

Site Tree Appraisal

Land Adjacent to the Sub-Station, Alkrington Hall Road North, Middleton M24 1SZ

“BS 5837 2012: Trees in Relation to Design, Demolition and Construction – Recommendations”



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Land Adjacent to the Sub-Station, Alkrington Hall Road North, Middleton M24 1SZ:

The following is a pre-development survey and appraisal of trees on and adjacent to the above site.

Its primary purpose being to categorize the trees according to BS 5837:2012 Trees in Relation to Design, Demolition and Construction – Recommendations, so that the Local Planning Authority may review the existing trees in association with the proposed development.

The report and associated plans have been produced for the sole purpose: - to accompany the above planning submission.

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1. Introduction:

1.1 This tree survey has been commissioned by Mr Kelly.

1.2 I have undertaken this tree survey following the guidance and recommendations of; 'BS 5837: 2012 Trees in Relation to Design, Demolition and Construction-Recommendations'.

1.3 Instruction: I am instructed by Mr Kelly to inspect the significant trees on and adjacent to the site that may be affected by the proposed property development and to provide an arboricultural report to accompany a planning application. The relevant tree information that has been noted and prepared to accompany the planning application is;

- A schedule of the significant trees on and adjacent to the site, to include basic data and an assessment of their condition, (see appendix 3).
- An appraisal of the impact that the proposed development may have on the trees and as a result, the visual amenity of the locale.
- An initial arboricultural method statement (AMS) setting out basic protective requirements and management needs of the trees to be retained and tree works required to facilitate the proposed development.

1.4 Documents and information provided: Mr Kelly provided me with the following documents:

- *AHRN Site Location Block Plan*
- *975-02 Proposed site Plan*
- *Alkrington_Screen_1 Proposed Visual Image*
- *Rochdale Council Incomplete Planning Application letter 24/01204/FUL*

1.5 Qualification and experience: I have based this report on my site observations and the provided information, and I have come to conclusions in light of my experience. I have experience and qualifications in arboriculture and list the details in appendix 1.

1.6 Report scope and limitations: Construction work often exerts undesirable pressures on existing trees, as do changes in their environment following construction (see appendix 2). This report has been prepared to analyse the impact that the proposed development may have to the existing site trees. It further advises on protective requirements and appropriate management needs of the trees, should they be retained on the site. The primary purpose of the report is to provide sufficient tree information to allow the Local Planning Authority to review any tree issues associated with the development proposal.

1.6.1 It should be noted that this report takes no account of indirect structural damage that may arise to buildings as a result of tree induced soil volume changes. Such damage can occur to buildings built on shrinkable clay sub-soils and will be more prevalent during prolonged drought conditions. Also buildings built on shrinkable soils following tree removal can suffer heave affects as the soil rehydrates. These issues should be addressed during the design of the proposed development (*National House Building Council-NHBC 2011-part 4.2 building near trees*). Also, this report does not take into account damage to drains and underground services that may be due to tree root activity. If damaged, drains can allow roots to penetrate them. If, however, they are in good repair tree roots have little capacity to access them. A drainage expert could give more advice.

2. Site visit and observations:

2.1 Site visit: I carried out an unaccompanied site visit on 29th October 2025. All my observations were from ground level without detailed investigations and all dimensions were measured using a diameter tape and laser measure, heights were measured using a clinometer. If access was restricted measurements were estimated. The weather at the time of inspection was clear and dry with good visibility.

2.2 Brief site description: The small development plot is located along the north side of Alkrington Hall Road North, opposite Dene Drive. The small strip of land, adjacent to the Sub-Station, consists of overgrown bramble weed and ground scrub (photo 01). There are no trees directly on the land, all adjacent trees are primarily located along the north boundary hedgerow. Three other trees are located in the neighbour's garden to the west side beyond the Sub-Station land.

2.2.1 Site Aspect and Topography:

- The site is south facing.
- The land is broadly level with no significantly raised features.

2.2.2 Preliminary Geological Information:

Soil Texture:	Sandy
Soil pH:	Acid
Drainage:	Freely Draining
Fertility:	Low
Carbon:	Low
Drains to:	Groundwater

(Cranfield Soil and Agrifood Institute; Land Information Systems, 2025)

2.2.3: Tree Protection Status: Rochdale Council do not currently publish Tree Preservation Order interactive maps on their website. Rochdale Borough Council will need to be contacted to establish the protection status of trees adjacent to the site.

