



Arboricultural Survey and Planning Integration Report

at

**5 Back Lane,
Hampstead,
London.
NW3 1HL**

29th November, 2016



C O N T E N T S

Section	Subject	Page
	Instructions	1
	Summary	1
	Documents Supplied	2
1	Scope of Survey	2
2	Survey Method	2
3	Bat Informative	3
4	The Site	3
5	Subject Trees	4
6	The Proposal	4
7	Arboricultural Landscape Integration	4
8	Post Development Pressure	5
9	Tree Protection Measures	5
10	Conclusions	6
11	Recommendations	7
Appendix A	Photographs	
Appendix B	Site Plan – Existing and Proposed Layouts	



Quaife Woodlands

2 Squerryes Farm Cottages, Westerham, Kent. TN16 1SL
 Telephone: 01959 563878 Facsimile: 01959 564854
 E-mail: jq@quaife-woodlands.co.uk

ARBORICULTURAL REPORT

LOCATION	5 Back Lane, Hampstead, London. NW3 1HL	REF: AR/3630/jq
CLIENT	David Loewi, Address as above	DATE OF REPORT 29 th November, 2016
REPORT PREPARED BY	J. Quaife, AA Registered Consultant Dip.Arb.(RFS), F.Arbor.A, CEnv.	DATE(S) OF INSPECTION 15 th November, 2016
SURVEY INSPECTOR(S)	J. Quaife, AA Registered Consultant Dip.Arb.(RFS), F.Arbor.A, CEnv.	SHEET No. 1 of 7

LOCAL AUTHORITY	Camden Council
CONTACT	Arboricultural Officer Gerry Oxford 0207 974 4444 gerry.oxford@camden.gov.uk

Please note that abbreviations introduced in [square brackets] are used throughout the report.

INSTRUCTIONS

Issued by – Mr M. Neale of Form Studio, 1 Bermondsey Exchange, 179-181 Bermondsey Street, London, SE1 3UW, on behalf of Mr Loewi.

TERMS OF REFERENCE – To survey the subject trees to assess their general condition and to provide a planning integration statement for the proposed development that safeguards the long term well being of the retained trees in a sustainable manner.

The content and format of this Report as written are for the exclusive use of the Client. It may not be sold, lent, hired out or divulged to any third party not directly involved in the subject matter without our written consent.

Summary

The proposal is to re-model the existing house and this includes an extension to the rear where there are two trees. One is a minor specimen (ornamental maple) whose removal will have no appreciable landscape impact, and the other (a pear) is to be retained.

The retained tree is to be pruned, as much as a matter of routine maintenance as any direct result of the proposal, and the levels of the rear yard will not be lowered, and where decking is to be installed to provide a level area, the materials used will be permeable.

The site is very constrained in size and logistical planning will need high focus.

The protection of the retained tree will be effected in accordance with current standards and guidance, and there are no matters of post development pressure upon it which could not be managed with routine maintenance.

The proposal is sustainable in arboricultural terms.

Documents Supplied

- Form Studio drawings of existing and proposed layouts, refs: 882-204/5/6 rev B

Scope of Survey

- 1.1 The survey is concerned with the arboricultural aspects of the site only.
- 1.2 Quaife Woodlands was not instructed to investigate the statutory protection status of trees on or adjacent to the subject site.
- 1.3 No discussions took place between the surveyor and any other party.
- 1.4 The trees were inspected 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).
- 1.5 The survey was undertaken in accordance with British Standard 5837:2012 Trees in relation to design, demolition and construction – Recommendations [BS5837] with modification.
- 1.6 This report sets out the Root Protection Area [RPA], described by the RPA radius [RPR] derived from Section 4.6 of BS5837, but modified to the site circumstances.
- 1.7 Pruning works will be required to be in accordance with British Standard 3998:2010 Tree work - Recommendations [BS3998].
- 1.8 This report does not cover the arrangements that may be required in connection with the laying or removal of underground services.
- 1.9 This report does not set out the working specifications of tree protection measures and engineering and design features, but provides enough detail in principle to demonstrate the feasibility of the scheme.

Survey Method

- 2.1 The survey was conducted from ground level.
- 2.2 No tissue samples were taken nor was any internal investigation of the subject trees undertaken.
- 2.3 No soil samples were taken and the trees were assessed in terms of dimensions and condition visually.
- 2.4 The positions of the subject trees are plotted at Appendix A derived from the supplied plan.

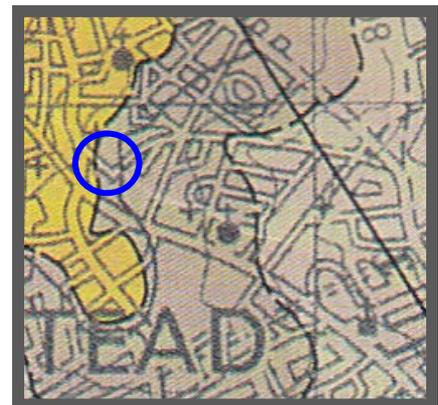
Bat Informative

- 3.1 I completed the Bat Conservation Trust's three-day residential course in July 2008. Whilst I am not a licensed bat handler and do not regard my knowledge of bats as being equivalent to an ecology professional, with successive experience I am very familiar with the observational requirements of bat habitats and cognisant of British Standard 8596:2015 Surveying for bats in trees and woodland, and more particularly the introduction, Micro guide to surveying for bats in trees and woodland, issued in respect of non-professional ecologists.
- 3.2 Bats are protected under the Wildlife & Countryside Act 1981 and subsequent legislation and The Conservation of Habitats and Species Regulations 2010 and it is an offence to deliberately or recklessly disturb them or damage their roosts. Trees should be inspected before any works commence and if the presence of bats is suspected advice will need to be sought from the Natural England Bat Line on 0845 1300228. Further advice on bats is available from The Bat Conservation Trust (020 7627 2629).
- 3.3 In my estimation there are no potential bat roosts in the tree to be removed or the tree to be retained.

The Site

- 4.1 The site is situated on the north-eastern side of Back Lane and the property is a mid-terrace, three-storey house, with the front elevation to the pavement. There is wide access path underneath the neighbouring property (No. 5a) to the south leading to the rear. The southern boundary of the subject rear garden is at a higher level than this path with a drop to it from the top of the retaining wall of about 1.55 metres.
- 4.2 The rear garden is paved but with a small herbaceous border against the retaining wall. The pear is in a small brick surround. The maple is in a small ornamental enclosure against the northern boundary with a small circular water feature.
- 4.3 The site is ringed in blue on this extract reproduced from the Geological Survey Drift Map, Sheet 256, North London (by permission of the British Geological Survey ©NERC. All rights reserved). The indicated soil parent material shown brown is London clay and the yellow zone is overlying Bagshot Formation sand.

*C08/105-CSL British Geological Survey.
© NERC. All rights reserved.*



- 4.4 Whereas the site may well have sand present, the underlying clay is probably the main component. Clay is a shrinkable soil and susceptible to compaction, which is harmful to tree roots. The precise soil make-up is in all likelihood a mixture as the ground may well be made up, but there is no history of water-logging and for the purposes of this project I have assumed the soil to be reasonably permeable. Given that the ground around the retained tree will not be exposed, if the soil is shrinkable it will be more of an engineering consideration.

- 4.5 I am not an expert on soils and although I have some working knowledge of them, if accurate soil analysis is required then a soil specialist should be contacted.

Subject Trees

- 5.1 There are just two subject trees. One is a small ornamental Japanese maple and the other is a pear. I have included photographs 1, 2 and 3 of them at Appendix A.
- 5.2 Both trees are in satisfactory condition. The maple is within an enclosure with a small water feature and although the top of its crown is above the boundary wall, it is of very minor landscape significance.
- 5.3 The pear is taller and the owners wish to retain it. Given that it is to be retained a categorisation in accordance with BS5837 is of no consequence.

The Proposal

- 6.1 The proposal is set out at Appendix B as far as it related to the rear garden and the two subject trees. The extension to the house does not affect the pear directly, but involves the lowering of the internal floor so that instead of stepping down into the rear garden, there will be a step up.
- 6.2 The existing soil levels in the rear garden will be maintained, other than the small excavation for the new step.

Arboricultural Landscape Integration

- 7.1 Of the two subject trees, the maple is to be removed and the pear retained with some pruning.
- 7.2 The maple (photographs 1 and 2, Appendix A) is a minor specimen within an almost complete enclosure containing a small water feature. It has outgrown its position but even so it is still an insignificant tree in landscape terms. Its removal will have no discernible impact upon the character and appearance of the area.
- 7.3 The pear (photograph 3, Appendix A) is to be retained. It is becoming too tall for its location and I suggest that it be reduced in height by a maximum of 2.5 metres. This reduction is due in any event irrespective of this proposal. In addition a few of the lower branches are to be removed just to create greater light and air underneath. The installation of a level decking area is to facilitate a table and chairs and the modest crown lift will provide a spatial enhancement. The tree is in good health and this pruning will not have any adverse physiological effect.
- 7.4 In summary, the loss of the small maple and the retention and pruning of the pear will not have a detrimental visual impact upon the character and appearance of the area.

Post Development Pressure

- 8.1 The concept of post development pressure is not that routine maintenance work to maintain clearances and the proportionality of trees is unacceptable. The term should more accurately be one of irresistible post development pressure where the spatial or physical relationship of a retained tree to a structure or feature demands pruning or removal that is inappropriate, but to which the local planning authority could not reasonably refuse consent.
- 8.2 The spatial relationship of the rear garden with the pear tree will be very similar to the existing relationship, other than the proposed pruning increasing the sense of light and air underneath it.
- 8.3 Accordingly there will be no appreciable post development pressure, and certainly none that would oblige the Council to give consent to inappropriate tree works.

Tree Protection Measures

- 9.1 The BS5837 gives a Root Protection Area [RPA] for each retained tree by reference to Section 4.6 in the BS. The RPA is an estimation of the area of the root system that would need to be retained to sustain the condition of the tree if all the other roots outside it were to be severed. The RPA represents a smaller proportion, (on average only a third), of a tree's root system and consequently whilst the RPA is particularly important to ensure that there are no adverse effects upon stability, if an encroachment does not reduce the overall assimilative function of the root system significantly it is unlikely to cause harm. However, as with any factor relating to trees each individual situation must be justified in site-specific terms.
- 9.2 The RPA is usually described as a circle with a radius (Root Protection Area Radius [RPR]) of the prescribed distance within which no unspecified activity should occur, though the shape and position of the RPA can be modified by an arboriculturist to meet individual site conditions according to the probable distribution of the tree roots. Intrusion into the RPA can take place only where the ground is adequately protected in accordance with the requirements of Section 6.2.3 of BS5837 or where work is carried out to an agreed design and working method.
- 9.3 In this instance the notion of an RPA with a shape which might be plotted is unworkable. As far as I am concerned, the distribution of roots is purely guesswork, and all that one can say is that as the tree is in satisfactory condition, it must have a commensurate root system, wherever that might be. In the specific context of this site the RPA is the entire rear garden.
- 9.4 **RPA Protection** There is no scope for fencing off the RPA. The rear garden is a mixture of paving and small herbaceous borders (photographs 4 and 5, Appendix A). The border in which the tree stands is to be retained as is the paving. For the construction period the garden will remain as it is with boarding over the borders, and relying upon the existing paving to protect roots. Other than pedestrian use and the storage of materials, no heavy plant will be operating in the rear garden.

- 9.5 The excavation for the “reversed” step shaded in orange at section B, Appendix B, is so minor that I am confident that it will have no adverse impact upon the pear.
- 9.6 The decking is to be installed over the existing paving as shaded in yellow at section B, Appendix B. This will need some paving at the house end to be lifted so that the decking finished surface level matches with the step, but the levels have been drawn to avoid any excavation into the soil below.
- 9.7 There is a possibility of the wide path to No. 5a being available for the delivery of some materials, but the internal work to the house to date has been conducted through the front door and this will continue.
- 9.8 The pear’s stem is to be protected with a guard made from shuttering plywood sheets mounted on a free-standing frame of wood or scaffolding. No part of the frame or the sheeting is to be in contact with the tree. The guard will be positioned before any work relating to this planning application is commenced, and will remain in position until all work has been completed.
- 9.9 I have not been advised of the underground service routes, but I understand there will only be provision for lighting and cables can be run in conduits along the base of the northern boundary wall. Such installations would have no adverse effect upon the pear.
- 9.10 One of the main tree protection considerations will be the logistical management of the site. The access to and from the rear garden will be restricted and attentive planning will be needed for materials handling and storage.

Conclusions

- 10.1 Of the two subject trees the small maple is to be removed and the pear retained. The former is of little landscape significance and its removal will not have any adverse impact upon the landscape. The pear is to be pruned merely to retain its proportionality to the site, and although prompted by this proposal, the pruning is more a matter of routine maintenance. In consideration of these matters the arboricultural landscape impact of the proposal will be neutral.
- 10.2 The retained tree does not cause any significant conflicts in terms of construction activities, nor will any significant issues of post development pressure be likely to emerge that could not be managed with continued routine maintenance.
- 10.3 The retained tree will be protected in accordance with current standards and guidance, with particular care given to logistical planning.
- 10.4 For trees to be sustainable within a development proposal they must be compatible with their surroundings, not just in terms of long-term spatial relationship but also in respect of minimising any potential conflicts to matters of routine maintenance. This proposal achieves this objective.
- 10.7 I have taken account of the information given to me and my own observations on site and I am satisfied that this scheme is arboriculturally sound and that the long-term well-being of the retained tree will be safeguarded in a sustainable manner.

Recommendations

11.1 The successful integration of the proposal with retained trees will need to take account of the following points:

- i) Implementation of the tree protection measures and methods set out in this Report.
- ii) Site logistics plan to include handling and storage of materials.
- iii) Site supervision – This scheme only has one static tree protection measure of the tree guard, but the Site Agent will be responsible for all ensuring that the pear is not exposed to any risk of damage, either through physical contact or by the spillage of harmful substances. The Site Agent will:
 - a) be present on site for the majority of the time,
 - b) be aware of the arboricultural responsibilities,
 - c) have the authority to stop any work that is causing, or has the potential to cause harm to any tree,
 - d) be responsible for ensuring that all site operatives are aware of their responsibilities toward the pear tree and the consequences of any failure to observe those responsibilities,
 - e) make immediate contact with the local authority and/or the project arboriculturist in the event of any tree-related problems occurring, whether actual or potential.

11.2 As a matter of course these points will be resolved in consultation with and subject to the approval of the planning authority through their Arboricultural Officer.

11.3 The sequence of works should be as follows:

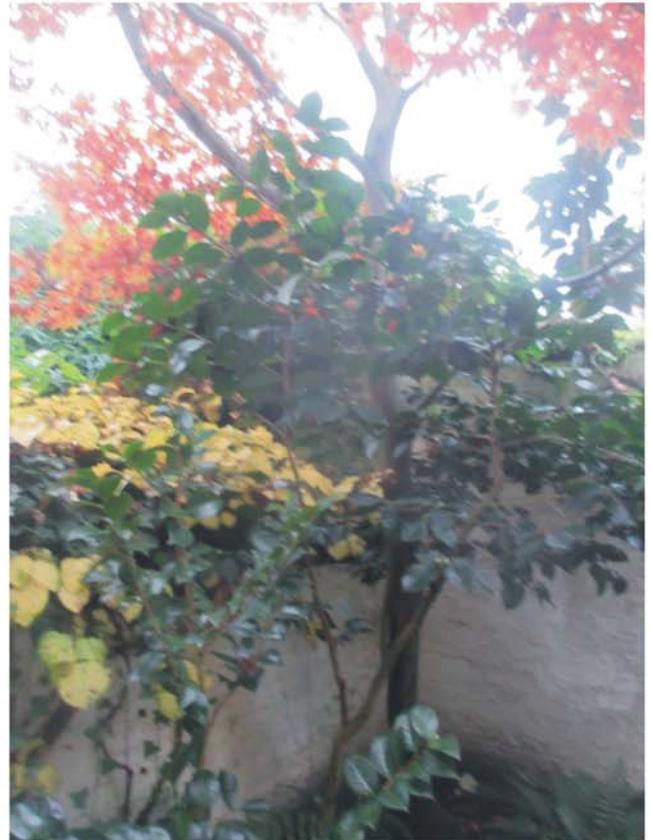
- i) initial tree works – tree removal and pruning
- ii) installation of tree guard
- iii) main construction, including work in the rear garden
- iv) removal of tree guard

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. Quaife Woodlands 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.

Photographs taken on 15th November, 2016



Photograph 1.
View of the maple looking up through the glass roof



Photograph 2.
View of the base of the maple



Photograph 3.
View of the crown of the pear looking to the north-east with suggested height reduction shown

Photographs taken on 15th November, 2016



Photograph 4.

View of the crown of the rear garden looking to the north-east with the base of the pear in the foreground, and the main paving is to remain with level decking installed above.



Photograph 5.

View of the rear garden looking to the south-west with the base of the pear in the foreground, and the step to be "reversed" arrowed. The main paving is to remain with level decking installed above.

Quaife Woodlands Arboricultural Survey AR/3630/jq

5 Back Lane, Hampstead, London, NW3 1HL

Site Plan of the Rear Garden - Existing and Proposed Sections and Proposed Plan

Scale 1:100 approximately @ A3

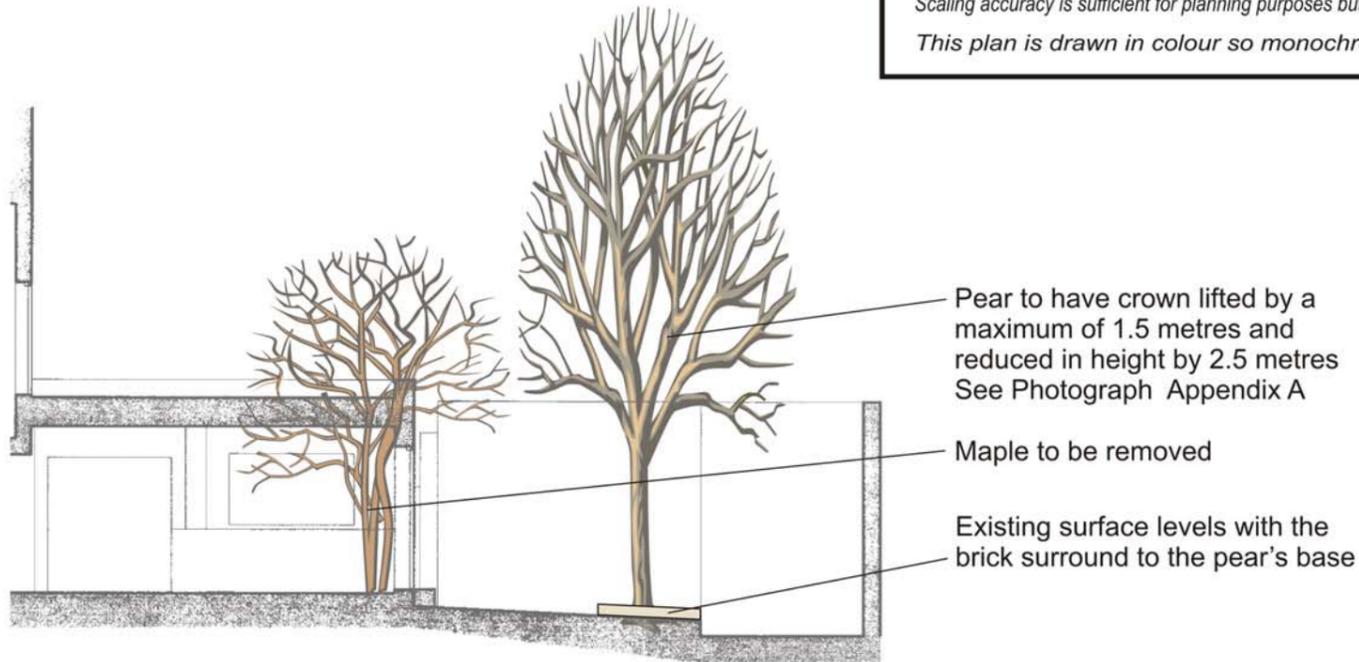
28th November, 2016



Scaling accuracy is sufficient for planning purposes but this drawing should not be used for construction

This plan is drawn in colour so monochrome reproduction may be unreliable

A



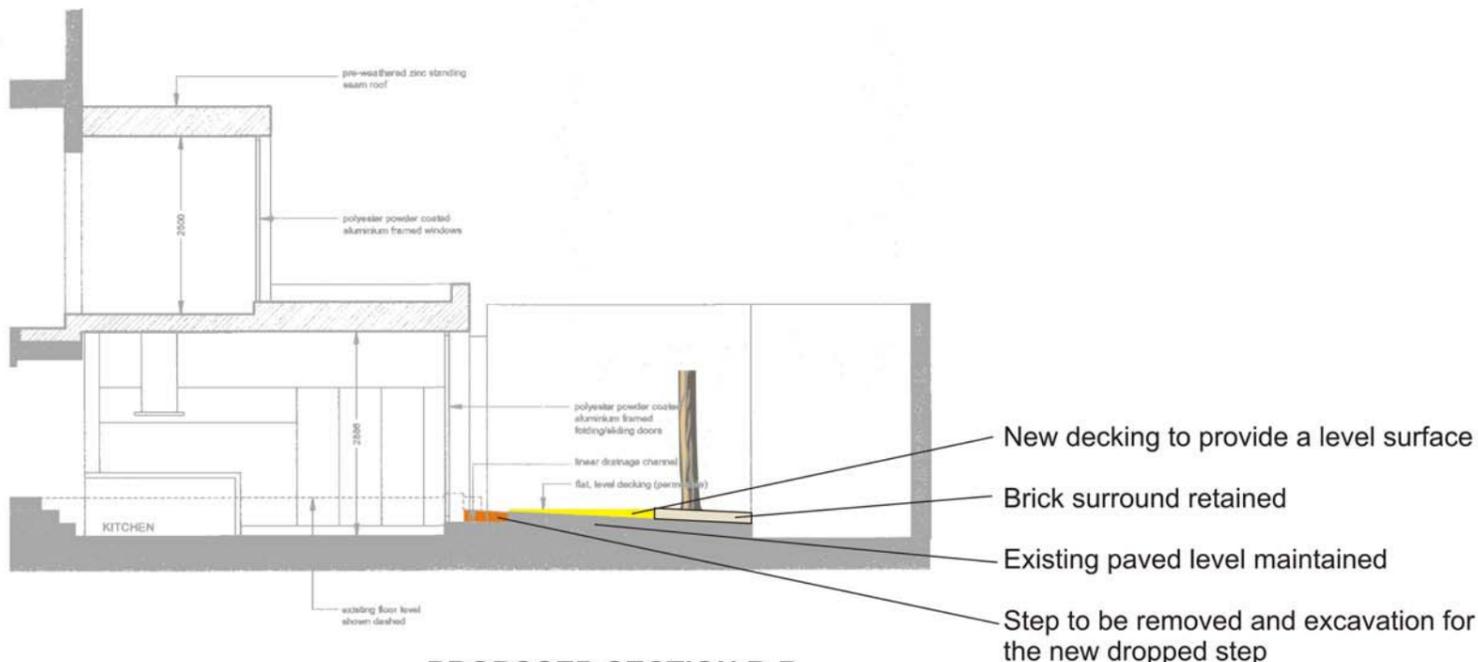
Pear to have crown lifted by a maximum of 1.5 metres and reduced in height by 2.5 metres
See Photograph Appendix A

Maple to be removed

Existing surface levels with the brick surround to the pear's base

EXISTING SECTION B-B

B



New decking to provide a level surface

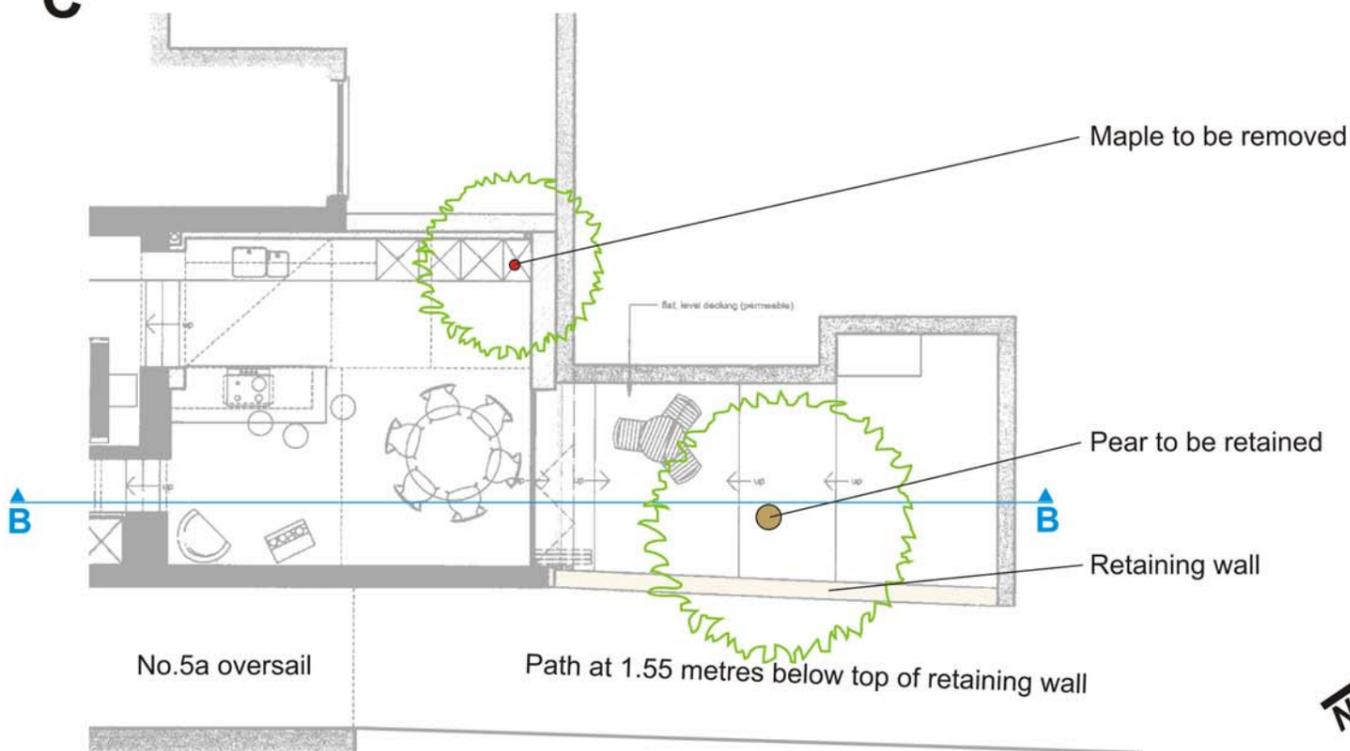
Brick surround retained

Existing paved level maintained

Step to be removed and excavation for the new dropped step

PROPOSED SECTION B-B

C



Maple to be removed

Pear to be retained

Retaining wall

No.5a oversail

Path at 1.55 metres below top of retaining wall



PROPOSED PLAN