

# Proposed Development

## 11 Albert Terrace Mews, NW1 7TA

### Arboricultural Method Statement



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### 1.0 Introduction

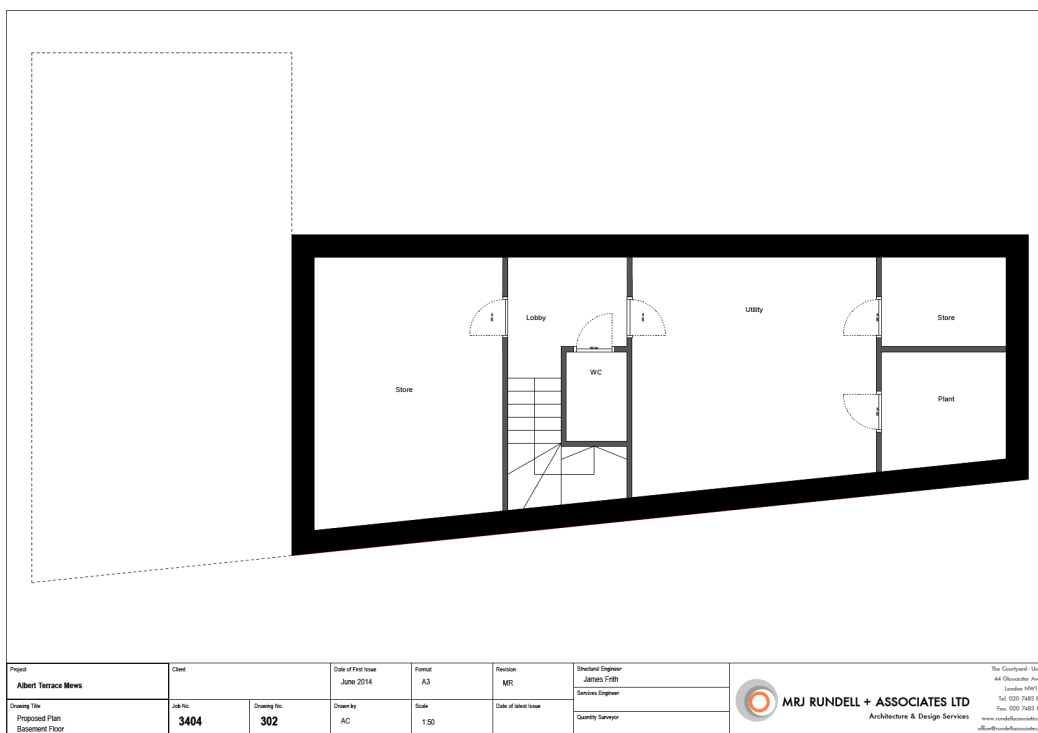
Crawshaw Environmental has been instructed to devise an Arboricultural Method Statement (AMS) for the proposed development at 11 Albert Terrace Mews, NW1 7TA. This method statement sets out a timetable of works, tree protection measures and monitoring. All aspects of the AMS should be strictly adhered to. This method statement should be used in conjunction with the Arboricultural survey, Tree Constraints Plan (TCP) and any Landscape Impact Assessment.

## 1.1 Site

The survey site is a modern house and surfaced, landscaped garden area set within a mews. There are various trees located within the garden and some within neighboring property, which are close to the boundary.

## 1.2 Proposals

The proposals are to construct a basement level below the existing lower ground floor within the property boundaries as shown below.



## 2.0 Overview

- ❖ No trees to be removed
- ❖ 5 trees to be retained (1 outside the property)
- ❖ 3 Olive trees within pots to be relocated during construction and then re-sited
- ❖ Scaffold boards to support stored Olive trees
- ❖ Retained trees to be protected by barrier Hoarding as described in section 6
- ❖ Existing boundary walls and protective fencing to be used to protect trees outside the development site
- ❖ Perimeter site hoarding to protect hedge and lower canopies
- ❖ Metal/wood ramps/boards to be used for ground protection on top of existing patio for machine and goods access

