BRITISH STANDARD 5837 TREE SURVEYS ARBORICULTURAL IMPLICATION STUDIES TPO/PLANNIG ADVICE/ PROJECT MANAGEMENT
TREE INVENTORIES AND RISK ASSESSMENTS WOODLAND MANAGEMENT PLANS TREE PLANTING SCHEMES TPO RE-SURVEY






# ARBORICULTURAL IMPLICATIONS ASSESSMENT

PROPOSED DEVELOPMENT

AT

WITHINGTON GOLF CLUB
M20 2UE

Author: C. Salisbury
Date: 22 March 2020
Ref: TRE/WGC

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## 1.0 Introduction

1.1 Mulberry Tree Management were instructed by Withington Golf Club Limited, to carry out an arboricultural survey of trees at their site in Withington.

1.2 This report details the arboricultural implications of developing the site, including:

- a survey of the trees on and near the development which may impact the proposal from ground level, noting their location, species and all relevant parameters, i.e. stem diameter, height, crown spread, condition etc;
- providing advice on the removal, retention and management of trees;
- assessment of the potential effects of the proposal on retained trees and vice versa;
- assessment of the requirement for tree protection for the duration of the works;
- mitigation for any loss;
- preparation of a tree schedule;
- and report on the above matters.

1.3 The survey was carried out on 15 March 2020 by means of inspection from ground level by an experienced and qualified arboriculturalist. The inspection can be restricted in cases where trees were Ivy clad or surrounded by vegetation.

1.4 Under *BS5837: 2012 Trees in Relation to Construction - Recommendations*, the assessment of trees is made objectively. The tree categorisation method identifies the quality and value of the existing tree stock, allowing informed decisions to be made concerning development design layout.

1.5 The following documents have been made available by the client:

- Drawing- 20 204 planning layout 21.02.20.dwg

1.6 The supplied drawing included some tree positions plotted. Any dimensions regarding tree positions and protective fencing must be checked on site.

1.7 Weather conditions during the survey were dry and windy.

1.8 The survey was carried out noting the conditions of the trees at the time of inspection. As trees are part of the natural environment, conditions can naturally change; therefore the contents of this report are valid for one year only. After this period, re-inspection may be necessary.

## 2.0 Survey Methodology

2.1 The trees were surveyed (prefixed T, or G for group) and recorded in the tree schedule in appendix one. Where groups are recorded, average height and diameter at breast height (DBH) of the trees in the group are reported. Where access to the base of any trees was limited, stem size was estimated.

2.2 All the trees were assessed using: a grading A to C (retention) and U (removal); condition and age class as defined in appendix two.

2.3 Where appropriate, canopy spread for each tree was recorded at four cardinal points in order to reproduce an accurate representation of the crown shape of the tree on the tree plan in appendix three.

2.4 The survey included all trees within the proposal area and trees near to the proposal.

## 3.0 Development Proposals

3.1 Due to the proposed development and its associated infrastructure there are a number of locations where the proposals are in close proximity to the trees surveyed. The Site Layout Plan within appendix three identifies the trees in relation to the proposed development.

3.2 In order to fully assess the impact of the proposals an Impact Table has been created detailing each tree, which shows the proximity of the associated works to the tree.

3.3 This can then be assessed in accordance with BS 5837:2012 to determine whether the development will have a detrimental impact on the health of each tree. Once this has been determined remedial measures can be detailed to reduce the impact the proposals will have on the treescape.

3.4 Impact Table:-

| Tree No. | Root Protection Area identified in Table 2 of BS 5837:2012 | Distance to Proposed Hard Standing (m) | Distance to Proposed Development (m) | Can the Tree/s be Successfully Retained |
|---|---|---|---|---|
| T1 | 203m$^2$ | N/A | 7.90 | Yes |
| T2 | 41m$^2$ | N/A | 2.80 | Yes as outlined in section 5.1 below |
| G1 | Fell Due to Development | | | |
| G2 | 157m$^2$ | N/A | 5.20 | Yes as outlined in section 5.1 below |

## 4.0 Impact Assessment

4.1 To assess the implications of the Impact Table each tree can be categorised in the following way: -

| | Trees to be retained | | Trees to be removed | |
|---|---|---|---|---|
| | With No Impact | With detailed construction | Due to Condition | Due to Development |
| Tree No. | T1, T2 & G2 | N/A | N/A | G1 |

## 5.0 Mitigation Proposals

### 5.1 Development Construction

5.2.1 As shown above, the Impact Table raises concern of the proximity of the proposed excavation for the development to T2 & G2 and the effect the proposals would have on the Safe Useful Life Expectancy of the trees.

