

# Arboricu Itura I Impact Assessment

in Relation to Proposed Residential Development at



Land off Herschel Avenue, Burnley, Lancashire, BB12 0RP

Prepared by:



April 2024

## ARBORICULTURAL IMPACT ASSESSMENT LAND OFF HERSCHEL AVENUE, BURNLEY

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Unit Two 11 Cannon Street Preston Lancashire PR1 3NR Ground Floc 14 Castlegal Penrith Cumbria CA11 7Hz



## ARBORICULTURAL IMPACT ASSESSMENT LAND OFF HERSCHEL AVENUE, BURNLEY

#### **PROJECT DETAILS**

Project No.: BTC2912

Site: Land off Herschel Avenue, Burnley, BB12 0RP

Agent for Client: Campbell Driver Partnership

Council: Burnley Borough Council

Survey Date: 05 March 2024

Surveyed by: Ryan Wilson BSc(Hons) FdSc MArborA

Prepared by: Ryan Wilson BSc(Hons) FdSc MArborA

Checked by: Joseph Lam bert BSC(Hons) FdSc MArbora MICFor

Date of Issue: 24 April 2024

Version No:





#### **DISCLAIMER**

Survey Limitations: Unless otherwise stated all trees are surveyed from ground level using non-invasive techniques. 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 in areas of ground vegetation, cannot therefore be expected. All obvious defects, however, are reported. 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 regards 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 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 potentially unacceptable risk to persons and/or property has been identified during our survey. 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 first attempt to inform the site occupier of the issues and, if not possible, then inform the relevant Council. 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 at the time of the survey using, where appropriate and/or practicable, a combination of measurement triangulation and GPS coordination. Where this is not possible then locations are estimated. Restrictions in these respects are detailed in the report.

The tree survey and any report information provided is intended as a guide to identify key tree related constraints to site development only. As such, 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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Validity: The findings and recommendations contained within this report are, providing its recommendations are observed and the site conditions are retained as per the date(s) of the survey, valid for a period of twelve months from the last survey date. This period of validity may be reduced should there be any changes in factors affecting both the surrounding environment and/or built structures in relative proximity to the trees. The condition of trees should be re-appraised directly, through a site survey, following major weather events such as storms, changes undertaken to the site's conditions, inclusive of demolition and/or ground works, or the removal of existing site vegetation, including trees.

TREE SUI	RVEY SCHEDULE FOR ARBORICULTURAL IMPACT ASSESSMENT
Site:	Land off Herschel Avenue, Burnley, Lancashire, BB12 ORP

Land off Herschel Avenue, Burnley, Lancashire, BB12 0RP

Campbell Driver Partnership Agent:

Surveyor: Rvan Wilson BSc(Hons) FdSc MArborA Survey Date: 05 March 2024 Job Reference: BTC2912

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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	White Willow	8	480	N E S W	4.5 5 3 4.5	3N 2.5	EM	G	Historical damage to west of stem, extending to 2m above ground level, with deadwood and decay present.	Remove tree to facilitate access for construction traffic into the site.	10+	C1	104	5.76
T2	White Willow	8	480#	E S	4.5 5 3 4.5	3N 2.5	EM	G	Tree located off site, with measurements estimated.  Moderately ivy clad from stem base to crown, which impeded inspection.	Indicated Root Protection Area (RPA) projected to be protected through retention of existing block paved, hard surfaced access to north which will form ground protection.  Any works utilising booms, MEWPS, or raising vehicle beds in the vicinity of the tree, including site deliveries, to be supervised by banks person to ensure adequate canopy clearances are maintained.	10+	C1	104	5.76
Т3	Silver Birch	8	320#	N E S W	2.5 3.5 3.5 3.5	2W 2	EM	G	Tree located in fenced area, with measurements estimated. Moderate ivy cladding.	Remove in order to construct development as proposed.	20+	B1	46	3.84
T4	Goat Willow	6	2x 200 2x 250 1x 180 (ms)	Ε	3 6 5 5	1W 2	М	G	Multiple stems from ground level with bark included unions, typical of species.	Remove in order to construct development as proposed.	10+	C1	108	5.85
T5	Common Ash	4	150	N E S W	2 2 2 2	1N 1	SM	Р	Exhibiting symptoms of colonisation by Ash Dieback Disease, with up to 30% of crown dead.  Not projected to be impacted by proposed works.	N/A	<10	U	10	1.8
Т6	Wild Cherry	2.5	290#	N E S W	2.5 2.5 2.5 2.5	1S 2	SM	G	Not accessed to survey, with measurements estimated.  Not projected to be impacted by proposed works.	N/A	40 +	B1	38	3.48

