

Arboricultural Impact Assessment

232 Hilton Lane, Prestwich, M25 9FX

Prepared for:

LEO PRESTWICH LIMITED

Our Ref: 21/AIA/BURY/06

OCT 2021

Tree Solutions Ltd

T: 01244 389114

E: info@tree-solutions.co.uk

W: www.tree-solutions.co.uk

Contents:

1.0	Instruction
2.0	Statutory Controls & Planning Policy
3.0	The Site
4.0	Development Proposal
5.0	General Constraints Data – Construction Exclusion Zones
6.0	Survey Methodology
7.0	Juxtaposition of Trees & Structures
8.0	Demolition/Development Impact to Trees
9.0	Proposed Revisions
10.0	Conclusions
11.0	Limiting Conditions

<i>Appendix 1</i>	Tree Survey Schedule
<i>Appendix 2</i>	Preliminary Tree Constraints Plan
<i>Appendix 3</i>	Arboricultural Impact Plan

1.0 INSTRUCTION

- 1.1 We have been instructed by Leo Prestwich Limited to carry out an Arboricultural Impact Assessment (AIA) in order to assess the development proposal in relation to trees in accordance with the principles of British Standard 5837 'Trees in Relation to Design, Demolition & Construction - Recommendations' 2012.
- 1.2 We are instructed to prepare a report in order to provide information to assist all parties involved in the planning process to make balanced judgements regarding arboricultural features in relation to the proposed development at 232 Hilton Road, Prestwich, M25 9FX. As such, all trees within influencing distance to the development proposal both on and adjoining the site have been surveyed and are listed within a Tree Survey Schedule (**Appendix 1**) and plotted on all accompanying plans.
- 1.3 The stage 1 tree survey was carried out on 08 October 2021 by Russell Pearce, Consultant to Tree Solutions Ltd. Our appraisal of the mechanical integrity of trees on the site is enough to inform the current project. The assessment of trees is carried out from ground level without invasive investigation and the disclosure of hidden defects cannot therefore be expected. Whilst the survey is not specifically commissioned to report on matters of tree safety, we report obvious defects that are significant in relation to the existing and proposed land use. We do not carry out detailed safety inspections unless specifically instructed to do so in writing and have not carried out such inspections of trees on the proposal site.
- 1.4 Four individual trees (T1–T4) and three groups (G1–G3) were surveyed and mapped on a Preliminary Tree Constraints Plan and Impact Assessment Plan Ref: 21/AIA/Bury/06 Drawing No. 1&2 at **Appendix 2/3**. All arboricultural information recorded during the survey is presented within a schedule at **Appendix 1**.
- 1.5 The Arboricultural Impact Assessment is based on proposed site layout plan Ref: 5821, Drawing No: P-002 (Rev A) provided by NC Architecture.

2.0 STATUTORY CONTROLS

- 2.1 A search on Bury Council's interactive map on 15/10/2021 revealed that no trees on or adjoining the site are subject to a Tree Preservation Order and the land does not fall within a designated Conservation Area. As such, statutory planning consent is not required prior to undertaking any tree works.