5.2.2 Section 7.5.3 of BS 5837:2012 advises that where a slab is to be formed within the root protection area it should not exceed an area greater than 20% of any existing unsurfaced ground. The table below details the amount of new surface proposed within the RPA of the tree.

| Tree No | Total Area m2 of RPA | Total m2 of New Development within the RPA | Percentage of Slab within the RPA |
|---|---|---|---|
| T2 | 41 | 2.5 | 6.1% |
| G2 | 157 | 17.7 | 11.3% |

5.2.3 As you can see form the table above the proposed excavation does not exceed 20% of the RPA. It is therefore felt that the proposed development will not have a detrimental impact upon the existing trees.

## 6.0 Conclusions and Arboricultural Recommendations

6.1 The tree categorisation method identifies the quality and value of the existing tree stock but it is not meant to be interpreted rigidly and is presented in order to form a balanced judgement on tree retention and removal.

6.2 A precautionary method of working near trees is detailed in the accompanying Arboricultural Method Statement.

6.3 Following site development, regular (annual or biannual) inspections of all retained trees should be undertaken by a qualified Arboricultural Consultant.

6.4 It is considered that in following the advice in this document, any negative factors affecting trees on the site will be minimised.

# Appendix One

# Tree Survey Schedule

TREE SURVEY SCHEDULE

| Arboricultural Data Sheet: | | | | | Date of Survey: 15/03/20 | | | | | Surveyor: C. Salisbury | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Tree No. | Species | DBH (mm) | Height (m) | Age | Crown Spread (m) | | | | Crown clearance | Condition rating | Comments and preliminary management recommendations | Estimated remaining contribution | Tree quality category rating |
| | | | | | **N** | **E** | **S** | **W** | | | | | |
| T1 | Lombardy Poplar | 670 | 22.20 | FM | 1.5 | 1.5 | 1.5 | 1.5 | 2.20 | B/C | A co-dominant specimen with reasonable form but evidence of slight basal decay. This tree is reaching the end of its safe useful life expectancy. | 10 – 20 | **C2** |
| T2 | Cherry | 300 | 12.60 | EM | 4.0 | 3.5 | 3.5 | 3.5 | 0.40 | B | A co-dominant specimen with reasonable form situated adjacent to car parking. | 40 – 60 | **C2** |
| G1 | 6 x Lombardy Poplar | 470< | 20.40 | FM | - | - | - | - | 2.00 | B/C | A linear belt with reasonable form situated adjacent to car parking. These trees are reaching the end of their safe useful life expectancy. | 10 – 20 | **C2** |
| G2 | 2 x Lombardy Poplar | 590 | 21.60 | FM | - | - | - | - | 4.00 | B/C | A linear belt with reasonable form situated adjacent to car parking. These trees are reaching the end of their safe useful life expectancy and causing root damage. | 10 – 20 | **C2** |

# Appendix Two

# Tree Survey Key

| Trees for removal | | | |
|---|---|---|---|
| Category and definition | Criteria | | |
| Category U<br>Those in such a condition that any existing value would be lost within 10 years and which should, in the current context, be removed for reasons of sound arboricultural management | 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 R category trees (i.e. where, for whatever reason, the loss of companion shelter cannot be mitigated by pruning)<br>Trees that are dead or are showing signs of significant, immediate, and irreversible overall decline<br>Trees infected with pathogens of significance to the health and/or safety of other trees nearby (e.g. Dutch elm disease), or very low quality trees suppressing adjacent trees of better quality<br>**Note** – Habitat reinstatement may be appropriate (e.g. R category tree used as a bat roost: installation of bat box in nearby tree). | | |
| Trees to be considered for retention | | | |
| Category and definition | Criteria - Subcategories | | |
| | 1 Arboriculture values | 2 Landscape values | 3 Conservation values |
| Category A<br>**Those of high quality and value**: in such a condition as to be able to make a substantial contribution (a minimum 40 years is suggested) | Trees that are particularly good examples of their species, especially if rare or unusual, or essential components of groups, or of formal or semi-formal arboriculture features (e.g. the dominant and/or principal trees within an avenue) | Trees, groups or woodlands which provide a definite screening or softening effect to the locality in relation to views into or out of the site, or those of particular visual importance (e.g. avenues or other arboricultural features assessed as groups) | Trees, groups or woodlands of significant conservation, historical, commemorative or other value (e.g. veteran trees or wood pasture) |
| Category B<br>**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 (e.g. presence of remediable defects including unsympathetic past management and minor storm damage) | Trees present in numbers, usually as groups or woodlands, such that they form distinct landscape features, thereby attracting a higher collective rating than they might as individuals but which are not, individually, essential components of formal or semi-formal arboriculture features (e.g. trees of moderate quality within avenue that includes better, A category specimens), or trees situated mainly internally to the site, therefore individually having little impact on the wider locality | Trees with clearly identifiable conservation or other cultural benefits |
| Category C<br>**Those 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 |
| | **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 150 mm should be considered for relocation | | |

