Landmark Trees

ARBORICULTURAL IMPACT ASSESSMENT REPORT FOR:

85 Winnington Road

London

N2 0TT

INSTRUCTING PARTY:

Mr J Aaron

85 Winnington Road

London

N2 0TT

REPORT PREPARED BY

Adam Hollis

MSc ARB MICFor FArbor A MRICS C Env

Ref: NLP/85WNR/AIA/02

Date: 24th November 2023

PART 1: MAIN TEXT

Section	Content	Page No
1.0	SUMMARY	4
2.0	INTRODUCTION	5
3.0	OBSERVATIONS	7
4.0	DEVELOPMENT CONSTRAINTS	10
5.0	ARBORICULTURAL IMPACTS	13
6.0	DISCUSSION	14
7.0	CONCLUSION	16
8.0	RECOMMENDATIONS	17
9.0	REFERENCES	20

PART 2 - APPENDICES

APPENDIX 1	Survey Data	22
APPENDIX 2	Recommended Tree Works	27
APPENDIX 3	Recommended Tree Works to Facilitate Development	29

PART 3 - PLANS

PLAN 1	Tree Constraints Plan	32
PLAN 2	Impact Assessment Plan(s)	34

Caveats

This report is primarily an arboricultural report. Whilst comments relating to matters involving built structures or soil data may appear, any opinion thus expressed should be viewed as qualified, and confirmation from an appropriately qualified professional sought. Such points are usually clearly identified within the body of the report. It is not a full safety survey or subsidence risk assessment survey. These services can be provided but a further fee would be payable. Where matters of tree condition with a safety implication are noted during a survey they will of course appear in the report.

A tree survey is generally considered invalid in planning terms after 2 years, but changes in tree condition may occur at any time, particularly after acute (e.g. storm events) or prolonged (e.g. drought) environmental stresses or injuries (e.g. root severance). Routine surveys at different times of the year and within two - three years of each other (subject to the incidence of the above stresses) are recommended for the health and safety management of trees remote from highways or busy access routes. Annual surveys are recommended for the latter.

Tree works recommendations are found in the Appendices to this report. It is assumed, unless otherwise stated ("ASAP" or "Option to") that all husbandry recommendations will be carried out within 6 months of the report's first issue. Clearly, works required to facilitate development will not be required if the application is shelved or refused. However, necessary husbandry work should not be shelved with the application and should be brought to the attention of the person responsible, by the applicant, if different. Under the Occupiers Liability Act of 1957, the owner (or his agent) of a tree is charged with the due care of protecting persons and property from foreseeable damage and injury.' He is responsible for damage and/or nuisance arising from all parts of the tree, including roots and branches, regardless of the property on which they occur. He also has a duty under The Health and Safety at Work Act 1974 to provide a safe place of work, during construction. Tree works should only be carried out with local authority consent, where applicable.

Inherent in a tree survey is assessment of the risk associated with trees close to people and their property. Most human activities involve a degree of risk, such risks being commonly accepted if the associated benefits are perceived to be commensurate.

Risks associated with trees tend to increase with the age of the trees concerned, but so do many of the benefits. It will be appreciated, and deemed to be accepted by the Instructing Party, that the formulation of recommendations for all management of trees will be guided by the cost-benefit analysis (in terms of amenity), of tree work that would remove all risk of tree related damage.

Prior to the commencement of any tree works, an ecological assessment of specific trees may be required to ascertain whether protected species (e.g. bats, badgers and invertebrates etc.) may be affected.

1.0 SUMMARY

Instructing Party:	Mr J Aaron	**Case Ref:**	NLP/85WNR/AIA/01
Local Authority:	LB Barnet	**Date:**	10/11/2023
Site Address: 85 Winnington Road, London N2 0TT			
Proposal: Demolition of existing dwelling and erection of new dwelling with basement and attic level accommodation.			

Report Checklist	**Y/N**		**Y/N**
Arboricultural constraints on site	Y	Trees removal proposed	Y
Tree Survey	Y	Topographical Survey	Y
BS5837 Report	Y	Conservation Area	Y
Tree Preservation Orders	Y		
Tree Protection Plan:	N/a	(Include in future method statement)	
Tree Constraints Plan:	Y		
Arboricultural Impact Assessment:	Y		

Site Layout				
Site Visit	Y	Date: 10/11/2023	Access Full/Partial/None	F/P
Trees on Site	Y		Off-site Trees	Y
Trees affected by development	Y		O/s trees affected by development	N
Tree replacement proposed:	Y		On or off-site trees indirectly affected by development	N

Trees with the potential to be affected

Removal of a number of stems forming part of H6 rated as negligible impact subject to proposed mitigation of replacement planting.

Comments

Recommended works for 2 trees regardless of development, but also pertinent to maintaining a safe work site. Those works are entirely separate to the planning application considered herein and any consent that may be given for this scheme: they will be applied for separately.

Recommendations		
1	Proposal will mean the loss of important trees (TPO/CA)	N
2	Proposal has sufficient amelioration for tree loss	Y
3	Proposals provide adequate tree protection measures	Y
4	Proposal will mean retained trees are too close to buildings	N
5	Specialist demolition / construction techniques required	N
6	The Proposal will result in significant root damage to retained trees	N
7	Further investigation of tree condition recommended	N

RPA= Root Protection Area
TPP= Tree Protection Plan
AMS= Arboricultural Method Statement
AIA = Arboricultural Implication Assessment
BS5837: 2012 'Trees in relation to design, demolition and construction – Recommendations'

2. INTRODUCTION

2.1 Terms of Reference

2.1.1 LANDMARK TREES were asked by Mr J Aaron to provide a survey and an arboricultural impact assessment of proposals for the site: 85 Winnington Road, London N2 0TT. The report is to accompany a planning application.

