Proposed Development of

Land to Rear of Potters House, Dinting Lane, Glossop

BS5837:2012

Tree Survey and Implications Assessment

Prepared by EBS on behalf of Stamford Wing

Issued: **May 2016**

Report on behalf of Stampford Wing, by EBS

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Contents

1. Introduction

1.1 Purpose of Report

This report provides an impact analysis of the proposed development on trees and woodland with guidance on appropriate management and protective measures. Its primary purpose is for the planning authority to review the tree information in support of the planning submission and use as a basis for issuing planning consent or engaging in further discussion towards that end. This report is based on my site observations and the information provided

1.2 Ecological Constraints

The Wildlife and Countryside Act 1981, as amended by the Countryside and Rights of Way Act 2000, provides statutory protection for the species that inhabit trees.

Tree Survey was conducted in line with regulations set out in BS5837:2012 – Trees in relation to design, demolition and construction.

1.3 Qualifications and Experience

This report is based on my site observations and the information provided, interpreted in the context of my experience. My Qualifications are a BSc (Hons) in Wildlife Conservation and I am a full member of CIEEM. I have over 10 years' experience in Arboriculture both in the private sector and local authority. During that time I have ran EBS working with environmental organisations in the UK and forestry projects abroad. Other work has included arboricultural assessments during golf course design phases, as well as assessments for private estates and individual landowners. I completed a training course in 2014 on BS5837 ran by CIEEM.

2. Site Evaluation

2.1 Site Visit

The site was visited on Friday 26th of March 2013 and revisited on Thursday 5th May 2016. All observations were taken from ground level. The majority of the trees and woodland were outside the boundary of the site and observations on these were confined to what was visible. The weather was dry with bright sunshine.

2.2 Site Description

The site is situated in the small village of Dinting approximately 1km from the centre of Glossop. The site consists mainly of hard standing with 1 tree on site and a number of other trees immediately adjacent on what appears to be an old spoil heap.

2.3 Collection of Data

An inspection of the individual trees around and abutting the site (where possible) and the woodland outside the site affected by the site, was carried out. All dominant boundary and adjacent trees were recorded as advocated by BS5837:2012.

2.4 Interpretation of Data

The Root Protection Area (RPA) for the individual trees was calculated using the process laid down in section 4.6 of BS5837:2012, the same principle has been used to provide a minimum RPA for the boundaries surrounding the site using the RPA's of the dominant boundary trees as guidance. Section 4.6 of BS5837:2012 is a simplistic methodology for establishing the minimum distance for protective barriers and consideration has been given to the influencing factors set out in section 4.6.3 of BS5837: 2012 in setting the RPA's on this site.

2.5 Root Protection Area

The Root Protection Area (RPA) is the area where ground disturbance must be carefully controlled. In principle, no significant disturbance should occur within the RPA of category A or B trees, and high levels of care are needed during any activities authorised within it if the trees are to be successfully retained. Generally consideration needs to be given to the space needed for the trees to be successfully retained after development had finished.

3. Survey Information

3.1 Treescape

The 1 tree on site is a Crack Willow of low quality (Cat U), it is a multi-stemmed specimen and is causing damage to an existing fence and concrete posts. The trees along the east boundary (see Figure 1 Existing Layout – Appendix 2) are positioned on what appears to be an old spoil heap and consist of low to moderate quality (Cat B & C) Sycamore, Hawthorn and Willow. Two of these trees are close to a retaining wall and have the potential to cause future damage. Many of the trees have been left unmanaged and the substrate appears unstable. It is envisaged that a number of these trees will be lost to development. However, if the developers decide to retain trees here a program of management would be required to thin out the heaviest branches and boughs of the larger specimens and look to stabilise the soil. It is recommended that any trees earmarked for removal (see below) are felled with the stumps remaining in situ so as to help stabilise the soil and lessen any effects on remaining trees.

Generic measurements have been taken for the trees and are included in the Tree Survey Schedule (Appendix Table 1).