**Age Class**

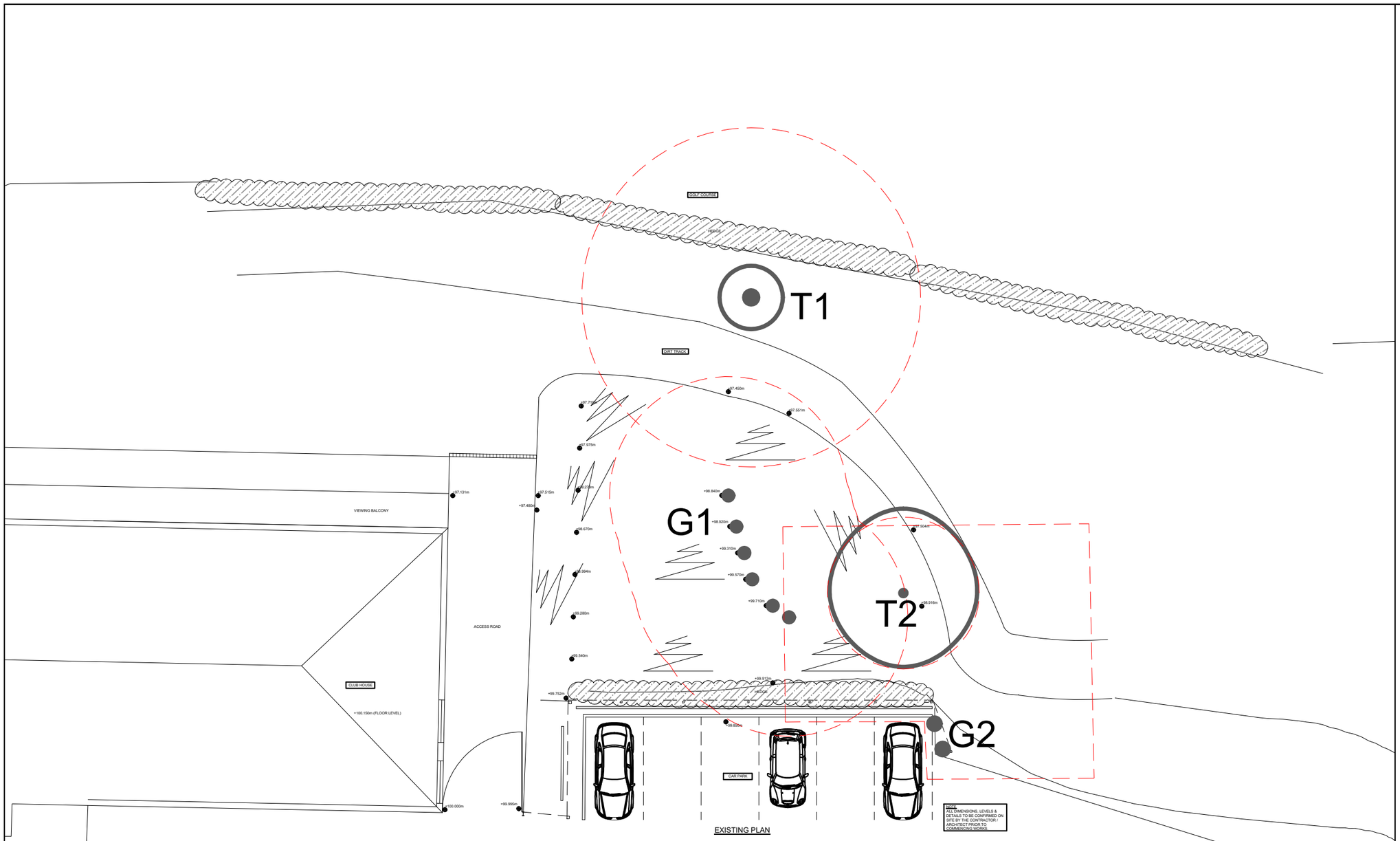
| | | |
|---|---|---|
| Y | Young | Trees that have not yet established |
| SM | Semi-Mature | Established trees up to 1/3 of expected height and crown |
| EM | Early mature | Between 1/3 and 2/3 expected height and crown |
| M | Mature | Between 2/3 and full expected height and crown |
| FM | Fully Mature | Full expected height and crown |
| OM | Over-Mature | Crown beginning to break up and decrease in size |
| S | Senescent | Crown in advanced stage of break-up |

