented scheme.
T4	87.6	24.3	Construction new flats	The proposed development will impact upon 21.3m <sup>2</sup> of this trees RPA, equating up to 21% of the trees minimum root protection area.

The survey process and the Tree Protection Plan (Appendix III) has indicated the extent of the theoretical Root Protection Areas (RPA) of the surveyed trees and has identified that there will be a minimal impact upon retained trees within or adjacent to the site.

## 7 ARBORICULTURAL METHOD STATEMENT

This Arboricultural Method Statement (AMS) provides how the construction of the new development can be undertaken within and adjacent to the Root Protection Area's (RPA's) of trees while minimising the potential impact upon them.

### 7.1 PHASING AND RESPONSIBILITIES

It will be the responsibility of the developer to ensure that those development phases identified as possibly impacting upon all retained trees are undertaken in line with the sequence set out in table 1 below:

### 7.2 SEQUENCE OF WORKS AND SUPERVISION TIMINGS

To ensure the impact upon all trees retained is minimised, all construction works close to or within the Root Protection Area should be completed in line with the following sequence of works and with the identified arboricultural supervision.

Table 3: Identifying sequence of construction works which effect trees and timings of arboricultural supervision.

Sequence	Works Phase	Arboricultural Supervision.
1	Pre-commencement site meeting.	Yes
2	Erection of tree protection measures.	Yes
3	Demolition of existing building.	No
4	Completion of tree works including felling.	No
5	Removal of existing hard surfacing within the RPA of retained trees.	Yes
6	Replacement of hard standing within the RPA of retained trees.	Yes
7	Construction of building footings within the RPA of retained trees.	Yes
8	Site sign off visit and agreement of removal of tree protection measures.	Yes

On completion of all arboricultural supervisory site visits, a scanned copy of the completed and signed supervisory form will be made available to the local planning authorities' case officer. Sequences 1 to 8 are discussed in detail within this report.

### 7.3 RESPONSIBILITIES

It will be the responsibility of the developer/site owner to instruct an arboricultural consultant to oversee the protection measures throughout the construction period.

It will be the responsibility of the site owner to ensure that copies of this Arboricultural Method Statement and its appendices are available on site at all times. It will be the responsibility of the site/project manager to send copies of any demolition or construction method statements which may have implications to all retained trees to the instructed arboricultural consultant prior to the commencement of works.

The site owner will be responsible for contacting the instructed arboricultural consultant at any time issues are raised related to the trees on site.

The construction manager will ensure the build sequences identified within table 1 are completed to ensure that no damage occurs to the trees during the construction processes. This includes the organisation of the pre-commencement site meeting.

The fencing and signs must be maintained in position at all times while construction activity is ongoing within each area and checked on a regular basis by an on-site person designated that responsibility. Protective fences will remain in position until completion of all construction works within that area.

The main contractor will be responsible for ensuring sub-contractors do not carry out any process or operation that is likely to adversely impact upon any tree on site.

## 7.4 TREE WORKS

This section of the report outlines all trees works required to facilitate the proposed development. The works required are identified within table 4 below:

Table 4: Identifying tree works.

Tree ID	Tree Works
T1, G3, T4, T9, T10, T11, T13, T14, T19, T20 and T24.	Prune back crown to 1.2m from perimeter.

## 7.5 TREE PROTECTION

To ensure all trees within and adjacent to the site can be successfully retained, a number of suitable tree protection methods will need to be installed prior to works commencing on site. These measures are outlined per tree within table 5 below:

Table 5: Identifying trees to be protected and the required methods.

Tree ID	Protection Methods
T1, G3, T4, T5, T6, T7, T9, T10, T13, T14, T17, T19, T20 and T24.	Protective fencing constructed in accordance with Figure 3 of BS 5837:2012 and scaffolding.
T26 and T27.	Existing fencing and hard standing.

The specific details of each protection method are described within this method statement and their locations identified within the attached Tree Protection Plan attached as appendix III.

