



October 2017
CBA10552 v1A

Portsmouth City Council

ARBORICULTURAL METHOD STATEMENT: TREE 3

Site:
Blendworth Crescent,
Havant



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The Complete Arboricultural Consultancy



ARBORICULTURAL METHOD STATEMENT: TREE 3

Client:	Portsmouth City Council
Site:	Blendworth Crescent
Arboricultural Consultant:	James Fuller <i>FdSc.Arb, BTEC Nat.Dip.Arb, M.Arbor.A</i>
Date:	October 2017

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Appendices

- CB1 Tree Protection Plan CBA10552.02C TPP
- CB2 Qualifications and Experience

1.0 INTRODUCTION

- 1.1 CBA Trees has been instructed by Adrian Legg of Portsmouth City Council to assess the impact of, and provide a specific method statement for, the proposed pumping station access road on Tree 3.
- 1.2 The access road was assessed as part of the main design phase of the site. The levels that were provided as part of the main design phase showed that the proposed access road for the pumping station could be constructed completely above ground level, without the need for any excavations.
- 1.3 Since the site has been active for construction, it has become clear that the levels that were originally provided do not accurately represent the levels on site.
- 1.4 A previous site meeting and method statement report based on the original levels information suggested that levels within the RPA of Tree 3 would need to be reduced by 300mm. However it is now recognised that this was not correct as the inclusion of the surface treatment on top of the new hard surfacing had not been considered.
- 1.5 This report considers the most recent situation on site and includes level information as set out for a site meeting on the 3rd October 2017.

2.0 DETAILS

- 2.1 Tree 3 is a mature Oak, with more than 40 years remaining contribution and has been given a high quality 'A' Grade with regard to BS5837:2012. The tree has a stem diameter of 990mm, which equates to a theoretical root protection area (RPA) of 11.9m (circle with a radius).
- 2.2 Planning permission has been granted for the site off Blendworth Crescent, Havant. The permission was based on the proposed method statement provided by CBA Trees (ref: 10552_2017-04-21 v1E AS). A Variation of Conditions 12 (Ecology), 14 (Landscaping) and 15 (approved plans) of the original planning permission to incorporate the pumping station.
- 2.3 Having set out the location of the access road for the pumping station on site it has become clear that the levels information initially provided was not correct and therefore the approved method statement is no longer feasible. Therefore the construction method detailed in Section 3 of this report is proposed, and shall be implemented on site, once it has been approved by Havant Borough Council.
- 2.4 Whilst on site it was noted that Tree 3 has low hanging epicormic growth which will need to be crown lifted over the footprint of the access road. It is proposed that the branches overhanging the footprint of the access road are removed. The low epicormic branches either side of the trunk provide low level screening into and out of the site and it is recommended that these branches are retained.

2.5 Photograph 1:

A view of Tree 3 and the low hanging branches



- 2.6 During a site meeting where Havant Borough Council's Tree Officer was present, it was noted that that vegetation around the base of Tree 3 was dead and it was thought that spraying had taken place around the base of the tree. CBA Trees has been advised that no spraying has taken place around the base of Tree 3 or on site and all treatment was undertaken by hand.

Having inspected the area around the base of Tree 3 it is clear why Havant Borough Council's Tree Officer suspects that something has taken place, as there is an obvious area of brown vegetation around the trunk of Tree 3. There is evidence of new growth around the base which suggests that it might not be a chemical application that has caused the vegetation in this area to die.

It should be noted that Tree 3 has a low canopy and Tree Protection Barriers that were covered with dense bind weed were located around the edge of the dead vegetation. It cannot be stated with any certainty that the vegetation around the base of Tree 3 may have turned brown due to the lack of sunlight from the low canopy and wall of bind weed. However, the brown vegetation has an obvious line which is where the Tree Protection Barriers were located and therefore it would be reasonable to assume that this could be a reason for the brown vegetation. As new vegetation is growing back through it is thought that leaving this area to naturally recover is recommended at this stage. The removal of the Tree Protection Barrier and the crown lifting of the Oak should further improve this area.