**Condition**

| | |
|---|---|
| A | Good |
| B | Fair |
| C | Poor |
| D | Dead |

# Appendix Three

# Plans




EXISTING PLAN

Category A Trees

Category B Trees

Category C Trees

Category U Trees

Root protection area

Mulberry TMC
Adamson House
Towers Business Park
Wilmslow Road
Didsbury
M20 2YY

Tel: 0161 955 3628
Email: info@mulberrytmc.co.uk

Site Address:
Withington Golf Club
Withington

Drawing Title:
BS5837 Plan

Drawing No:
WGC/BS/01

| Date: | Scale: | Drawn by: |
|---|---|---|
| 21/03/2020 | 1:200@A3 | CS |

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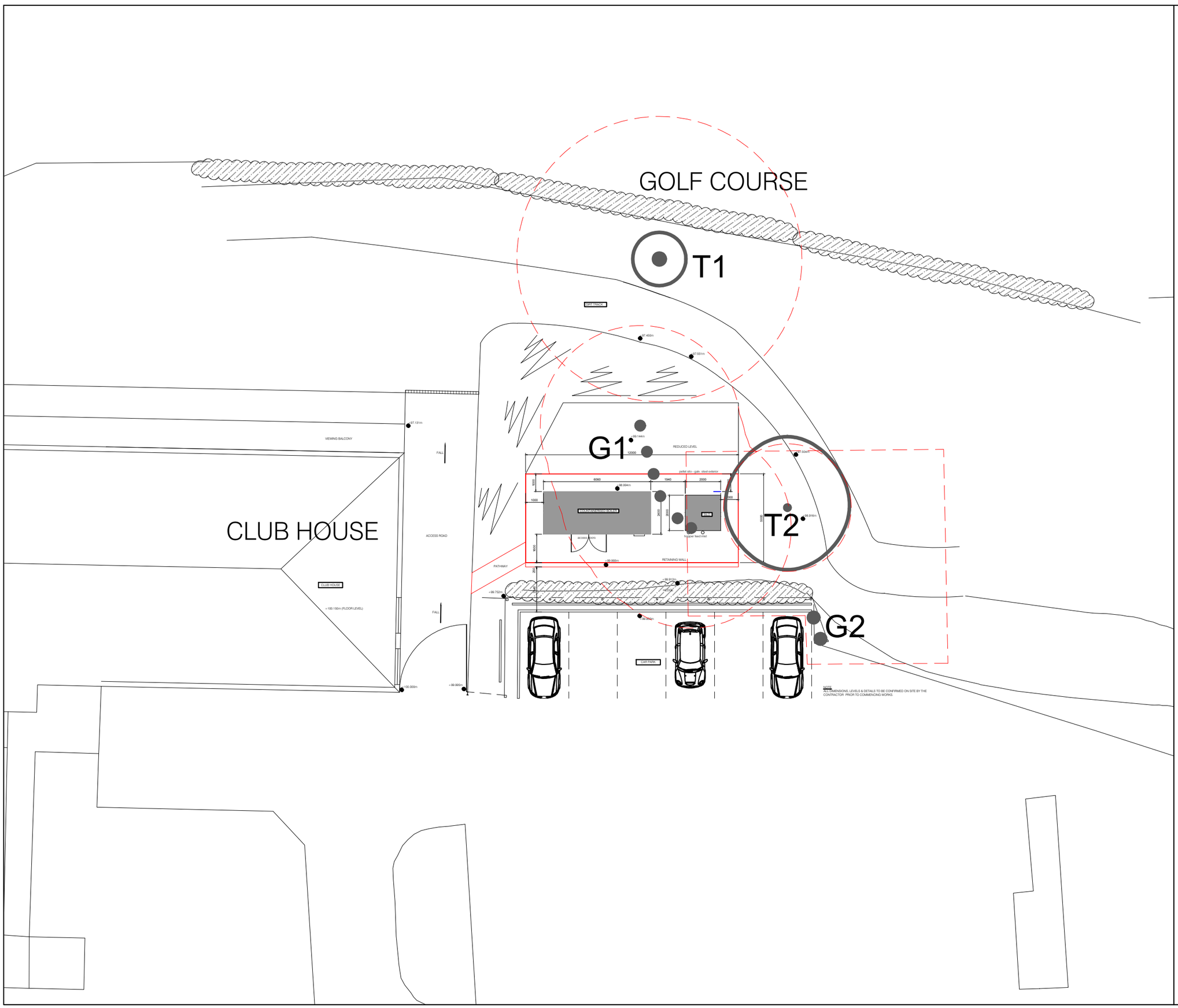


Category A Trees

Category B Trees

Category C Trees

Category U Trees

Root protection area

Mulberry TMC
Adamson House
Towers Business Park
Wilmslow Road
Didsbury
M20 2YY

Tel: 0161 955 3628
Email: info@mulberrytmc.co.uk

Site Address:
Withington Golf Club
Withington

Drawing Title:
AIS Plan

Drawing No:
WGC/AIS/01

| Date: | Scale: | Drawn by: |
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