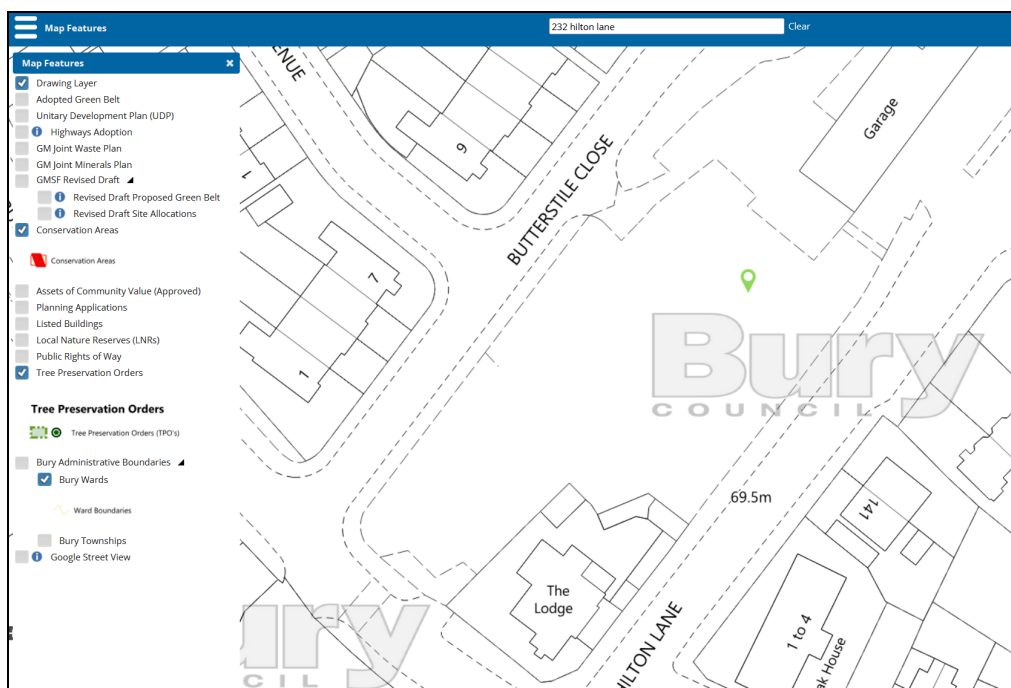


Plate 1 - Screenshot extract from Bury Council interactive map revealing no protected trees on site

2.2 Protected Species

- 2.2.1 Mature trees often contain cavities, crevices and hollows that offer potential habitat for species such as bats and barn owls. Both are afforded protection under the Schedule 5 of the Wildlife and Countryside Act 1981 (as amended). Bats are also protected under The Conservation of Habitats and Species Regulations 2010 (as amended).

2.3 Wildlife Habitats

- 2.3.1 Trees and hedgerows of most species provide valuable nesting sites for a wide range of birds, and it is likely that nesting birds will be present on the site during the period March to September.

3.0 THE SITE

- 3.1 Vacant building plot on corner of Hilton Lane and Butterstile Lane. Land is unkempt and boarded off with only low-grade tree cover of temporary/transient landscape benefit/value.

4.0 DEVELOPMENT PROPOSAL

- 4.1 Residential development with associated vehicular access and parking.

5.0 GENERAL CONSTRAINTS DATA - CONSTRUCTION EXCLUSION ZONES (CEZ's)

5.1 GENERAL

- 5.1.1 The three phases of an AIA were outlined in Section 1. In addition, during the development process for retention trees, there may be three and even four constraints to consider: Construction Exclusion Zone (CEZ's):

- CEZ 1: Root Protection Area (see 5.2)
- CEZ 2: Tree Crown Protection (see 5.3)
- CEZ 3: Tree Dominance (see 5.4)
- CEZ 4: New Tree Planting Zone (see 5.5)

CEZ's are explained below:

5.2 CEZ 1: ROOT PROTECTION AREA (RPA)

- 5.2.1 The RPA, calculated in m², should be protected before and during any demolition/construction works. This ensures the effective retention of trees by safeguarding a reliable quantum of functioning tree roots. The RPA is based on a radial measure from the centre of the tree stem, which is calculated by multiplying the stem diameter by a factor of twelve or by the (mean stem diameter²) x number of stems for multi-stemmed trees. With the AIA 1, the RPA is only shown indicatively on the preliminary TCP, as its shape may be subject to amendment as the design progresses.
- 5.2.2 During the AIA 2, the derived radial measure is converted by the arboriculturalist into the actual area to be protected, having due regard to prevailing site conditions and how these may have affected the tree(s), particularly in relation to factors affecting their likely rooting disposition. The RPA for each tree should initially be plotted as a circle centred on the base of the stem. Where pre-existing site conditions or other factors indicate that rooting has occurred asymmetrically, a polygon of equivalent area should be produced. Modifications to the shape of the RPA should reflect a soundly based arboricultural assessment of likely root distribution.
- 5.2.3 The means of protecting the RPA will include the installation of tree protective fencing prior to the start of any demolition or construction work on site. The prohibition of various activities within the RPA must be adhered to (e.g. mechanical excavation, soil stripping, fire lighting, material storage, lowering levels and creating excessive sealed surfacing) and may include the use of temporary ground protection and/or special engineering solutions where construction is proposed near to retention trees or within the RPA.

5.3 CEZ 2: TREE CROWN PROTECTION ZONE

- 5.3.1 This is the area above ground occupied by the crown (branches) of the tree, along with allowances for working space (safe working area) and if appropriate, for future growth. The extent of CEZ 2 is determined by considering the existing and future crown spread of the tree(s), bearing in mind the possibility of this being modified by an acceptable quantum of pruning.