2.7 **Photograph 2:**
A view of the base of Tree 3



3.0 'NO DIG' METHOD STATEMENT FOR PUMPING STATION ACCESS ROAD

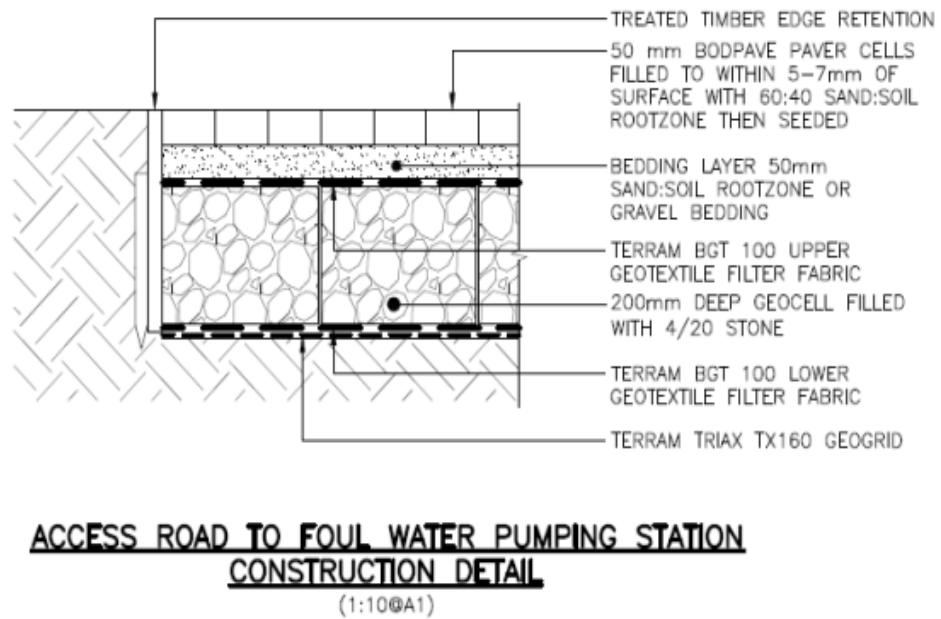
- 3.1 Plan CBA10552.02C TPP appended at CB1 indicates where no-dig hard surfaces are to be installed within the RPA's of retained trees. The 'No Dig' hard surface shall be created from Geosynthetics Cellular Confinement system, Cellweb or a similar product.
- 3.2 The 'No Dig' hard surface shall be installed in accordance with the manufacturer's method statement. New surfacing is proposed within the RPA of Tree 3 which has the potential to cause harm to the tree if not implemented with care. The levels have been reviewed in this area and are not the same as originally stated.

The original position was that the levels within the RPA of Tree 3 would be raised by 300mm (10.50 Existing to 10.80 Proposed), with minor fluctuations across the proposed road.

The level runs downhill to the base of the Oak tree. There is another 150mm of surfacing to go on top of the hard standing. There will need to be 150mm of the existing soil removed within the RPA (see attached plan). The build-up of levels within the RPA will be a mix of a 300mm section and a 400-500mm section. The build-up will be as shown in Figure 1 below, with different depths of cellular confinement system.

- 3.3 I am confident that the proposed 'No Dig' hard surface can be installed without causing significant harm to the existing trees. This surface solution is within the recommendations set out in BS5837:2012 and would be appropriate in this situation.

