
Tree Protection Measures

11 HARVIL ROAD
Ickenham
Uxbridge
UB10 8AJ

(Hillingdon Council)

Prepared for Mr. R Matharu

1. Summary

- 1.1 A total of three individual trees have been surveyed for planning purposes; none of them need to be removed to accommodate the proposed new extension.
- 1.2 There is an existing raised hard standing where the proposed front extension would be sited with negligible or no impact on tree roots of the beech tree, which is anyway more than 10M away.
- 1.3 A full survey has understandably not been commissioned for this householder project. Our Tree Retention and Protection Plan is based on an Ordnance Survey plan supplied by us which provides sufficient detail for the purposes of determining the condition.
- 1.4 Limitations
The statements made in this report do not take account of the effects of extremes of climate, vandalism or accident, whether physical, chemical or fire. We cannot therefore accept any liability in connection with these factors, nor where prescribed work is not carried out in a correct and professional manner in accordance with current good practice. The authority of this report ceases at any stated time limit within it, or if none stated after two years from the date of the survey or when any site conditions change, or pruning or other works unspecified in the report are carried out to, or affecting, the subject tree(s), whichever is the sooner.

2. National and Local Planning Policy for Trees

- 2.1 National Policy and Guidance
 - 2.1.1 National Planning Policy Framework March 2012 from the Department for Communities and Local Government states in section 11 (Conserving and Enhancing the Natural Environment) that *“planning permission should be refused for development resulting in the loss or deterioration of irreplaceable habitats, including ancient woodland and the loss of aged or veteran trees found outside ancient woodland, unless the need for, and benefits of, the development in that location clearly outweigh the loss”*.
 - 2.1.2 The British Standards Institute published BS: 5837 *“Trees in relation to design, demolition and construction – Recommendations”* in April 2012. This document was developed through consultation with engineers, architects, landscape architects, town planners, developers and central government and sets out guidance on the principals to be applied to achieve a satisfactory juxtaposition of trees with structures. It should not be quoted as if it were prescription or specification; interpretation of this document should be left to sufficiently qualified and experienced people who have assessed the trees and site conditions and applied their logic and informed judgement.

3.1 Statutory Protection and Designation

According to the Council's website, this property is not within a Conservation Area. There is a Tree Preservation Order Number 759 on the Beech Tree in the front garden.

3.2 Local Policy and Guidance

The most relevant local policy is the BE38 Hillingdon Local Plan: Part two saved UDP policies (2012).

3. Survey

3.1 Site description

- 4.1.1 11 Harvil Road is a two story residential dwelling within the built up defined settlement of Ickenham(outlined in red in the following aerial photograph).



- 4.1.2 The property is defined by the rear garden to the West, Harvil Road to the East, and the front driveway/parking area to the East. The following photograph shows the front garden area.



Two trees in the front garden---TPO 759 on the Beech tree visible towards the rear

There is a no construction proposed near these trees. A small proposed porch extension is more than 10 M away from these trees, as shown on the attached Block Plan.



Front Driveway entrance and horse chestnut tree

- 4.1.3 The rear garden has a cedar tree near the South boundary which is more than 6M away from the proposed rear extension.



There are no other trees in the rear garden.

4.2 Trees (see plan in appendix II)

- 4.2.1 The objectives of the survey are to provide a measured survey and quality assessment of trees and hedges within or adjacent to the site, the results of which should be used to inform feasibility studies and design options. To incorporate quality trees and hedges wherever reasonably possible into the proposed development and to protect them during construction work.

4.2.2 Trees within the property boundary:

Beech tree—Under TPO 759 situated on the south boundary of the front garden

Horse chestnut tree—a medium size tree in the front garden towards the east boundary

Cedar Tree—A mature tree in the rear garden towards the South boundary.

4. **Arboricultural Impact Assessment**

4.1 Proposed development

To build a two-story extension to the western and northern aspect of the house.

4.2 Tree Constraints and Impacts

- 5.2.1 **Above ground**; such as tree stems located where built structures are proposed and low branches obstructing access.

Site specific:-

The upper branches of the Beech tree, Cedar tree and horse chestnut tree are far away from the proposed development as shown on the Block Plan.

- 5.2.2 **Below ground;** account must be taken for the potential impact of new foundations, contractor's access, working space and provision for the storage of materials. The estimated root protection areas (RPAs) are shown on the plan in appendix II.

The BS 5837 "one-size fits all" calculations for RPAs can only be used as a very rough guide on this site. The green shaded areas is informed estimation of the most likely RPA for the surveyed trees.

Site specific:-

As the footprint of the proposed extension to the west is more than 7M away from the cedar tree, the impact on roots will be negligible since this area is not conducive to root growth and is unlikely to contain any tree roots.