2.1.2 The proposals are for the demolition of the existing dwelling and erection of new dwelling with basement and attic level accommodation.

2.1.3 This report will assess the impact on the trees and their constraints, identified in our survey. Although the proposals were known at the time of the survey, Landmark Trees endeavour to survey each site blind, working from a topographical survey, wherever possible, with the constraints plan informing their evolution.

2.1.4 I am a Registered Consultant and Fellow of the Arboricultural Association and a Chartered Forester, with a Masters Degree in Arboriculture and 25 years' experience of the landscape industry - including the Forestry Commission and Agricultural Development and Advisory Service. I am a UK Registered Expert Witness, trained in single and joint expert witness duties. I am also Chairman of the UK & I Regional Plant Appraisal Committee, inaugurated to promote international standards of valuation in arboriculture.

2.2 Drawings Supplied

2.2.1 The drawings supplied by the Instructing Party and relied upon by Landmark Trees in the formulation of our survey plans are:

Existing site survey: FPC – Winnington Road – Existing Drawings 160718*

Proposals: FPC_Proposed – Combined Applications 160718

*In the absence of a full topographical survey, tree positions may be approximate only.

2.3 Scope of Survey

2.3.1 As Landmark Trees' (LT) arboricultural consultant, I surveyed the trees on site on the 10th of November 2023, recording relevant qualitative data in order to assess both their suitability for retention and their constraints upon the site, in accordance with British Standard 5837:2012 Trees in relation to design, demolition and construction – Recommendations [BS5837:2012].

2.3.2 Our survey of the trees, the soils and any other factors, is of a preliminary nature. The trees were SURVEYED on the basis of the Visual Tree Assessment method expounded by Mattheck and Breloer (The Body Language of Trees, DoE booklet Research for Amenity Trees No. 4, 1994). LT have not taken any samples for analysis and the trees were not climbed, but inspected from ground level.

2.3.3 A tree survey is generally considered invalid in planning terms after 2 years, but changes in tree condition may occur at any time, particularly after acute (e.g. storm events) or prolonged (e.g. drought) environmental stresses or injuries (e.g. root severance). Routine surveys at different times of the year and within two - three years of each other (subject to the incidence of the above stresses) are recommended for the health and safety management of trees remote from highways or busy access routes. Annual surveys are recommended for the latter.

2.3.4 The survey does not cover the arrangements that may be required in connection with the laying or removal of underground services.

2.4 Survey Data & Report Layout

2.4.1 Detailed records of individual trees are given in the survey schedule in Appendix 1 to this report. General husbandry recommendations are distinguished at Appendix 2 from the minimum requirements to facilitate development / form part of the planning application at Appendix 3. The former may still be relevant to providing a safe site of work, of course. Similarly, if for whatever reason the development does not go ahead, our recommendations in Appendix 2 would still apply.

2.4.2 A site plan identifying the surveyed trees, based on the Instructing Party's drawings / topographical survey is provided in Part 3 of this report.

2.4.3 This plan also serves as the Tree Constraints Plan with the theoretical Recommended Protection Areas (RPA's), tree canopies and shade constraints, (from BS5837: 2012) overlain onto it. These constraints are then overlain in turn onto the Instructing Party's proposals to create a second Arboricultural Impact Assessment Plan in Part 3. General observations and discussion follow, below.

3.0 OBSERVATIONS

3.1 Site Description

Photograph 1: Rear elevation of 85 Winnington Road, London N2 0TT

3.1.1	This property is located in the Garden Suburb Ward within the Hampstead Garden Suburb of the London Borough of Barnet. It comprises a detached neo-Georgian style building set on the east side of Winnington Road. It was constructed in 1933, and features later alterations and extensions.
3.1.2	The site itself is relatively level throughout but there are significant changes in levels along its boundaries.
3.1.3	In terms of the British Geological Survey, the site overlies the Bagshot Sand Formation. Sand and gravel soils are less prone to compaction during development than clay soils, potentially reducing the threat to tree health from construction traffic. The design of foundations near problematic tree species will also need to take into consideration subsidence risk in relation to the clay subsoil and its depth. Further advice from the relevant experts on the specific soil properties can be sought as necessary.
3.1.4	The actual limits of soil series are not as clearly defined on the ground as on plan and there may be anomalies between them. Further advice from the relevant experts on the specific soil properties can be sought as necessary.