3.4 **Figure 1:** Cross section of 'No Dig' hard surfaces for Trees 3 and 6 respectively



3.5 **Photograph 3:**

A view of the level – blue tape represents top of the build up



3.6 **Introduction**

This guidance describes the procedure required to undertake the construction of hard surfacing, i.e. access road, whilst exerting no adverse effects on the roots of trees to be retained. 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. Where hard surfacing passes beneath the tree's canopy, or where it encroaches upon the Construction Exclusion Zone (CEZ) of retained trees, a porous 'no dig' method of construction will be required. The construction has been engineer designed and consists of a non-clogging gas and water permeable surface and sub-base. This will incorporate a three-dimensional cellular confinement system to prevent future rutting and underlying ground compaction.

The Tree Protection Plan CBA10552.02C TPP (appended at CB1) outlines areas where hard surfacing will be installed using a 'no-dig' specification.

3.7 **Method of working**

Responsibilities:

- The Site Manager shall be responsible for the overall implementation of this Method Statement
- The Site Manager shall be responsible for ensuring the work area has been CAT scanned, and services identified on the ground by a responsible person using equipment within calibration. All relevant service drawings will be checked, and any necessary trial holes will be excavated, but only under arboricultural on site supervision.
- CBA Trees has assessed the increase in levels and do not believe that it will have a detrimental impact on the retained trees.
- The Site Manager shall be responsible for the safe handling and distribution of materials around the site.
- The Site Manager shall be responsible for providing a completed Quality Assurance document at the conclusion of the scheme.

Materials:

- PPE as required by the Site Manager
- Cellular confinement system
- Stapler and staples
- Staking pins
- Separation geotextile membrane
- Edge restraints
- **Infill aggregate (angular granular 40-20mm no fines)**
- Wearing course

3.8 **Method of Preparation**

- The Site Manager will set out the exact location of the area to receive the new surfacing.
- Tree protective barriers shall be erected as per the Tree Protection Plan (CBA10552.02C TPP, appended at CB1).

- Following the CAT scan, the site supervisor will direct the implementation of the hard surfacing as per the following details.
- The Site Manager shall ensure the prepared surface meets the necessary strength requirements prior to following works.
- The Site Manager shall provide the setting out of any edging requirements.

3.9 *Preparation of the surface for the cellular confinement system*

- Prior to the installation of a new ground surface, existing ground cover vegetation should be killed/destroyed using an appropriate herbicide (see Pesticide Handbook). Specialist advice should be sought in order to determine the most suitable herbicide treatment, due to the potential for leaching through the soil.
- 150mm of the soil will be removed to establish the new surface, in the locations specified on the Tree Protection Plan; this shall be removed under the supervision of the arboricultural consultant.
- The ground levels are to be raised within the Root Protection Area (RPA). This will be achieved by the use of a granular material, which does not inhibit vertical gaseous diffusion. Examples of suitable granular materials include, no-fines gravel, washed aggregate, or cobbles.
- No-fines granular materials should be used wherever fill or a sub-base is required, to ensure adequate gaseous diffusion.

3.10 *Edge Supports*

- Timber edge – 50mm x 50mm tanalised timber stakes shall be hammered into the ground along the setting out line, at 900mm centres and at changes in direction. The finished level of the stakes shall be 25mm below the finished level of the edging timbers. Tanalised 25mm x 125mm timber rails shall be fixed across the stakes with appropriate fixings. The finished top of timber level shall be approximately 25mm lower than the adjacent finished ground level.
- A 45 degree infill of good quality top soil shall be added around the edge of the timber supports to avoid a significant step off. Stakes will also be provided to stop vehicles from dropping off the edge.

3.11 *Construction*

- Lay geotextile membrane over prepared surface between edgings, ensuring overlaps of 300mm minimum. Temporarily retain geotextile with either stakes or weights.
- Expand the cellular confinement system over the geotextile and anchor open with pins during infilling.
- The expanded cellular confinement system panels shall be in-filled with the appropriate aggregate by hand, under the direction of the site supervisor. The cellular confinement system shall be overfilled by 50mm, to create a surcharge over the product, which protects the leading edges of the cells.
- The infill aggregate shall be rolled or whacked to ensure cohesion of components.

