## Arboricultural Impact Assessment Overview

in Relation to Proposed Construction of Detached Four Storey Residential Apartment Building and Associated Parking



Land adjacent to the Black Horse Inn, Pimlico Road, Clitheroe, BB7 4PZ

Prepared by:



April 2018

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# ARBORICULTURAL IMPACT ASSESSMENT OVERVIEW LAND ADJACENT TO BLACK HORSE INN, CLITHEROE

### Control sheet

Project No.:	BTC1535
Site:	Land adjacent to Black Horse Inn, Pimlico Road, Clitheroe
Client:	Mr F Duffin
Council:	Ribble Valley Borough Council
Survey Date:	9 March 2018
Surveyed by:	
Prepared by:	
Checked by:	Phill Harris MSc BSc(Hons) HND MArborA CEnv MICFor
Date of Issue:	12 April 2018
Status:	First Issue for Agent/Client Review





# Bowland C Tree Consultancy Ltd

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Site:	Land adjacent to the Black Horse Inn, Pimlico Road, Clitheroe, Lancashire, BB7 4PZ									
Proposal:	Construction of detached four-storey residential apartment building									
Survey Dates:	11 November 2015 & 9 March 2018									
Report Date:	12 April 2018									
Prepared By:	Ryan Gledhill FdSc MArborA									
Report Ref:	BTC1535									
Client:	Mr F Duffin									

**Introduction and Rationale.** Bowland Tree Consultancy Ltd was instructed to carry out an appraisal of the potential for development works at the above site to impact upon trees and, in turn, to advise on appropriate protective measures for retained trees during the works, where appropriate, and on facilitation pruning and/or felling works, where identified as necessary. In this respect, a survey of trees, in accordance with BS5837:2012 - Trees in Relation to Design, Demolition and Construction – Recommendations, and the disclaimer at page 6, was carried out on 9 March 2018.

In consideration of the above, a brief overview of the observations, findings and recommendations are set out below, along with comments on any issues raised. A Tree Survey Schedule (TSS) detailing specific tree related information, Tree Constraints Plan (TCP) detailing the existing site and tree positions, and a Tree Impact Plan (TIP) detailing the projected tree related impacts of the proposed development are also appended.

The TCP shows the existing site under consideration with pertinent tree constraints detailed, whilst the TIP also has an overlay of the development proposals showing the footprint of the proposed unit and associated hard surfaces, etc. The TCP and TIP are based on a topographical survey based existing site plan and site proposal plan, as supplied by the project architects, Storah Architecture, and, for the purpose of this report, the details of the plans supplied are presumed to be accurate.

**The Site and the Proposal.** The site under consideration is located in a suburban residential area off Pimlico Road on the northern edge of the town of Clitheroe, Lancashire, within the administrational boundaries of Ribble Valley Borough Council.

The site is L-shaped and currently consists of two distinct areas, being an area of hard-standing to the west and a raised overgrown rear residential property garden to the south-east (see TCP). The site is bordered to the north by an access road and an area of land with trees, to the east by the neighbouring area of land with trees and a residential garden, to the south by neighbouring residential properties and gardens, and to the west by Pimlico Road (see TCP). There is a single vehicular access point into the western section of the site from the access road to the north of the area of hard-standing (see Fig 1, below.).



Fig. 1: Area of hard standing, which forms the western section of the site, looking north towards the vehicular access point



Fig. 2: Steps and access point into garden area from south-eastern corner of area of hard-standing, looking east

The two areas of the site are divided by a stone retaining wall, which runs the length of the eastern boundary of the area of hard-standing and is up to approximately six metres in height. As such, the garden area to the south-east is raised from the hard-standing area to the west, with a difference in ground levels of up to several metres (see Fig. 2, previous page). The garden area, which is currently very overgrown with dense ground vegetation, currently has stone walls to the west, north and east, and a steep rock face to the south. As noted previously, topography within the site is split into two levels with the hard-standing area being in the region of 1.5 metres lower than the lowest point within the raised garden area.

The project architects, Storah Architecture, have informed that the proposal is to construct a four-storey detached residential property housing five apartments, with shared outdoor amenity space, within the garden area to the south-east, and to utilise the area of hard-standing to the west as car-parking and for new tree planting (see TIP). In turn, construction of the building will require the demolition of the wall where it divides the garden area from the hard-standing, the subsequent excavation of the ground within the garden down to a depth approximately level with that of the hard-standing, and the strengthening of the retained walls where subsequently identified to be necessary. The existing vehicular access point to the north is to be utilised as a shared vehicular access for both the proposed property and the existing property to the south.