#### Headings and Abbreviations:

Branch & Canopy Clearances:

Management Recommendations:

General Observations and Comments:

Height:

Stem Diam: Branch Spread:

Life Stage:

RPA m²:

RPA Radius (m):

# (Estimated Dimensions):

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:

In metres, to half nearest 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 diameter in millimetres, to nearest 10mm - measured and calculated as per Annex C of BS5837:2012. MS = multi-stemmed, TS = twin-stemmed

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

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.

Estimated age class - Y = young, SM = semi-mature, EM = early-mature, M = mature, PM = post-mature

Physiological Condition - a measure of the tree'(s)' overall vitality, i.e. D = Dead, MD = Moribund, P = Poor, M = Moderate, G = Good

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.

Either Preliminary or In Consideration of the Proposed - 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. Arboricultural Impact Assessment and Method Statement related Surve ys take the proposed development into consideration with recommendations made accordingly. More than one option may be given if considered appropriate

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

Root Protection Area in m2 - calculated area around the tree that must be appropriately protected throughout the development process in order avoid root damage

Root Protection Area Radius - in metres measured from the centre of the stem to the line of tree protection

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 SU	IRVEY SCHEDULE FOR ARBORICULTURAL IMPACT ASSESSMENT
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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)
T7	Elder	3	1x 80 1x 90 (ts)	N E S W	1.5 1.5	1N 1.5	SM	М	Growing out of hard standing on lane.  Not projected to be impacted by proposed works.	N/A	<10	U	7	1.44
G1	Lawson Cypress	<b>≤</b> 6.5	≤ 280#	N E S W	≤3 ≤3 ≤3	0 ≥ 0	EM	G	Group located within fenced area, with measurements estimated.	Remove group in order to construct development as proposed.	20+	B1	<b>≤</b> 35	≤ 3.36
G2	Ash, Alder, White Willow, Hawthorn, Elder	≤ 12	≤ 380#	N E S W	5 5 5 5 5 5	3N ≥ 0	EM	М	Woodland group located outside northern boundary, and not accessed to survey. Majority of the trees are ivy clad, which obstructed views.	Remove applicable section of tree group where within site ownership boundaries (See Tree Impact and Protection Plan (TIPP)).  Prune remaining trees along northern boundary to attain approximately 5m ground clearance over site. NB: Client/Agent to obtain necessary written permission for works where required to trees located outside of the proposed red line boundary prior to instructing/undertaking any tree works.  Ensure protection of RPA of remaining group as a far as practicable through establishment of Construction Exclusion Zone (CEZ) in accordance with appended temporary fencing specification (See TIPP).  Any works utilising booms, MEWPS, or raising vehicle beds in the vicinity of the remaining tree group, including site deliveries, to be supervised by banks person to ensure adequate canopy clearances are maintained.	20+	B1,2	≤ 65	≤ 4.56
G3	Hazel, Willow, Blackthorn, Elder	<b>≤</b> 4.5	≤ 120	N E S W	≤ 2.5 ≤ 2.5 ≤ 2.5 ≤ 2.5	0 ≥ 2.5	SM	G	Group evidently pruned with flail in past. Not projected to be impacted by proposed works.	N/A	10+	C1	<b>≤</b> 7	≤ 1.44