3.12 *Finishes*

- The Site Manager shall conduct a visual inspection of the finished surface structure prior to the application of any wearing course.

- Any chosen porous wearing course for the car parking and driveways should be applied as per the instructions of the manufacturers involved.

3.13 *Signing off*

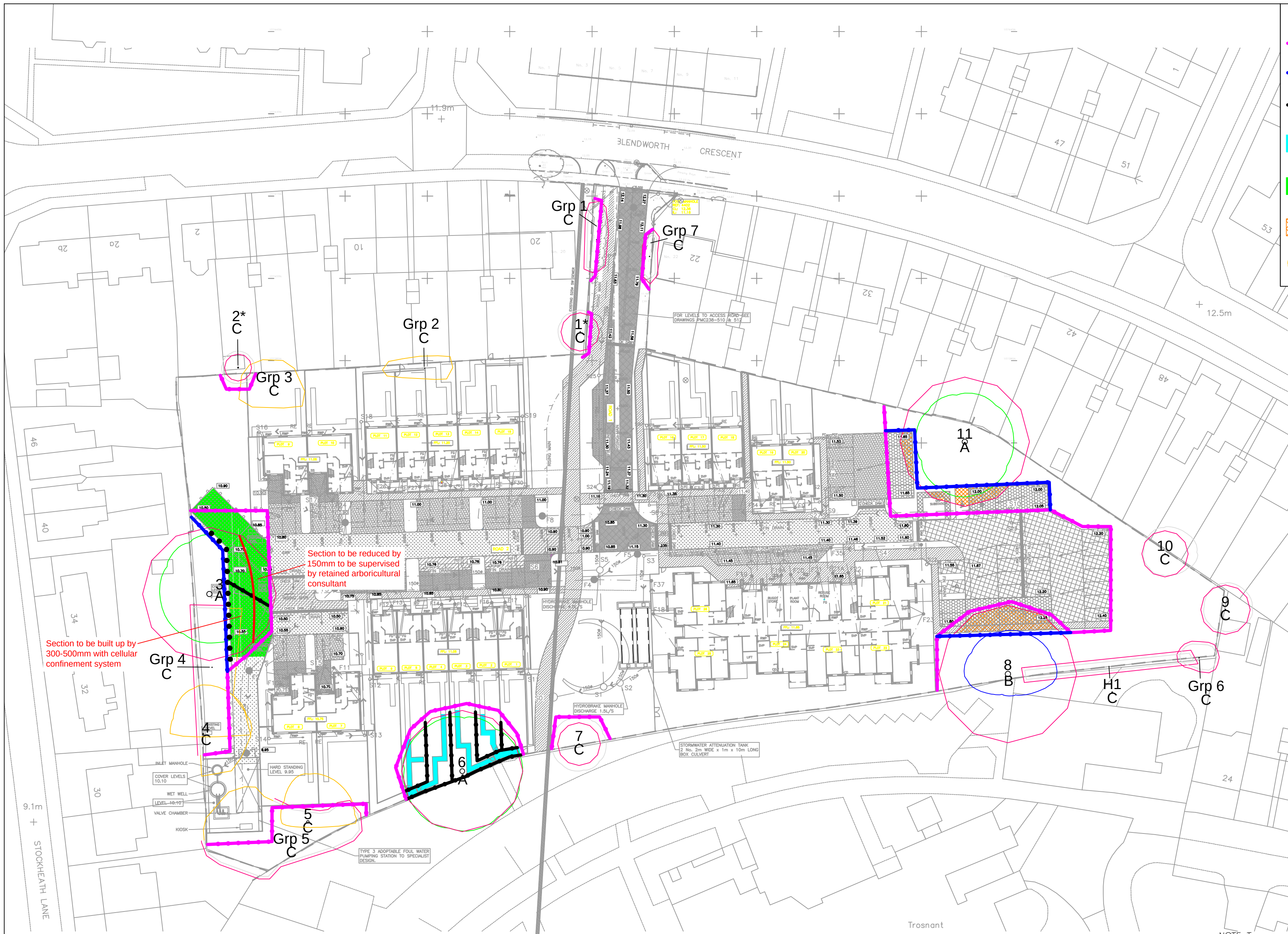
- The Site Manager shall ensure that all waste material is removed from site.
- The Site Manager shall provide the associated Quality Assurance document to the client.
- The arboriculturist shall also sign off the works if present throughout the process to oversee the implementation.

