Wentworth Castle Gardens
Park Drive
Barnsley

Arboricultural Method Statement

Prepared at the Request of
Sarah Dennett
The National Trust

On
14 February 2019

By
Ian Kennedy BSc. (Hons.), M.Arbor.A. MICFor.

Treescapes Consultancy Ltd.

All rights in this report are reserved. You may not reproduce or transmit, in any form or by any means, electronic, mechanical, photocopying, recording, or otherwise, or store in any retrieval system of any nature, any part of this report without our written permission. The content and format are for the exclusive use of the addressee in dealing with this site. You may not sell, lend, hire out, or divulge any of the content to a third party not directly involved with this site, without our written consent.

©Treescapes Consultancy Ltd.

SUMMARY

Treescapes Consultancy Ltd. have been instructed by Sarah Dennett, senior building surveyor with the National Trust to prepare an arboricultural method statement for the proposed installation of IT services within the root protection areas of trees at Wentworth Castle Gardens.

The purpose of this method statement is to implement the proposals whilst limiting potential disturbance to retained trees to an acceptable level.

The key operations that should take account of trees, in chronological order are listed below.

a. Remove Trees 6, 13 and 14.

b. Erect temporary tree protection barriers at the positions shown on Plan 1.

c. Excavate the service trenches within the root protection areas (RPAs).

d. Install the services.

e. Backfill the trenches.

f. Remove temporary tree protection barriers.

Section 3 is the arboricultural method statement.

If the consented development is carried out in accordance with this method statement then disturbance to the retained trees will be maintained at an acceptably low level.

© Treescapes Consultancy Ltd.

CONTENTS

© Treescapes Consultancy Ltd.

1 INTRODUCTION

1.1 Instruction

Treescapes Consultancy Ltd. have been instructed by Sarah Dennett, senior building surveyor with the National Trust to prepare an arboricultural method statement to support a planning application to install an IT service trench and customer kiosk.

1.2 Qualifications and Experience

I have based this report on three site visits, the information provided by the National Trust and my report dated 13 December 2018.

1.3 Documents and Provided Information

Sarah Dennett provided a topographic survey of the existing site layout and a plan showing the proposals as Autocad compatible files. I have not checked the accuracy of these plans or the locations of the trees plotted on them.

I met with the contractor responsible for excavating the trench on 29 January 2019 to identify the extent of the RPAs and the methods of digging within the RPAs.

1.4 Development Proposals

Most of the IT service trench will be excavated outside of the RPAs of trees. However, in two specific areas it is not possible to avoid the RPAs of some trees due to other constraints such as existing buildings and archaeological features.

1.5 Purpose of this Report

The purpose of this report is to provide a method statement that demonstrates how the services will be installed without having an adverse impact on the existing trees.

© Treescapes Consultancy Ltd.

1.6 Relevant Industry Standards and Codes of Practice

The main arboricultural industry standards and codes of best practice relevant to the planning and execution of this project are:

- BS 5837 (2012) – Trees in relation to construction – Recommendations;
- BS 3998 (2010) – Tree Work – Recommendations; and
- National Joint Utilities Guidelines, Volume 4 – NJUG Guidelines For The Planning, Installation And Maintenance Of Utility Apparatus In Proximity To Trees (Issue 2) (www.njug.org.uk)

© Treescapes Consultancy Ltd.

2 SITE VISIT AND OBSERAVTIONS

2.1 Site Visits

I have carried out a number of site visits to Wentworth Castle Gardens.

My first visit was on 20 November 2018 to carry out the initial tree survey.

My second visit was on 29 January 2019 to discuss proposals for the service route with the National Trust and their service installation contractor. This visit sought to minimise the extent of the route through RPAs of trees.

My third visit took place on 14 February 2019 to mark the positions of RPAs on the ground with marking paint.

2.2 Site Description

The site is located at Ordnance Survey grid reference SE 3207 0330 to the south of Lowe Lane, which runs in a southwest to northeast direction at this point.