The Beech tree under TPO is on the other side of the existing house and proposed double storey extension. It is therefore highly unlikely that the footprint of the extension encroaches the RPA of this tree.

The RPA of the horse chestnut tree will be restricted by the existing asphalt parking area to the north and east.

5. Conclusions

- 5.1 If the footprint of the proposed extension does not exceed as shown in Block Plan, to the south of the existing house, then the impact on roots will be negligible at worst but more likely virtually non-existent.
- 5.2 The existing house is already far away from the three identified trees.
- 5.3 Protection of the existing trees will preserve and enhance the character and natural landscape features of the area and wider locality. We see no obvious reason why this proposal conflicts with any national or local planning policy in relation to tree issues.

6. References

BS 3998: 2010 *"British Standard Recommendations for Tree work"*.

BS 5837: 2012 *"Trees in Relation to Design, Demolition & Construction - Recommendations"*. *"Diagnosis of ill-health in Trees"* Strouts and Winter DTLR1998 (Forestry Commission)

"Principles of Tree Hazard Assessment and Management". David Lonsdale. DTLR 1999 (Forestry Commission)

"The Law of Trees, Forests and Hedgerows" Charles Mynors 2002

"Tree Surveys: A Guide to Good Practice" Fay, Dowson & Helliwell 2012, Arboricultural Association Guidance Note 7.

"Trees in the Townscape – A Guide for Decision Makers" Trees & Design Action Group 2012

"Tree Roots in the Built Environment". Roberts, Jackson & Smith 2006 – Research for Amenity Trees No. 8.

"Visual Amenity Valuation of Trees and Woodlands – The Helliwell System"; R. Helliwell 2008, Arboricultural Association Guidance Note 4.

Sequential Method Statement

Contact Details

Site Manager	TBC	
Architect	TBC	
Local Council Tree Officer	Hillingdon Council (Tree Section)	

- It will be the site manager's responsibility to ensure this document is adhered to at all times.
- The site manager is ultimately responsible for the cost of any remedial measures or replacement planting in mitigation of damage to the trees or their roots.

Supervision

Trees cannot be reasonably protected unless the on-site staff are aware of the tree protection measures and committed to their implementation. This method statement must be followed in sequence and be made available together with the Tree Retention and Protection Plan to all staff throughout the entirety of the development project.

Visit no.	Phase	Detail	Persons present	Date
1	Pre-commencement of any demolition or construction activity	Pre-commencement "toolbox talk" confirming tree protection measures Mark out tree protection measures (coloured spray) ready for installation by others	Site manager	TBC
2	Completion of construction and hard landscaping	To inspect condition of trees and rooting area To prescribe any remedial work as required	Local Authority	TBC

Tree Protection

Retained trees will be protected by barriers and/or ground protection in accordance with the associated Tree Retention and Protection Plan (TRP Plan) before any materials or machinery are brought onto the site, and before any soil stripping or ground level changes occur. The areas protected with barriers create a *construction exclusion zone*. This will be maintained until all work is completed.

The tree retention and protection plan shows the alignment of tree protection fencing, which is to be installed prior to any of the following taking place:

- Plant and material delivery
- Surfacing and/or soil stripping
- Utility installation
- Construction works
- Landscaping

Stages for installation of tree protection barriers:

- 1) Hand clearance of any vegetation to allow clear working access.
- 2) Setting out of fencing points
- 3) Fencing erected
- 4) Site meeting with Local authority to 'sign-off' tree protection fencing.
- 5) Site accessible to construction traffic

To ensure accuracy and avoid future costly adjustments, the tree protection barriers must be set out in line with the measurements within the plan with all node points being marked clearly on site for the fencing contractor to work to.

The typical barrier construction is suitable for areas of high intensity development, and shall comprise interlocking weld-mesh panels, well braced to resist impacts by attachment to a scaffold framework that is set firmly into the ground. A detailed specification can be found on the plan.

Once erected all barriers will be regarded as sacrosanct, and will not be removed or altered without approval of the local planning authority.

Once the exclusion zone has been protected by barriers and/or ground protection and construction work can commence.

Where construction working space or temporary access is required within the root protection area (noted on the TRP Plan), this will be facilitated by a set-back of the protective barriers.

Ground Protection

The ground protection to be installed must be capable of supporting the expected loads and avoid rutting, compaction and damage to the soil.

Stages for ground protection installation for foot traffic only:

- 1) Lay woven geotextile over existing ground surface by hand
- 2) Cover the area with compressible layer, woodchip for example
- 3) Cover compressible layer with side butting scaffold boards or plywood boards
- 4) Area ready for construction access

Any scaffolding required within the area will be erected with the uprights placed on spreader boards.