2.3 Identification and location of the trees: The locations of the significant trees are illustrated on the Tree Constraints Plan *RTS/29102025/TCP 001* included with this report. All the relevant information on the trees is contained within this report and the provided documents listed in 1.4 above.

2.4 Tree observations: The trees were not climbed; I visually inspected the significant trees from ground level in accordance with visual tree assessment (VTA) techniques and recorded the information on the schedule included at appendix 5. The assessment has been to a level one of the TRAQ assessment criteria.

3 APPRAISAL:

- 3.1 Relevant references:** ‘BS 5837:2012 Trees in Relation to Design, Demolition and Construction-Recommendations’.
- 3.2 Arboricultural Impact Assessment (AIA):** The proposal is to construct a one-bedroom bungalow on the small plot of land. At this stage I have not been made aware of any proposed routes for new underground drains or other utility services. Although it is assumed that these would be routed towards the front of the new building under Alkrington Hall Road North and away from the existing trees to the north of the site.
- 3.3** Given that the closest trees to the site are located along the north boundary (photo 01), there would be no requirement to remove any of the trees to facilitate the development. Other adjacent trees, towards the west (T7, T8 & T9), are to the far west side of the Sub-Station land and well beyond being influenced by the proposed building.
- 3.4** There will be a requirement to excavate building footings which will slightly overlap the calculated root protection area (RPA) of tree T6, see Arboricultural Impact Assessment drawing *RTS/29102025/AIA 002*. The excavation overlap, however, is calculated to be a mere 2 square metres. This 2 square metre overlap of the RPA would amount to an approximate 9% overlap of the total RPA. Due to the very minimal overlap together with the fact that all the remaining sections of the RPA and contiguous areas will remain undisturbed, the potential loss or damage to roots is considered insignificant and would not be expected to cause any significant harm to the long-term health and viability of the tree.
- 3.5** Some builder activity would have to take place to the south side RPA segments of T1, T2, T4, T6 & T10, see *RTS/29102025/AIA 002*. Given that these areas are to the far north of the building plot and distant from the Alkrington Hall Road North entrance, builder activity here is not expected to be excessive. Damage to any underlying tree roots, therefore, is unlikely. As a result of limited damage anticipated, and given the limited workspace available, it is not considered necessary or practicable to install protective tree fencing around the RPAs or ground protection above the trees’ RPAs.
- 3.6** To facilitate the bungalow construction it will be necessary to undertake minor facilitation pruning to tree T6. The tree pruning specifications are noted in the Recommendations, section 5 of the report. No other tree works will be required.

4 CONCLUSIONS:

- 4.1 Given the limited tree works required to Facilitate the bungalow construction, a negative impact to the visual amenity of the area that is currently provided by the trees is not anticipated.
- 4.2 **Other Considerations:** Trees by their very nature have structures that allow bats to shelter or roost in them, more so with moribund and decayed trees. All species of bats are protected by the Wildlife and Countryside Act 1981 (as amended), the Conservation (Natural Habitats) regulations 1994 and the Countryside Act and Rights of Way Act 2000. Also it is an offence to disturb or destroy nesting birds. Appropriate ecological assessments should be undertaken to avoid contravention of the above.

5 RECOMMENDATIONS:

Arboricultural Method Statement (AMS);

- 5.1 Prior to any other activity on the site the following arboricultural works should be undertaken.

Table 1 Tree works:

Tree	Tree Work	Priority
T6	Crown lift prune the south side of the tree's crown (over the development plot) to obtain a branch height clearance above ground level of approximately 5 metres.	Prior to any other site works