**The Trees.** Two trees (prefixed 'T') and eight groups of trees (prefixed 'G') were surveyed in respect of the proposals and their associated potential to impact upon said vegetation, and the respective constraints of these items are plotted on the appended TCP.

The surveyed vegetation consists of various broadleaf and coniferous species including Ash, Sycamore, Leyland Cypress and Western Red Cedar. The trees range from young to early-mature in age, and stand at heights of up to 15 metres, have maximum diametrical crown spreads of up to approximately 16 metres, and stem diameters of up to 700 millimetres. Tree dimensions and other pertinent information such as structural defects and physiological deficiencies, along with recommendations for remedial management works, are included in the TSS attached.

According to the Ribble Valley Borough Council (RVBC) planning department's website, the site does not stand within a conservation area. The website does, however, list a Tree Preservation Order (TPO), dated 1977, to be present at Pimlico Road, although no address or information other than the road name is given. RVBC should, therefore, be contacted before carrying out any tree work that does not relate directly to the implementation of a detailed (i.e. full) planning approval.

The trees were appraised in accordance with BS5837:2012 Table 1 (appended) and, as detailed in Table A, below, one tree and seven groups were allocated a low retention value of 'C'. In addition, one tree and one group were considered unsuitable for retention ('U' category). With regard to Table A, it should be noted that tree quality and value is categorised within the existing context without taking into account any site development related issues, but that the recommendations for works take the proposal into consideration where there are clearly definable potential impacts upon trees.

	Ret. Cats.	Tree/Group Numbers	Totals
Those of a high quality that should be afforded appropriate consideration in the context of development	'A'	-	-
Those of a moderate quality that should be afforded appropriate consideration in the context of development	'В'	-	-
Those of a low quality that should be afforded appropriate consideration in the context of development	ʻC'	T2, G1, G2, G3, G4, G5, G7, G8	1 Tree 7 Groups
Those considered unsuitable for retention	ʻU'	T1, G6	1 Tree 1 Group
			= 2 Trees & 8 Groups in Total

**The Proposal's Projected Impacts on Trees.** As detailed in Table B, overleaf, the development is projected to require the removal of one low quality (i.e. 'C' category) tree and three low quality groups. However, I would note that, all of the trees that require removal are located behind a very tall boundary stone wall and are therefore largely obscured from public view. As such, their loss is projected to have a negligible impact on the local landscape. Furthermore, one tree and one group categorised as unsuitable for retention (i.e. 'U' category) are recommended for removal to facilitate the proposed construction, however, these trees would have been recommended for removal as part of pertinent arboriculture management regardless of development.

#### Table B: Arboricultural Impacts of Proposed Development & Other Tree Removal Proposals

	Ret. Cats.	Removals necessary to implement development	Removals recommended regardless of development	Total no. of tree removals
Those of a high quality that should be afforded appropriate consideration in the context of development	<b>'</b> A'	-	-	-
Those of a moderate quality that should be afforded appropriate consideration in the context of development	<b>'B'</b>	-	-	-
Those of a low quality that should be afforded appropriate consideration in the context of development	'C'	T2 G2, G4, G5	-	1 Tree 3 Groups
Those that should be removed for sound management reasons regardless of site plans	'U'	T1 G6	T1 G6	1 Tree 1 Group
Totals		2 Tree 4 Groups	1 Tree 1 Group	= 2 Trees & 4 Groups in Total

In addition to the above, the previous report issued 17 December 2015 stated that the architect at the time, David Storah, had informed the consultant that group G3, which is understood to be located on neighbouring third-party owned land to the top of the steep rock wall that forms the shared boundary south of the garden, is scheduled to be removed by the tree owners as they have concerns regarding their locations, growing from the top of the rock face, and their associated increased risk of failure over the long-term.

**Mitigation for Projected Tree Losses.** As detailed on the TIP, the development proposals include the provision of a new planting bed along the western boundary to Pimlico Road along with a further planting bed to the southern corner of the site. The planting bed close to the western boundary is of a sufficient size to accommodate approximately four newly planted trees of suitable species and a hedge line understorey, which is anticipated to provide a partial screen between the site and Pimlico Road and, in turn, to confer a substantial future visual amenity. The planting bed to the south is of sufficient size for the planting of one new tree and a hedgerow border.

In consideration of the above, it is therefore anticipated that the proposed development can accommodate up to approximately five new trees as part of its landscaping which, in turn, is projected to sufficiently mitigate for the necessary tree removals. In turn, the provision of specific tree numbers, species, planting locations and post-planting management, in the form of a landscape plan, can be conditioned to a planning approval.