4.0 *CONCLUSION*

- 4.1 CBA Trees has assessed the 150mm level reduction within the RPA, the build-up in level within the RPA, the crown lifting and the brown vegetation around the base of the tree.
- 4.2 It is our opinion that the 150mm level reduction can be carried out without being detrimental to the long term physiological condition of, as long as the excavations are carried out under the supervision of the retained arboricultural consultant.
- 4.3 The build-up in level will be the same specification as previously approved, only deeper in some locations. This specification will still allow for water percolation through the new surface.
- 4.4 The removal of some of the low hanging branches over the access road will not have a detrimental impact on the overall appearance of the tree, and will not be detrimental to the physiological or structural condition of the tree.
- 4.5 The brown vegetation around the base of Tree 3 is not considered to be from spraying and is more likely to be from significant shading from the low branches and dense bind weed on the Tree Protection Barrier.







KEY

- LOCATION OF TREE PROTECTION BARRIER FOR DURATION OF MAIN CONSTRUCTION WORKS
- LOCATION OF TREE PROTECTION BARRIER DURING SPECIALIST WORKS WITHIN RPA
- LOCATIONS OF FENCES, GATES + POSTS WITHIN RPAs TO BE INSTALLED AS DETAILED IN SECTION 13 OF THE ARBORICULTURAL REPORT
- LOCATION OF 'NO DIG' FOOTPATHS, 100mm BUILD UP AS DETAILED IN SECTION 12 OF THE ARBORICULTURAL REPORT
- LOCATION OF 'NO DIG' SURFACE APPROX 300mm BUILD UP OF LEVELS TO BE CONSTRUCTED AS DETAILED IN SECTION 12 OF THE ARBORICULTURAL REPORT
- LOCATION OF HAND EXCAVATIONS TO BE SUPERVISED BY ARBORICULTURAL CONSULTANT
- TREES, GROUPS + SECTIONS OF GROUPS TO BE REMOVED TO FACILITATE PROPOSED LAYOUT

KEY

- ROOT PROTECTION AREA (RPA)
- CROWN SPREAD
- TREE NUMBER
- CATEGORY

JOB TITLE
Land adjacent Blendworth Crescent, Havant

DRAWING TITLE
Tree Protection Plan

CBA DRAWING No.
CBA10552.02C TPP

BASE PLAN DRAWING No.
PMC238-501 D

SCALE 1:500@A2

DRAWN AM

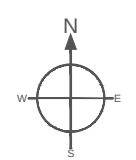
DATE October 2017

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NOTE: Trees marked with * and groups and hedges are indicatively plotted







The Professional Arboricultural Consultancy

Qualifications of James Fuller Senior Consultant

James Fuller **FdSc.Arb, BTEC Nat.Dip Arb, M.Arbor.A** joined CBA Trees in 2007 as a gap-year junior surveyor/arborist having attained the Foundation Degree in Arboriculture at Sparsholt College near Winchester and has more recently acquired the Professional Tree Inspector's Certificate.

Over the years James has gained experience in every field of our work, undertaking all elements of consultancy including large BS5837:2012 tree surveys using the latest data capture equipment to produce Implication Assessments and Method statements for planning applications.

Having broadened his knowledge and gained considerable experience, James is now a retained Senior Consultant, undertaking site assessments, site monitoring, and provision of advice to prominent development companies for large and complex projects.