3.2 Individual Trees

All individual trees surveyed are detailed in the Tree Survey Schedule (Appendix Table 1) and have been plotted onto drawing J015451 (Appendix 2). A large number of trees are recommended for removal owing to their poor health and in some cases potential to become dangerously unstable in current conditions. Site photos are shown in Appendix 3.

3.3 Ecology of the Site

Many of the trees were noted as suitable for supporting a variety of breeding birds but not suitable for bat roosts. Prior to any tree works commencing a full breeding bird survey should be conducted unless felling takes place outside of the breeding season.

4. Arboricultural Implications Assessment

4.1 Summary of the Impact on Woodland and Trees

The impact of the proposals on the woodland and individual trees has been assessed by the extent of disturbance in the RPA's.

4.1.1 und Level Changes/Re-profiling

The proposal may have the potential to destabilise the ground to the east of the site that currently contains a high number of potentially dangerous trees recommended for removal

4.1.2 Removal

The current proposal includes removal of 3 trees, with further thinning proposed of trees on spoil heap.

4.1.3 Compensation

Planting of trees of local provenance are recommended to compensate the losses and should incorporated into the design of the development.

4.2 Proposals to Mitigate Impact

4.2.1 Protection of Retained Trees and Woodland

The successful retention of trees depends on the quality of the protection and the administrative procedures to ensure that the protective measures remain in place whilst there is an unacceptable risk of damage. An effective means of doing this is through the use of an Arboricultural Method Statement that can be specifically referred to in a planning condition. An Outline Arboricultural Method Statement for this site is set out in Section 5.

4.2.2 Summary of Impact on Local Community

Subject to adequate precautions to protect retained woodland and individual trees as specified in the Outline Arboricultural Method Statement included in this report, the development proposals will not have a significant arboricultural impact on the site. Every opportunity should be taken to provide adequate compensatory planting and to incorporate trees in to the design of the redevelopment.

5. Outline Arboricultural Method Statement

5.1 Introduction

The Arboricultural Impact assessment in section 4 identified the impact on trees and woodlands and how that might affect the local character. The Arboricultural Method Statement sets out the management and protection details that must be implemented to secure successful tree and woodland retention. It is based on the assumption that the minimum general standards for development issues are those set out in BS5837:2012. It also draws on the author's expertise and knowledge in interpreting these standards in relation to the specific circumstances of this site.

Plans provided are for information and guidance and should only be used for dealing with tree and woodland issues. The location of all protection measures must be clarified prior to construction and clearly marked as such on the ground.

5.2 Protection Barriers

Protective barriers should be fit for purpose, BS5837:2012 section 6.2.2 sets out the default position, however it also states in 6.2.2.3 that 'where the site circumstances and associated risk do not necessitate the default position, an alternative specification should be prepared and agreed by the local planning authority'.

It is not possible to erect fencing to protect trees along the top of the eastern embankment as trees earmarked for removal are immediately adjacent with roots and canopies merging. Trees to be retained are to be clearly marked from those recommended for removal.

5.3 Precautions when working within the RPAs

If suitable protection fencing is carried out, working within the RPA's should not be an issue, however if works are undertaken within the RPA they must be carried out with care and the following general guidance followed (not all may be relevant).

5.3.1 General Excavation

All excavation must be carried out by hand causing the minimum disruption of roots. Exposed roots to be removed should be cut 10-20cm behind the final face of excavation. Retained roots must be protected from direct sunlight, drying out and extreme temperatures by an appropriate covering. Roots greater than 25mm should be retained where possible, roots 25 - 100mm should only be cut in exceptional circumstances. Roots over 100mm should only be cut following guidance from the arboricultural consultant.

5.3.2 Removal of Structures

Structure are any man made structure above or below ground and includes roads, tracks and paths. Roots frequently grow adjacent and below buildings and damage can occur through disturbance. Use of hand tools may be required. Debris should be removed across existing hard standing away from the RPA and if appropriate existing below ground features can be left in place as removal will cause excessive root disturbance.