## 3.0 Tree constraints

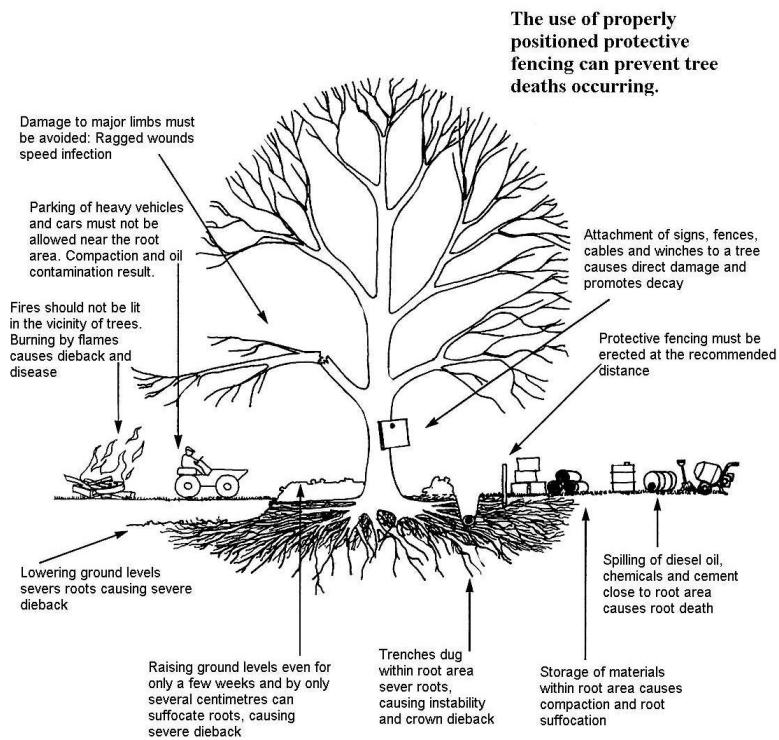
With reference to the Arboricultural Report and Tree Protection Plan (TPP), particular attention should be given to the trees that are to be retained. The TPP clearly identifies the Root Protection Areas (RPA) for the trees which will be retained. This method statement sets out in addition a Construction Exclusion Zone (CEZ) by way of protective fencing and signage. Protection of the retained trees is paramount to the granting of planning permission, the design of the development and the future health and success of the trees.

## 4.0 Tree Protection

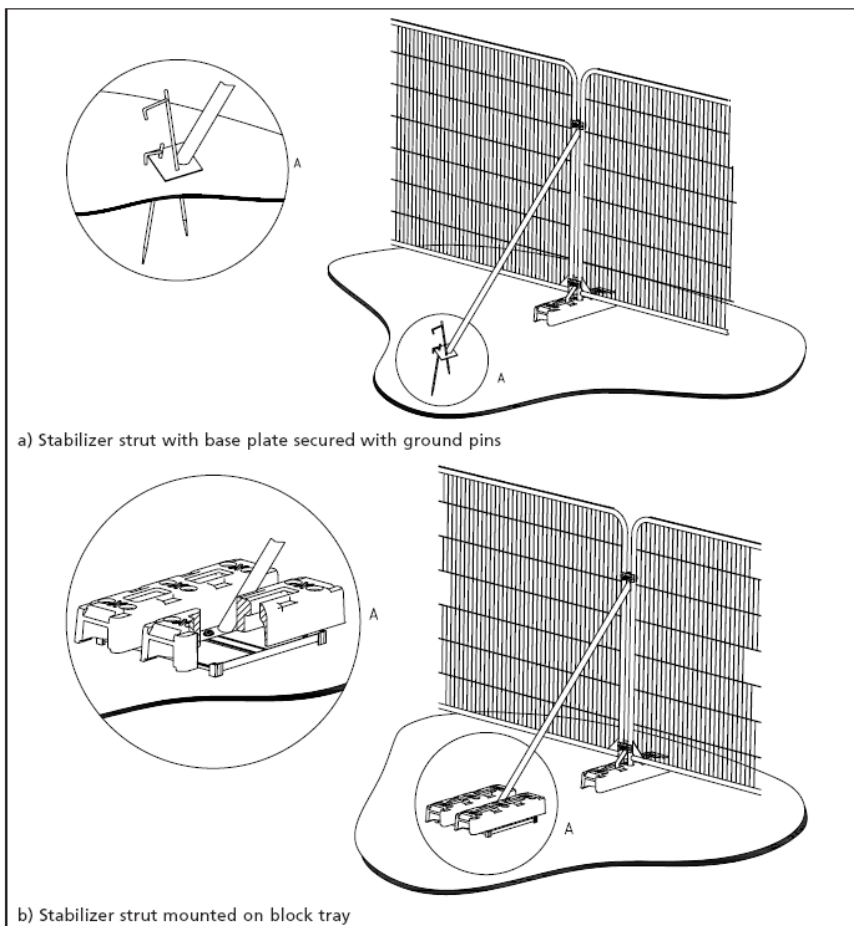
Prior to construction the trees are to be protected by tree protection fencing or Hoarding installed in accordance with BS 5837:2012 as identified within the Tree Protection Plan for approval by the local authority.