5.4 CEZ 3: TREE DOMINANCE ZONE

- 5.4.1 N/A as all trees are to be removed.

5.5 CEZ 4: NEW PLANTING ZONE

- 5.5.1 In some cases, it may be appropriate to identify and protect areas intended for new landscape planting, which can fail to establish if the soil has been heavily compacted or contaminated during the demolition/construction process. The means of protecting CEZ 4 will either be by fencing it off prior to the start of works on site, or by soil remediation once construction has finished (and prior to the start of planting). Topsoil protection in areas destined for new planting is frequently an economy measure, saving on plant replacement and soil structure remediation.

6.0 SURVEY METHODOLOGY

- 6.1 The method used in the preparation of this report is based on the principles of BS 5837: 2012.

1. Tree heights were surveyed to the nearest 1m
2. Trunk diameters were measured by use of forestry girth tape
3. The category assessment (Table 1) on which the trees is based include current and long-term
4. arboricultural, landscape, cultural and conservation values (BS5837: 2012). This table can be found at **Appendix 1**
5. For clarity, the grading system is summarised from **Table 2** of the BS as follows:

U grade – trees for removal, effective for less than 10 years

A grade – trees of high quality and value, effective for more than 40 years

B grade – trees of moderate quality and value, effective for more than 20 years

C grade – trees of low quality and value, effective for 10 years

Note: We have indicated colour coding on the drawing and therefore a monochrome copy should not be relied on.

6.2 SOIL ASSESSMENT

- 6.2.1 N/A all trees are to be removed.

7.0 JUXTAPOSITION OF TREES AND STRUCTURES

7.1 Below ground constraints

- 7.1.1 The below ground constraints are generally summarised as the root protection area (RPA). The shape of the RPA and its exact location will depend upon arboricultural considerations including likely tolerance of the tree to root disturbance; morphology and disposition of the roots when known influenced by past or existing site conditions; soil type and structure; and topography and drainage.
- 7.1.2 The purpose of the RPA is to prevent physical damage to tree roots and to prevent damage to the soil structure. Tree roots are damaged by soil compaction, changes in soil levels or soil contamination which could reduce tree health and/or stability.
- 7.1.3 Root patterns are affected by topography and characteristics of the soil or substrate. Where trees are located within proximity to existing hard standing or underground physical barriers, they are unlikely to have an even distribution of lateral roots due to restrictions in root growth created by compacted sub-grades beneath. The RPA of all trees have been plotted unmodified as there were no significant underground barriers present to prevent good radial root spread.

7.2 Underground Services

- 7.2.1 N/A all trees are to be removed.

8.0 DEVELOPMENT IMPACT TO TREES

- 8.1 Tree Solutions carried out a stage one preliminary tree survey and provided the project architect with a report in which all existing trees and their respective Root Protection Areas (RPA) were identified and plotted on a tree constraints and impact assessment plan. The architect has incorporated the design and layout advice contained within the stage 1 survey and input from Tree Solutions to ensure the best quality trees can be retained with no adverse construction impacts. We are satisfied that the layout has taken the long-term future of the most important trees and into account and is in accordance with The National Planning Policy Framework (2021), Bury Council Planning Policies and recommendations contained with BS5837: 2012.
- 8.2 We have recommended the removal of all trees within the site boundary in order to accommodate the proposed development. These trees are unremarkable, low-grade specimens that offer no material conservation or cultural value. They currently only provide temporary/transient landscape benefit that can be easily mitigated by better new quality tree planting that will radically enhance the landscape character and setting of the locale. All trees have therefore been categorised as 'C' grade as their retention value is disproportionate to the value of providing housing to the area. As such, we can see no valid arboricultural grounds to object to this application.



P1 – site viewed from Buttersile Lane

9.0 PROPOSED REVISIONS TO THE SCHEME

- 9.1 We advise that all proposed revisions having implications for trees should be referred to us for review.

