

# ARBORICULTURAL IMPACT ASSESSMENT AND METHOD STATEMENT

**49 Barn Hill, HA9 9LL**

Report by

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On the instructions of Mohammed Ali

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## 1 Report summary

- 1.1.1 This report has been prepared to accompany the planning application for the refurbishment at 49 Barn Hill, HA9 9LL.
- 1.1.2 The wooden box will be required around the trunk of T5 Cherry plum as precaution of potential damage caused by development activity.
- 1.1.3 The tree fencing will be required around all retained trees (Refer Appendix 3).
- 1.1.4 Provided precautions to protect the identified trees are specified and implemented through the measures included in this report; the development proposal will have little or negligible impact on the retained trees or their wider contribution to an area amenity and character if the methods detailed in this report will be followed.

## 2 Introduction and report background

### 2.1 Instruction

- 2.1.1 I have been instructed by Mohammed Ali to carry out tree survey and produce the arboricultural report in support of a planning application in relation to the property refurbishment and landscape works at 49 Barn Hill, HA9 9LL.
- 2.1.2 The purpose of the survey is to cover trees within the site boundary and its immediate curtilage to assess the impact of the development on trees and the impact of retained trees on the development. The Section 5 Arboricultural Method Statement (Section 5 of this report) specifies the principles, which need to be adopted during the demolition and construction of the development. Although any specific activities proposed in RPAs may require agreement by LPA if requested in reserved matters stage. The report produced on the survey data allows the Local Planning Authority (LPA) to assess information about trees as part of the planning submission following principles of British Standard BS5837:2012 Trees in relation to design, demolition and construction – Recommendations.

### 2.2 Methodology

- 2.2.1 The methodology of Visual Tree Assessment (VTA), described by Mattheck (2007), was followed. The survey covers trees with a trunk diameter of 75mm or above and any significant vegetation on the development site.
- 2.2.2 The best intentions were made to produce accurate measurements; however, some dimensions were estimated due to the limitation of the access, dense undergrowth e.g.
- 2.2.3 Data collected for each tree includes the following information:
- Sequential reference number, i.e. T1, T2, T3 etc.
  - Species (Botanical Name in Latin)
  - Height (in meters).
  - Stem diameter recorded in mm
  - Branch Spread, recorded in meters at the extents of the 4 Cardinal Points, i.e. North, East, South & West.
  - Ground clearance, representing level of first significant branching or canopy

- Life stage: Y – Young, SM – Semi Mature, M – Mature
- Condition comment: structural and/or physiological condition.
- Overall condition: Good, Moderate, Poor, In decline
- Estimated remaining contribution: >10 years, 10 + years, 20 + years, 30+ years, 40 + years.
- BS 5837:2012 Category ‘U’ or ‘A’ to ‘C’ grading with the subcategory 1, 2 or 3
- Tree Work recommendations in the context of the site current use, during the development and after the development.

2.2.4 Trees were categorized into ‘A’, ‘B’, ‘C’ and ‘U’ category graded in the guidance of BS5837: 2012.

- Category **A** – trees of high quality and value, with an estimated life expectancy of at least 40 years.
- Category **B** – trees of moderate quality and value. An estimated life expectancy of at least 20 years.
- Category **C** – trees of lower quality and value. An estimated life expectancy of at least 10 years, and with a stem diameter of up to 150mm measured at 1.5m from ground level.
- Category **U** – dead, dying or unsuitable for retention. Life expectancy of less than 10 years

### 2.3 Limitation

2.3.1 The survey was undertaken from the ground level using basic tools without detailed investigations. The data collected can be found in the tree schedule in Appendix 2.

2.3.2 The tree condition can rapidly change due to unpredictable factors, such as climatic and manmade events. The risk assessment is based on the factors apparent at the time of the site visit. The re-inspection of trees for health and safety condition should be made on an annual basis.

2.3.3 The soil assessment has not been conducted and detailed soil analysis should be undertaken, or data about the soil assessment should be provided.