**Summary and Conclusions.** Two individual trees and eight group of trees were surveyed at the site under consideration in respect of a proposal to construct a four-storey detached residential apartment building with associated car parking.

One tree and seven groups were allocated a low retention value and one tree and one group of trees were classed as unsuitable for retention regardless of the proposed development.

From the information provided, my appraisal determined that construction of the development will require the removal of one low quality tree and four low quality groups, and one individual tree and one group classed as unsuitable for retention, although their loss is projected to have a negligible impact upon the visual amenity of the local landscape.

Furthermore, the development proposals include the provision of planting beds along the frontage to Pimlico Road and an additional soft landscaping area towards the southern boundary, which are of a sufficient size to accommodate up to approximately five newly planted trees and two hedgerows, which are projected to adequately mitigate for the necessary tree losses. The provision of which can be conditioned to a planning approval.

In turn, in order to ensure that the retained trees are adequately protected throughout development, in accordance with BS5837:2012, specific details regarding the timing, procedures, working methods and protective measures to be used should be included in a detailed Arboricultural Method Statement (AMS) and on a Tree Protection Plan (TPP), the provision of which and adherence to, can be conditioned to a planning approval for the application under consideration.

Ryan Gledhill FdSc MArborA Consulting Arboriculturist



#### **GENERAL RECOMMENDATIONS**

**Non-Development Related Tree Works and Recommendations.** Any general management pruning works for retained trees that are stated to be non-development related, as detailed in the TSS, are recommended in accordance with prudent arboricultural management and should therefore be carried out regardless of any site plans and potential changes in land usage. All tree works should be carried out in accordance with BS3998:2010 - Tree Work – Recommendations.

**Tree Work Related Consents.** No tree pruning or removal works should commence on site until necessary consents have been obtained from the LPA as part of a planning approval or in respect of any statutory tree protection.

**Protected Species.** Hedges, climbing plants, shrubs and trees should be inspected for birds' nests prior to any clipping, pruning or removal works, and any work likely to destroy or disturb active nests should be avoided until the young have fledged. All personnel carrying out tree works should also be vigilant of the possibility that roosting bats may be present in trees and, if any bat roosts are identified, then it is essential that works are halted immediately and that a suitably qualified and experienced ecologist investigate prior to works continuing.

**Arboricultural Contractors.** All tree works should be carried out by suitably qualified and experienced arboricultural contractors carrying appropriate public liability insurance cover and be implemented to the minimum current CE and UK industry standards and in accordance with industry codes of practice. Only certificated personnel should, in accordance with The Control of Pesticides Regulations, apply any pesticides.

**Contractors and Subsequently Identified Tree Defects.** Contractors should be made aware that, should any significant tree defects become apparent during operations that would not have been immediately obvious to the surveyor, then such defects should be notified immediately to the client and subsequently confirmed to the consultant within five working days.

**New Tree Planting.** Where trees are removed in order to facilitate construction then new tree planting proposals should be included as part of the landscape design plan for the site. All tree planting should be carried out in accordance with BS 8545:2014 Trees: from Nursery to Independence in the Landscape – Recommendations.

**Retained Tree Management.** Any tree risk management appraisal and subsequent recommendations made in this report were based on observations and site circumstances at the time of our survey. Trees are dynamic living organisms whose structure is constantly changing and even those evidently in good condition can succumb to damage and/or stress. In this respect we would note that, under the Occupiers' Liability Act (1957 & 1984), site occupants have a duty of care to take reasonable steps to prevent or minimise the risk of personal injury and/or damage to property from any tree located within the curtilage of the land they occupy. It is accepted that these steps should normally include commissioning a qualified and experienced arboriculturist to survey their trees in order to identify any risk of harm to persons or damage to property that they may present and, where unacceptable risks are identified, taking suitable remedial action to negate those risks.



#### DISCLAIMER

**Survey Limitations:** Unless otherwise stated all trees are surveyed from ground level using non-invasive techniques, in sufficient detail to gather data for and inform the design of the current project only. The disclosure of hidden crown and stem defects, in particular where they may be above a reachable height or where trees are ivy clad or located in areas of restrictive ground vegetation, cannot therefore be expected. Detailed tree safety appraisals are only carried out under specific written instructions. Comments upon evident tree safety relate to the condition of said tree at the time of the survey only. Unless otherwise stated all trees should be re-inspected annually in order to appraise their on-going mechanical integrity and physiological condition. It should, however, be recognised that tree condition is subject to change, for example due to the effects of disease, decay, high winds, development works, etc. Changes in land use or site conditions (e.g. development that increases access frequency) and the occurrence of severe weather incidents are also significant considerations with regard to tree structural integrity, and trees should therefore be re-assessed in the context of such changes and/or incidents and inspected at intervals relative to identified and varying site conditions and associated risks.