10.0 CONCLUSIONS

- 10.1 BS 5837: 2012 contains clear and current recommendations for a best practice approach to the assessment, retention, and protection of trees on development sites. The proposed development has followed this guidance by:
- Seeking arboricultural advice and undertaking a phase 1 preliminary tree survey in order to inform the layout and design of the proposed development
 - Respecting the constraints posed to development of the site by high or moderate quality trees
 - Acting upon arboricultural advice throughout the design process in order to obtain the best development proposal whilst considering the current and future tree requirements
 - New landscaping associated with this development will enhance the amenity and landscape value of the site well into the future making this the most sustainable option to ensuring continued tree cover

11.0 LIMITING CONDITIONS

Unless stated otherwise:

Information contained in this report covers only those trees that were examined and reflects the condition of those trees at the time of the inspection.

The inspection is limited to visual examination of the subject trees from ground level only and without dissection, excavation, probing or coring. There is no warranty or guarantee, expressed or implied, that problems or deficiencies of the subject trees may not arise in the future.

This report has been prepared for the sole use and benefit of the client. Any liability of Tree Solutions shall not be extended to any third party.

No part of this report can be reproduced without the authorisation of *Tree Solutions Ltd*.

Appendix One

Tree Survey Schedule

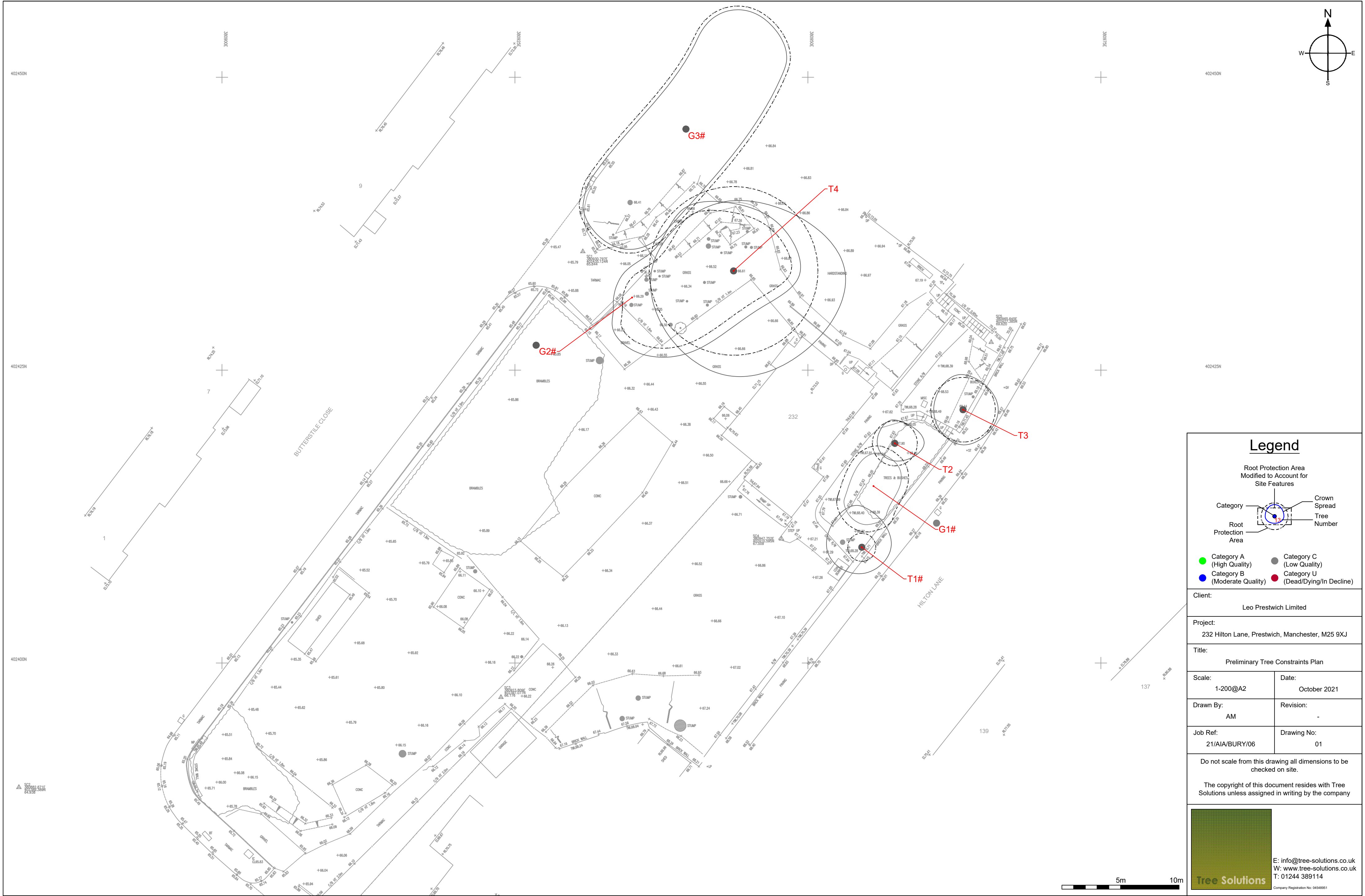
TREE SURVEY SCHEDULE (BS5837: 2012)											Tree Solutions Arboricultural Consultants					
Site: 232 HILTON LANE, PRESTWICH, M25 9XJ											Surveyor: RUSSELL REARCE		Page 1 of 1			
Client: LEO PRESTWICH LTD											Assessment Dates: 08-Oct-21					
Brief: ARBORICULTURAL IMPACT ASSESSMENT											Viewing Conditions: CLEAR					
											Job Reference: 21/AIA/BURY/06					
Tree Number	Name	Age	Height (m)	Crown clear	North	East	South	West	Diameter (mm)	Vitality	Comments	E.R.C	Management	Category	RPA (m)	RPA (m²)
T1	Elm	Y	4	0	3.5	2.5	2.25	3	100	Good	Multistemmed at base. With spreading crown. No access to stem - dense brambles. DBH estimated.	10+	Remove for development & replace with betetr quality specimsn tree/s	C1	1.2	5
T2	Sycamore	Y	6	0	2	2.5	1.5	1.5	155	Good	90, 90, 90. Bifurcated at base. Young vigourous tree. Tarspot through crown.	10+	As T1	C1	1.8	11
T3	Rhus typhina	EM	6	1	3	3	3	2.5	230	Moderate	Good form. Some suppression by adjacent trees.	10+	As T1	C1	2.7	24
