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Arboricultural Impact Assessment Overview

in Relation to Proposed Construction of
Detached Residential Property at



**30 Beverley Drive, Clitheroe,
Lancashire, BB7 1HY**

Prepared by:

Bowland 
Tree Consultancy Ltd

April 2017

ARBORICULTURAL IMPACT ASSESSMENT OVERVIEW 30 BEVERLEY DRIVE, CLITHEROE

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**ARBORICULTURAL IMPACT ASSESSMENT OVERVIEW
30 BEVERLEY DRIVE, CLITHEROE**

Control sheet

Project No.: BTC1146

Site: 30 Beverley Drive, Clitheroe, Lancashire, BB7 1HY

Agent for Client: Sunderland Peacock & Associates Ltd

Council: Ribble Valley Borough Council

Survey Date: 26 April 2017

Surveyed by: Phill Harris MSc BSc(Hons) HND MArborA CEnv MICFor

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TREE SURVEY SCHEDULE FOR ARBORICULTURAL IMPACT APPRAISAL

Site: 30 Beverley Drive, Clitheroe, Lancashire, BB7 1HY

Agent for Client: Sunderland Peacock & Associates Ltd

Surveyor: Phill Harris – Chartered Arboriculturist

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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 (m ²)	RPA Radius (m)
T1	Silver Birch	14.5	380#	N 4.5 E 4.5 S 4 W 3.5	4.5-W 4.5	EM	G	Located on neighbouring land and therefore not inspected.	Ensure protection of Root Protection Area (RPA) throughout development using Temporary Protective Fencing (specification appended) to form a Construction Exclusion Zone (CEZ).	40+	A1/2	65	4.56
T2	Silver Birch	14	350#	N 3.5 E 3.5 S 3.5 W 3.5	4-S 3.5	EM	G	Located on neighbouring land and therefore not inspected.	Ensure protection of RPA throughout development using Temporary Protective Fencing to form a CEZ.	40+	A1/2	55	4.2
T3	Blue Lawson Cypress	7	350#	N 3.5 E 3.5 S 3.5 W 3.5	N/A 1.5	SM	G	- Located on neighbouring land and therefore not inspected. - Evidently recently very heavily topped.	Ensure protection of RPA throughout development using Temporary Protective Fencing to form a CEZ.	10+	C1	55	4.2
T4	Beech	17	800#	N 7.5 E 7.5 S 7.5 W 7.5	N/A 2	M	M	- Located on neighbouring land and therefore not inspected. - Crown showing signs of a moderate reduction in vitality with small leaves and slightly sparse foliage cover.	Ensure protection of RPA throughout development using Temporary Protective Fencing to form a CEZ.	20+	B1	290	9.6
G1	Ash	≤ 8.5	≤ 150	N ≤ 2.5 E ≤ 2.5 S ≤ 2.5 W ≤ 2.5	N/A ≥ 0	Y-SM	G	- Very closely spaced group of mainly very young self-set Ashes along top of retaining wall. - Several semi-mature Hawthorn and young Elm.	Remove due to low value.	<10	U	≤ 10	≤ 1.8
G2	2no. Holly, 1no. Leyland Cypress	≤ 5	≤ 140#	N ≤ 2 E ≤ 1 S ≤ 2 W ≤ 2	N/A ≥ 0	Y	G	- Located on neighbouring land and therefore not inspected. - Loose group.	Ensure protection of RPAs throughout development using Temporary Protective Fencing to form a CEZ.	10+	C1	≤ 9	≤ 1.68
H1	Box	1.7	N/A	≤ 2 wide	N/A 0	SM	G	Evidently growing on neighbouring land, but growing along and over boundary fence.	Ensure protection throughout development using Temporary Protective Fencing.	10+	C1	N/A	1
H2	Privet	3	N/A	≤ 3 wide	N/A 0	SM	G	Short length of outgrown hedge close to boundary.	Ensure protection throughout development using Temporary Protective Fencing.	10+	C1	N/A	1

Headings and Abbreviations:

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, M = 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 existing site and tree circumstances and conditions into account and not proposed developments. Arboricultural Impact Assessment and Method Statement related
ERC: Surveys take the proposed development into consideration with recommendations made accordingly. More than one option may be given if considered appropriate
Cat. Grade: Category Grading - the retention value listed as U, A, B or C - in accordance with BS5837:2012 Table 1
RPA m²: Root Protection Area in m² - calculated area around the tree that must be appropriately protected throughout the development process in order to avoid root damage
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