Where trees are located wholly or partially on neighbouring private third-party land then said land is not accessed and our inspection is therefore restricted to what can reasonably be seen from within the site. Stem diameters and other measurements of trees located on such land are estimated. Any subsequent comments and judgments made in respect of such trees are based on these restrictions and are our preliminary opinion only. Recommendations for works to neighbouring third-party trees are only made where a potential risk to persons and/or property has been identified during our survey or, if applicable, where permissible works are required to implement a proposed development. Where significant structural defects of third-party trees are identified and associated management works are considered essential to negate any risk of harm and/or damage then we will inform the relevant Council of the matter. Where a more detailed assessment is considered necessary then appropriate recommendations are set out in the Tree Survey Schedule.

Where tree stem locations are not included on the plan(s) provided then they are plotted by the arboriculturist at the time of the survey using, where appropriate and/or practicable, a combination of measurement triangulation and GPS co-ordination. Where this is not possible then locations are estimated. Restrictions in these respects are detailed in the report.

This document is intended as a guide to identify key tree related constraints to site development only, and the potential influence of trees upon existing or proposed buildings or other structures resulting from the effects of their roots abstracting water from shrinkable load-bearing soils is not considered herein. The tree survey information in its current form should not therefore be considered sufficient to determine appropriate foundation depths for new buildings. Accordingly, an updated survey, with reference to the current NHBC Standards Chapter 4.2 - Building Near Trees, must therefore be prepared for the specific purpose of informing suitable foundation depths subsequent to planning approval being granted. The advice of a structural engineer must also be sought with regard to appropriate foundation depths for new buildings.

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TREE SURVEY SCHEDULE & BS5837:2012 'TABLE 1'



# TREE SURVEY SCHEDULE FOR ARBORICULTURAL CONSTRAINTS APPRAISAL Site: Land adjacent to the Black Horse Inn, Pimlico Road, Clitheroe, BB7 4PZ Client: Mr F Duffin

Surveyors:	Kendall Rigg HND TechArborA & Ryan Gledhill FdSc MArborA
Survey Dates:	11 November 2015 & 9 March 2018
Job Ref:	BTC1535

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No.	Species	Height	Stem Diam.		Branch Spread	Branch & Canopy Clearances	Life Stage	PC	General Observations and Comments	Management Recommendations	ERC	Cat. Grade	RPA (m²)	RPA Radius (m)
T1	Pear	5	320	N E S W	3 3 3 2	2-S 2	EM	M/P	<ul> <li>Located approximately 75mm from a 3m high stone wall.</li> <li>Wall on opposite side is approximately 5m tall.</li> <li>Very limited future potential for retention growth due to annual incremental growth causing structural damage to the wall.</li> <li>Dense ivy up stem and into crown, which severely inhibited a clear visual inspection.</li> </ul>	<ul> <li>Remove to facilitate construction of development as proposed.</li> </ul>	<10	U	46	3.84
T2	Ash	11	1x300 1x260 1x200 (ms)	E S	7 10 4 6.5	0.3-Е 3	EM		<ul> <li>Self-set.</li> <li>Located at base of an approximately 4m high stone built retainer wall.</li> <li>Trifurcates at a height of 0.5m.</li> <li>Central and western stems have an acutely tight fork with bark formation extending to base.</li> <li>Eastern primary leader extends away from tree at 45°.</li> <li>Moderate stem lean and biased crown to north-east.</li> </ul>	<ul> <li>Remove to facilitate construction of development as proposed.</li> </ul>	10+	C2	89	5.33
G1	8no. Leyland Cypress	≤ 12	≤ 310	N E S W	≤ 3 ≤ 3 ≤ 3 ≤ 3	2-E ≥2	EM		<ul> <li>Very closely spaced group.</li> <li>Evidently an outgrown hedge.</li> <li>Crown lifted to 2m and now unmanaged.</li> </ul>	<ul> <li>Retain in context of development.</li> <li>Protect Root Protection Area (RPA) throughout development using Temporary Protective Fencing (specification appended) to form a Construction Exclusion Zone (CEZ).</li> </ul>	10+	C2	≤ 43	≤ 3.72
G2	1no. Elder, 1no. Hazel	≤ 5	≤ 9x70 (ms)#	N E S W	≤ 3 ≤ 2 ≤ 0 ≤ 2	0.1-N ≥ 1.5	SM	М	<ul> <li>Closely spaced group.</li> <li>Crowns biased to north due to proximity of a 4m high stone built retainer wall.</li> </ul>	<ul> <li>Remove to facilitate construction of development as proposed.</li> </ul>	10+	C2	≤ 20	≤ 2.52