## 7.6 PROTECTIVE FENCING

The protective fence shall be installed prior to the commencement of any site works within that area e.g. before any materials or machinery are brought on site, development or demolition commences. The purpose of the fencing is to provide protection to the RPA's of retained trees during construction. The type of fencing used shall be appropriate to the level of construction activity adjacent. The fences shall have waterproof signs attached to it stating that this is a **Construction Exclusion Zone** and that **NO WORKS are permitted within the fence**.

The protective fencing will be sited as per the Tree Protection and Retention Plan Demolition attached as Appendix II and Tree Protection Plan Construction attached as Appendix III. which shall comply with Figure 3 in BS 5837 2012 shown below. Specialised

Figure 3 Examples of above-ground stabilizing systems

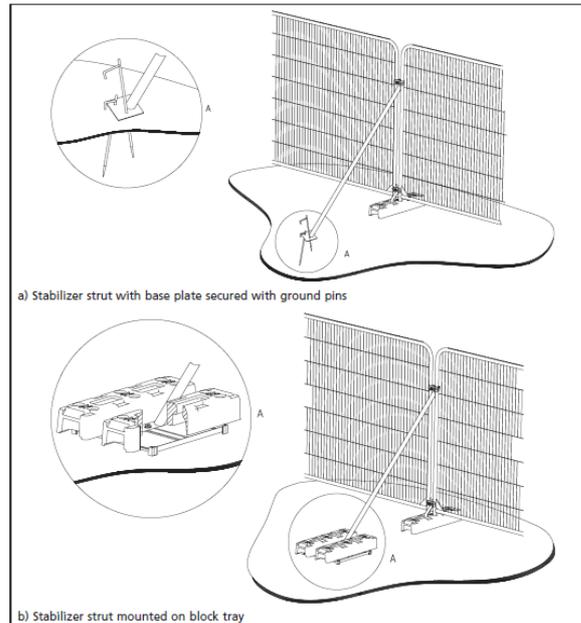


Figure 1 identifying the required tree protection fencing.

All fencing will need to be erected prior to any works commencing, on completion of the fencing its position will be checked by the project arboricultural consultant. The fencing will remain intact until all works are completed on site. All tree protection fencing shall be regarded as sacrosanct and will not be removed or altered without prior written consent of the Local Authority Tree Officer.

## 7.7 TEMPORARY GROUND PROTECTION

The temporary ground protection will be formed using the required scaffolding, this will form a raised walk way within the RPA of the retained trees.

## 8 REMOVAL OF EXISTING HARD SURFACING WITHIN THE RPA OF RETAINED TREES

The works to remove the existing hard surfacing within the RPA of trees T1, T26 and T27 have the potential to cause damage to roots. To ensure these works do not cause harm the following methodology will be adhered to:

- The wearing course only, can be broken up and removed with the use of a mini excavator, however works will need to be completed under the supervision of the project arboriculturist. The excavator must be kept upon the existing unbroken hard surface at all times.
- The sub base will need to be removed/broken up with the use of hand tools only.
- All roots less than 25mm diameter can be cleanly cut with secateurs or a sharp pruning saw.
- If roots greater than 25mm in diameter are identified these will be retained and covered with damp hessian to prevent drying out.
- Any exposed roots must be recovered with soil at the earliest opportunity.

## 9 REPLACEMENT OF HARD SURFACING WITHIN THE RPA OF RETAINED TREES

The works to construct the new hard standing within the RPA of trees T1, T26 and T27 can lead to damage to their roots. To ensure this does not happen the replacement hard surfacing is to be constructed using a 3D cellular confinement system will be used to reduce the impact upon the root system and prevent any compaction. The 3D cellular confinement system will be installed as per the manufactures instructions (a sample methodology is attached as appendix IV).