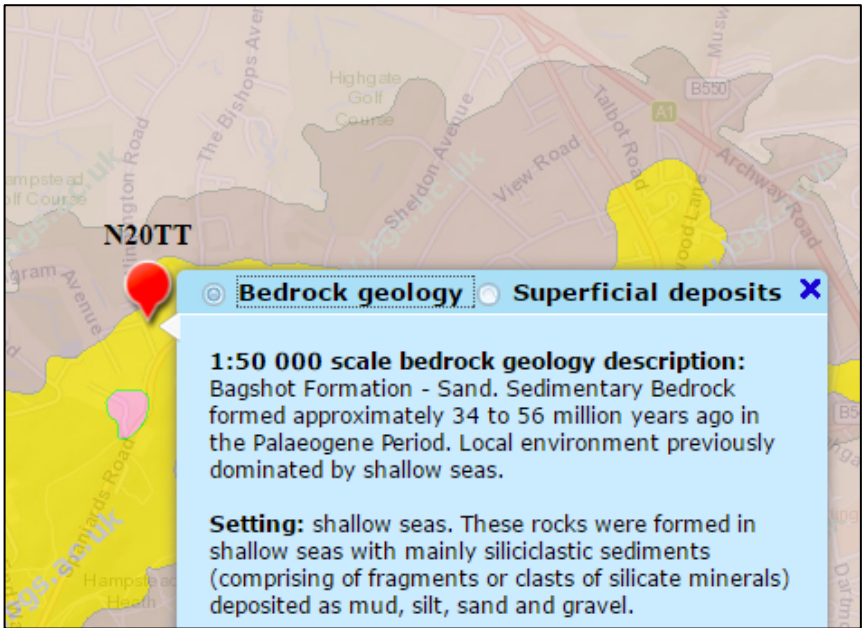


Figure 1: Extract from the BGS Geology of Britain Viewer

3.2 Subject Trees

3.2.1	Of the 19 surveyed trees, groups and hedges 1 is A category* (High Quality), 2 are B category (Moderate Quality), 6 are C category (Low Quality) and 1 is category U category *(Unsuitable for Retention). The remaining trees / groups / hedges are included for the sake of completeness but should not be construed to provide a planning constraint. Such specimens include G2, H3, H6, H7G13, H14 and H16. It will ne noted that the street tree T17 has been removed and replaced since our original survey of the site in 2016.
3.2.2	The tree species found on site comprise laurel, Japanese privet, hornbeam, purple plum, common yew, photinia, fig, holly, privet, Atlantic cedar, Lawson cypress, Japanese maple, box, pyracantha, silver birch, sycamore, cherry and a group of mixed broadleaves.
3.2.3	In terms of age demographics there is a preponderance of young and semi-mature trees on the site with a few early mature and mature trees in the population.

3.2.4	Full details of the surveyed trees can be found in Appendix 1 of this report.
3.2.5	There are recommended works for 1 on-site tree (T18) and 2 off-site trees (T12 and T17 – third party trees). These are listed in Appendix 2.
3.2.6	As detailed in Paragraph 3.3.1, we understand that T18 is subject to a Tree Preservation Order. As the works recommended in Appendix 2 are entirely separate to any required for the planning application this report considers, a separate application for these works will be required.

3.3 Planning Status

3.3.1	We understand T18 and the off-site G11 are protected by Tree Preservation Orders, and also understand the site stands within the Hampstead Garden Suburb Conservation Area. Both designations will affect the subject trees: it is a criminal offence to prune, damage or fell such trees without permission from the local authority. Consent for this scheme will not apply to any recommendations for further management works to TPO trees detailed in Appendix 2.
3.3.2	Relevant local planning policies comprise Policies G1 and G7 of the London Plan 2021, Policy DM01 of the Development Management Policies DPD (adopted September 2012) and Policies CS5 and CS7 of LB Barnet's Local Plan Core Strategy DPD (adopted September 2012).

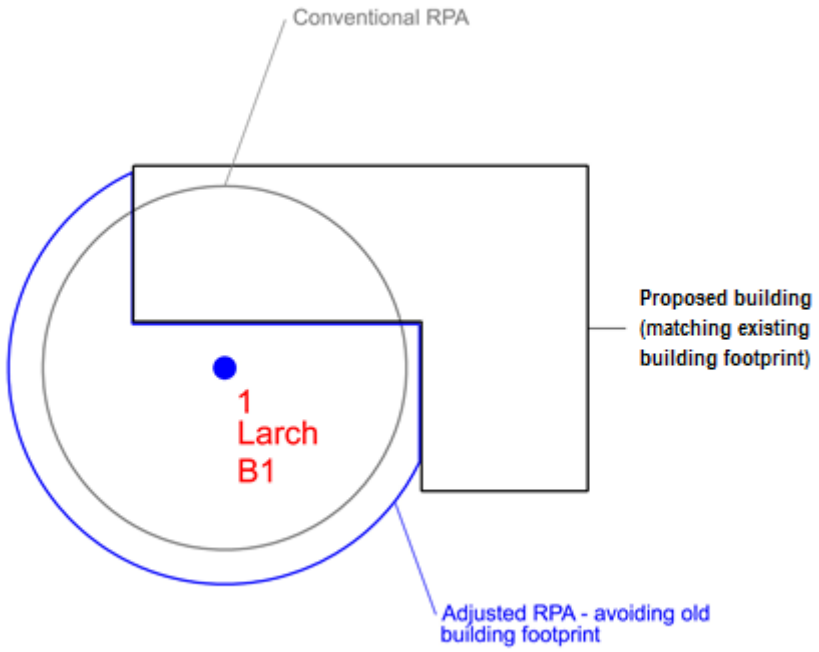
4.0 DEVELOPMENT CONSTRAINTS

4.1 Primary Constraints

4.1.1 BS5837: 2012 gives Recommended Protection Areas (RPA's) for any given tree size. The individual RPA's are calculated in the Tree Schedule in Appendix 1 to this report, or rather the notional radius of that RPA, based on a circular protection zone. The prescribed radius is 12-x stem diameter at 1.5m above ground level, except where composite formulae are used in the case of multi-stemmed trees.

4.1.2 Circular RPA's are appropriate for individual specimen trees grown freely, but where there is ground disturbance, the morphology of the RPA can be modified to an alternative polygon, as shown in the diagram below (Figure 2). Alternatively, one need principally remember that RPA's are area-based and not linear – notional rather than fixed entities.

Figure 2



4.1.3 In BS5837, paragraph 4.6.2 states that RPA's should reflect the morphology and disposition of the roots; 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.

4.1.4 ***A priroi* modifications have been made in this instance, to reflect the circa 1.5m change in levels to the garden to the south of the application site.**

4.1.5	The quality of trees will also be a consideration: U Category trees are discounted from the planning process in view of their limited service life. Again, Category-C trees would not normally constrain development individually, unless they provide some external screening function.
4.1.6	At paragraph 5.1.1. BS5837: 2012 notes that "Care should be exercised over misplaced tree preservation; attempts to retain too many or unsuitable trees on a site are liable to result in excessive pressure on the trees during demolition or construction work, or post-completion demands on their removal."