### 3 The site visit and observations

#### 3.1 The site

3.1.1 A site visit was conducted on 9<sup>th</sup> January 2021 to carry out the survey.

#### 3.2 Tree population summary

3.2.1 The tree survey identified total of 4 individual trees and 1 tree group from which:

- All identified features were identified as unremarkable trees due to limited life expectancy 10+ years and impaired condition or being young trees to qualify to higher category and such the trees were graded as 'C' category.

3.2.2 All trees were graded in accordance with BS5837:2012 and data are summarized in Appendix 2 and the Tree Protection Plan indicating trees location in Appendix 3.

## 4 Arboricultural impact statement

### 4.1 The proposal

4.1.1 The latest proposal seeks refurbishment of the existing building into two residential units with separated gardens. (Figure 1)

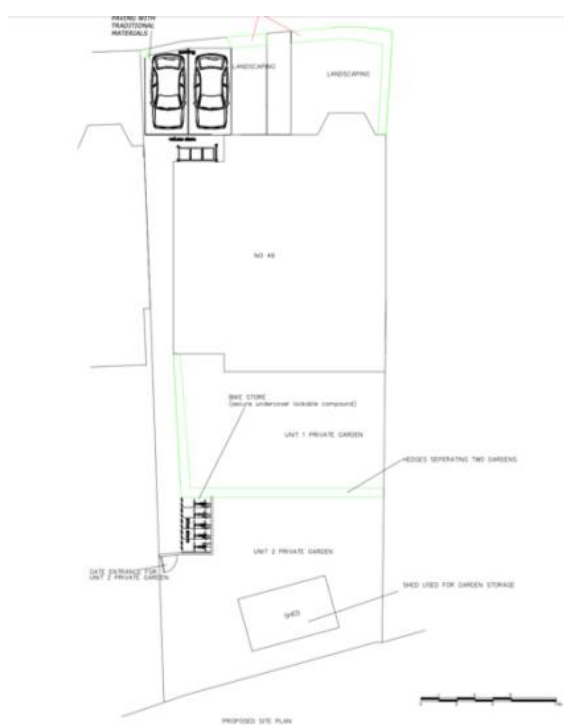
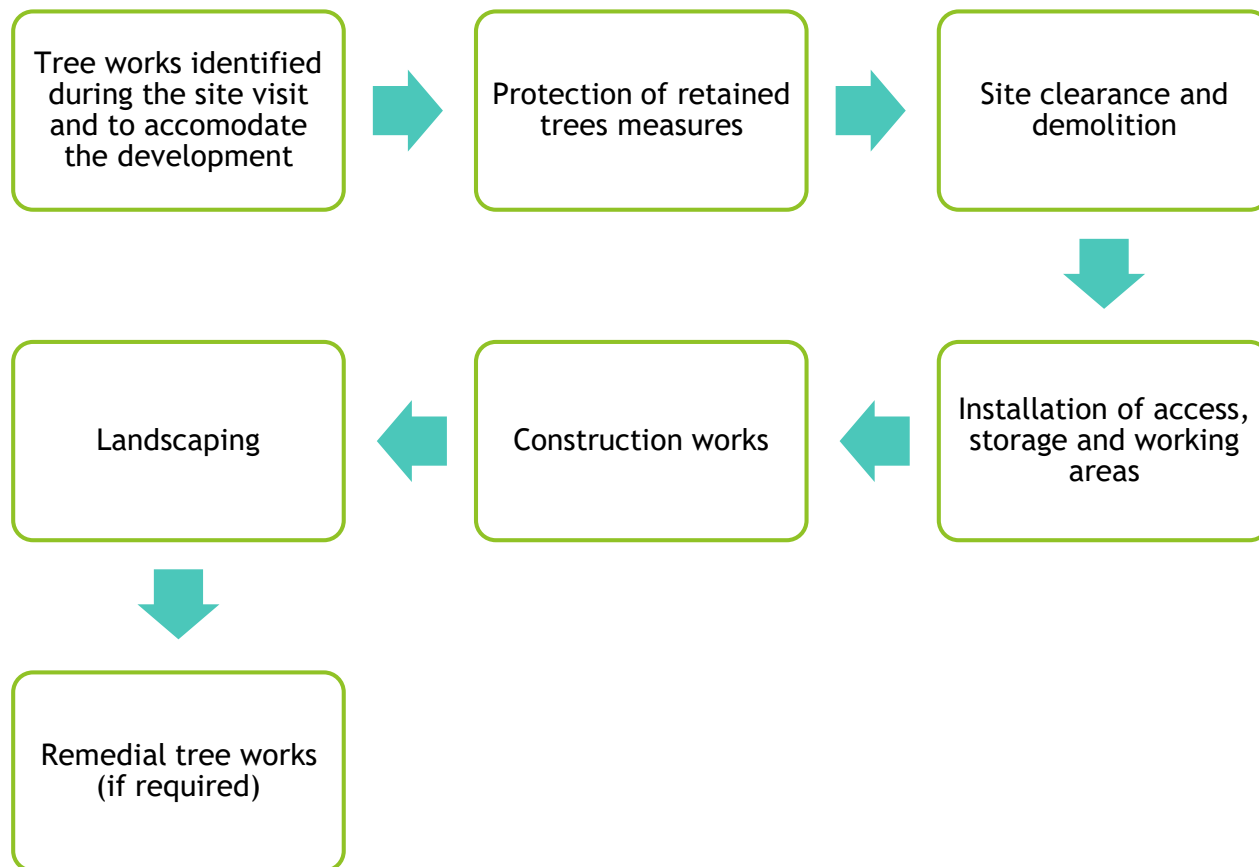