The site is accessed from Lowe Lane along a drive that runs in a southerly direction towards the Northern College buildings and car park.

The trees considered in this report are either side of the proposed IT service trench which runs along the access drive between the main Wentworth Castle buildings and gardens to the informal and unsurfaced car park to the north.

© Treescapes Consultancy Ltd.

3 METHOD STATEMENT

3.1 General Precautions

The following general precautions should ensure the health and longevity of retained trees. They should be enforced during the construction phase within the RPAs of retained trees and under their canopies.

- All work will be carried out in accordance with a current risk assessment.
- All proprietary materials will be installed in accordance with their manufacturer's instructions and a current risk assessment.
- All equipment and tools will be used in accordance with their manufacturer's instructions and a current risk assessment.
- No storage of materials or fuel.
- No bonfires within 10m of the outer edge of the crown or RPA of a tree.
- No refuelling of mechanical equipment.
- No mixing of cement.
- No washing of cement mixers.
- No raising the soil level without the agreement of the Local Planning Authority (LPA).
- Only operate or park vehicles and plant if the soil is suitably protected, as recommended by Treescapes Consultancy Ltd. and agreed by the LPA.
- The guidance contained within the National Joint Utilities Group Volume 4 (Guidelines For The Planning, Installation And Maintenance Of Utility Apparatus In Proximity To Trees (Issue 2, 2007); http://www.njug.org.uk/) will be followed when installing underground services within the rooting areas of retained trees. To minimise potential damage to tree roots excavations will be carried out by a pneumatic excavation lance.
- No materials will be dumped or stored within the RPA of a tree or under its canopy, whether in a skip or directly on the ground, unless the ground is suitably protected against contamination and compaction.

© Treescapes Consultancy Ltd.

3.2 Phasing of work

The works will be phased as follows.

a. Remove Trees 6, 13 and 14.

b. Erect temporary tree protection barriers at the positions shown in Appendix 2.

c. Excavate the service trenches within the root protection areas (RPAs).

d. Install the services.

e. Backfill the trenches.

f. Remove temporary tree protection barriers.

3.3 Trees to be felled

Tree 6 will be felled because it has been significantly damaged by fire in the last 12 months significantly reducing its useful life expectancy.

Trees 13 and 14 are relatively small and insignificant trees and are growing close to an existing garden wall. The trees have the capacity to grow substantially larger and have the potential to contribute to movement of the wall in time if they are retained.

3.4 Temporary Tree Protection Barriers

Temporary tree protection barriers will be erected in the locations shown on the tree protection plan included as Appendix 2. These will remain in place for the duration of the construction phase and will not be removed or moved without the permission of the Local Planning Authority (LPA).

There are a number of fencing standards available for tree protection where development is proposed. The standard used depends on the extent of development, the level of access required and the size of vehicles that will be operating. Very robust, braced 2m high fencing as described in BS5837: 2012 is necessary for sites with lots of activity with large vehicles.

The vehicle being used on the site will be tracked mini digger approximately 1.5 tonnes and 1m in width. Trafficking will be restricted the existing road and track network and the sections of the service route that are outside the RPAs. See photos 1 and 2. For this reason the fencing specified in BS5837: 2012 will not be necessary. Instead, and in recognition of the small vehicle being used and limited movements, the following fencing standard is proposed. This is proposed to delimitate the edge of the RPAs and ensure the vehicle remains on the existing track network.

- Metal road-pins (1.2m) securely driven into the ground (200-300mm) at 2m centres, supporting orange mesh barrier fencing (1m high) securely attached to the pins using strong cable ties (4.8mm x 300mm).

© Treescapes Consultancy Ltd.

3.5 Excavate the service trenches within the root protection areas.

The root protection areas have been marked on the ground with orange paint so that there can be no confusion as to the extent of the RPAs. This was done by me on 14 February 2019. See photo 3.

The trees and groups that require special excavation are Tree 5 and Group 28.