The tree protection fencing is to be erected as detailed below and maintained in place until the completion of the project. The fencing should be used in conjunction with existing fences and walls to enable a clear CEZ whilst reducing excessive fencing and clutter.

### *Common causes of Tree Death*



Protective fencing specification



Protective Hoarding example



Warning signs



### 5.0 Tree Survey Schedule

ID	Species	H/T	Stems	Dia mm	Canopy Spread				First Branch	H/T Crown	Age	Years Rem	Cat	Observations	Recommen dations	Planning Notes
					North	East	South	West								
T1	Walnut	10	S	350	4	6	5	6	2W	3	Early Mature	40+	A	Good overall condition, just outside boundary fence. Widespread canopy. Slight southerly lean. Damage to boundary wall.	Monitor wall damage	Could have 25-30% crown reduction, no raising of crown
T2	Japanese zelkova	6	S	200	5	4	3	3	2N	3	Early Mature	40+	B	Good overall condition, some minor rot on stem	None	Can be retained
T3	Cherry	5	S	100	1	1	2	4	2W	2	Young	20	C	Growing within brick retainer. Poor weedy specimen	None	Poor specimen could be removed and replaced
T4	Silver Birch	12	S	300#	2	2	2	2	4N	3	Early Mature	30	B	Within neighbouring property. Good overall condition	None	Out of site
T5	Acacia	5	S	75	1	1	1	1	4E	5	Young	10	C	Crowded by adjacent trees	Monitor/ possible	Poor specimen crowded

## 6.0 Root Protection Areas

ID	Species	Category	RPA (r)	RPA (a)
T1	Walnut	A	4.2	55.4
T2	Japanese zelkova	B	2.4	18.1
T3	Cherry	C	1.2	4.5
T4	Silver Birch	B	3.6	40.7
T5	Acacia	C	0.9	2.5

## 7.0 Time table of works

Time Table
Pre-commencement meeting prior to construction works to discuss the tree protection measures.
Installation of tree protection measures (barriers / ground protection / special surfaces
Tree protection measures to be signed off by either the LPA Arboricultural Officer or the appointed Arboriculturalist.
Installation of access routes
Main construction and hard landscaping works
Inspection by the LPA Arboriculturalist or appointed Arboriculturalist to agree any issues raised if necessary
Protection measures to allow the soft landscaping works.
Soft landscaping works
Aftercare & Monitoring

## 8.0 Demolition & Construction Works

Below is the prescriptive method statement to protect the retained trees during demolition, construction and landscaping works. Protection measures are put in place to protect the main stem, limbs and canopy, as well as the roots on and beneath the surface. Every effort has been made to ensure the highest protection for the trees within and adjacent to the site.

### Ground Protection during Construction

The installation of protective hoarding around the trees, as shown on the Tree Protection Plan, will create a Construction Exclusion Zone CEZ. There will be no access to this area for construction purposes, storage of materials or tools. The hoarding at 8ft tall will protect the ground and the roots of the trees by complete exclusion. Scaffold boards will be laid down to accommodate the temporary placement of the Olive trees within pots. The boards will protect the existing slabs, whilst spreading any weight burden imposed until they can be re positioned. Metal or wooded ramps will be used to facilitate the ingress of digging machinery and equipment from the rear gate.