Headings and Abbreviations:

Headings and Appreviations:		
No.	Allocated sequential reference number - Tree ('T'), Group ('G'), Woodland (W') or Hedge ('H') reference number - refer to plan and to numbered tags where applicable	
Species:	Common name	
Height:	In metres, to nearest half metre – where possible approximately 80% are measured using an electronic clinometer and the remainder estimated against the measured trees. In the case of Groups and Woodlands the measurement listed is that of the highest tree	
Stem Diam .:	Stem diameter in millimetres, to nearest 10mm - measured and calculated as per Annex C of BS5837.2012. MS = multi-stemmed, TS = twin-stemmed	
Branch Spread:	Crown radius measured (or estimated where considered appropriate) from the four cardinal points (north, east, south and west) to give an accurate visual representation of the crown	
Branch & Canopy Clearances:	Existing height above ground level, in metres, of first significant branch and direction of growth (e.g. 2.5-N) and of canopy at lowest point – to inform on crown to height ratio, potential for shading, etc.	
Life Stage:	Estimated age class - Y = young, SM = semi-mature, EM = early-mature, PM = post-mature	
PC:	Physiological Condition - a measure of the tree'(s)' overall vitality, i.e. D = Dead, MD = Moribund, P = Poor, M = Moderate, G = Good	
General Observations and Comments:	Comments relating to the tree'(s)' overall condition and any other pertinent factors including structural defects, current and potential direct structural damage, physiological decline, poor form, etc.	
Management Recommendations:	Either Preliminary or In Consideration of the Proposal - In the case of Arboricultural Constraints Surveys the recommended management works only take exiting site and tree circumstances and conditions into account and not proposed developments. Arbonicultural Impact Assessment and	Method Statement related
	Surveys take the proposed development into consideration with recommendations made accordingly. More than one option may be given if considered appropriate	
ERC:	Estimated Remaining Contribution - in years as per BS5837:2012 (i.e. <10, 10+, 20+, 40+)	
Cat. Grade:	Category Grading - tree retention value listed as U, A, B or C - in accordance with BS5837:2012 Table 1	
RPA m <sup>2</sup> :	Root Protection Area in m <sup>2</sup> - calculated area around the tree that must be appropriately protected throughout the development process in order avoid root damage	Bowland Ć
RPA Radius (m):	Root Protection Area Radius - in metres measured from the centre of the stem to the line of tree protection	
# (Estimated Dimensions):	Where trees are located off-site, or are inaccessible for any other reason, and accurate measurements or other information cannot be taken then the information provided is estimated and is duly suffixed with a "#" symbol	Tree Consultancy Ltd

# TREE SURVEY SCHEDULE FOR ARBORICULTURAL CONSTRAINTS APPRAISAL Site: Land adjacent to the Black Horse Inn, Pimlico Road, Clitheroe, BB7 4PZ Client: Mr F Duffin