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

Category and definition	Criteria (including subcategories where appropriate)			Identification on plan
Trees unsuitable for retention (see 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	- 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 the health and/or safety of other trees nearby, or very low quality trees suppressing adjacent trees of better quality <i>Note: Category U trees can have existing or potential conservation value which it might be desirable to preserve; see BS5837:2012 paragraph 4.5.7.</i>			Red
	1. Mainly arboricultural qualities	2. Mainly landscape qualities	3. Mainly cultural values, including conservation	
Trees to be considered for retention				
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	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	Trees with very limited conservation or other cultural benefits	Grey
	Note – Whilst C category trees will usually not be retained where they would impose a significant constraint on development, young trees with a stem diameter of less than 150mm should be considered for relocation			

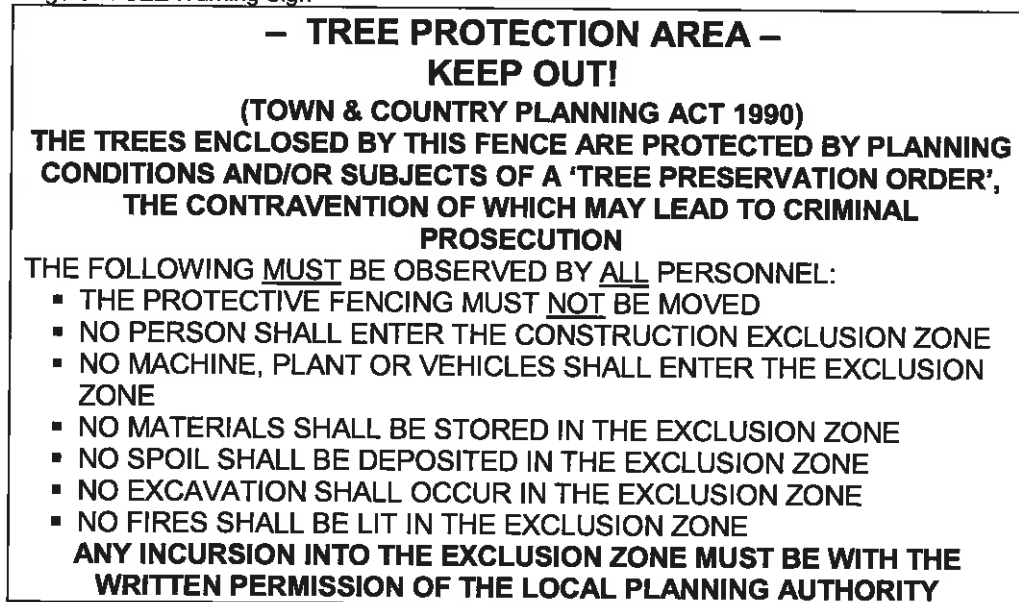
- TEMPORARY PROTECTIVE FENCING & GROUND PROTECTION SPECIFICATION -

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;
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;
5. 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.