T4	Cherry	EM	15	3	6	9.5	9	7	600	Moderate	No access to stem, dense vegetation and brambles. DBH estimated. Dense vegetation and ivy obscuring view of stem and primary branch unions. Asymmetric crown with large gap, appears to be from previous limb failure. Poor form. Low aesthetic value.	10+	As T1	C1	7.2	163
G1	Lawson's cypress	SM	9	0.5	2	2	2	2	220	Good	Good form and vitality. No defects noted. Limited access to stems. DBH estimated avg.	10	As T1	C2	2.6	22
G2	Sycamore	Y	4	0	1.75	1.75	1.75	1.75	80	Good	Young self-set tree with vigourous growth. Low aesthetic value. Privet and elm also within group.	10+	As T1	C2	1	3
G3	Leyland cypress	EM	6	1	4	4	4	4	340	Moderate	Part of linear group of x5 with more 3rd party trees contiguous. Previously topped at current height with large diameter cuts. Some minor decay in stems at this point. Low aesthetic value.	10+	Remove trees within site boundary	C2	4	52
HEADINGS & ABBREVIATIONS																
SPECIES:		COMMON NAME (LATIN NAMES AVAILABLE ON REQUEST)														
AGE RANGE/LIFE STAGE:		Y = YOUNG, SM = SEMI MATURE, EM = EARLY MATURE, M = MATURE, PM = POST MATURE														
HEIGHT:		ESTIMATED AND RECORDED IN METRES. APPROXIMATELY 1 IN 10 TREES ARE MEASURED USING A CLINOMETER AND THE REMAINDER ESTIMATED AGAINST THE MEASURED TREES														
CROWN SPREAD:		MAXIMUM CROWN RADIUS MEASURED TO THE FOUR CARDINAL COMPASS POINTS FOR SINGLE SPECIMENS ONLY (MEASUREMENT FOR TREE GROUPS - MAXIMUM RADIUS OF THE GROUP)														
CROWN CLEARANCE & DIRECTION OF GROWTH:		HEIGHT IN METERS OF CROWN CLEARANCE ABOVE ADJACENT GROUND LEVEL (TO INFORM ON GROUND CLEARANCE, CROWN/STEM RATIO AND SHADING)														
STEM DIA/MULTI-STEM DIA:		STEM DIAMETER - MEASURED AT APPROXIMATELY 1.5 METRES ABOVE GROUND LEVEL OR A COMBINATION OF STEMS FOR MULTI-STEMMED TREES														
VITALITY:		A MEASURE OF PHYSIOLOGICAL CONDITION. D = DEAD, MD = MORIBUND, P = POOR, M = MODERATE, G = GOOD														
E.R.C. = ESTIMATED REMAINING CONTRIBUTION:		RELATIVE USEFUL LIFE EXPECTANCY (YEARS)														
BS 5837 CATEGORY & SUB-CATEGORY GRADING:		A = HIGH QUALITY AND VALUE, B = MODERATE QUALITY AND VALUE, C = LOW QUALITY AND VALUE, U = UNSUITABLE FOR RETENTION (SUB-CATEGORY REFERS TO ARBORICULTURAL, LANDSCAPE AND CULTURAL/CONSERVATION VALUES)														
BS 5837 RADIUS & BS 5837 RPA:		PROTECTIVE DISTANCE - RADIUS FROM THE CENTRE OF THE STEM TO THE LINE OF TREE PROTECTION (CONSTRUCTION EXCLUSION ZONE - CEZ) AND PROTECTIVE BARRIER ROOT PROTECTION AREA - BS 5837 (2012) ANNEX D (THE RECOMMENDATIONS STATE THAT THE RPA SHOULD BE CAPPED AT 707 M ⁻²) NOTE - ALL CALCULATIONS ROUNDED TO NEAREST DECIMAL														