4.1.7	In theory, only moderate quality trees and above are significant material constraints on development. However, the low quality trees would comprise a constraint in aggregate, in terms of any collective loss / removal, where replacement planting would be appropriate, though no such collective impact is proposed.
4.1.8	In this instance, the moderate and high quality trees present have the potential to pose significant constraints to the development of the site although it should be noted that their positions outside the site boundaries and the significant level changes present mean that the constraints are likely to be limited in practice.

4.2 Secondary Constraints

4.2.1 The second type of constraint produced by trees that are to be retained is that the proximity of the proposed development to the trees should not threaten their future with ever increasing demands for tree surgery or felling to remove nuisance shading (Figure 3), honeydew deposition or perceived risk of harm.

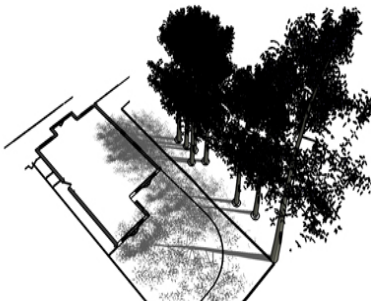


Figure 3 –
Generic Shading Constraints

4.2.2 The shading constraints are crudely determined from BS5837 by drawing an arc from northwest to east of the stem base at a distance equal to the height of the tree, as shown in the diagram opposite. Shade is less of a constraint on non-residential developments, particularly where rooms are only ever temporarily occupied.

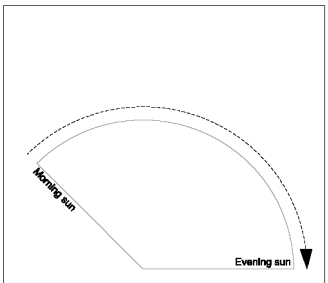


Figure 4 – Shading Arc

4.2.3 This arc (see Figure 4) represents the effects that a tree will have on layout through shade, based on shadow patterns of 1x tree height for a period May to Sept inclusive 10.00-18.00 hrs daily.

4.2.4 Assuming that they will be retained, the orientation of the on- and off-site trees will ensure that shading constraints are minimal, with leaf deposition and honey-dew likely to be as it is today.

Note: Sections 5 & 6 will now assess the impacts upon constraints identified in Section 4. Table 1 in Section 5 presents the impacts in tabular form (drawing upon survey data presented in Appendices 1 & 2). Impacts are presented in terms of whole tree removal and the effect on the landscape or partial encroachment (% of RPA) and its effect on individual tree health. Section 6 discusses the table data, elaborating upon the impacts' significance and mitigation.

5.0

Hide irrelevant | Show All Trees

Table 1: Arboricultural Impact Assessment

(Impacts assessed prior to mitigation and rated with reference to Matheny & Clark (1998))

Ref: NLP/85WNR/AIA

B.S. Cat.	Tree No.	Species	Impact	Tree / RPA Affected	Age	Growth Vitality	Species Tolerance	Impact on Tree Rating	Impact on Site Rating	Mitigation
	H6	Yew, Common	Part-felled to Facilitate Development	m^2 N/A %	Young	Normal	N/A	N/A	N/A	Stems do not constitute a planning constraint so not necessary

6.0 DISCUSSION

6.1 Rating of Primary Impacts

6.1.1 The principal impact in the current proposals is the removal of a number of stems from within the western section of the yew hedge H6 in the area adjacent to the new kitchen and terrace. As detailed in paragraph 3.2.1, this hedge does not form a planning constraint and is included in this document purely for the sake of completeness. As such, no mitigation for the loss of these very small specimens is necessary.

6.1.2 Provided that demolition and construction activities are adequately controlled, it is highly unlikely that any retained trees will be impacted by the proposals.

6.1.3 It will be noted that the trees protected by Tree Preservation Orders (G11 and T18) are entirely unaffected by the proposals considered herein.

6.2 Rating of Secondary Impacts

6.2.1 There will always be marginal secondary impacts of honeydew / litter deposition and partial shade on this site, regardless of development. The status quo is unlikely to change with further development, which is the salient point for planning to consider. Thus, the secondary impacts of development are minimal.

6.3 Mitigation of Impacts

6.3.1 All plant and vehicles engaged in demolition works should either operate outside the RPA, or should run on a temporary surface designed to protect the underlying soil structure. The demolition of the building should proceed inwards in a “pull down” fashion. Hard surfacing can be lifted with caution by a skilled machine operator again working away from the tree.

6.3.2 Nuisance deposition can be further mitigated with routine maintenance, light pruning / deadwooding and the fitting of filtration traps on guttering (see Figure 5 below).

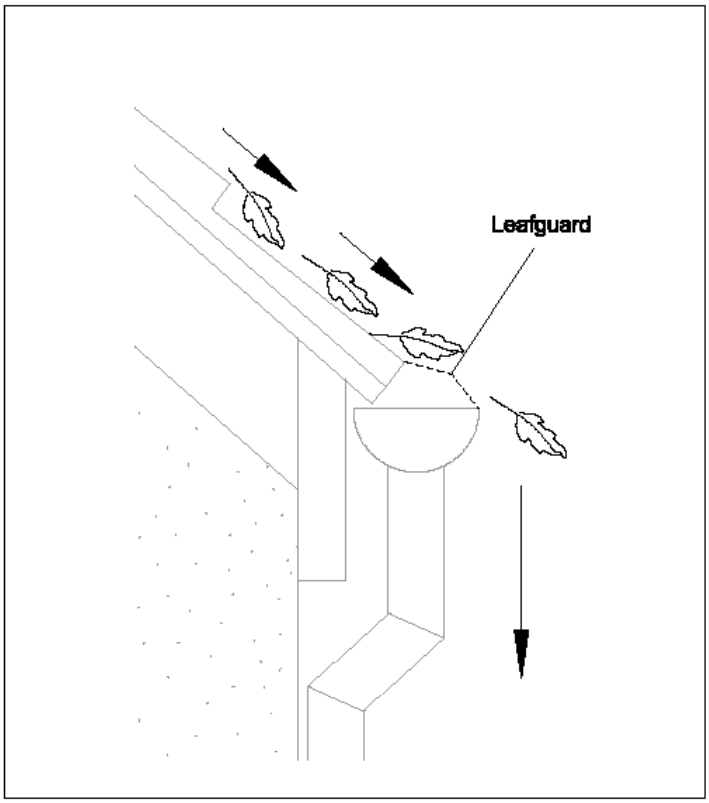


Figure 5: Filtration traps, as shown above, could be fitted on the gutters which can easily be maintained at 2-3m above ground.

