



DUCKWORTHS  
ARBORICULTURE LTD.

## BS:5837 ARBORICULTURAL REPORT ARBORICULTURAL METHOD STATEMENT ADDENDUM (PART 2)

LAND AT SOUTHGATE HOUSE, WELLINGTON ROAD AND ADJACENT TO  
THE CARNIVAL POOL SITE  
WOKINGHAM  
BERKSHIRE  
RG40 2AF

CLIENT: WOKINGHAM BOROUGH COUNCIL

JULY 2025  
Ref: AMS 06747 / 2025

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**Project:** This report is to discharge outstanding matters pertaining to Condition 6 of the planning consent, relating to tree protection to ensure significant retained trees can be successfully protected and retained during 'Phase 2' of the residential development within with Carnival Pool / Southgate House site.

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# 1. INTRODUCTION

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## 1.1 INSTRUCTION

This site-specific Arboricultural Method Statement has been written to discharge planning conditions for planning consent ref: 20089 and which relates to the protection of trees at the Carnival Pool Leisure Hub and Land at Wellington Road & Finchampstead Road, Wokingham, RG40 2A.

This report is to discharge outstanding elements relating to condition 6 of the planning consent, with regards to tree protection and to ensure significant retained trees can be successfully protected and retained during 'Phase 2' of the residential development within with Carnival Pool / Southgate House site.

The Phase 2 Arboricultural Method Statement has been provided in two parts to ensure no delays with the development on site.

Part 1 of the Arboricultural Method Statement was submitted and approved in 2022 and provides a methodology for the following processes on site:

1. Realignment of Tree Protection Fencing to facilitate crane matting
2. Tree removal / retention
3. Clearance of undergrowth
4. Relocation of two trees adjacent to drainage run

This Phase 2, Part 2 Arboricultural Method Statement is intended to complete the Arboricultural Methodology, and provides information on:

5. The infill of the ditch, & construction of the no-dig parking spaces
6. Excavation and depth for the electrical ducts to the car charging points
7. Structure (foundations) for charging points, and
8. The construction details for the access road

This Arboricultural Method Statement details the steps which will be taken to ensure significant trees can be successfully protected and retained during and on completion of the proposed landscaping works.

## 1.2 SCOPE

The British Standard 5837:2012 'Trees in Relation to Design, Demolition and Construction' is designed to assist those concerned with trees and planning to form balanced judgments. This report does not therefore seek to put arguments for or against development but provides a means of protecting the trees which may be affected during development.

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### 1.3 DOCUMENTS

The trees were surveyed as part of the original planning application ref: 172012 in May 2017 by Atkins Ltd. Later surveys (August 2019 – updated February 2022) by Sarah Duckworth of Duckworth's Arboriculture Ltd. provide information on the current tree stock, the quality of the trees on site and identify those which are no longer present.

**DISCLAIMER:** This is an independently produced Arboricultural Report. I have no connection with any of the parties involved in this site or application that could influence or bias the opinions expressed in this report.

### 1.4 COMPLIANCE AND STANDARDS

All works must be undertaken in accordance with:

- **BS 5837:2012 – Trees in Relation to Design, Demolition and Construction**
- **BS 3882:2015 – Specification for Topsoil (if topsoil is added)**
- **BS 3998:2010 – Tree Work – Recommendations**
- **APN 12 (September 2020) – 'The Use of Cellular Confinement Systems Near Trees: A Guide to Good Practice'**

### 1.5 CAVEATS

The report is valid for a period of two years from the date of issue being 24<sup>th</sup> July 2025 and will expire on 24<sup>th</sup> July 2027.

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## 2. ARBORICULTURAL METHOD STATEMENT (AMS)

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### 2.1 NO-DIG PARKING BAYS – STRUCTURE & INFILL OF DITCH

#### THEORY

Any increase in levels within the RPA will be constructed so as to ensure continued water permeation and gaseous exchange to and from the rooting environment and the atmosphere. If porosity is not maintained and anaerobic conditions are created, it can result in root death and ultimately bring about the demise of trees.

Cellular confinement systems will be used to build up soil levels within the shallow ditch which currently runs along the northeastern edge of the site in order to construct the permitted parking spaces in these areas.