5.3.3 Installation of New Structures

New structures within RPA's are potentially damaging, these should be designed to have the minimum impact on the RPA, this may include above ground construction using piling. New surfaces such as roads, paths and car parks should be constructed to allow water and gas movement, give load spreading to avoid compaction and be constructed with little or no excavation. Provision of new services should only pass through RPA's as a final resort, if this is the case trenchless installation is the preferred method. These are engineering issue that should be guided by tree expertise. It is not thought any RPAs of retained trees will be disturbed.

5.3.4 Soft Landscaping

The layout of the site ensures that re-profiling will be kept outside the RPA's with ground levels maintained at original levels, where there is possibility of re-profiling extending over the RPA; this is likely to be on a very small scale and not exceed any more than 15% of the RPA. Where new planting exists within the RPA's this should be carried out with care and ideally mulch rather than grass should be placed around the base of retained trees to reduce the risk of mowing damage, because of the layout of the site this will be limited but needs to be considered.

5.4 Site Storage, Cement mixing and Washing points

All site storage areas, cement mixing and washing points for equipment and vehicles must be outside the RPA's. Where there is a risk of polluted water run off precautions must be in place to contain any spillages.

5.5 Tree and Shrub Planting (if relevant)

Any proposed Tree and shrub planting on completion should be carried out using the appropriate planting techniques for the size of plant being planted. Appropriate protection measures should be put in place to protect the plants during establishment; consideration should be given to potential threats from domestic stock, wild mammals and mechanical damage. Maintenance of all stock should be carried to ensure successful establishment, this will require replacement of losses and should continue for up to 5 years or until successful establishment is confirmed by the local authority.

5.6 Tree Protection Supervision

Tree protection cannot be reliably implemented without arboricultural input. This input varies depending on the site and resources available. An arboricultural consultant should be instructed to oversee any protective measures and management proposals outlined in this Method Statement.

It is recommended that arboricultural input is taken during the preparation period before work starts to ensure that any detail changes in the application are considered in relation to trees and woodland. A pre commencement meeting should take place with both the arboricultural consultant and local council representative in attendance prior to commencement of works to ensure all protection measures are in place. The arboricultural consultant should visit the site during development at an interval agreed at the pre commencement meeting; this should be flexible so as to allow supervision of sensitive works.

5.7 Site Management

It is the developer's responsibility to ensure that the details of any agreed Method Statement and any subsequent amendments are fully understood by all site personal. A copy of the report should be available on site at all times.

Appendix 1

Table 1: BS5837 Data

TREESURVEYSCHEDULE

Client:	Stamford Wing	**Site:**	Dinting Lane, Glossop		
Date of Survey:	05/05/2016	**Surveyor:**	B.Gaudie, J.Ashworth	**Tagged:**	No

Tree ID	Common Name	Latin Name	Maturity	Height (m)	Stem Dia. (mm)	Spread				Crown	Category	Life Expectancy (years)	Structural Condition	Phys. Condition	Comment
						N	E	S	W						
1	Crack Willow	*Salix fragilis*	Mature	16	670 mg	0	10	6	6	2	U	-10	Poor	Poor	Low vigour. Causing damage to fence. REMOVE
2	Sycamore	*Acer pseudoplatanus*	Young	12	150	1	1	1	1	4	C	+20	Fair	Fair	Potential to cause damage to wall. REMOVE
3	Hawthorn	*Crataegus monogyna*	Mature	10	400 mg	4	2	2	3	3	C	-20	Fair	Fair	Potential to cause damage to wall. REMOVE
Group A	Sycamore, Crack Willow, Hawthorn		Mixed	Max 20	Max 800						B, C and U	Mixed age group of trees, on what appears to be unstable substrate. Not within site boundary. Ideally should be thinned for stability.			

Table 2 RPA Data

Tree No	DBH	RPA Radii
	Metre	Metre
1*	0.67	6.70
2*	0.15	1.80
3	0.40	4.00
4	0.8max	8.00max

*Denotes Multi-Stemmed Tree