7.0 CONCLUSION

7.1	No tree that constitutes a planning constraint is impacted by the proposals therefore the potential impacts of development are negligible.
7.2	The full potential of the impacts can be largely mitigated through design and precautionary measures. These measures can be elaborated in Method Statements in the discharge of planning conditions.
7.3	The species affected are generally tolerant of root disturbance / crown reduction and the retained trees are generally in good health and capable of sustaining these reduced impacts.
7.4	The trees that are recommended for felling are of little individual significance, such that their loss will not affect the visual character of the area.
7.5	Therefore, the proposals will not have any significant impact on either the retained trees or wider landscape thereby complying with Policies G1 and G7 of the London Plan 2021, Policy DM01 of the Development Management Policies DPD (adopted September 2012) and Policies CS5 and CS7 of LB Barnet's Local Plan Core Strategy DPD (adopted September 2012). Thus, with suitable mitigation and supervision the scheme is recommended to planning.

8.0 RECOMMENDATIONS

8.1 Specific Recommendations

8.1.1	Current tree works recommendations are found in Appendix 2 to this report, with works to facilitate development in Appendix 3. Any tree removals recommended to facilitate development within this report should only be carried out with local authority consent. As detailed previously, the works recommended in Appendix 2 are considered necessary regardless of development and will accordingly require a separate TPO application.
8.1.2	Excavation and construction impacts within the RPAs of trees identified in Table 1 above, will need to be controlled by method statements specifying mitigation methods suggested in para 6.3 above and by consultant supervision as necessary. These method statements can be provided as part of the discharge of conditions.

8.2 General Recommendations for Sites Being Developed with Trees

8.2.1	Any trees which are in close proximity to the proposed development should be protected with a Tree Protection Barrier (TPB). Protective barrier fencing should be installed immediately following the completion of the tree works, remaining in situ for the entire duration of the development unless otherwise agreed in writing by the Council. It should be appropriate for the intensity and proximity of the development, usually comprising steel, mesh panels 2.4m in height ('Heras') and should be mounted on a scaffolding frame (shown in Fig 2 of BS5837:2012). The position of the TPB can be shown on plan as part of the discharge of conditions, once the layout is agreed with the planning authority. The TPB should be erected prior to commencement of works, remain in its original form on-site for the duration of works and be removed only upon full completion of works.
8.2.2	A TPB may no longer be required during soft landscaping work but a full arboricultural assessment must be performed prior to the undertaking of any excavations within the RPA of a tree. This will inform a decision about the requirement of protection measures. It is important that all TPBs have permanent, weatherproof notices denying access to the RPA.
8.2.3	The use of heavy plant machinery for building demolition, removal of imported materials and grading of surfaces should take place in one operation. The necessary machinery should be located above the existing grade level and work away from any retained trees. This will ensure that any spoil is removed from the RPAs. It is vital that the original soil level is not lowered as this is likely to cause damage to the shallow root systems.
8.2.4	Any pruning works must be in accordance with British Standard 3998:2010 Tree work [BS3998].
8.2.5	Where sections of hard surfacing are proposed in close proximity to trees, it is recommended that "No-Dig" surfacing be employed in accordance with BS5837:2012 and 'The Principles of Arboricultural Practice: Note 1, Driveways Close to Trees, AAIS 1996 [APN1]'.
8.2.6	If the RPA of a tree is encroached by underground service routes then BS5837:2012 and NJUG VOLUME 4 provisions should be employed. If it is deemed necessary, further arboricultural advice must be sought.
8.2.7	Numerous site activities are potentially damaging to trees e.g. parking, material storage, the use of plant machinery and all other sources of soil compaction. In operating plant, particular care is required to ensure that the operational arcs of excavation and lifting machinery, including their loads, do not physically damage trees when in use.

8.2.8 To enable the successful integration of the proposal with the retained trees, the following points will need to be taken into account:

1) Plan of underground services.
2) Schedule of tree protection measures, including the management of harmful substances.
3) Method statements for constructional variations regarding tree proximity (e.g. foundations, surfacing and scaffolding).
4) Site logistics plan to include storage, plant parking/stationing and materials handling.
5) Tree works: felling, required pruning and new planting. All works must be carried out by a competent arborist in accordance with BS3998.
6) Site supervision: the Site Agent must be nominated to be responsible for all arboricultural matters on site. This person must:
   - be present on site for the majority of the time;
   - be aware of the arboricultural responsibilities;
   - have the authority to stop work that is causing, or may cause harm to any tree;
   - ensure all site operatives are aware of their responsibilities to the trees on site and the consequences of a failure to observe these responsibilities;
   - make immediate contact with the local authority and/or a retained arboriculturalist in the event of any tree related problems occurring.

8.2.9 These points can be resolved and approved through consultation with the planning authority via their Arboricultural Officer.

8.2.10 The sequence of works should be as follows:

i) initial tree works: felling, stump grinding and pruning for working clearances;
ii) installation of TPB for demolition & construction;
iii) installation of underground services;
iv) installation of ground protection;
v) main construction;
vi) removal of TPB;
vii) soft landscaping.