Figure 1 Proposed landscape scheme

### 4.2 Tree protection measures

4.2.1 All retained trees require the installation of protective barrier fencing as per the specification of BS5837:2012, barrier type default specification is detailed in section 6.2.

## 5 Sequence of works





## 6 Arboricultural method statement

### 6.1 Tree Protection Plan

6.1.1 The attached plan (at Appendix 4) is based on the provided information and reflects the measurements and site boundaries. The plan is only relevant for dealing with tree issues. Trees to be retained have coloured centres and outlines, whilst trees removed have dashed hatching.

- The protection barriers placement is shown by dashed line.
- The purple hatching indicates areas of ground protection within RPA.
- The orange hatching indicates areas of specialist construction methods within RPA such as pile and beam foundation, micro drilling, changes of levels e.g. (as per related sections of the report and annotation on the TPP)
- The yellow hatching indicates areas of Construction Exclusion Zone (CEZ), and such any construction activity must be avoided within the zone.

## 6.2 Tree protection barriers

6.2.1 Tree protection barriers location is indicated in the Tree Protection Plan (TPP). The barriers must be clearly marked by all-weather signs “Keep Out (Figure 2 BS5837: 2012 default specification for barriers type).

6.2.2 T5 will require wooden box around the stem in order to protect tree from potential damage of the development activity.

6.2.3 The barriers shall be minimum of 2m high with vertical and horizontal scaffold frameworks. The vertical tubes should be spaced at least 3 m interval and driven securely into the ground. The welded mesh should be securely fixed on the framework.