A cellular confinement system is a series of geocells arranged in a honeycomb-like formation that is combined with an underlying geotextile and angular stone to spread loads in such a way as to minimise compaction of underlying soil. Due to its 3-dimensional structure, a geocell mat offers all-round confinement to the encapsulated material, which provides a long-term improvement in the performance of the sub-base.

Trees north of the ditch are protected by Tree Preservation Orders therefore it is not possible to lay a conventional sub-base for new hard surfacing due to the potential harm to the trees as a result of compaction and capping of the soil.

The new ditch infill and no-dig parking surfaces will follow the three principles described in the Arboricultural Practice Note 1: Driveways Close to Trees (Patch & Dobson 1996) which are as follows:

- Roots of retained trees will not be severed
- Soil must not be compacted
- Oxygen must be able to diffuse into the soil (and carbon dioxide out of the soil) beneath the engineered surface

#### INSTALLATION

APN 12 'The Use of Cellular Confinement Systems Near Trees: A Guide to Good Practice' permits the removal of up to 50mm of leaf litter and surface vegetation prior to the installation of no-dig surfacing within the root protection areas of trees. This layer can be carefully scraped back using the toothless bucket of a small excavator. Care will be taken not to damage any exposed surface roots or come into contact with / damage lower branches of trees.

Any protruding rocks / stones will be removed, and tree stumps / shrub roots will be grubbed out. Ramps made of sharp sand will be used as a protective layer to cover up any surface roots so that they are not damaged when the infill is introduced.

Once clear the site will be covered with a base geotextile made of polypropylene or polyester (min. 300g/m<sup>2</sup>) with a CBR puncture resistance of 4000N. A base geotextile is required to separate the fill material and the subgrade; this geotextile must cover the entire area to be surfaced. If several sheets are required, they should overlap by at least 30cm. On top of that the geocell mat 200mm deep will be stretched out and staked in place using J-hooks (steel reinforcing bars), construction pins or wooden stakes.

Where the cellular confinement system sits above tree root zones the infill will be crushed 20/40 stone. If this is not available 4/20 stone can be used. In all situations the infill material should be washed or graded so that it contains no fine particles (fines). The aggregate must have enough internal strength to perform both during installation and in the long-term. MOT Type 1, Type 2 and Type 3 are not suitable for use as infill because they contain fines.

Once the first layer is completed, it can be repeated from the base geotextile upwards creating layers of the cellular confinement system until the correct ground levels are achieved.

#### COMPLETION

Once the required levels have been achieved, the parking spaces will be edged with 125mm concrete upstand and surfaced with permeable Macadam to maintain the porosity of the surfacing.

Where required and appropriate to do so, the end cells of each layer of the geocell mat within the landscaped verge can be filled with topsoil and used to create the new landscape strip.

## **2.2 EXCAVATION AND DEPTHS OF ELECTRICAL DUCTS TO PARKING POINTS**

The routes of the underground ducts to the EV charging points are shown in drawing No. 24G694-ENT-XX-EX-D-E-6305 'External cabling for EV charging points' and have been designed and agreed in accordance with the arboricultural advice and recommendations.

The ducts will be routed at right angles across the access road to approach the tree's radially so as to reduce root severance and limit any impact on trees.

Where possible the ducts will be placed directly under the new access drive avoiding the need for any excavation into the existing ground levels. However, if some excavation is required at the northeast end of the site where existing ground levels are higher, they will be excavated by hand – notably if they are required within the root protection areas of T7A, T8, T9 & T13.

Trenches will be excavated by operatives working from the retained areas of existing hard standing. Any woody roots identified within the trenches will be cut back to the edge of the trench using sharp hand tools to prevent splits and fractures forming back along the root.

Concrete is toxic to tree roots and should not come into direct contact with the ground. Non porous plastic sheeting will be used to line the excavation and protect the ground before any concrete is laid within the root protection area.

## 2.3 STRUCTURE (FOUNDATIONS) FOR CHARGING POINTS

Overground charging stations are no longer proposed within the scheme because it is not clear whether future occupants will be reliant on vehicles given the sites location close to town and Wokingham train station.

However, to future proof this requirement and ensure the option remains available, ducts will still be laid under the hard standing and protected under a base plate to be accessible should any residents wish to install their own EV charging stations at a later date.