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

Category and definition	Criteria (including subcategories where app	propriate)		Identification on plan
Trees unsuitable for retention (se	e Note)			
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, so that will become unviable after removal of cannot be mitigated by pruning)</li> <li>Trees that are dead or are showing signs of the suppressing adjacent trees of better quality.</li> <li>Note: Category U trees can have existing or poparagraph 4.5.7.</li> </ul>	Red		
	Mainly arboricultural qualities	2. Mainly landscape qualities	Mainly cultural values, including conservation	
Trees to be considered for retenti	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	Note — Whilst C category trees will usually not 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 the state o	Trees with very limited conservation or other cultural benefits	Grey

# - 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:

- 1. 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;
- 2. be retained in place throughout the development process until completion of the project, and only removed following receipt of written permission from the LPA;
- 3. 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;
- 4. be erected prior to any construction, demolition or excavation works and remain in place for the duration of the project;
- 5. preclude any delivery of site accommodation and/or materials and/or plant machinery;
- 6. 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;
- 7. preclude the storage of all development related materials and substances including fuels, oils, additives, cement and/or any other deleterious substance; and
- 8. 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.
- 9. <u>Important</u>: 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 MUST BE OBSERVED BY ALL 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 ZONF
- 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.

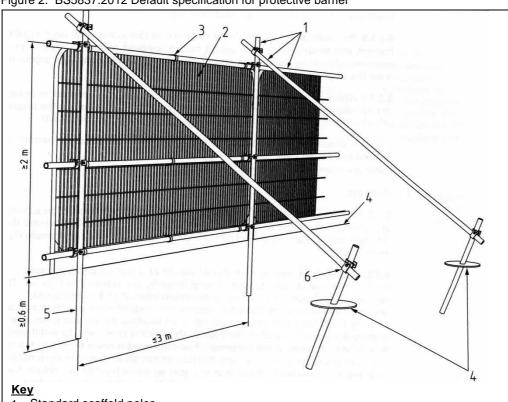


Figure 2: BS5837:2012 Default specification for protective barrier

- 1. Standard scaffold poles.
- 2. Heavy gauge 2 metre tall galvanised tube and welded mesh infill panels
- 3. Panels secured to uprights and cross members with wires ties
- 4. Ground level
- 5. Uprights driven into the ground until secure (minimum depth 0.6 metres)
- 6. Standard scaffold clamps

#### 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.

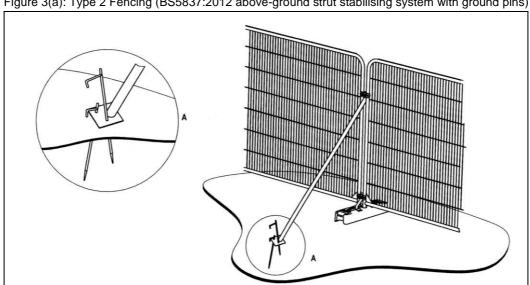
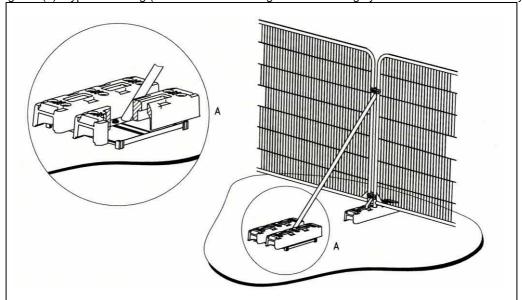


Figure 3(a): Type 2 Fencing (BS5837:2012 above-ground strut stabilising system with ground pins)

#### 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.

Figure 4: Temporary Ground Protection – Recommended Construction

Protective fencing

Protective fencing

Protective fencing

Protective fencing

Protective fencing

Protective fencing

Frotective fencing

Protective fencing

Frotective fencing