Figure 2 Default specification for protective barrier

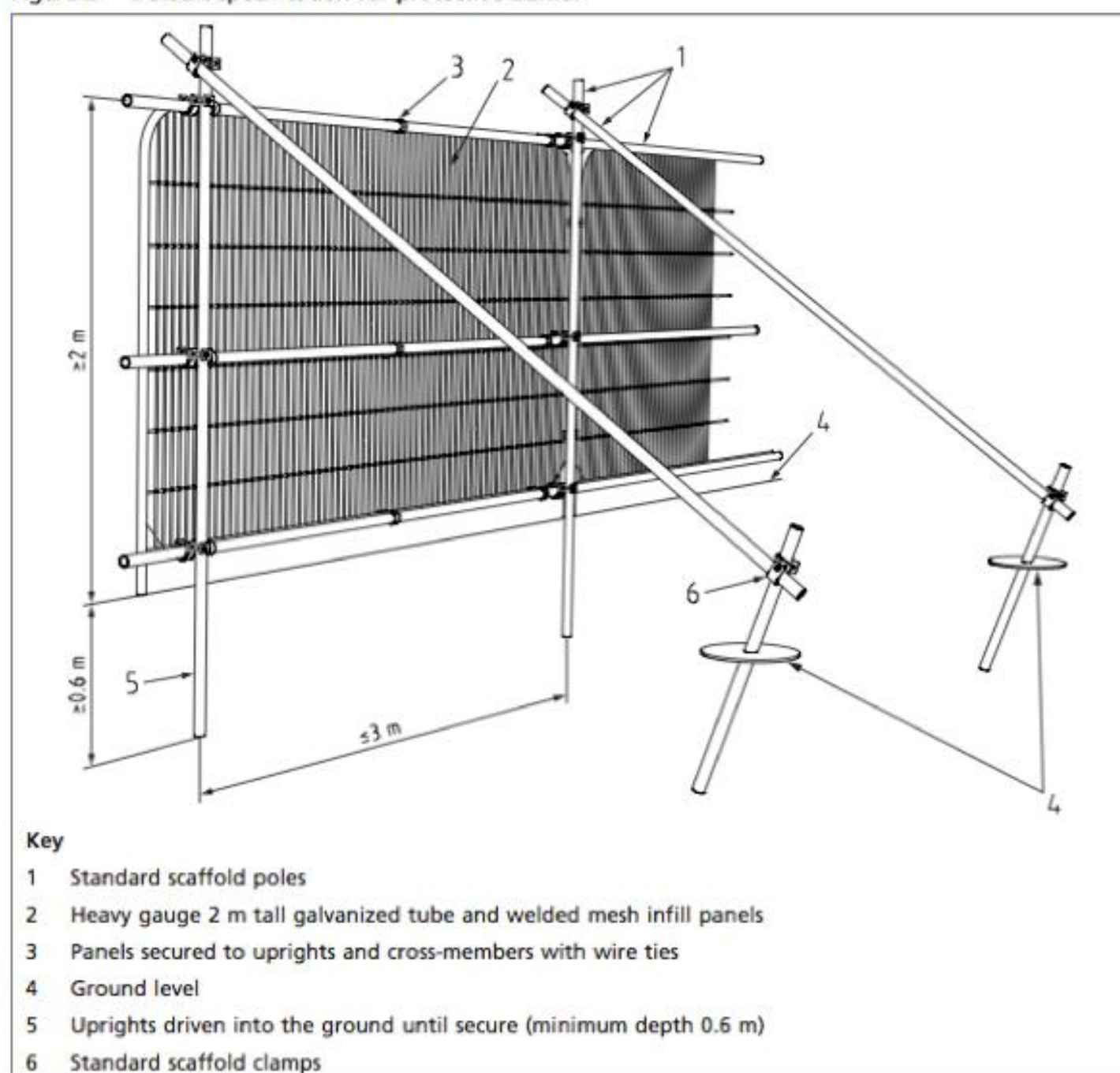


Figure 2 BS5837: 2012 default specification for barriers type



*Figure 3 All weather protective sign example*

### 6.3 Site set-up, storage and material mixing

- 6.3.1 Space must be allowed outside of RPAs for site machinery and material storage.
- 6.3.2 The material must be stored outside the RPAs, which also applies to cement mixing and washing points. The runoff the potential of the contaminants must be considered to avoid incursion to the RPA of retained trees, refer to TPP for the

### 6.4 Site monitoring and supervision

- 6.4.1 The Project Arboricultural Consultant (PAC) shall attend site prior to the commencement of the development to ensure a satisfactory level of protective fencing and ground protection; ground level alternations; construction of walls, installation of new surfaces within RPAs of retained trees and at least every month during the development works. Where agreed with the L.A. it may be acceptable to supply photographs of the fencing to avoid the necessity for a site visit.
- 6.4.2 All Site monitoring or supervision shall be followed by a report submission with an annotated photographic record and textual commentary on all matters of tree protection to the Local Authority, which by act or omission are in breach of the Arboricultural Method Statement. The initial site visit confirming placement of satisfactory tree protection shall be notified to LA within 5 working days prior to the commencement of the development.