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 4.5.7.</i>			See Table 2
	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)	See Table 2
Category B Trees of moderate quality with an estimated remaining life expectancy of at least 20 years	Trees that might be included in category A, but are 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 retention for beyond 40 years; or trees lacking the special quality necessary to merit the category A designation	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	Trees with material conservation or other cultural value	See Table 2
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 150 mm	Unremarkable trees of very limited merit or such impaired condition that they do not qualify in higher categories	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 landscape benefits	Trees with no material conservation or other cultural value	See Table 2

Appendix Two

Preliminary Tree Constraints Plan



Legend

Root Protection Area
Modified to Account for
Site Features

Category

Root Protection Area

Crown Spread

Tree Number

Category A
(High Quality)

Category B
(Moderate Quality)

Category C
(Low Quality)

Category U
(Dead/Dying/In Decline)

Client: Leo Prestwich Limited	
Project: 232 Hilton Lane, Prestwich, Manchester, M25 9XJ	
Title: Preliminary Tree Constraints Plan	
Scale: 1-200@A2	Date: October 2021
Drawn By: AM	Revision: -
Job Ref: 21/AIA/BURY/06	Drawing No: 01

Do not scale from this drawing all dimensions to be checked on site.

The copyright of this document resides with Tree Solutions unless assigned in writing by the company

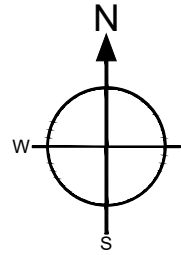
Tree Solutions

E: info@tree-solutions.co.uk
W: www.tree-solutions.co.uk
T: 01244 389114

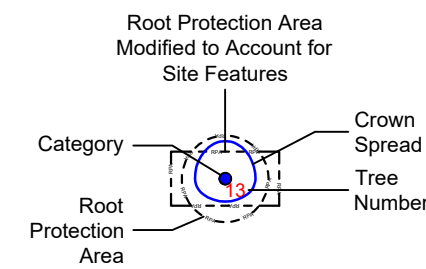
Company Registration No: 04548951

Appendix Three

Impact Assessment Plan



Legend



- Category A (High Quality)
- Category B (Moderate Quality)
- Category C (Low Quality)
- Category U (Dead/Dying/In Decline)
- Tree Proposed for Removal

Client: Leo Prestwich Limited	
Project: 232 Hilton Lane, Prestwich, Manchester, M25 9XJ	
Title: Arboricultural Impact Assessment	
Scale: 1-200@A2	Date: October 2021
Drawn By: AM	Revision: -
Job Ref: 21/AI/BURY/06	Drawing No: 02
Do not scale from this drawing all dimensions to be checked on site.	
The copyright of this document resides with Tree Solutions unless assigned in writing by the company	



E: info@tree-solutions.co.uk
W: www.tree-solutions.co.uk
T: 01244 389114

Company Registration No: 04548951