The boarding will be left in place until the construction/hard landscaping works are finished.

A single thickness of boarding laid on the soil surface will provide sufficient protection for pedestrian loads.

Trenching and Underground Services

Existing services must be used for this project.

Further guidance is detailed in NJUG Volume 4: 2007 “Guidelines for the Planning, Installation and Maintenance of Utility Services in Proximity to Trees”; and section 7.7 of BS: 5837.

Thereafter, the development shall be implemented in accordance with the approved details. The fencing shall be retained in position until development is completed. The area within the approved protective fencing shall remain undisturbed during the course of the works and in particular in these areas:

2.a There shall be no changes in ground levels;

2.b No materials or plant shall be stored;

2.c No buildings or temporary buildings shall be erected or stationed.

2.d No materials or waste shall be burnt; and.

2.e No drain runs or other trenches shall be dug or otherwise created, without the prior written consent of the Local Planning Authority.

Hard and Soft Landscaping

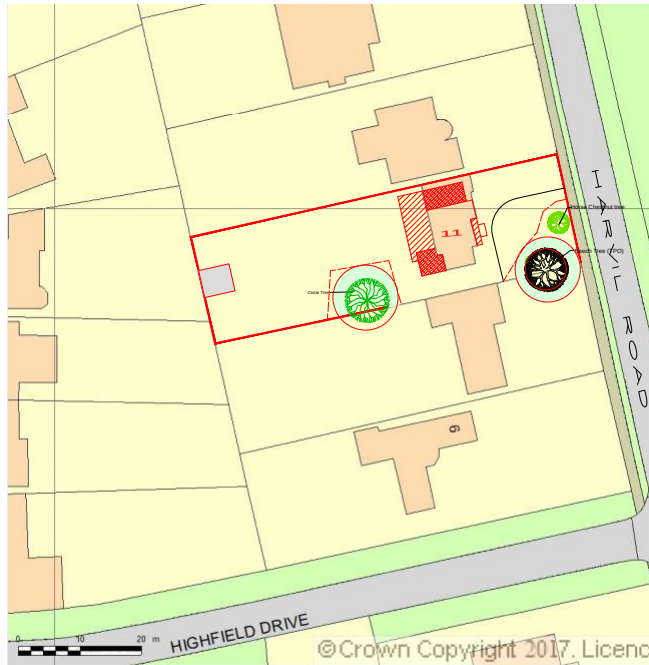
This phase of the development should only be commenced once all building construction has been completed, and all associated plant and material has been removed from site.

Hard landscaping must not involve excavation, cement mixing or any other potentially damaging disturbance of the ground or roots within the RPA of retained trees.

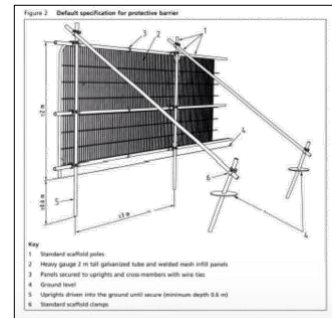
For all planting within the RPA of retained trees, only transplants or small shrubs will be used and then only with hand-dug holes. New planting must allow for increased canopy spread and root spread of existing trees.

All tree and shrub planting must be carried out in accordance with BS 4428:1989 and BS 8545:2014.

Tree Retention and Protection Plan



BLOCK PLAN
SCALE 1:500@A3



- AREA FOR STORAGE OF BUILDING MATERIAL
- TEMPORARY TREE PROTECTION BARRIERS (BS5837:2005)
- ESTIMATED ROOT PROTECTION AREA (RPA)

BS 5837:2005 Root Protection Area:

THE RPA CAN BE A VARIED SHAPE ENCLOSING THE CORRECT ROOTABLE AREA OR SHOWN AS A CIRCLE FOR CONVENIENCE.

Calculated as:-

Single-stem tree:- radial distance = $12 \times \text{stem diameter at 1.5m ht.}$

Trees with two to five stems:-

combined stem diameter = square root of (stem diameter 1)² + (stem diameter 2)²..... + (stem diameter 5)².

Trees with more than five stems:- combined stem diameter = square root of (mean stem diameter)² x number of stems



PROJECT:

PROPOSED DOUBLE STOREY SIDE/REAR EXTENSION

11 Harvil Road
Ickenham

DRAWN BY:

P.S.

DATE:

15/01/2018

SCALE:

AS SHOWN@A3

FILENAME:

HC/17/1

DRAWING TITLE:

TREES LOCATION&PROTECTION PLAN

DRAWING NUMBER:

HR-01

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