The soil within the RPAs will be excavated using an air spade to blast the soil from around the roots. I am informed that the trench will be approximately 300mm wide and 650mm deep.

An air spade can have limitations where the soils are heavy clay soils, are wet or compacted.

I expect that air spade will be able to cope with the soils around Tree 5. This is light, sandy and dry.

There is some compaction along the proposed route through Group 28 because the route is along an existing access track used by agricultural vehicles. A combination of the air spade and conventional spade will be used; the air space to loosen and free the soil around the roots and the conventional spade to remove the soil from the trench around the roots.

The roots will be wrapped in damp hessian, and maintained damp during dry weather, until the services are ready to be installed and the trench back filled.

3.6 Install the services

The services will be routed under the exposed root plates.

3.7 Backfill the trenches

The hessian will be removed from around the roots immediately before the trenches are backfilled with the excavated soil. The soil will be lightly firmed by trampling by a person. Machinery will not be used to firm or compact the soil.

3.8 Remove the Temporary Tree Protection Barriers

The temporary tree protection barriers will be removed following completion of the works.

3.9 Monitoring

To ensure that the work is carried out in accordance with this method statement it will be monitored by an arboriculturalist at the following points:

1. On the first day that excavation within the RPAs begins.
2. At the end of the first day to ensure that the roots are being properly covered with hessian.

© Treescapes Consultancy Ltd.

3. On the day that the services are being installed.
4. On the day that the soils are being back filled and firmed.

© Treescapes Consultancy Ltd.

4 LEGAL CONSIDERATIONS

4.1 Protected Trees

If these trees are protected by a Tree Preservation Order (TPO), located in a conservation area or protected by planning conditions, it will be necessary to obtain permission from the Local Planning Authority (LPA) before any work, other than certain exempted operations, can be carried out to them. The work specified in this report is necessary for their reasonable management and should be acceptable to the LPA but tree owners should appreciate that they may take an alternative point of view and have the option to refuse to grant consent.

I understand that planning permission allows the minimum amount of work to protected trees required to implement the consented development without requiring further consent under tree protection legislation.

4.2 Wildlife Conservation Legislation

The nests of most birds are legally protected while they are in use. Bats are also legally protected and their roosts are protected whether or not they are in use. Tree surgeons should be aware of their duties under the legislation enacted to protect wildlife and carry out their site assessment and work accordingly. If bats are suspected Natural England should be consulted.

The Forestry Commission and others produced a leaflet called: *Woodland Management for Bats* (2005) which contains some useful advice and is free to downloadfrom:http://www.forestry.gov.uk/forestry/INFD-6K3CXY

On page 14 this publications states:

> *'The Wildlife and Countryside Act 1981 makes it an offence to disturb, damage or destroy bats or their roosts (even if bats are not present in the roost at the time of any incident). The Act applies in both England and Wales, and requires consultations with the appropriate Statutory Nature Conservation Organisation* [NaturalEngland] *before carrying out activities which might harm or disturb bats or their roosts (even if unoccupied).'*
>
> *'The Act is amended by the Countryside and Rights of Way Act 2000 in England and Wales. This adds 'reckless' to the offence of damaging or destroying a place a bat uses for shelter or rest, or disturbing a bat while using a roost. Under EU Regulations damaging or destroying a breeding site or resting place is an absolute offence, regardless of whether the act of doing so may be considered reckless or deliberate.'*

© Treescapes Consultancy Ltd.

Appendix 1

The Experience and Qualifications of Ian Kennedy

1. Qualifications

Ian graduated from the Scottish Agricultural College in August 1995 with a Higher National Diploma in Horticulture (HND) with Distinction.

In 1998 Ian graduated from the University of Aberdeen with aBSc (Hons) Upper second class in Forestry with Arboriculture and Amenity Forestry.

He passed the LANTRA Professional Tree Inspection examination in (2006).

In 2009 his application to become a professional member of the Arboricultural Association was assessed to fulfil all the necessary requirements and he became a professional member of the Association that year.

