Tree Care Consultancy
ARBORICULTURAL CONSULTANTS

Arboricultural Impact Assessment
Windy Gap Farm
Green Balk Lane
Lepton
Huddersfield
HD8 0EW

Report Reference: TCC-1903-1
29 July 2024

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Prepared For:
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1 Introduction

1.1 Instruction and Brief

Tree Care Consultancy was commissioned by Mr. Brown to prepare an Arboricultural Impact Assessment to accompany a planning proposal for a Class Q Barn conversion and small rear extension at Windy Gap Farm, Green Balk Lane Lepton, Huddersfield HD8 0EW. The report produced includes the following information:

- A tree survey, undertaken in accordance with British Standard 5837:2012 'Trees in relation to design, demolition and construction' – Recommendations.
- A Tree Constraints Plan (TCP – appendix 4) and Tree Impact Plan (TIP – appendix 5). These highlight the potential development limitations trees pose on site.
- An Arboricultural Impact Assessment which analyses the potential impacts the proposal may have on surrounding trees.

1.1.1 This report is based on site observations and information provided by the agent and applicant. Conclusions have been made in light of the surveyor's experience and qualifications. The client may choose to accept or disregard the recommendations made in this report or seek additional advice.

1.1.2 This report is only concerned with trees in relation to construction. This report makes no attempt to provide a full safety inspection of the trees surveyed. It should not be seen as an alternative for a Tree Hazard Assessment which is specific to minimising the risk and liability associated with trees.

1.1.3 Climatic conditions including storms, drought and temperature-related factors can cause damage and failure in apparently healthy trees. It should be remembered that all trees do pose a risk and whilst every effort has been made to detect any major defects in inspected trees, no guarantee can be given as to their safety. Although the risk should be managed to an acceptable level, no tree can always be guaranteed as safe.

1.1.4 This report is based on Visual Tree Assessment (VTA) methodology, as devised by Mattheck (1991). V.T.A is a ground level visual assessment of a tree, which is carried out to identify obvious mechanical defects, signs of ill health, potential mechanical failure and the suitability of a tree to a site. The survey is compiled in accordance with British Standard 5837:2012 'Trees in relation to design, demolition and construction' - Recommendations with Root Protection Areas (RPA's) based upon section 4.6 of the document.

1.1.5 A tree survey was undertaken by Steve Waterson on 29 February 2024. The weather on the survey date presented no visibility constraints.

1.1.6 Measurements were calculated using the necessary instruments or estimated where access could not be gained. No climbing inspections or decay detection analysis was undertaken.

1.1.7 Details explaining the criteria and methodology used in generating the tree survey schedule is included in Appendix 1 and 2. Trees were graded using table 1 of BS5837. The resulting tree survey data results are included within the tree survey schedule at Appendix 3.

1.1.8 This survey should be read in conjunction with the Tree Constraints Plan (TCP - appendix 4) and Tree Impact Plan (TIP – appendix 5). These have been prepared by overlaying tree survey data onto site layout drawings provided by SPB Architect. The author has relied on the accuracy of these drawings in the production of this report.

1.2 Planning Background & Site Context

1.2.1 For additional site context and background please refer to David Storrie Planning Consultant supporting information that will accompany the Class Q Planning submission.

1.3 Tree Status

1.3.1 No trees on or immediately adjoining the site are understood to be the subject of a Tree Preservation Order (TPO) and the site does not lie within a Conservation Area. In the case of trees that are subject of TPO, Conservation Area controls or planning application procedures it is essential the Local Authority's advice is sought and where necessary consent obtained prior to undertaking any tree removal or pruning operations.

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1.4 Soil Assessment

1.4.1 No soil testing was undertaken and no soil information was provided for the author. The precise soil type could only be confirmed with further soil investigation/analysis though there is possible potential for the subsoil to consist of shrinkable clay.

2 Tree Quality Assessment

2.1.1 As highlighted in table 1 below, the tree survey included 1No. retention category "B" item.

Table 1:

Category	Category Description	Tree Numbers
'A'	Trees of high quality, with life expectancy in excess of 40 years	Not applicable
'B'	Trees of moderate quality, with life expectancy in excess of 20 years	T1
'C'	Trees of low quality with life expectancy in excess of 10 years or young trees	Not applicable
'U'	Seriously defective trees that cannot be retained in present context for longer than 10 years	Not applicable
Total number of trees:		1No. individual tree

2.1.2 The site supports 1No. mature Oak tree of visual significance. The tree exhibits normal vitality despite extensive ground works previously undertaken within its rooting zone. The impact of these past works upon the trees rooting volume will have created an atypical RPA with root growth biased eastwards into more favorable open soils. Accordingly an adapted RPA is shown on the TCP and TIP.