## 7 Conclusion and recommendations

- 7.1.1 No trees will be impacted by the development and such no removal or tree works are required.
- 7.1.2 T5 will require wooden box around the trunk as a precaution from potential damage from the development activity.
- 7.1.3 The tree fencing will be required around all retained trees.
- 7.1.4 The impact on retained trees will be negligible, and the scheme should be achievable in arboricultural terms if the methods outlined in this report are followed.

## Appendix 1 – References and Copyright

1. British Geological Survey (2014).  
<http://mapapps.bgs.ac.uk/geologyofbritain/home.html>. BGS, Keyworth, Nottingham.
2. G. Mercer, A. Reeves & D. O'Callaghan. 'The Relationship between Trees, Distance to Buildings and Subsidence Events on Shrinkable Clay Soil' AB Academic Publishers 2011. Arboricultural Journal, 33, 229-245.
3. BSI (2010) BS 3998:2010 'Tree Work – Recommendations'. British Standards Institute
4. BSI (2014) BS8545: Trees from nursery to independence in the landscape: Recommendations. British Standards Institute
5. BSI (2012) BS5837: Trees in Relation to Design, Development and Construction: Recommendations. British Standards Institute
6. BSI (2014) BS8545: Trees from nursery to independence in the landscape: Recommendations. British Standards Institute
7. National joint utilities group (2007) NJUG Guidelines for the Planning, Installation and Maintenance of Utility Apparatus in Proximity to Trees
8. The National Archives (2017) Town and Country planning act, 1990, <http://www.legislation.gov.uk/ukpga/1990/8/contents>; Accessed 20.02.2017
9. Trees and design action group (2014) Trees in a hard landscape: Guide for delivery
10. Department for Communities and Local Government (2014) Tree Preservation Orders and trees in conservation areas.

### Copyright

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## Appendix 2: Tree Schedule