Surveyors:	Kendall Rigg HND TechArborA & Ryan Gledhill FdSc MArborA
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No.	Species	Height	Stem Diam.		Branch Spread	Branch & Canopy Clearances	Life Stage	PC	General Observations and Comments	Management Recommendations	ERC	Cat. Grade	RPA (m²)	RPA Radius (m)
G3	2no. Ash, 1no. Sycamore, 1no. Western Red Cedar	≤ 14	1x700 1x350	S	≤ 8 ≤ 11 ≤ 6 ≤ 5	0.1-N ≥5	SM	М	<ul> <li>Located on neighbouring land and therefore not inspected in detail.</li> <li>Closely spaced self-set linear group.</li> <li>Growing out of top northern edge and along top of an approximately 4m high very steep rock scarp.</li> <li>Rock wall covered in ivy, which extends up trees' stems and into crowns.</li> <li>Unable to inspect in detail due to density of ivy.</li> <li>Crowns heavily biased north-east.</li> </ul>	<ul> <li>Liaise with neighbouring land owner regarding their expressed interest in the removal of the trees.</li> </ul>	10+	C2	≤ 277	≤ 9.39
G4	3no. Leyland Cypress, 3no. Fir	≤ 8	≤ 220	N E S W	≤ 3.5 ≤ 3.5 ≤ 3.5 ≤ 3.5	1-W ≥ 1	Y-SM	М	<ul> <li>Closely spaced group growing in-between large rocks.</li> <li>Evidently planted as an informal hedge.</li> <li>Moderate ivy cover to upper canopy.</li> </ul>	<ul> <li>Remove to facilitate construction of development as proposed.</li> </ul>	10+	C2	≤ 22	≤ 2.64
G5	1no. Elder, 1no. Hazel	≤ 4	≤ 80	N E S W	≤ 3 ≤ 2 ≤ 1 ≤ 2	1-N ≥ 1	Y	М	Loosely spaced self-set group.	<ul> <li>Remove to facilitate construction of development as proposed.</li> </ul>	10+	C2	≤ 3	≤ 0.96
G6	Dogwood, Willow	≤ 5		N E S W	≤ 4 ≤ 4 ≤ 4 ≤ 4	0.1-N ≥ 0	EM	М	<ul> <li>Very overgrown Dogwood surrounded by dense ground vegetation up to a height of approximately 1.75m.</li> <li>Collapsed tree towards rear of dogwood, but unable to get within 6m–8m of fallen tree due to dense ground vegetation.</li> <li>Fallen tree identified as Willow species, but no leaves visible.</li> </ul>	<ul> <li>Remove to facilitate construction of development as proposed.</li> </ul>	<10	U	≤ 41	≤ 3.6
G7	5no. Western Red Cedar, Sycamore, Ash	≤ 15	≤ 300	N E S W	≤ 4 ≤ 4 ≤ 4 ≤ 4	0.1-S ≥ 0	SM	G	<ul> <li>Closely to loosely spaced group located on neighbouring land behind an approximately 4m tall wall.</li> </ul>	<ul> <li>Retain in context of development.</li> <li>Located on neighbouring land behind substantial retaining wall; no projected impacts.</li> </ul>	10+	C2	≤ 41	≤ 3.6
G8	3no. Ash	≤ 7	≤	N E S W	≤ 2 ≤ 2 ≤ 2 ≤ 2 ≤ 2	3-S ≥ 2	Y	G	<ul> <li>Loosely spaced group located on neighbouring land behind an approximately 4m tall wall.</li> <li>Growing in close proximity to boundary wall.</li> </ul>	<ul> <li>Retain in context of development.</li> <li>Located on neighbouring land behind substantial retaining wall; no projected impacts.</li> </ul>	10+	C2	≤ 4	≤ 1.08

Category and definition	Criteria (including subcategories where app	ropriate)		Identification on plan
Trees unsuitable for retention (see				
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	<ul> <li>Trees that have a serious, irremediable, st that will become unviable after removal of cannot be mitigated by pruning)</li> <li>Trees that are dead or are showing signs of Trees infected with pathogens of significar suppressing adjacent trees of better qualit. Note: Category U trees can have existing or poparagraph 4.5.7.</li> </ul>	Red		
	1. Mainly arboricultural qualities	2. Mainly landscape qualities	3. Mainly cultural values, including conservation	
Trees to be considered for retention	on	•	· · · · · · · · · · · · · · · · · · ·	•
Category A Trees of 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 those that are essential components of groups or 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)	Green
Category B Those of moderate quality and value: those in such a condition as to make a significant contribution. A minimum of 20 years is suggested.	Trees that might be included in the high category, but are downgraded because of impaired condition. Examples include the presence of remediable defects including unsympathetic past management and minor storm damage	Trees present in numbers, usually as groups or woodlands, so they form distinct landscape features which attract a higher collective rating than they might as individuals. But which are not, individually, essential components of formal or semi-formal arboricultural features. For example, trees of moderate quality within an avenue that includes better, A category specimens. Or trees which are internal to the site, therefore individually having little visual impact on the wider locality	Trees with clearly identifiable conservation or other cultural benefits	Blue
Category C Those trees of low quality and value: currently in adequate condition to remain until new planting could be established - a minimum of 10 years is suggested - or young trees with a stem diameter below 150 mm	Trees not qualifying in higher categories Note – Whilst C category trees will usually not to trees with a stem diameter of less than 150mm	Trees present in groups or woodlands, but without this conferring on them significantly greater landscape value, and/or trees offering low or only temporary screening benefit be retained where they would impose a significant of	Trees with very limited conservation or other cultural benefits constraint on development, young	Grey

#### BS5837:2012 Table 1 – Cascade Chart for Tree Quality Assessment

### - TEMPORARY PROTECTIVE FENCING & GROUND PROTECTION SPECIFICATION -

**Construction Exclusion Zones (CEZs)**, shall be enclosed by **Temporary Protective Fencing** and/or, where necessary, **Temporary Ground Protection Measures**. The fencing/ground protection Type(s), locations, and extents shall be agreed, in writing, with the Local Planning Authority (LPA). In turn, the **Temporary Protective Fencing** and/or **Temporary Ground Protection Measures** shall:

- be constructed as in accordance with the Type 1, Type 2 or Type 3 'Temporary Protective Fencing Construction' sections and, where applicable the 'Temporary Ground Protection Measures' section, as detailed herein and agreed, in advance with the LPA;
- 1. be retained in place throughout the development process until completion of the project, and only removed following receipt of written permission from the LPA;
- 2. be sited in the area(s) defined by the Root Protection Areas on the associated Tree Impact Plan, or as the CEZs on the Tree Protection Plan;
- 3. be erected prior to any construction, demolition or excavation works and remain in place for the duration of the project;
- 4. preclude any delivery of site accommodation and/or materials and/or plant machinery;
- preclude all construction related activity, with the sole exception of specified arboricultural works and any other works to be carried out under supervision that have been agreed by all parties;
- 6. preclude the storage of all development related materials and substances including fuels, oils, additives, cement and/or any other deleterious substance; and
- 7. be affixed with a 600mm x 300mm warning sign reading "TREE PROTECTION AREA KEEP OUT" (see Figure 1, below), at every 10.0 metre length of protective fencing.

Important: Any incursion into CEZs must be by prior arrangement, following consultation with the LPA.

Figure 1: CEZ Warning Sign

## - TREE PROTECTION AREA -KEEP OUT!

#### (TOWN & COUNTRY PLANNING ACT 1990) THE TREES ENCLOSED BY THIS FENCE ARE PROTECTED BY PLANNING CONDITIONS AND/OR SUBJECTS OF A 'TREE PRESERVATION ORDER', THE CONTRAVENTION OF WHICH MAY LEAD TO CRIMINAL PROSECUTION

THE FOLLOWING <u>MUST</u> BE OBSERVED BY <u>ALL</u> PERSONNEL:

- THE PROTECTIVE FENCING MUST NOT BE MOVED
- NO PERSON SHALL ENTER THE CONSTRUCTION EXCLUSION ZONE
- NO MACHINE, PLANT OR VEHICLES SHALL ENTER THE EXCLUSION ZONE
- NO MATERIALS SHALL BE STORED IN THE EXCLUSION ZONE
- NO SPOIL SHALL BE DEPOSITED IN THE EXCLUSION ZONE
- NO EXCAVATION SHALL OCCUR IN THE EXCLUSION ZONE
- NO FIRES SHALL BE LIT IN THE EXCLUSION ZONE ANY INCURSION INTO THE EXCLUSION ZONE MUST BE WITH THE WRITTEN PERMISSION OF THE LOCAL PLANNING AUTHORITY

#### Type 1 (i.e. 'Default') Temporary Protective Fencing Construction (see Figure 2, below)

- 1. Temporary protective fencing panels shall be weldmesh "Heras" panels of at least 2.0 metres in height.
- 2. The panels shall butt together and be securely fixed to a scaffold framework, as per points 3 to 5 of Figure 2, overleaf.
- 3. The scaffold framework shall comprise of upright poles of at least 3.0 metres in length driven no less than 0.6 metres into the ground at maximum 3.0 metre centres with horizontal and diagonal poles fixed to the uprights, as per points 4 to 5.
- 4. The two horizontal rail poles shall be attached to the uprights at heights of 0.6 and 1.8 metres with 3 no. clamps to each joint.
- 5. The diagonal scaffold pole struts be clamped to the top rail of the scaffold framework at a 45° angle and extend back into the CEZ and clamped to a 0.7 metre length of scaffold tube that shall be driven no less than 0.5m into the ground.
- 6. No fixing shall be made to any tree and all possible precautions shall be taken to prevent damage to tree roots when locating posts.
- 7. A 600mm x 300mm warning sign reading "TREE PROTECTION AREA KEEP OUT" (see Figure 1) shall be fixed to every 10.0 metre length of protective fencing.
- 8. On completion of erection, and prior to any demolition or construction works, site preparation, excavation or delivery of plant and materials, the Consulting Arboriculturist or the LPA Tree Officer, as agreed, shall inspect the Temporary Protective Fencing.