3 Arboricultural Impact Assessment

3.1.1 The following section evaluates the proposed layout in relation to trees within influencing distance of the proposed conversion. Any tree and design conflicts are highlighted, and possible remedial action recommended. The assessment is based on the surveyor's findings together with plans and information provided by SBP Architect.

3.1.2 The development proposal seeks to convert and extend the existing barn and hard standing to provide a residential use via a Class Q planning submission.

3.2 Trees to be removed to accommodate the proposal

3.2.1 As shown in Table 2 overleaf it is not proposed or indeed necessary to remove any trees as part of the proposed development.

3.2.2 The Oak T1 can be retained and adequately safeguarded as part of the conversion.

Table 2:

Tree categories A, B, C & U	Trees to be retained and protected	Trees to be removed for on basis of proposed layout	Trees to be removed for arboricultural management reasons
'A'	Nil	Nil	Nil
'B'	T1	Nil	Nil
'C'	Nil	Nil	Nil
'U'	Nil	Nil	Nil

3.3 Below ground constraints

3.3.2 The area of roots that need to be protected around a tree to try to ensure it does not suffer damage during the construction process is called the Root Protection Area (RPA).

3.3.3 As recommended in BS5837 we have plotted the RPA's onto the TCP and TIP taking full account of the surrounding topographical factors, tree condition and probable root disposition. As referred to at paragraph 2.1.2 the Oak T1 is afforded an atypical RPA, taking into account previous ground works and construction of the existing hard standing. The impact of these past works upon the trees rooting volume will have resulted in root growth now biased eastwards in order to take advantage of favorable open soils. Accordingly an adapted RPA is shown on the TCP and TIP, which better reflects past construction activities and resulting root growth.

3.3.4 Whilst the prescribed RPA of this tree will not be affected by the conversion and proposed rear extension, care will be required to ensure the nearby rooting zone is not compromised during the course of conversion work. Should the LPA deem it necessary the positioning and implementation of a tree protection scheme can be agreed as part of the current scheme.

3.4 Above Ground Constraints

3.4.2 No pruning will be required to accommodate the proposed conversion. Furthermore there is sufficient space between the proposed building footprint and the retained Oak T1 to install scaffolding without the need to undertake facilitation pruning.

3.5 Alterations to Ground Levels

3.5.1 A rise or reduction in soil level can have major implications on the health and longevity of trees. In view of the established building footprint and related hard standing no level changes will be required.

3.6 Material Storage

3.7.1 No material storage will be required within the Construction Exclusion Zone or within the RPA's of retained trees.

3.7 Services

3.8.1 No new services or soak-a-ways are to be sited or constructed within the RPA of the retained Oak T1. Existing drainage will serve the proposed conversion and proposed extension with no new service runs proposed within the RPA of Oak T1.

Conclusions

4.1.1 The design intention is to safeguard the health and longer term viability of the retained Oak T1 and the value it affords to the local landscape. From the tree survey findings, comments and observations, it can be seen this aspiration is readily achievable.

4.1.3 The protection of trees and their subsequent health and future potential is dependent upon all persons operating within the site. Communications are vitally important to ensure that all parties understand the reason for tree protection and its continued existence. Providing all necessary tree protection works are undertaken, retained trees and development alike will satisfactorily coexist.

4.1.4 It is hoped that this report and recommendations provides all necessary information, however, should there be any queries or should clarification of any points be required, please contact the report author.

Appendices

Appendix 1 - Explanation of Survey Details

Tree Id- Each tree/group has been given a unique number, which coincides with the drawings located in appendix 3.

Species & botanical name- where identifiable the full botanical name has been given. Where a cultivar, variety or species cannot be accurately given the genus name only will be given.

Height (m)- measured approximately to the nearest 1m. If height issues are critical, measurements can be collected accurately using optical instruments.

No of stems- the number of separate stems each individual tree has.

Stem Dia @1.5m (mm)- the diameter of the given tree at 1.5m above soil level, (on sloping ground taken on the up-slope side of the tree base). Where the tree is multi-stemmed measurements will be record for each stem.

Spread- indicates the crown radius from the base of tree in four compass directions, recorded to the nearest metre.

Crown height + direction (m)- recorded as the first significant branch and direction of growth.