## 10 CONSTRUCTION OF BUILDING FOOTINGS WITHIN THE RPA OF RETAINED TREES

The foundations of the proposed flats 1, 3 and 5 will be within the RPA of trees T1, G3 and T4 to minimise impacts upon these trees it is recommend that the foundations are formed using piles, with the pile heads being formed at or above the undisturbed ground level. A structural engineer will determine the specification of piles requires. To ensure no damage occurs to the trees the following precautions will need to be adhered too:

- The existing hard surfacing is retained to provide ground protection for the piling rig.
- Once the piles have been installed the existing hard standing can be removed as per the guidance above in section 8.
- The pile heads or ground beam will then be formed at or above the undisturbed ground level, below the existing concrete base.
- The new insulation and floor must be then installed immediately.

## 11 SERVICES

The location of all proposed underground service runs has not been identified. However, any excavations required to install these will not be installed within the soft landscaped areas of the RPA of the retained trees and in accordance with NJUG Volume 4 Guidelines for the planning, installation and maintenance of utility apparatus in proximity to trees.

## 12 ARBORICULTURAL SUPERVISION

Prior to any works on a site an initial pre-commencement site meeting will be undertaken with the project arboriculturist, the LPA tree officer and member of the project design and construction team, to outline all the requirements within the method statement.

Once the tree protection fencing has been installed, the arboricultural consultant will visit the site and inspect to ensure it is compliant. If the fencing does not comply with this method statement, the arboricultural consultant will inform the fencing contractor that adjustments are required. Once this has been completed the fencing can be signed off by the arboricultural consultant.

Throughout the construction period the arboricultural consultant will monitor the condition of the trees, and the protective fencing, ensuring it is still in situ and effective. The visits will be undertaken at appropriate intervals, as agreed with the LPA Tree Officer at the pre-commencement meeting. Records of all visits will be completed, these will be issued to the developer and made available to the LPA case officer.

The arboricultural consultant shall directly supervise all works which have to be undertaken within the RPA's These include:

- Pre-commencement site meeting.
- Erection of tree protection measures.
- Removal of existing hard surfacing within the RPA of retained trees.
- Replacement of hard surfacing within the RPA of retained trees.
- Construction of building footings within the RPA of retained trees.
- Site sign off visit and agreement of removal of tree protection measures.

The arboricultural consultant will be given a minimum of 2 working days' written notice of the commencement of any of the construction phases identified above. Any variations from the methodology set out in this statement must be highlighted to the arboricultural officer and the impact assessed prior to the commencement of any works. Any significant changes will need to be approved in writing by the LPA tree officer.



## **13 GENERAL PRECAUTIONS**

### **13.1 SITE FACILITIES**

The position of the site office, compound, toilets and storage space will be sited outside of the RPA of any retained trees or within existing hard standing. Any re-siting of these during the course of the proposed development will need to be approved in writing by the Local Authority Tree Officer.

### **13.2 STORAGE SPACE**

There will be no spoil or construction material stored within the protected sections of the RPA of the retained trees or shrubs on the site. Where possible all storage should be contained within pre-existing hard surfaces. Possible locations have been identified within the Tree Retention and Protection Plan.

### **13.3 HAZARDOUS MATERIALS**

No mixing or storage of materials will take place up a slope where they may leak into a CEZ.

No hazardous materials such as fuels, oils or cement will be stored within the storage area in the rear garden.

Materials which may contaminate the soil will not be discharged within 10m of any tree stem. When undertaking the mixing of materials, it is essential that any slope of the ground does not allow contaminates to run towards a tree root protection area.

### **13.4 TREE SURGERY WORKS**

All tree works considered necessary for health and safety reasons or to facilitate the development will be undertaken in accordance with British Standard 3998 (2010) Recommendations for Tree Works.

All works required are outlined within the Tree Survey Schedule.