- 5.1.1 All the recommended tree works should be of a standard that is in accordance with BS 3998:2010 Tree Work-Recommendations. All the arboricultural work on this site should be undertaken by an arboricultural contractor who is able to comply with the above BS standard. The arboricultural contractor should hold public and products liability insurance to a minimum of £5 million and employer's liability insurance as required by law. The arboricultural contractor should be able to show competency by means of relevant certification and health and safety policy. Suitable arboricultural contractors can be sourced from the Arboricultural Association approved contractor list or the Local Planning Authority occasionally has lists of competent contractors. Rowbottom's Tree Services Ltd (arboricultural consultancy) cannot accept any liability where the prescribed work is not carried out in a correct and professional manner in accordance with current good practice.
- 5.1.2 The advised tree works within this report are recommended in order to facilitate the proposed property development. None of these tree works should be undertaken until there has been full approval from the Local Planning Authority.
- 5.2 Upon completion of the above arboricultural works, the ground bramble and weed scrub may be skimmed off the soil surface. This may be undertaken using a mini digger fitted with a wide bucket. The ground scrub skimming, however, should be limited to no deeper than 100mm of the soil surface. The bungalow construction should then be undertaken following the guidance of this AMS.
- 5.3 Fires on the site should be avoided if possible. Where they are unavoidable, they should not be lit in a position where heat could affect tree foliage or branches. The potential size of a fire and wind direction should be taken into account when determining its location and it should be attended at all times until safe enough to leave.
- 5.4 Any materials whose accidental spillage would cause damage to a tree (e.g. oil, cement washing and vehicle washings etc.) should be stored and handled well away from the outer edge of its RPA.
- 5.5 All ground areas beyond the plot boundaries should be treated as construction exclusion zones (CEZ). All operatives of machinery and heavy plant should be made aware of these CEZs. The operatives are to respect these zones and ensure that no damage occurs to trees due to careless use of machinery.
- 5.6 Siting of cabins and storage of building materials should be outside of the CEZ. Any proposal to install cabins or store materials within a CEZ should be agreed with the appointed arboriculturist and the Local Planning Authority prior to such installation.

6 BIBLIOGRAPHY

6.1 BS 5837:2012 Trees in Relation to Design, Demolition and Construction - Recommendations



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M.Arbor.A

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Appendix 1

Brief qualifications and experience of Mr W. J. Rowbottom.

1. Qualifications:

- Tree surgery craft certificate 1992
- BTEC Higher National Diploma in Arboriculture 2000 (HN Dip Arb).

2. International Society of Arboriculture (ISA):

- Tree Risk Assessment Qualification (TRAQ).

This is a systematic qualification of risks that may be posed by trees within their existing site setting over a given time frame.

3. Continuing professional development: Professional member of the Arboricultural Association.
M Arbor A. Professional member of the Consulting Arborist Society (CAS).

4. Experience: Managed an arboricultural contracting company for 20 years. Practiced arboricultural consultancy since 2010.

Appendix 2

Trees and Construction Sites – General Issues

Trees that have good health and stability are well adapted to their surroundings. Any demolition or construction activity which affects the adaptation of trees to the site could be detrimental to their health, future growth and safety. Trees tend to become less tolerant of change after they have reached maturity or have suffered previous damage or physiological stress. Site design and subsequent management, therefore, should aim to minimize the effect of change.

The part of a tree most susceptible to damage on a construction site is the root system, which, because it is not immediately visible, is frequently ignored. Within a short distance of the trunk, the roots become highly branched, so as to form a network of small diameter woody roots, which can extend radially for a distance much greater than the canopy spread of the tree, except where impeded by unfavourable soil conditions. The growth and development of all roots is influenced by the availability of water, nutrients, oxygen and the penetrability of the soil. Given favourable conditions, the tree's root system tends to develop sufficient volume to provide physical stability for the tree. Typically, however, around 80% of a tree root system is concentrated in the upper 600mm of the soil profile. Due to this relatively shallow depth, the threat to a tree root system on a development site can arise from:

- Root severance or fracture during excavation works
- Compaction of the soil structure, which restricts moisture percolation through the soil profile and gaseous exchange between the surface air and soil atmosphere. Soil compaction can occur as a result of driving heavy plant machinery over the soil surface, repetitive pedestrian footfall and storage of building materials.
- Waterlogging due to land grade changes
- Toxic contamination due to chemical runoff from construction activities.

Damage to the tree trunk and branches can also occur on development sites if appropriate distances between tree and construction work is not maintained. Such damage, however, is not usually sufficient to kill a tree directly, but can make it unsafe by affecting the dynamics and growth of the tree, or by initiating long term decay. Such damage can also be disfiguring. The attachment of notice boards and cables etc. can all damage trees, as can the use of tree trunks as a winch anchor.

Damage to a tree on a construction site may not at first be noticeably obvious, the full effect of such damage usually taking 3 or 4 years to become evident, at which time the tree may die and/or become unsafe. A tree that has taken decades to reach maturity can be damaged irreparably in a few minutes by actions that might be unwitting, negligent or wilful. The early provision of physical protection of the tree from damage is therefore critical.

Appendix 3

Tree Data (Explanations of):

The data collected and recorded on each tree reflects the recommendations provided in section 4.4.2 of BS 5837:2012 Trees in Relation to Design, Demolition and Construction-recommendations.

Tree number: T (individual tree), G (group of stems or several trees planted together or self-seeded), S (stump of a tree that has been cut at or close to ground level), SH (shrub masses).

Species: Common tree name; *specific name recorded in italics*.