Life stage- described as young, semi-mature, early-mature, mature or over-mature.

Physiological condition (P)- an assessment of the trees health. Considers vitality, die back and the presence of disease. Described as Good = no significant health problems Fair = symptoms of ill health that can be remediated Poor = significant ill health.

Structural condition (S)- an assessment of the trees structural condition. Described as Good = no significant defects Fair = significant defects that can be remediated Poor = significant defects no remedy.

Observations – negative and positive- narrative comments on general condition, significant defects and overall appearance (e.g., the presence of any decay).

Preliminary management recommendations- e.g., requires pruning or further investigation of suspected defects is needed.

Life expectancy- preliminary management recommendations, e.g., requires pruning or further investigation of suspected defects is needed.

Retention Category- Each tree/group is identified with a retention category in accordance with BS5837 (an in depth explanation is provided on the following page)

RPA radius (m)- minimum area in metres which should be left undisturbed around each retained tree.

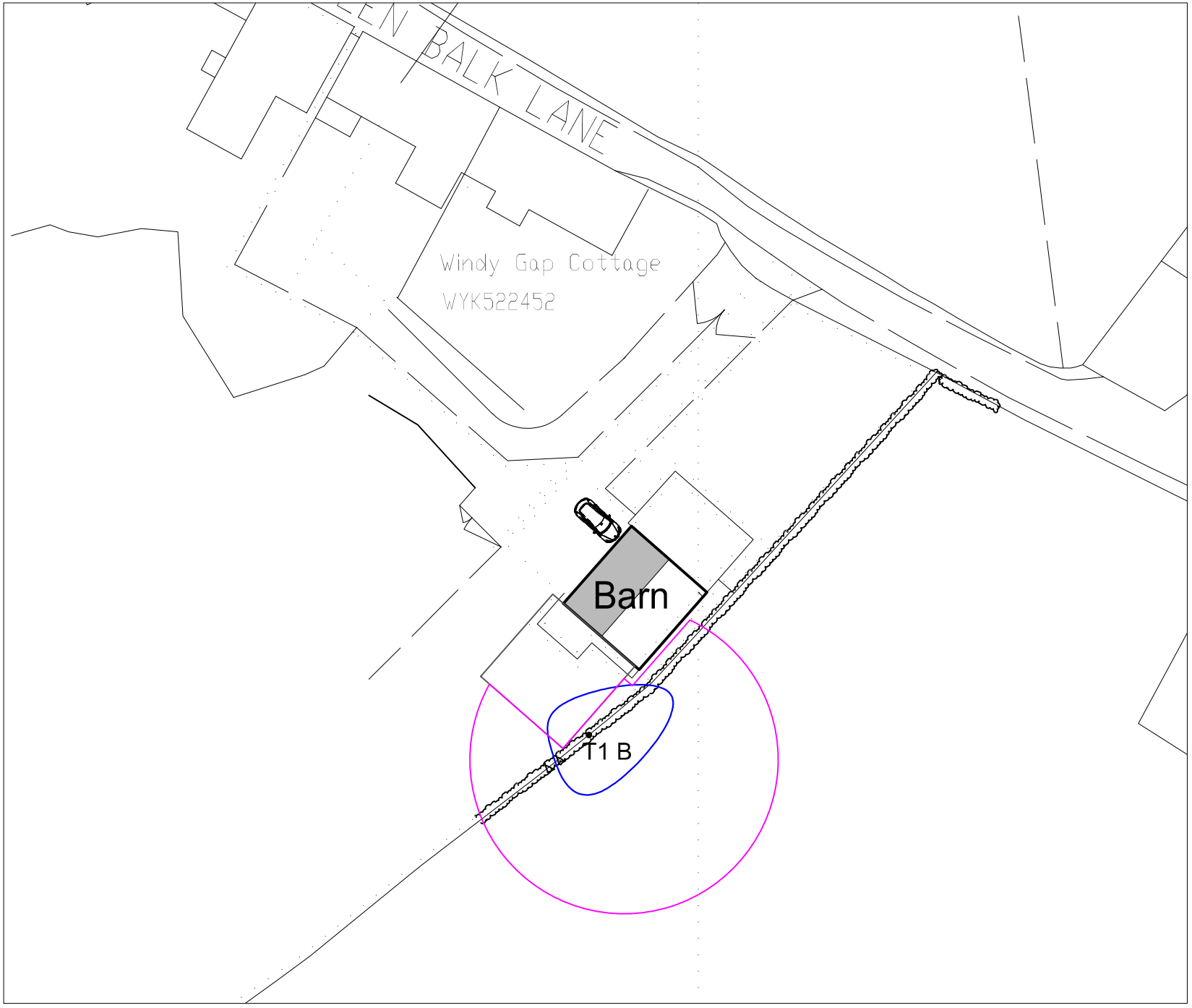
Appendix 2 - Cascade Chart for Tree Quality Assessment (Extract from BS5837 table 1)