**APPENDIX I TREE SURVEY SCHEDULE**



*Connick Tree Care*

**APPENDIX II**

**TREE CONSTRAINTS PLAN**



**APPENDIX III      TREE RETENTION AND PROTECTION PLANS**

## APPENDIX IV SAMPLE INSTALLATION METHODOLOGY FOR 3D CELLULAR CONFINEMENT SYSTEM

Installation guide
WREKIN PRODUCTS

### ProtectaWeb Method Statement

**For the Installation of ProtectaWeb Tree Root Protection System**

**Introduction**

The Wrekin Tree Root Protection System is available in 4 different depths for varied traffic loadings, each site should have a specific design detailed to ensure the correct depth of product is used.

However, unless the existing ground conditions contain very weak soils and have a low CBR the the following can apply:

- Footpath System- Geogrid and Geotextile combination with Asphalt/Resin- for Pedestrains and Cycleways, no vehicular traffic.
- 75mm- For Pedestrains Cycleways and Vehicles up to 1.5tons
- 100mm- For Cars, 4 wheel drives, vans etc up to 6tons
- 150mm- For Fire engines, removal vehicles and dust carts up to 20-30tons
- 200mm- For Contruaction vehicles, cranes etc 40tons and all above.

**No dig System**

**Material List:**

- ProtectaWeb 3 Dimensional Cellular Confinement System
- Root-Tex 30 minimum separation and protection fleece
- Root-Tex 10 minimum separation geotextile
- Steel 700mm staking pins
- Stapler and Staples/heavy cable ties
- 4/20mm or 40/20mm Clean Angular Stone to Bs EN 13242 and 12620
- Finish porous surfacing materials are preferable

**Stage 1-Ground Preparation**

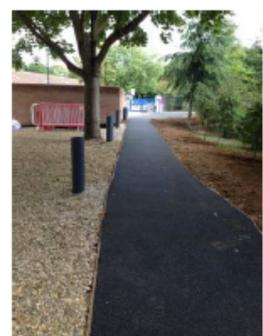
- Remove surface vegetation to treat with suitable herbicide to level-under the supervision of the project Arboriculturist.
- Fill any hollows that may be in the exposed ground with no fines 4/20mm clean angular stone.
- Place Root-Tex 30 Geotextile over the area to be protected ensuring laps with a minimum of 300mm.
- Mark out the area to be protected with edging detail. For Example: Timber boards.

**Stage 2-Installation of ProtectaWeb TRP**

- Roll out Root-Tex 30 Geotextile to cover the area to be protected.
- Insert 4 equally spaced steel pins along the the width of the panel.
- Expand the panel over the Root-Tex 30 and the pins, extend to the required length, then pin across the opposite panel end.
- Pin along the length of the panel each side.
- If full panels are not being used then ensure the cells have been expanded to their full dimension.
- Staple or cable tie any adjacent panels together.

*The ProtectaWeb panels can be cut to shape if required with a heavy duty Stanley Knife.*





1. Wrekin Products Ltd is continually seeking to improve our products and therefore reserves the right to alter product specifications without prior notice.  
2. It is the responsibility of all users to satisfy themselves that the above data is current.  
3. Wrekin cannot be held responsible for the performance of these products as conditions of use are beyond our control.

10-6-161 UK

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## WREKIN PRODUCTS

### Stage 3-Filling the ProtectaWeb

Using 4/20mm or 40/20mm clean angular stone to Bs EN 13242 and 12620 (depending on the cell depth being used)

- Fill the cells of the ProtectaWeb with a 4/20mm or 40/20mm clean angular stone. Allow 25mm overfill for any settlement of the stone into the cells.
- If the area is to be trafficked immediately, slightly increase the amount of surcharge overfill to a maximum of 50mm over the ProtectaWeb with 4/20mm or 40/20mm clean angular stone.