Height: Approximate height of the tree to the nearest metre.

DBH: Stem diameter (recorded in millimetres) measured in accordance with Annex C of the BS 5837:2012.

Crown Spread: A record (to the nearest half metre) of the radial distances between the tree trunk and the end of the further most branches, in the direction of the four cardinal compass points.

Height to Lowest Branch: This parameter estimates the lowest point of the crown above the ground. Minor and dead branches are ignored.

Age: Estimated maturity of the tree; Moribund (at the point of death), Mature (last one third of life expectancy), Early mature (one third to two thirds life expectancy), Young (at less than one third of life expectancy).

Condition: An assessment of tree physiological condition. Good (high vigour and strong growth), fair (average vigour and growth), Poor (low vigour and declining growth).

Category Rating: An assessment to identify the quality and value (in non-fiscal terms) of the existing tree stock, allowing informed decisions to be made concerning which trees should be removed or retained in the event of a development occurring, (for categorisation criterion see appendix 6).

Observations and Comments: A preliminary observation of the tree's physiological condition, structural form and its suitability to the existing site setting. Basic tree management advice may be recommended.

Appendix 4

Explanatory notes

AGE:	Estimated maturity of the tree; Moribund (at the point of death), Mature (last one third of life expectancy), Early mature (one third to two thirds life expectancy), Young (at less than one third of life expectancy).
AIA:	Arboricultural Impact Assessment; an assessment that evaluates the effects that the proposed design may have on the existing site trees and any constraints that the trees pose to the design, and where necessary recommend mitigation measures.
AMS:	Arboricultural Method Statement.
CEZ:	Construction Exclusion Zone; a fenced off area around a tree or group of trees that should remain undisturbed and free from demolition and construction activity.
Crown:	The structural part of the tree above ground level that consists of branches, twigs and foliage.
Included Bark:	Bark that remains (trapped) between branch and trunk or co-dominant stems. Has potential to be a structurally weak union.
Measurements:	All measurements are taken using a diameter tape and laser measure, tree heights are measured using a clinometer. If access is restricted measurements are estimated.
RPA:	Root Protection Area; The minimum area around a tree deemed to contain sufficient roots and soil volume to maintain the tree's viability, and where the protection of the roots and soil structure is treated as a priority. The RPA increases with tree size and is calculated from a measurement of the trunk diameter.
Species:	The tree species identification is based on visual identification. The common English name of what the tree appeared to be is listed first followed by the botanical name in <i>italics</i> . In some instances, it may be difficult to quickly and accurately identify a particular tree without further detailed investigation. Where there is some doubt as to the precise species of the tree, the genus is followed by the abbreviation spp; in order to avoid delay in the production of the report. The species listed for groups and hedges represent the main component and there may be other minor species not listed.
TRAQ:	Tree Risk Assessment Qualification. A tree risk qualification methodology; Level one; is a basic visual assessment of an individual tree or a population of trees near to targets of concern, conducted from a specified perspective, to identify obvious defects or specified conditions. Only defects visible from the perspective from which the assessment is made are expected to be identified.
VTA:	Visual Tree Assessment; a non-invasive method of examining the health and structural condition of individual trees, as advised by Mattheck (1993) and Hazard Evaluation by Matheny and Clark (1993). Guidance is also taken from Lonsdale (1999) Principles of Tree Hazard Assessment and Management.

Appendix 5
Tree Schedule

Tree No	Species	Height (M) * Crown Height above GL	DBH (mm) *	Crown Spread (M) *	Height to Lowest Branch (M) Direction of Lowest Branch	Age Range	Condition	RPA Radius (M)	RPA Square metres	BS 5837 Category Rating	Observations and Comments
T1	Hawthorn <i>Crataegus monogyna</i>	<u>9.5</u> 3.5	248 combined	N – 2.0 S – 3.0 E – 2.5 W – 3.0	<u>2.0</u> N	Mature	Fair	2.9	26	C1	A twin stemmed hedgerow tree
T2	Lawsons Cypress <i>Chamaecyparis lawsoniana</i>	<u>10.0</u> 2.0	160	N – 2.5 S – 2.0 E – 2.0 W – 1.5	<u>3.0</u> N	Early Mature	Fair	1.9	11	C1	Hedgerow conifer
T3	Lawsons Cypress <i>Chamaecyparis lawsoniana</i>	<u>10.0</u> 2.0	220	N – 4.0 S – 1.5 E – 3.0 W – 1.5	<u>1.8</u> N	Early Mature	Fair	2.6	21	C1	Hedgerow conifer
T4	Ash <i>Fraxinus excelsior</i>	<u>10.6</u> 3.5	225	N – 1.0 S – 3.5 E – 3.0 W – 2.5	<u>3.0</u> S	Early Mature	Fair	2.7	22	C1	A self-seeded Ash tree.
T5	Lawsons Cypress <i>Chamaecyparis lawsoniana</i>	<u>11.0</u> 2.5	285	N – 1.5 S – 2.0 E – 2.5 W – 2.0	<u>2.0</u> E	Mature	Fair	3.4	36	C1	Hedgerow conifer
T6	Cherry <i>Prunus avium</i>	<u>11.0</u> 3.5	230	N – 5.0 S – 5.0 E – 3.5 W – 4.0	<u>4.0</u> W	Mature	Fair	2.7	22	C1	North side neighbour's tree; Dense ivy ascending the trunk and branches.