Category and definition	Criteria (including subcategories where appropriate)			Identification on Plan
Category U Those in such a condition that they cannot realistically be retained as living trees in the context of the current land use for longer than 10 years	• Trees that have a serious, irremediable, structural defect, such that their early loss is expected due to collapse, including those that will become unviable after removal of other category U trees (e.g., where, for whatever reason, the loss of companion shelter cannot be mitigated by pruning) • Trees that are dead or are showing signs of significant, immediate, and irreversible overall decline • Trees infected with pathogens of significance to health and/or safety of other trees nearby, or very low-quality trees suppressing adjacent trees of better quality NOTE: Category U trees can have existing or potential conservation value which it might be desirable to preserve			DARK RED
TREES TO BE CONSIDERED FOR RETENTION				
Category and definition	**Criteria – Subcategories**			**Identification on Plan**
	1 Mainly arboricultural values	**2 Mainly landscape values**	**3 Mainly cultural values, including conservation**	
Category A **Trees of a high quality** with an estimated remaining life expectancy of at least 40 years	Trees that are particularly good examples of their species, especially if rare or unusual, or essential components of groups, or of formal or semi-formal arboricultural features (e.g., the dominant and/or principal trees within an avenue)	Trees, groups or woodlands of particular visual importance as arboricultural and/or landscape features	Trees, groups or woodlands of significant conservation, historical, commemorative or other value (e.g., veteran trees or wood-pasture)	LIGHT GREEN
Category B **Those of moderate quality** with and estimated remaining life expectancy of at least 20 years	Trees that might be included in category A, but are downgraded because of impaired condition (e.g., presence of significant though remediable defects, including unsympathetic past management and storm damage), such that they are unlikely to be suitable for retention for beyond 40 years; or trees lacking the special quality necessary to merit the category A designation	Trees present in numbers, usually as groups or woodlands, such that they attract a higher collective rating than they might as individuals; or trees occurring as collectives but situated so as to make little visual contribution to the wider locality	Trees with material conservation or other cultural value	MID BLUE
Category C **Those of low quality** with an estimated remaining life expectancy of at least 10 years, or young trees with a stem diameter below 150mm	Unremarkable trees of a very limited merit or such impaired condition that they do not qualify in higher categories	Trees present in groups or woodlands, but without this conferring on them significantly greater landscape value; and/or trees offering low or only temporary/transient screening benefits	Trees with no material conservation or other cultural values	GREY

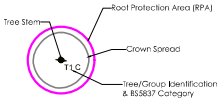
Appendix 3 - Tree Schedule

Tree ID	Species, Botanical Name	Height (m)	No of stems	Stem @ 1.5M (mm)	Spread - N,E,S,W				Crown height+ direction (m)	Life stage	Physiological (P) and Structural (S) condition. Observations- negative and positive	Recommendations	Life expectancy	Retention category	RPA Radius (m)	RPA (sq. m)
T1	Oak - Quercus petraea	15	1	1050 0ver ivy	5	9	9	8	4.5 north	Mature	P=Good, S=Good. Reasonably prominent feature within local landscape. Attractive mature specimen. Northerly extending crown previously reduced away from existing barn providing 2m crown clearance to building. The tree has a natural crown bias to the east, extending over the neighbouring field, due to south westerly prevailing winds. Northwestern RPA ground levels impacted by cut and fill 25-30 years previous to accommodate a 200mm thick concrete hard standing laid on 150mm sub base. Maximum cut circa 600mm. These earlier works will have resulted in an adapted rooting zone. The latter is reflected in a modified RPA with rooting volume absent beneath the hardstanding. Existing rooting volume will be biased eastwards into the adjoining field. The tree maintains reasonable vitality with minor snags, dead wood and pruning wounds present within the crown.	Retain tree with no work required.	20-40 years	B	12.6	499

Appendix 4 - Tree Constraints Plan



KEY



Category A
Tree/group of high quality with an estimated remaining life expectancy of at least 40 years.

Category B
Tree/group of moderate quality with an estimated remaining life expectancy of at least 20 years.