#### **Type 2 Temporary Protective Fencing Construction** (see Figure 3(a), below)

- 1. Temporary protective fencing panels shall be weldmesh "Heras" panels of at least 2.0 metres in height.
- 2. The panels shall stand on rubber or concrete feet.
- 3. The panels shall butt together, and be joined together using a minimum of two anti-tamper couplers, installed so that they can only be removed from inside the fence.
- 4. The distance between the fence couplers shall be at least 1.0 metre, and shall be uniform throughout the fence.
- 5. The panels shall be supported on the inner side by stabiliser struts, which shall be clamped to the scaffold framework at a 45° angle and extend back into the CEZ and shall be attached to a base plate, which shall be secured to the ground with pins (Figure 3a).
- 6. No fixing shall be made to any tree and all possible precautions shall be taken to prevent damage to tree roots when locating posts.
- 7. A 600mm x 300mm warning sign reading "TREE PROTECTION AREA KEEP OUT" (see Figure 1) shall be fixed to every 10.0 metre length of protective fencing.
- 8. On completion of erection, and prior to any demolition or construction works, site preparation, excavation or delivery of plant and materials, the Consulting Arboriculturist or the LPA Tree Officer, as agreed, shall inspect the Temporary Protective Fencing.



#### Type 3 Temporary Protective Fencing Construction (see Figure 3(b), overleaf)

- 1. Temporary protective fencing panels shall be weldmesh "Heras" panels of at least 2.0 metres in height.
- 2. The panels shall stand on rubber or concrete feet.
- 3. The panels shall butt together, and be joined together using a minimum of two anti-tamper couplers, installed so that they can only be removed from inside the fence.
- 4. The distance between the fence couplers shall be at least 1.0 metre, and shall be uniform throughout the fence.
- 5. The panels shall be supported on the inner side by stabiliser struts, which shall be clamped to the scaffold framework at a 45° angle and extend back into the CEZ and shall be attached to a block tray base (Figure 3b).
- 6. No fixing shall be made to any tree and all possible precautions shall be taken to prevent damage to tree roots when locating posts.
- 7. A 600mm x 300mm warning sign reading "TREE PROTECTION AREA KEEP OUT" (see Figure 1) shall be fixed to every 10.0 metre length of protective fencing.
- 8. On completion of erection, and prior to any demolition or construction works, site preparation, excavation or delivery of plant and materials, the Consulting Arboriculturist or the LPA Tree Officer, as agreed, shall inspect the Temporary Protective Fencing.



Figure 3(b): Type 3 Fencing (BS5837:2012 above-ground stabilising system with strut on block tray)



#### **Temporary Ground Protection**

- 1. Any necessary Temporary Ground Protection areas shall conform to Figure 4, below, unless otherwise agreed with the LPA.
- 2. The Ground Protection Area shall be left undisturbed and covered by a semi-permeable geotextile membrane which shall, in turn, be covered by a compressible layer consisting of a material such as woodchip.
- 3. Side-butting scaffold boards shall then be fitted to cover the Ground Protection Area.
- 4. On completion of installation, and prior to any demolition or construction works, site preparation, excavation or delivery of plant and materials, the Consulting Arboriculturist or the LPA Tree Officer, as agreed, shall inspect the Temporary Ground Protection.
- 5. The Temporary Ground Protection shall remain in place until completion of the project and only removed following receipt of written permission from the LPA.







#### <u>KEY</u>

T = Individual Tree





Important: The original version of this plan was produced in colour, which is essential to the plan's interpretation and usability. As such, a monochrome copy should not be relied upon



#### <u>KEY</u>

T = Individual Tree

G = Group of Trees Please refer to associated Tree Survey Schedule for specific details in respect of items below: Tree Categorisations: Those to be Considered for Retention: Category 'A' Tree/Group Those of a High Quality with an Estimated Remaining Life Expectancy of at Least 40 . Years Category 'B' Tree/Group Those of a Moderate Quality with an Estimated Remaining Life Expectancy of at Least 20 Years Category 'C' Tree/Group Those of Low Quality with an Estimated Remaining Life Expectancy of at Least 10 Years, or Young Trees . Those Considered Unsuitable for Retention: Category 'U' Tree/Group 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 Note: The locations of the trees In groups G3, G5, G7 and G8 were not included on the OS based site plan provided, and were subsequently plotted by the arboricultural surveyor at the time of the survey using GPS siting and, where possible, measurement from existing site features. As such, the plotted locations of these groups cannot therefore be considered to be wholly accurate Root Protection Areas (RPAs): RPAs RPAS Area(s) of Ground Around Trees that Shouk be Protected Throughout Development Works with Protective Fencing to form a Construction Exclusion Zone Project: LAND ADJACENT TO THE BLACK HORSE INN PIMLICO ROAD CLITHEROE BB7 4PZ Client: MR F DUFFIN Title: TREE IMPACT PLAN in Relation to Proposed Construction of Detached Four Storey Residential Apartment Building and Associated Parking Scale: 1:250@A3 Date: March 2018 Drawn by: RG Checked by: ΡН **Bowland** C Tree Consultancy Ltd e: info@bowlandtreeconsultancy.co.uk t: 01772 437150

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