## 2.4 CONSTRUCTION OF TEMPORARY ACCESS ROAD WITHIN THE RPA OF T004

The surface of the access road will need to be raised where it falls within the 'Precautionary Dig Zone 'A' which makes up the root protection area of T004 (Oak). Tree Protection Fencing approved within the Arboricultural Method Statement (Part 1) will remain rigid and intact during the roadway construction.

The existing tarmac pathway which pre-dates the current development is providing a certain level of protection from compaction for the tree's roots. In view of this the tarmac is to be retained and the raised roadway constructed above. The tarmac will have holes 200mm diameter at approximately 0.5m spacings cut into the surface to improve water filtration. The retained tarmac will create a separation layer, preventing the infill aggregate from migrating into the subgrade below.

The new roadway will be built up to the required levels using layers of cellular confinement system as per Detail Section 50 of the planning drawing No. P1040-HLM-XX-00-DR-L-3097.

The increase in levels within the RPA should be carried out and constructed to ensure water permeation and gaseous exchange to and from the rooting environment and the atmosphere.

Above the gravel, a layer of Cell web system minimum 200mm deep will then be opened out and pinned in place. Pin spacing will vary according to the site conditions but will generally be required at 1m – 2m centres on flat surfaces, mainly placed around the perimeter of the area and where adjacent sections of the cellular confinement system abut each other, with less in the middle of the area.

The open cells will be filled with crushed 20/40 stone. If this is not available 4/20 stone can be used. In all situations the infill material should be washed or graded so that it contains no fine particles (fines). The aggregate must have enough internal strength to perform both during installation and in the long term. MOT Type 1, Type 2 and Type 3 are not suitable for use as infill because they contain fines.

Once in place, the geo-cell system will be covered with a base geotextile made of polypropylene or polyester (min. 300g/m<sup>2</sup>) with a CBR puncture resistance of 4000N. The geotextile must cover the entire area within the root protection area of T004 (Oak) and sheets will be laid to overlap by at least 30cm.

A new cell web layer will then be laid and the process is repeated until the required road subbase level is achieved. On completion of the no-dig subbase, the road will be surfaced with a permeable macadam installed in accordance with the engineers recommended specifications.

Following the completion of the residential development the tree protection fencing can be removed, and good quality screened topsoil will be used to grade the edge of the roadway to meet the adjacent ground levels prior to landscape planting.

## 2.5 GENERAL CONSIDERATIONS

Roots can be killed by pollution of the rooting area by chemicals and leaching. Loose, granular or liquid materials, including cement mix and fuel will be stored on an impermeable membrane well away from the trees' Root Protection Areas.

Particular care will be taken in the planning of deliveries if they require wide or tall loads and plants with booms, rigs or counterweights which can cause serious and permanent damage to trees making their safe retention impossible.

## 2.6 UNFORESEEN CIRCUMSTANCES

In the event of unforeseen circumstances whereby it is not possible to work in accordance with the Arboricultural Method Statement, then advice should be sought immediately from a qualified Arboriculturist.

**THERE SHALL BE NO DEVIATION FROM THIS METHOD STATEMENT WITHOUT CONSULTATION WITH A QUALIFIED ARBORICULTURIST AND / OR THE WRITTEN CONSENT OF THE LOCAL PLANNING AUTHORITY.**

## APPENDICES

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- A. Contacts
- B. Qualifications

## APPENDIX A – CONTACTS

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### Site Supervisor

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Feltham Construction

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### Arboricultural Consultant

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### Local Planning Authority

Wokingham Borough Council  
  
E-mail: [tndl\\_specialist@wokingham.gov.uk](mailto:tndl_specialist@wokingham.gov.uk)  
Tel: 01189746503

## APPENDIX B - QUALIFICATIONS

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This Arboricultural report has been prepared by Sarah Duckworth, Independent Arboricultural Consultant, trading as Duckworth's Arboriculture Limited.

I have over 20 years' experience working in the field of Arboriculture and for the past 17 years I have worked as a Local Authority Tree Officer both directly and independently providing contracted support. Since 2010 I have worked as a private consultant carrying out a range of Arboricultural Reports and Assessments for private clients.

I hold the Royal Forestry Society's Professional Diploma (Level 6) for which I received the Lockhart Garrett Award. I also hold the Arboricultural Association's Technicians Certificate (with Distinction).

I am a LANTRA qualified Professional Tree Inspector and a Professional Member of the Arboricultural Association.