### Stage 4-Finish Surfacing Details

The ProtectaWeb TRP system can be surfaced with the materials listed below:

#### Finish 1- Block Paving

- Place Root-Tex 10 separation fabric over the filled ProtectaWeb
- Lay sand/gravel bedding material as per to manufacturers recommendations
- Place porous/standard blocks as per manufacturers instructions

#### Finish 2-Porous and standard Asphalt

- Slightly surcharge the ProtectaWeb with 25mm of 4/20mm or 40/20mm clean angular stone
- Place hot Asphalt as per to manufacturers instructions

#### Finish 3- Resin Bound Gravels

- Place Root-Tex 20 separation fabric over the filled ProtectaWeb
- Lay Asphalt carpet and resin bound gravel to the required thickness and as per the manufacturers instructions

#### Finish 4-Loose Gravel

- Option 1- Slightly overfill the ProtectaWeb with the clean angular stone
- Option 2- Place a 25mm thick decorative stone on top of the filled ProtectaWeb

#### Finish 5- CellTrack Gravel Retention System

- Place Root-Tex 10 separation geotextile over the filled ProtectaWeb
- 20mm bedding layer of 5mm single sized stone and lightly tamp
- Lay CellTrack porous pavers and fill with a 6-10mm decorative stone

#### Finish 6- CellTrack Grass Protection System

- Place Root-Tex 10 separation geotextile over the filled ProtectaWeb
- 70mm of Rootzone bedding layer (60% sand/40% soil) and lightly tamp
- Lay CellTrack porous pavers and fill with Rootzone mix, seed accordingly (please allow 4-6 weeks for the seed to germinate before trafficking)

#### NEW Finish 7- Trial-Flex

- Place Root-Tex 10 separation geotextile over the area for pedestrian protection.
- Roll over Egrid on top of the Geotextile (strength based per application)
- Cover to a depth of 50mm of TrialFlex porous flexible resin bound finish.

#### Finish 8- Concrete

- Place Root-Tex 10 separation Geotextile over the filled ProtectaWeb
- Cast the concrete slab over the Geotextile

## WREKIN PROTECTAWEB



1. Wrekin Products Ltd. is continually seeking to improve our products and therefore reserves the right to alter product specifications without prior notice.
2. It is the responsibility of all users to satisfy themselves that the above data is current.
3. Wrekin cannot be held responsible for the performance of these products as conditions of use are beyond our control.



## APPENDIX V

## QUALIFICATIONS AND EXPERIENCE

**Paul Roberts**

### 1. QUALIFICATIONS

<b>Subjects</b>		<b>Level</b>	<b>Dates</b>
Foundation degree in Arboriculture (UCLAN)	Merit		June 2013 – September 2016
Professional Tree Inspection Course (LANTRA)	Pass		June 2009
Arboricultural Association Technicians Certificate (ABC)	Merit		September 2006 – June 2007
Royal Forestry Society's Full Certificate in Arboriculture	Merit		September 2005 – June 2006

### 2. CAREER SUMMARY

I first started my career in the arboricultural industry in 2000 work for a commercial contracting company, here I worked for 6 years and was involved in tree felling, pruning and planting on a daily basis. During this time obtained NPTC units for use of chainsaws on the ground and in the tree and for aerial rescue.

On successful completion of the Arboricultural Association Technicians Certificate in June 2007 I decided to progress my career away from the practical side to arboricultural consultancy at Jacobs Ltd. While working for Jacobs Ltd I gained valuable experience in all aspects of arboricultural consultancy including management of large tree stocks, tree condition assessment and trees in relation to developments. My time at Jacobs also saw me work as discipline lead for clients which required close liaison with Ecologist's, Engineers and Contractors to ensure pragmatic solutions were reached with all parties' to ensure successful project delivery.

In 2011 I made the transition from private consultancy to local authority where I spent 2 and a half years working for the London Borough of Hackney as an Arboricultural Officer. During this time, I began the foundation degree in Arboriculture through Myerscough College, which I have successfully completed.

I joined Connick Tree Care in June 2014, where I now work as the Senior Arboricultural Consultant.

### 3. AREAS OF EXPERTISE

- Tree hazard risk assessments for tree owners
- Decay assessment and mapping
- Pre-development site surveys and arboricultural implication studies
- Tree management reports to prioritise maintenance programs
- Tree related insurance claims
- Diagnosis of tree disorders
- General arboricultural advice