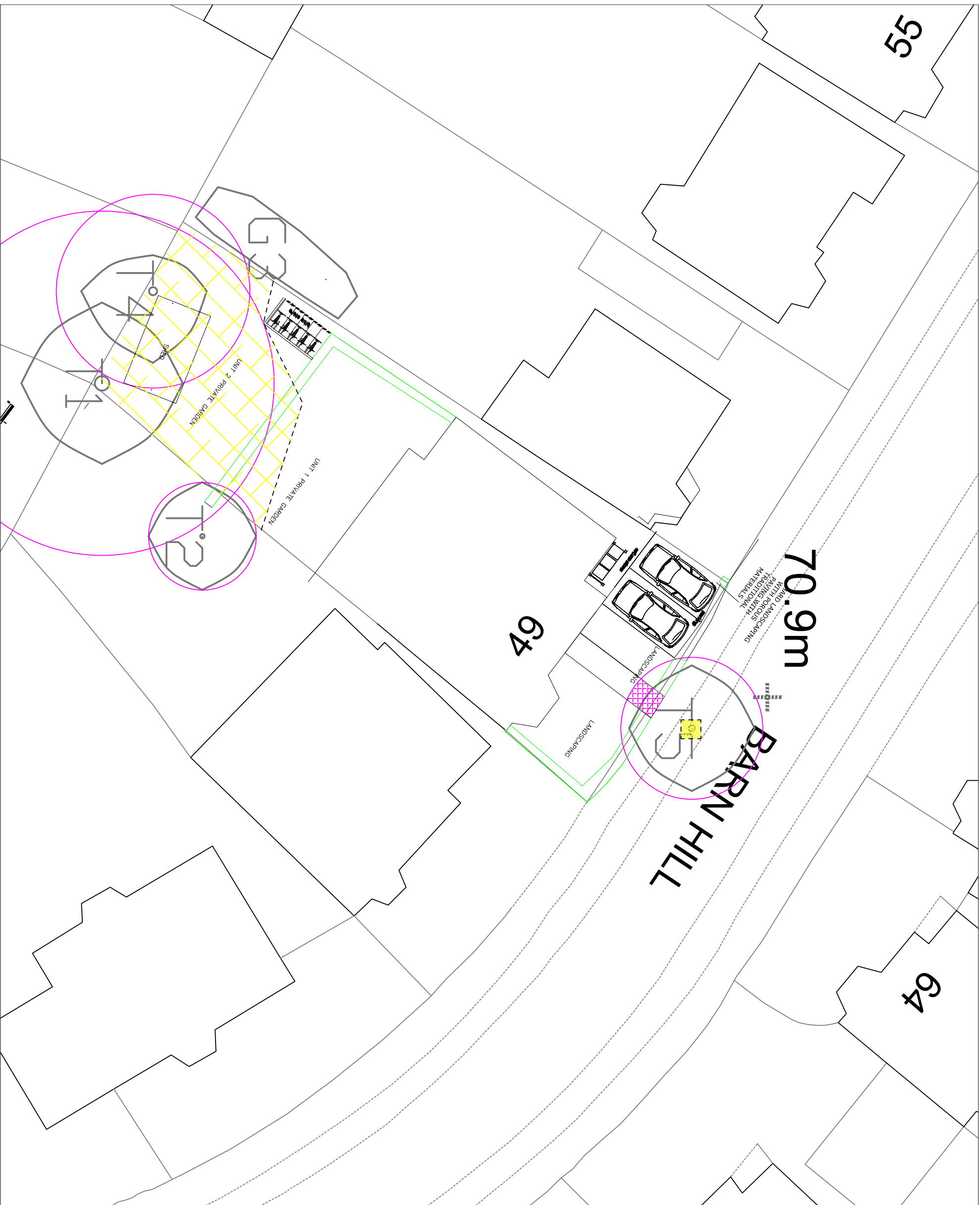
Date: 06/01/2021

Tree Id	Taxon code	Height	Number of stems	DBH	RP	RPA	Crown spread N	Crown spread S	Crown spread E	Crown spread W	Crown clearance	Life stage	Physiological condition	Life Expectancy	Retention category	Note
T1	Cupressocyparis leylandii	13	1	80	9.6	289.5	4.5	4.5	4.5	4.5	1	Mature	Fair	40+	C13	Access restricted base obstructed by material, data estimated, codominant stems, weak union
T2	Prunus cerasifera	6	1	25	3	28.3	3	3	3	3	0	Early Mature	Fair	20+	C1	On the neighbouring property, data estimated, epicormic growth on the base, rubbing branches
T4	Prunus cerasifera	7.5	1	45	5.4	91.6	3	4	4	2	2	Early Mature	Fair	20+	C13	Access restricted structure, data estimated, suppressed crown, ivy on the stem
T5	Prunus cerasifera	6	1	33	3.96	49.3	3.5	3.5	3.5	3.5	2	Mature	Fair	20+	C13	Street tree, epicormic growth on the stem, previous arboricultural practice, epicormic growth on the stem, minor dieback, minor deadwood
G3	Prunus cerasifera	7	3	15	1.8	10.2	3	3	3	3	0	Early Mature	Fair	20+	C23	On the neighbouring garden behind perimeter fence, data estimated, multistem, leaning stems



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### Appendix 3: Tree protection plan














Site  
49 Barn Hill, Wembley, HA9 9LL

Client  
Mohammed Ali

Drawing title  
Tree Survey & Protection Plan

Drawing No.	Scale	Date
1 of 1	1:250@A3	13.01.2021

Key

-  Category A – trees of high quality and value
-  Category B – trees of moderate quality and value
-  Category C – trees of low quality and value
-  Category U – trees of unsuitable for retention
-  Group of trees / hedgerows
-  Root protection area
-  Trees to be removed
-  Tree protective barriers
-  Ground Root Protection
-  Specialist Construction Methods
-  Construction Exclusion Zone

