

Arboricultural Constraints Appraisal

in Relation to Proposed Construction of Detached Residential Property at



9 Greenside, Ribchester, Lancashire, PR3 3ZJ

Prepared by:



September 2018

ARBORICULTURAL CONSTRAINTS APPRAISAL 9 GREENSIDE, RIBCHESTER

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ARBORICULTURAL CONSTRAINTS APPRAISAL 9 GREENSIDE, RIBCHESTER

Control sheet

Project No.: BTC1643

Site: Greenside, Ribchester, Lancashire, PR3 3ZJ

Agent for Client: Sunderland Peacock & Associates Ltd

Council: Ribble Valley Borough Council

Survey Date: 14 September 2018

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

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TREE SURVEY SCHEDULE FOR ARBORICULTURAL CONSTRAINTS APPRAISAL 9 Greenside, Ribchester, Lancashire, PR3 3ZJ Site:

Sunderland Peacock & Associates Ltd

Surveyor: **Survey Date:**

Phill Harris Chartered Arboriculturist 14 September 2018

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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 | Lawson Cypress | 10.5 | 2X300 | N 3.5 E 3.5 S 3.5 W 3.5 | 2 1 | М | M/G | Stem base approximately 500mm from top of 500mm high retaining wall, which is showing signs of moderate displacement in two locations in close proximity to tree. Stem divides into multiple sub stems at a height of approximately 500mm with several tight forks. Previously topped at a height of approximately 9m. Some foliar browning throughout crown. | • | 10+ | C1 | 237 | 8.69 |
| T2 | Lawson Cypress | 10.5 | 350 | N 3 E 3 S 3 W 3 | 2 | SM | M | Stem bifurcates at a height of approximately 6m with a tight fork. Previously topped at a height of approximately 9m. Crown showing signs of a moderate reduction in vitality with extensive foliar browning and moderately sparse foliage cover. | • | 10+ | C1 | 55 | 4.2 |
| G1 | 3no. Lawson Cypress | ¥ 9 | 1x300 2x180 | N ≤ 3 E ≤ 3 S ≤ 3 W ≤ 3 | 2 ≥1.5 | SM | M | Very closely spaced linear group. One tree is multi-stemmed from 700mm with tight forks, one is twinstemmed from 500mm with tight forks, and one is single stemmed. All crowns heavily topped at a height of approximately 9m. All crowns showing signs of a moderate reduction in vitality with extensive foliar browning and moderately sparse foliage cover. | • | 10+ | C1 | ≤ 70 | ≤ 4.72 |
| G2 | Goat Willow, 1no. Privet. | 9 IV | ≤ 8x60 (ma)# | N ≤ 4 E ≤ 4 S ≤ 4 W ≤ 4 | N/A ≥ 0 | SM | | Closely spaced group. Willows are evidently multi-stemmed coppice regrowth. | • | 10+ | C1 | ≤ 13 | ≤ 2.04 |
| G3 | Silver Birch, Cherry, Holly | ≤ 8 | 180# | N ≤ 2 E ≤ 2 S ≤ 2 W ≤ 2 | N/A ≥ 1 | Y-SM | G | Moderately spaced group located next to boundary fence on neighbouring land. Not inspected in detail, with most measurements subsequently estimated. | • | 10+ | C1 | ≤ 15 | ≤ 2.16 |
| H1 | Privet | ≤ 1.5 | N/A | ≤ 1.5 | N/A 0 | SM | G | ■ Short length of managed boundary hedge. | • | 10+ | C1 | N/A | ≈1 |

Headings and Abbreviations

General Observations and Comments:

Management Recommendations:

RPA m2:

Agent for Client:

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: 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

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.

Branch & Canopy Clearances: Life Stage: 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 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

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

RPA Radius (m): # (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 Bowland ©

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

| 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 | Trees that have a serious, irremediable, st that will become unviable after removal of cannot be mitigated by pruning) Trees that are dead or are showing signs of the significant suppressing adjacent trees of better quality. Note: Category U trees can have existing or poparagraph 4.5.7. | Red | | |
| | 1. Mainly arboricultural qualities | 2. Mainly landscape qualities | 3. 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 | Trees not qualifying in higher categories Note – Whilst C category trees will usually not be 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 | Grey |



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 co-ordination. 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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Statutory Tree Protection: It is the client's responsibility to check for the presence of any statutory tree protection measures, such as the site's location within a Conservation Area and/or the presence of any Tree Preservation Orders, directly with the applicable Council's planning department prior to scheduling or carrying out any tree works. In turn, it is also the client's responsibility to check for the need for a felling licence with the Forestry Commission prior to scheduling or carrying out any tree works. Bowland Tree Consultancy Ltd cannot be held responsible for any decisions made by the client to prune or remove trees where any such statutory protection exists.

- 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;
- 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.