In 2011 he passed the final examination of the Institute of Chartered Foresters and become a member of that institute in January 2012.

2. Practical experience

Presently Ian is working in private practice as an independent arboricultural and woodland management consultant undertaking tree conditions surveys, pre-development tree surveys to the BS5837:2012 standard, mortgage reports and woodland management planning works. Clients range from home owners and farmers to architects, building companies, local authorities, schools and larger development companies.

Prior to private practice Ian held a number of positions in local government. Firstly he was the arboriculturalist within a planning office in Essex. Ian gained considerable experience regarding trees in relation to development, in particular BS 5837.

Development work formed the core of his duties and applications ranged from small back garden developments to major schemes such as the redevelopment of Ministry of Defence land for private residential development. Ian also undertook all functions associated with Tree Preservation Orders (TPOs), including the making of new TPOs, assessing suitability of applications to work on protected trees and trees in conservation areas.

Ian went on to managed a 500 hectare woodland estate for a local authority in South Yorkshire that included a mix of urban and rural woodlands. This included preparation and implementation of detailed management plans for multiply use woodlands. He undertook all aspects of silvicultural management from marking to

© Treescapes Consultancy Ltd.

contract tendering and monitoring. He also managed the access, conservation, landscape and archaeological requirements of the estate.

Ian was directly involved in the estate achieving Forest Stewardship Council certification in 2003 and personally ensured continued certification.

Ian has worked extensively with Forestry Commission to obtain the necessary licences for management works and ensured the estate benefited fully from the full range of grants available.

Latterly at the same authority Ian went on to manage the trees and woodlands unit, having overall responsibility for management of the authority's tree and woodland stock and associated staff, together with delivery of other tree related services such as those associated with the Town and Country Planning Acts.

3. Continuing professional development

Ian regularly attends meetings, seminars and training events hosted by The Arboricultural Association. Institute of Chartered Foresters, Royal Forestry Society and Forestry Commission and benefits from the respective journals, briefings and newsletters available to members of the first three of the organisations listed.