9.0 REFERENCES

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Landmark Trees

PART 2 – APPENDICES

APPENDIX 1

TREE SCHEDULE

Botanical Tree Names

Birch, Silver	: Betula pendula	Oak, Sessile	: Quercus petraea
Box, common	: Buxus sempevirens	Oak, English	: Quercus robur
Cedar, Atlantic	: Cedrus atlantica	Oak, Holm	: Quercus ilex
Cherry	: Prunus spp	Oak, Red	: Quercus rubra
Cypress, Lawson	: Chamaecyparis lawsonia	Photinia	: Photinia x fraseri 'Red Robin'
Fig, Common	: Ficus carica	Plum, Purple	: Prunus piassardii
Holly, Common/English	: Ilex aquifolium	Privet, Common	: Ligustrum vulgare
Hornbeam, Common	: Carpinus betulus	Privet, Japanese	: Ligustrum japonicum
Laurel, Cherry	: Prunus laurocerasus	Pyracantha	: Pyracantha spp
Maple, Japanese	: Acer palmatum	Sycamore	: Acer pseudoplatanus
Medlar	: Mespilus germanica	Yew, Common	: Taxus baccata

Notes for Guidance:

1. Height describes the approximate height of the tree measured in metres from ground level.
2. The Crown Spread refers to the crown radius in meters from the stem centre and is expressed as an average of NSEW aspect if symmetrical.
3. Ground Clearance is the height in metres of crown clearance above adjacent ground level.
4. Stem Diameter (Dm) is the diameter of the stem measured in millimetres at 1.5m from ground level for single stemmed trees. BS 5837:2012 formula (Section 4.6) used to calculate diameter of multi-stemmed trees. Stem Diameter may be estimated where access is restricted and denoted by '#'.
5. Protection Multiplier is 12 and is the number used to calculate the tree's protection radius and area
6. Protection Radius is a radial distance measured from the trunk centre.
7. Growth Vitality - Normal growth, Moderate (below normal), Poor (sparse/weak), Dead (dead or dying tree).
8. Structural Condition - Good (no or only minor defects), Fair (remediable defects), Poor - Major defects present.
9. Landscape Contribution - High (prominent landscape feature), Medium (visible in landscape), Low (secluded/among other trees).
10. B.S. Cat refers to (British Standard 5837:2012 section 4.5) and refers to tree/group quality and value; 'A' – High, 'B' - Moderate, 'C' - Low, 'U' - Unsuitable for retention. The following colouring has been used on the site plans:
    - High Quality (A) (Green),
    - Moderate Quality (B) (Blue),
    - Low Quality (C) (Grey),
    - Unsuitable for Retention (U) (Red)
11. Sub Cat refers to the retention criteria values where 1 is Arboricultural, 2 is Landscape and 3 is Cultural including Conservational, Historic and Commemorative.
12. Useful Life is the tree's estimated remaining contribution in years.

Landmark Trees

Site: 85 Winnington Road

Date: 10/11/2023

Appendix 1

BS5837 Tree Constraints Survey Schedule

Landmark Trees Ltd

020 7851 4544

Surveyor(s): Adam Hollis

Ref: NLP/85WNR/AIA

Tree No.	English Name	Height	Crown Spread	Ground Clearance	Stem Diamete	Age Class	Protection Radius	Growth Vitality	Structural Condition	B.S. Cat	Sub Cat	Useful Life	Comments
G1	Laurel	6	5511	1.5	245	Semi-mature	2.9	Moderate	Fair	C	2	20+	Chlorotic foliage (yellowed) Die-back (minor) at tips Remote survey only
G2	Privet, japanese	2	0.2	1.5	70	Young	0.8	Normal	Good				
H3	Hornbeam	3.5	1,1,0.3, 0.3	1.0	110	Young	1.3	Normal	Good				
W4	Mixed Broadleaves	17	5	5.0	600	Mature	7.2	Normal	Good	A	2	>40	Oak & sycamore Holly, laurel understorey
T5	Plum, Purple	6	3444	3.0	354	Mature	4.2	Normal	Fair	B	2	20+	A tree with insignificant defects RS Stands 1.5m above application site, so modified RPA
H6	Yew, Common	1.5	0.5	0.0	0	Young	0.0	Normal	Good				

Landmark Trees

Site: 85 Winnington Road

Date: 10/11/2023

Appendix 1

BS5837 Tree Constraints Survey Schedule

Landmark Trees Ltd

020 7851 4544

Surveyor(s): Adam Hollis

Ref: NLP/85WNR/AIA

Tree No.	English Name	Height	Crown Spread	Ground Clearance	Stem Diamete	Age Class	Protection Radius	Growth Vitality	Structural Condition	B.S. Cat	Sub Cat	Useful Life	Comments
H7	Photinia	3	0.5	1.5	73	Semi-mature	0.9	Normal	Good				
T8	Fig	4	3532	1.0	250	Young	3.0	Normal	Good	C	2	>40	Very limited visibility RS also young ash growing next to it will damage wall with age: fell
T9	Holly	5	2	3.0	100	Young	1.2	Moderate	Fair	C	2	20+	A sparser than normal canopy Remote survey only
H10	Privet	4	0.5	0.0	20	Semi-mature	0.2	Moderate	Fair				Lost its structure Sparse towards W
G11	Cedar, Atlantic	13	2344	2.5	400	Early Mature	4.8	Normal	Good	B	2	40+	Crown lifted to 5m Group of 3 but W member dead
T12	Cypress, Lawson						0.0						Removed