E 22 5

Figure 2: BS5837:2012 Default specification for protective barrier

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

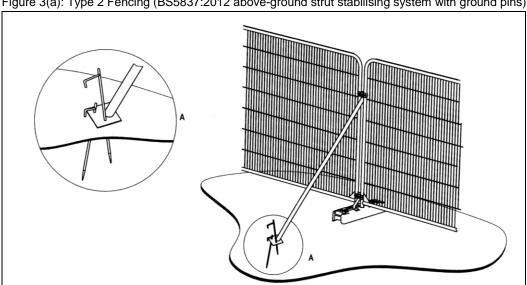
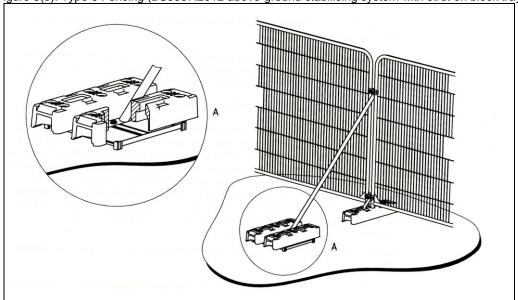


Figure 3(a): Type 2 Fencing (BS5837:2012 above-ground strut stabilising system with ground pins)

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)

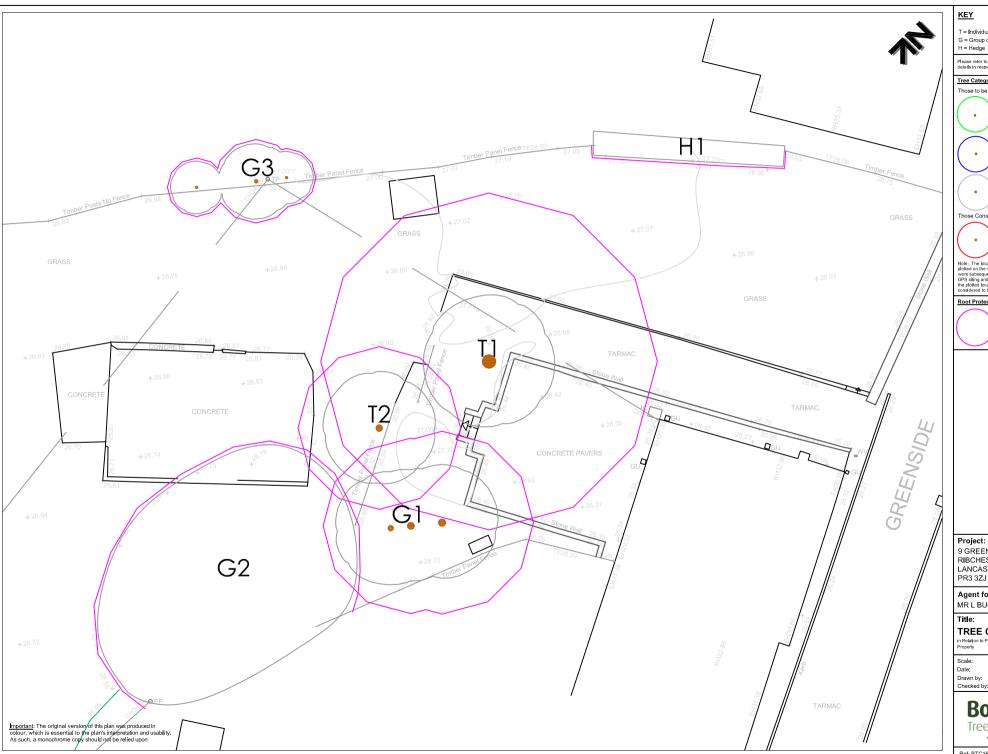


Temporary Ground Protection

- 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.

Protective fencing Edge of RPA Protective fencing Protected protected by geotextile fabric, and side butting pressible tayer protected by geotextile fabric, and side butting scaffold boards on a

Figure 4: Temporary Ground Protection – Recommended Construction



- 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/Hedge Those of a High Quality with an Estimated Remaining Life Expectancy of at Least 40

Category 'B' Tree/Group/Hedge Those of a Moderate Quality with an Estimated Remaining Life Expectancy of at

Least 20 Years Category 'C' Tree/Group/Hedge

Those of Low Quality with an Estimated Remaining Life Expectancy of at Least 10 Years, or Young Trees

Those Considered Unsultable for Retention:

Category 'U' Tree/Group/Hedge 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 and extents of groups G2 and G3 were not plotted on the site topographical survey plan provided, and were subsequently plotted by the arboricultural surveyor using GPS siting and estimation at the time of the survey. As such, the plotted location of these groups cannot therefore be considered to be wholly accurate.

Root Protection Areas (RPAs):

RPAs
Area(s) of Ground Around Trees that
Should be Protected Throughout
Development Works with Protective Fencing
to form a Construction Exclusion Zone - see
appended Temporary Protective Fencing
Specification

Project

9 GREENSIDE RIBCHESTER LANCASHIRE PR3 3ZJ

Agent for Clent: MR L BUCKLEY

TREE CONSTRAINTS PLAN

in Relation to Proposed Construction of Detached Residentia

Scale: 1:200@A3 September 2018 Date: Drawn by: PH RG



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