4. Relevant experience

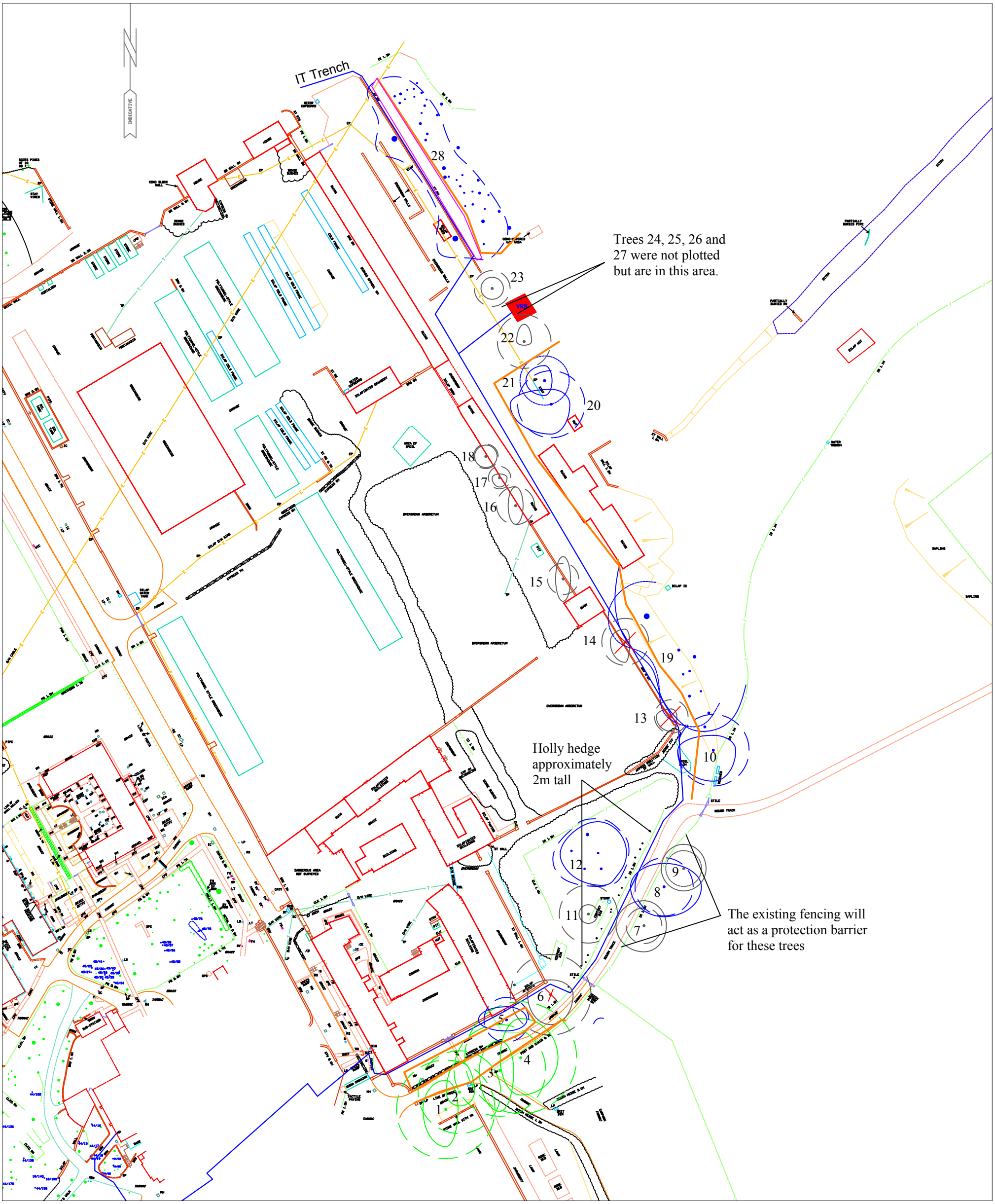
Ian Kennedy has spent 19 years working with trees, including as the arboricultural advisor to planning officers for a Local Planning Authority and manager of a trees and woodlands unit for another local authority with overall responsibility for trees, including in relation to the Town and Country Planning Acts.

© Treescapes Consultancy Ltd.

Appendix 2

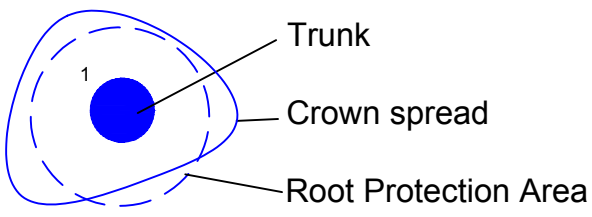
Tree Protection Plan

© Treescapes Consultancy Ltd.



Tree protection plan showing the proposed site layout

The location of a tree and its respective number



Green - Retention category A
Blue - Retention Category B
Grey - Retention Category C
Red - Retention Category U

Tree Protective fencing

Ground protection

Tree to remove

© Treescapes Consultancy Ltd.

Photograph 1. The existing tarmac road that will be used by contactors.

Photograph 2. The existing track through group 28.

© Treescapes Consultancy Ltd.

Photograph 3 showing the edge of the RPA of Tree 5 marked in paint.

© Treescapes Consultancy Ltd.

Treescapes Consultancy Ltd.
Luke Steer
Melbourne
17 Millans Park
Ambleside
Cumbria
LA22 9AG

Office: 015394 34698
Mobile: 07734 113964
Email: luke.steer@treescapesconsultancy.co.uk

Ian Kennedy
16 Hartcliffe View
Thurgoland
Sheffield
S35 7BD

Office: 0114 288 5501
Mobile: 07891 488 303
Email: ian.kennedy@treescapesconsultancy.co.uk

Website: www.treescapesconsultancy.co.uk