Category C
Tree/group of low quality with an estimated remaining life expectancy of at least 10 years, or young trees with a stem diameter below 150mm.

Category U
Trees in such condition that they can not realistically be retained as living trees in the context of the current land use for longer than 10 years.

Drawing Title:
Tree Constraints Plan

Site Address:
Windy Gap Farm
Green Balk Lane
Lepton

Client:
SBP Architect

Date: 11/03/2024

Job Ref: TCC- 1903-1

Scale: 1:500 at A4

Revision: 1

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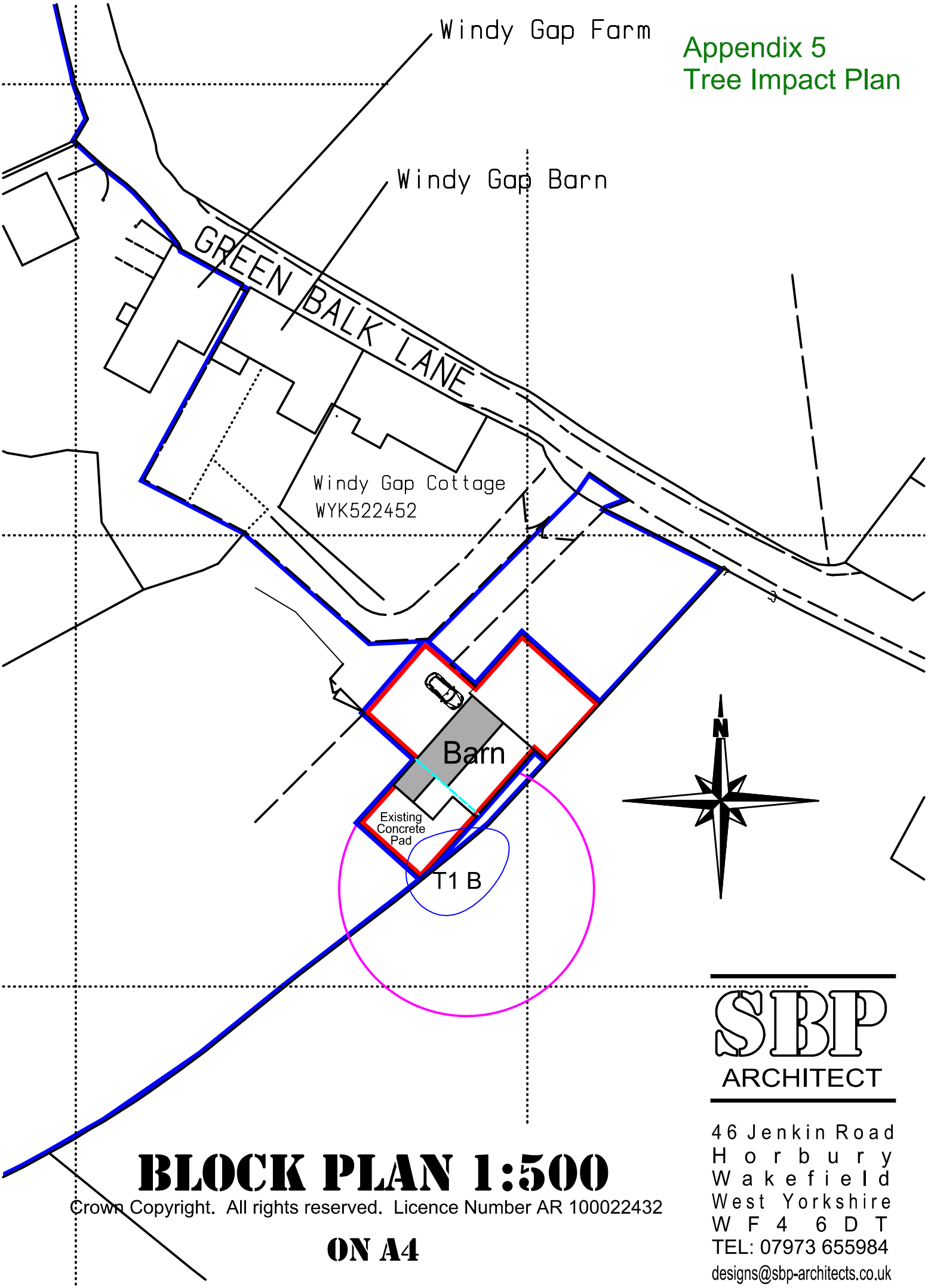
Appendix 5
Tree Impact Plan



BLOCK PLAN 1:500

ON A4

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