Tree No	Species	Height (M) * Crown Height above GL	DBH (mm) *	Crown Spread (M) *	Height to Lowest Branch (M) Direction of Lowest Branch	Age Range	Condition	RPA Radius (M)	RPA Square metres	BS 5837 Category Rating	Observations and Comments
T7	Cherry <i>Prunus avium</i>	<u>8.0</u> 3.5	278 combined	N – 3.0 S – 3.0 E – 4.0 W – 2.5	<u>2.0</u> S	Mature	Fair	3.3	34	C1	West side neighbour's tree.
T8	Yew <i>Taxus baccata</i>	<u>4.0</u> 1.8	200	N – 3.0 S – 2.0 E – 2.5 W – 2.0	<u>0.5</u> W	Mature	Fair	2.4	18	C1	West side neighbour's tree.
T9	Weeping Birch <i>Betula 'Youngii'</i>	<u>8.0</u> 1.8	380	N – 3.5 S – 4.5 E – 3.0 W – 3.0	<u>2.5</u> W	Mature	Fair to Good	4.5	63	B1	West side neighbour's tree.
T10	Japanese Maple <i>Acer palmatum</i>	<u>4.5</u> 1.8	150	N – 4.0 S – 2.5 E – 3.0 W – 2.5	<u>1.0</u> N	Mature	Fair	1.8	10	C1	North side neighbour's tree

Appendix 6

Tree Quality Assessment and Categorization Criterion

Identification on the plan

Category U: Trees unsuitable for retention;

Trees which are 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. These trees, however, can have existing or potential conservation value. They could, therefore, be up graded from a U category if issues concerning their safety can be appropriately managed.

Dark Red

Trees to be considered for retention;

Category A: trees of high quality

Have an estimated remaining life expectancy of at least 40 years.

Light Green

Category B: Trees of moderate quality

Have an estimated remaining life expectancy of at least 20 years.

Mid Blue

Category C: Trees of low quality.

Have an estimated life expectancy of at least 10 years, or young trees with a stem diameter below 150mm.

Grey

For a tree to qualify under any given category, it should fall within the scope of that categories definition (U, A, B, C).

Trees in categories A to C should then qualify under one or more of three subcategories (1, 2, and 3). The subcategories 1, 2 and 3 are intended to reflect arboricultural and landscape qualities, and cultural values, respectively. These definitions are described below:

Arboricultural Qualities:**Sub-Category A1:**

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).

Sub-Category B1: Trees that might be included in category A, but have been downgraded because of impaired condition (e.g. presence of significant though remediable defects, including unsympathetic past management and storm damage), such that they are unlikely to be suitable for beyond 40 years; or trees lacking the special quality necessary to merit the category A designation.

Sub-Category C1: Unremarkable trees of very limited merit or such impaired condition that they do not qualify in higher categories.

Landscape Qualities:

Sub-Category A2: Trees, groups or woodlands of particular visual importance as arboricultural and / or landscape features.

Sub-Category B2: Trees present in numbers, usually growing as groups or woodlands, such that they attract a higher collective rating than they might as individuals; or trees occurring as collectives but situated so as to make little visual contribution to the wider locality.

Sub-Category C2: Trees present in groups or woodlands, but without this conferring on them significantly greater collective landscape value; and / or trees offering low or only temporary / transient benefits.

Cultural Values:

Sub-Category A3: Trees or woodlands of significant conservation, historical, commercial or other value (e.g. veteran trees or woodland pasture).

Sub-Category B3: Trees with material conservation or other cultural value.

Sub-category C3: Trees with no material conservation or other cultural value.

Appendix 7:

Site Photos

Photo 01:

