Arboricultural Survey

Methodology:
All trees, groups of trees, woodlands, hedges and large shrub groups growing on and/or within influencing distance of the sites red line boundary (RLB) or survey area (as defined by the client), were surveyed and categorised in accordance with the guidance set out in British Standards (BS)5837:2012 Trees in Relation to Design, Demolition and Construction - Recommendations.

Where the Arboriculturist determined it appropriate to do so, trees forming groups and/or areas of woodland (including orchards, wood pasture & historic park land) have been recorded as such.

Survey Limitations:
- The survey was made at ground level using visual observation methods only;
- Detailed examinations, such as climbing inspections and advanced decay detection equipment were not employed, though may form part of the recommendations;
- It is not the purpose or within the scope of this survey to assess trees in detail with regard to tree risk/safety, however where obvious tree risk features/indicators are observed and pose an imminent risk to persons or property, the client will be notified;
- Measurements were taken using specialist equipment such as tapes, lasers & GPS devices;
- Where it was not possible to take accurate measurements (due to site restrictions) values have been estimated;
- Locations & physical dimensions of inaccessible trees have been estimated;
- Arboricultural features found to be of sufficient distance from the defined RLB or outside of the defined scope of the survey (as defined by the client) have been excluded;
- Arboricultural features found to be of insufficient size, as defined by BS 5837:2012 (i.e less than 75mm stem diameter when measured at 1.5m) have been excluded from the survey where the Arboriculturist has determined it appropriate to do so;
- No searches to determine the presence of statutory tree protection on or around the area of survey has been carried out.
- All surveyed trees have been plotted onto a 'base plan' provided by the client, which represents the site in its existing condition, where ever possible this should be a topographical survey carried out by a land surveyor. Acceptable alternatives include a measured survey from an architect or a OS tile from Ordinance Survey. The Survey accuracy can vary depending on the quality of the provided base plan.

Tree Quality Assessment:
Each tree has been assigned a category (**U**, A, **B**, **C**) and one (or more) sub-category (**1**, **2**, **3**) in accordance with Table 1 - cascade chart for tree quality assessment, as contained in British Standards (BS)5837:2012. In addition to the British Standards defined categories, an additional category (**V**) has also been provided in compliance with UK Government guidance for Ancient and Veteran trees/woodland and to help provide clear distinction of these arboricultural features from other trees.

Tree Schedule (TS):
The tree survey schedule contains full details of all collected data for recorded trees, groups, woodlands and hedges. Information includes:
- Sequential reference number and suffix (T, G, W, H) denoting the type of arboricultural feature, i.e. Tree, Group of Trees, Woodland or Hedge;
- Common name;
- Height - recorded in meters (m);
- Stem diameter - recorded in millimeters (mm), measured in accordance with *Figure C.1, Annex C* (BS5837:2012);
- Crown extent - recorded in meters to either the four cardinal or inter-cardinal points (N, E, S, W or NE, SE, SW, NE);
- Canopy clearance - recorded in meters denoting the ground to canopy height at each of the four cardinal or inter-cardinal points (N, E, S, W or NE, SE, SW, NE);
- Age class - including, Newly Planted, Young, Semi-mature, Early-mature, mature & Ancient;
- Physiological condition
- Structural condition
- BS 5837:2012 categorisation and sub-category;
- Estimated remaining life expectancy (<10 Yrs, 10+ Yrs, 20+ Yrs or 40+ Yrs);
- Observations

Root Protection Area (RPA)

In order to avoid damage to the roots or rooting environment of retained trees, the RPA has been plotted around each tree. This is a minimum area (m^2) which should be maintained and left undisturbed around each retained tree.

The RPA is calculated in accordance with chapter 4.6 of (BS)5837:2012 Trees in Relation to Design, Demolition and Construction - Recommendations. The calculated RPA is capped at 707m^2, which is the equivalent to a circle with a 15m radius.

Existing site features such as dwellings, retaining walls, roads, service routs, etc., are likely to be partial or complete barriers to root development. Where existing site features are believed to be significant enough to be considered barriers to root development, the RPAs affected have been modified to appropriately reflect these barriers.

Where RPAs have been modified, they have been done so to equal distances in all directions (with the exception of any identified root barrier) from the trunk of the tree. The RPAs are increased in size (radius) across both the "site" and adjacent land to maintain the area (m^2) as per the original un-modified (circular) RPA.