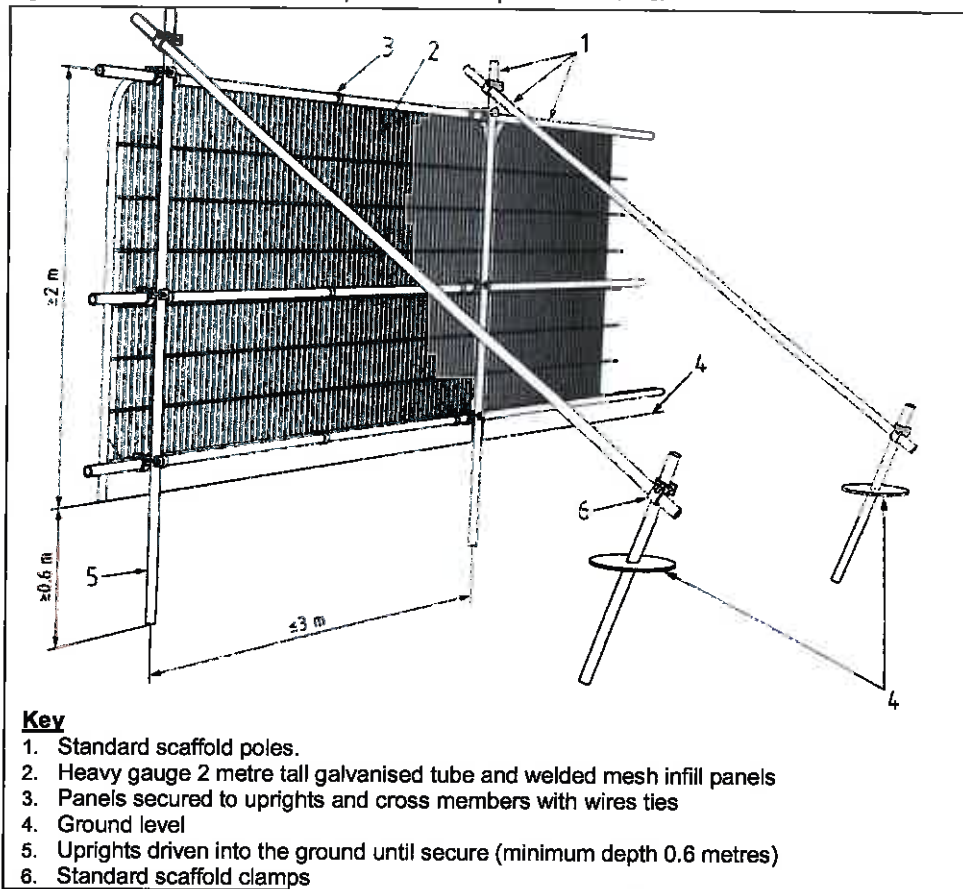
Figure 1: CEZ Warning Sign



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.

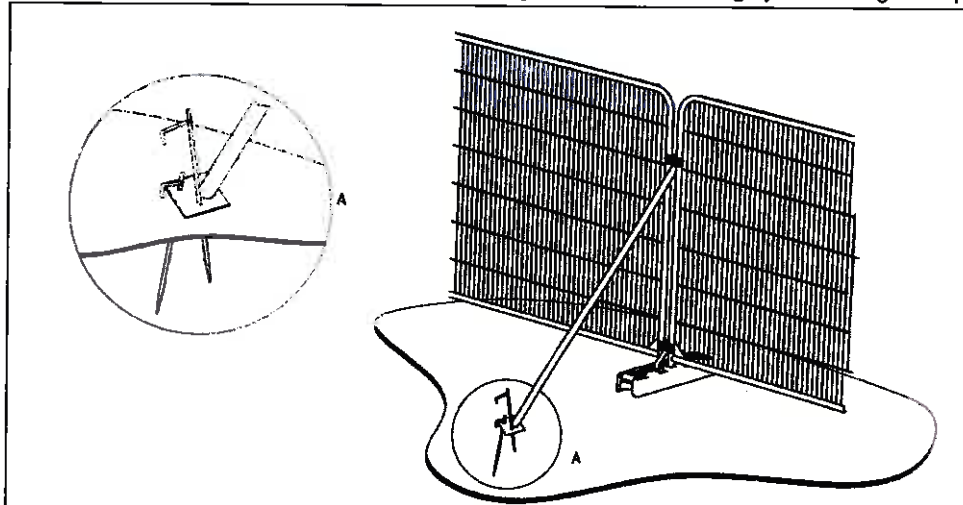
Figure 2: BS5837:2012 Default specification for protective barrier



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.

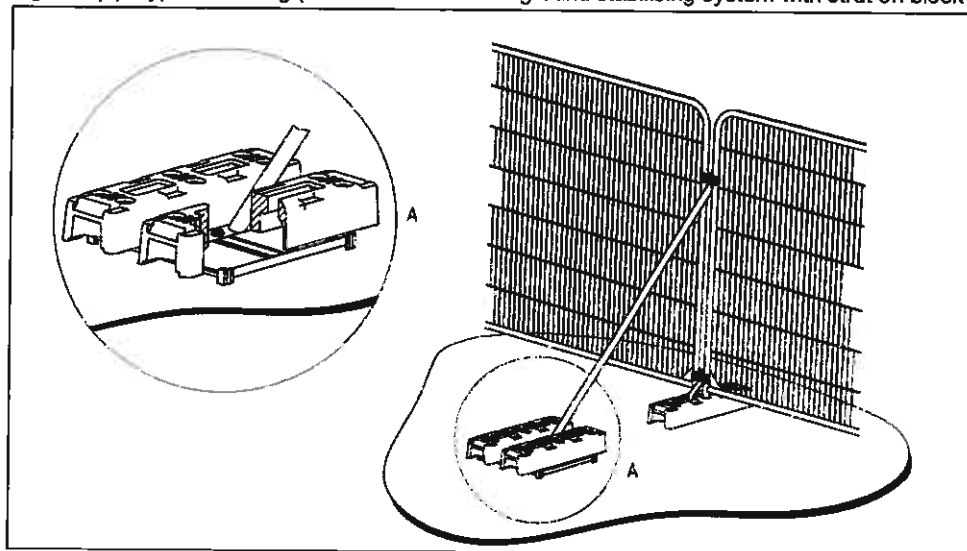
Figure 3(a): Type 2 Fencing (BS5837:2012 above-ground strut stabilising system with ground pins)



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

2. Any necessary Temporary Ground Protection areas shall conform to Figure 4, below, unless otherwise agreed with the LPA.
3. 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.
4. Side-butting scaffold boards shall then be fitted to cover the Ground Protection Area.
5. 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.
6. 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