Landmark Trees

Site: 85 Winnington Road

Date: 10/11/2023

Appendix 1

BS5837 Tree Constraints Survey Schedule

Landmark Trees Ltd

020 7851 4544

Surveyor(s): Adam Hollis

Ref: NLP/85WNR/AIA

Tree No.	English Name	Height	Crown Spread	Ground Clearance	Stem Diamete	Age Class	Protection Radius	Growth Vitality	Structural Condition	B.S. Cat	Sub Cat	Useful Life	Comments
G13	Maple, Japanese	3	1.5	0.5	122	Young	1.5	Normal	Good				All <75mm dm
H14	Box	1	0.3	0.0		Young	0.0	Normal	Good				
H15	Laurel, Cherry	2.5	0.5	0.5	80	Semi-mature	1.0	Moderate	Fair	C	2	10+	Chlorotic foliage Variably maintained
H16	Pyracantha	2	0.3	0.5		Young	0.0	Normal	Good				
T17	Birch, Silver	8	2	1.0	100	Semi-mature	1.2	Normal	Good	C	2	>40	Replacement tree .
T18	Sycamore	14	4546	3.0	539	Mature	6.5	Poor	Fair	U		<10	Dying back (uniform) Decay in trunk Significant deterioration on 2017 N stem mostly dead

Landmark Trees

Site: 85 Winnington Road

Date: 10/11/2023

Appendix 1

BS5837 Tree Constraints Survey Schedule

Landmark Trees Ltd

020 7851 4544

Surveyor(s): Adam Hollis

Ref: NLP/85WNR/AIA

Tree No.	English Name	Height	Crown Spread	Ground Clearance	Stem Diamete	Age Class	Protection Radius	Growth Vitality	Structural Condition	B.S. Cat	Sub Cat	Useful Life	Comments
T19	Cherry, Columnar	6	1	1.0	120	Semi-mature	1.4	Normal	Good	C	2	>40	A tree with insignificant defects Street tree

APPENDIX 2

RECOMMENDED TREE WORKS

Notes for Guidance:

Husbandry 1 - Urgent (ASAP), 2 - Standard (within 6 months), 3 - Non-urgent (2-3 years)

CB - Cut Back to boundary/clear from structure.
CL# - Crown Lift to given height in meters.
CT#% - Crown Thinning by identified %.
CCL - Crown Clean (remove deadwood/crossing and hazardous branches and stubs)*.
CR#% - Crown Reduce by given maximum % (of outermost branch & twig length)
DWD - Remove deadwood.
Fell - Fell to ground level.
FInv - Further Investigation (generally with decay detection equipment).
Pol - Pollard or re-pollard.
Mon - Check / monitor progress of defect(s) at next consultant inspection which should be <18 months in frequented areas and <3 years in areas of more occasional use. Where the Owner/Instructing Party retain their own ground staff, we recommend an annual in- house inspection and where practical, in the aftermath of extreme weather events.
Svr Ivy / Clr Bs - Sever ivy / clear base and re-inspect base / stem for concealed defects.

*Not generally specified following BS3998:2010

Landmark Trees

Site: 85 Winnington Road
Date: 10/11/2023

Surveyor(s): Adam Hollis
Ref: NLP/85WNR/AIA

Appendix 2

Recommended Tree Works

Hide irrelevant
Show All Trees

Tree No.	English Name	B.S. Cat	Height	Ground Clearance	Crown Spread	Recommended Works	Comments/ Reasons
G11	Cedar, Atlantic	B	13	2.5	2344	Thin Remove dead member	Crown lifted to 5m Group of 3 but W member dead Recommended husbandry 2
T18	Sycamore	U	14	3.0	4546	Fell	Dying back (uniform) Decay in trunk Significant deterioration on 2017 N stem mostly dead Recommended husbandry 1

APPENDIX 3

RECOMMENDED TREE WORKS TO FACILITATE DEVELOPMENT (See Table 1)

Notes for Guidance:

RP - Pre-emptive root pruning of foundation encroachments under arboricultural supervision.
CB - Cut Back to boundary/clear from structure.
CL# - Crown Lift to given height in meters.
CT#% - Crown Thinning by identified %.
CCL - Crown Clean (remove deadwood/crossing and hazardous branches and stubs)*.
CR#% - Crown Reduce by given maximum % (of outermost branch & twig length)
DWD - Remove deadwood.
Fell - Fell to ground level.
FInv - Further Investigation (generally with decay detection equipment).
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Mon - Check / monitor progress of defect(s) at next consultant inspection which should be <18 months in frequented areas and <3 years in areas of more occasional use. Where the Owner/Instructing Party retain their own ground staff, we recommend an annual in- house inspection and where practical, in the aftermath of extreme weather events.
Svr Ivy / Clr Bs - Sever ivy / clear base and re-inspect base / stem for concealed defects.

*Not generally specified following BS3998:2010

Landmark Trees

Site: 85 Winnington Road
Date: 10/11/2023

Surveyor(s): Adam Hollis
Ref: NLP/85WNR/AIA

Appendix 3

Recommended Tree Works To Facilitate Development

Hide irrelevant
Show All Trees

Tree No.	English Name	B.S. Cat	Height	Ground Clearance	Crown Spread	Recommended Works	Comments/ Reasons
H6	Yew, Common		1.5	0.0	0.5	SFell Fell stems adjacent to new kitchen & terrace	To facilitate development

Landmark Trees

PART 3 – PLANS

PLAN 1

TREE CONSTRAINTS PLAN

G11
Cedar
B2

No. 83
WINNINGTON ROAD

T19
Cherry
C2

H15
Laurel
C2

H10
Privet

T9
Holly
C2

H6
Yew
C2

T18
Sycamore
C2

G1
Laurel
C2

H6
Yew

G2
Privet

H3
Hornbeam

W4
Mixed Broadleaves
A2

G2
Privet
C2

T5
Plum
B2

No. 87
WINNINGTON ROAD

G13
Maple

T7
Larch
C2

H6
Yew

H6
Yew

T8
Fig
C2

H7
Photinia

WINNINGTON ROAD

H14
Box

H16
Pyracantha

G11
Cedar
B2

No. 87
WINNINGTON ROAD

0 M 5 M 10 M

N

NOTE:

This survey is of a preliminary nature. The trees were inspected from the ground only on the basis of the Visual Tree Assessment method. No samples were taken for analysis. No decay detection equipment was employed. The survey does not cover the arrangements that may be required in connection with the laying or removal of underground services.

Branch spread in metres is taken at the four cardinal points to derive an accurate representation of the crown.

Root Protection Areas (RPA) are derived from stem diameter measured at 1.5 m above adjacent ground level (taken on sloping ground on the upslope side of the tree base).

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Site: 85 Winnington Road	1:200@ A1
Drawing Title: Tree Constraints Plan	November 2023

Key:

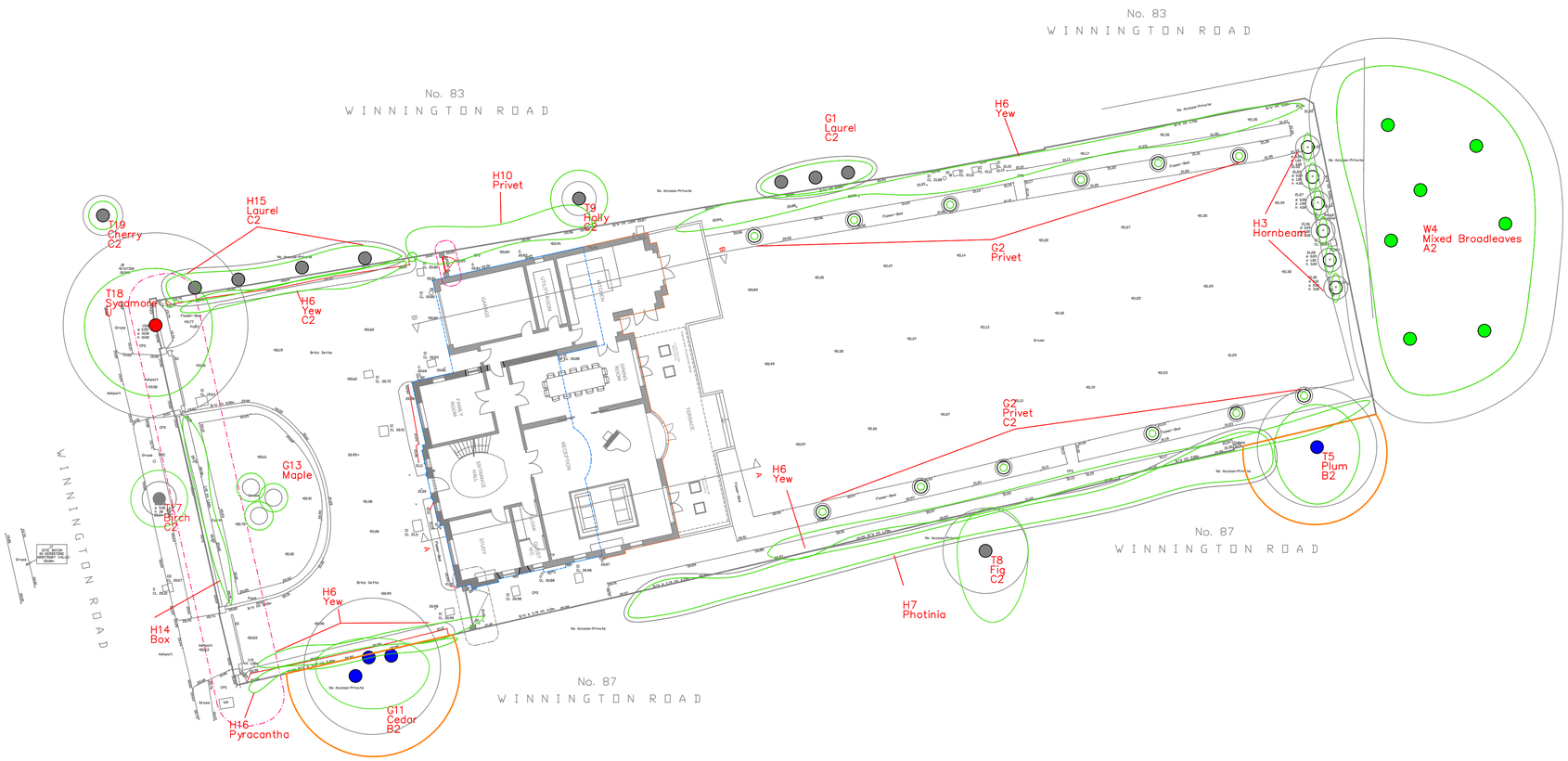
- Category A High Quality
- Category B Moderate Quality
- Category C Low Quality
- Category U Trees Unsuitable for Retention

Category
Crown Spread
Alternate RPA
Tree Number
Species
Category
Root Protection Area
T3
Beech
B2

PLAN 2

ARBORICULTURAL IMPACT ASSESSMENT PLAN (S)

i. Ground Floor



NOTE:

This survey is of a preliminary nature. The trees were inspected from the ground only on the basis of the Visual Tree Assessment method. No samples were taken for analysis. No decay detection equipment was employed. The survey does not cover the arrangements that may be required in connection with the laying or removal of underground services.

Branch spread in metres is taken at the four cardinal points to derive an accurate representation of the crown.

Root Protection Areas (RPA) are derived from stem diameter measured at 1.5 m above adjacent ground level (taken on sloping ground on the upslope side of the tree base).

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Site: 85 Winnington Road	1:200@ A1
Drawing Title: Arboricultural Impacts Assessment Plan	November 2023

Key:

- Category A High Quality
- Category B Moderate Quality
- Category C Low Quality
- Category U Trees Unsuitable for Retention

Category — Crown Spread
Root Protection Area — Tree Number, Species, Category