Survey Definitions

Age Class:
Newly Planted (NP) - A tree that has recently been planted, typically within the last 1-2 years.
Young (Y) - A tree that is well established but still in the early stages of growth;
Semi-mature (SM) - A tree that is significantly developed but has not yet reached full size or growth potential;
Early-mature (EM) - A tree that has reached near full size and may begin to show signs of ageing;
Mature (M) - A tree that has reached its full size and growth potential for its species and surroundings;
Ancient (A) - A tree which is surviving beyond its species typical age range.

Physiological Condition:
Good - Good vitality with no evident signs of physiological dysfunction;
Fair - Moderate vitality with some signs of physiological dysfunction, but unlikely to be of long-term significance and/or reversible;
Poor - Low vitality with significant and/or irreversible physiological dysfunction;
Dead - No vitality.

Structural Condition:
Good - No hazard indicators, with a form typical of the species or growing location;
Fair - Some hazard indicators, but of no long-term significance and/or easily mitigated;
Poor - Significant and/or irreversible hazard indicators that may result in premature failure (whole or in-part);
Not Visible - Restricted view/access prohibiting full visual inspection.

Categories & Life Expectancy:
Category **U** - Trees in such condition that they cannot realistically be retained as living trees in context of the current land use for longer than 10 years.
Category **A** - Trees of high quality with an estimated remaining life expectancy of at least 40 years.
Category **B** - Trees of moderate quality with an estimated remaining life expectancy of at least 20 years.
Category **C** - Trees of low quality with an estimated remaining life expectancy of at least 10 years, or young trees with a stem diameter below 150mm.
Category **V** - Trees which, because of their age, size and condition, is of exceptional biodiversity, cultural or heritage value (Ancient/Veteran Trees); or land which has been continuously wooded since at least 1600 AD (Ancient Woodland).

Sub-categories:
1 - Mainly arboricultural qualities
2 - Mainly landscape qualities
3 - Mainly cultural values, including conservation

No. Individual Trees Surveyed				
U	**A**	**B**	**C**	**V**
2	0	4	17	0

No. Groups/Hedges/Woodlands Surveyed				
U	**A**	**B**	**C**	**V**
0	0	5	0	0

Indicative only

Located in raised planter 1.2m high.

Located in raised planter 1.2m high.

0m 5m 10m 15m 20m

Referenced Documents

Title:	Originator:	Drawing Number:	Key
Topographical Survey	Survey Solutions	65277MCLS - 01	

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https://arbtech.co.uk, 01244 661170

Address:
Piccadilly Gardens, 1b Parker Street, Manchester, M1 1RG

Client:
Aisling Wallace - Civic

Drawing:
Tree Constraints Plan

Project No.:	Drawing No.:	Revision No.:
46241505	TCP01	03

Date:	Scale:	Drawn:
Aug 2026	1:200@A0	GL

Tree Key:

Tree/Group number:	1T	Tree Canopies:		Trunks:	
Root Protection Area:		Ancient / Veteran Tree Buffer Zone:		Ancient woodland Extent (2014a):	
Category 'U' Tree Stems (BS5837):		Category 'U' Tree Groups (BS5837):		Category 'A' Tree Stems (BS5837):	
Category 'A' Tree Groups (BS5837):		Category 'B' Tree Stems (BS5837):		Category 'B' Tree Groups (BS5837):	
Category 'C' Tree Stems (BS5837):		Category 'C' Tree Groups (BS5837):		Category 'V' Tree Stems:	
Category 'V' Groups:		Basic Shading Arc:			

All dimensions should be checked on site. No dimensions are to be scaled from this drawing. Please notify us of any discrepancies found. Arbtech Consulting Ltd. cannot be held responsible for inaccuracies in the base drawing in which this plan is based.
This drawing is designed to reflect the principles of the layout or design only, and relates only to the protection of retained trees.
This drawing is not to be read as a definitive part of the engineering or construction designs or method statement. An architect or structural engineer should be contacted over any matters of construction, detailing or specification and for any standards or regulatory requirements relating to proposed structures, hard surfacing or underground services.
This drawing was produced in colour - a monochrome copy should not be relied upon.

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