A conveyor system will be deployed over the RPA's and gate to transfer all spoil from the site to waiting vehicles. All spoil will be stored, prior to shipment within the patio area, which lies outside the RPA's. At no point should the trees be undermined, without adequate rooting soil volume remaining. The Arboricultural consultant should be instructed to inspect the proposals prior to any undermining works. The conveyor will be located outside the protective hoarding and enable the exit of spoil material without impact on the ground within the RPA's.

### Canopy Protection during Construction

The protective hoarding will physically protect the stems and lower limbs of the retained trees. It will also protect the hedge at the rear of the property from inside and outside the site. T4 lies outside the site and will naturally be protected by the boundary wall. All other retained trees will be within the CEZ, as shown.

### Excavations within the RPA

There will be no excavation within the RPA's of any of the retained trees.





### **Excavation and spoil**

Care should be taken when planning site operations to ensure that wide or tall loads or plant with booms or jibs and counterweights can operate without coming into contact with the retained trees. This is of particular relevance to the pouring of the concrete foundations and the delivery and placement of the heavy masonry blocks.

Reference is also made to materials which could contaminate the soils e.g. concrete mixings, concrete washings and mortar which should not be discharged within 10m of the Root Protection Area or under or within 10m of any other tree or shrub.

Accordingly the materials should not be mixed within the Root Protection Area or on an area sloping towards the tree. On completion of the works all surplus materials are to be collected and disposed of offsite, the temporary ground protection removed and the affected area made good.

### **Underground Services**

All utility runs will be from within the existing building structure and there will be no impact on the RPA's.

## **9. Supervision & Reporting**

The developer, site manager, developer's Arboriculturalist and the Council's Arboriculturalist must meet on site before any development activity begins to confirm the timing and implementation of the agreed tree works and instillation of the tree protection measures.

A suitably competent Arboriculturalist is to make regular site visits, at intervals of not more than 14 days (to be determined at the pre-commencement site meeting) which is also to determine the manner in which those visits are to be recorded and logged, to confirm that the protection measures agreed and employed are functional and achieving their purpose. To liaise with the LPA's Arboriculturalist and agree any changes or revisions that may be necessary, before they are implemented. Any changes to the agreed protection measures or procedures are to be agreed in writing by the LPA, recorded and circulated to all parties as an addendum to this method statement.

## **10. Contingency Plans**

In the event of unforeseen incidents occurring, that may adversely affect or threaten the welfare or security of the trees, the resident Site Agent/Manager shall inform the Arboricultural Consultant at the earliest opportunity and not more than one working day following the incident.

The Arboricultural Consultant will visit the site to inspect and assess the circumstances and make any appropriate recommendations. The Local Planning Authority Tree Officer will be informed by the Arboricultural Consultant of such incidents and recommendations will be submitted for approval by the Local Planning Authority, initially verbally, and then in writing.

A record of any emergency incidents and works shall be maintained by the Arboricultural Consultant

- ❖ Incidents which may merit such contingency plans include
- ❖ Accidental / unauthorised damage to the limbs, roots or trunk of trees
- ❖ The spillage of chemicals within or adjacent to a Root Protection Area
- ❖ The discharge of toxins / waste within or adjacent to a Root Protection Area
- ❖ The un-scheduled access over the RPA's

## **11. Aftercare & Monitoring**

Where possible health, vigour and future development of the root systems should be encouraged, below are recommendations for maintaining the roots ability to breath, take up water and nutrients and expand if needed.

- ❖ Tree roots should be undisturbed in the existing environment
- ❖ A qualified arboriculturalist should visit the site post development and undertake a health & safety assessment of the trees to determine any issues arising and to recommend an adjustment or any additional measures he deems suitable to maintain the health a viability of the trees.

## 12. References

British Standards 5837: 2012 Trees in relation to design, demolition and construction.

Tree Preservation Orders - A Guide to Good Practice-

Diagnosis of ill health in trees - R G Sprouts and T G Winter - Forestry

Principles of tree hazard management - David Lonsdale – Forestry

Commission Publication ISBN 0-11-753355-6

The body language of trees - Claus Mattheck and Helge Breloer – Forestry Commission Publication ISBN 0-11-753067-0

Arboriculture research and Information note 12 'Tree Root Systems'.

Tree Roots and in the Built Environment John Roberts, Nick Jackson

## 13. Tree Protection Plan.

Key to Tree Protection Plan

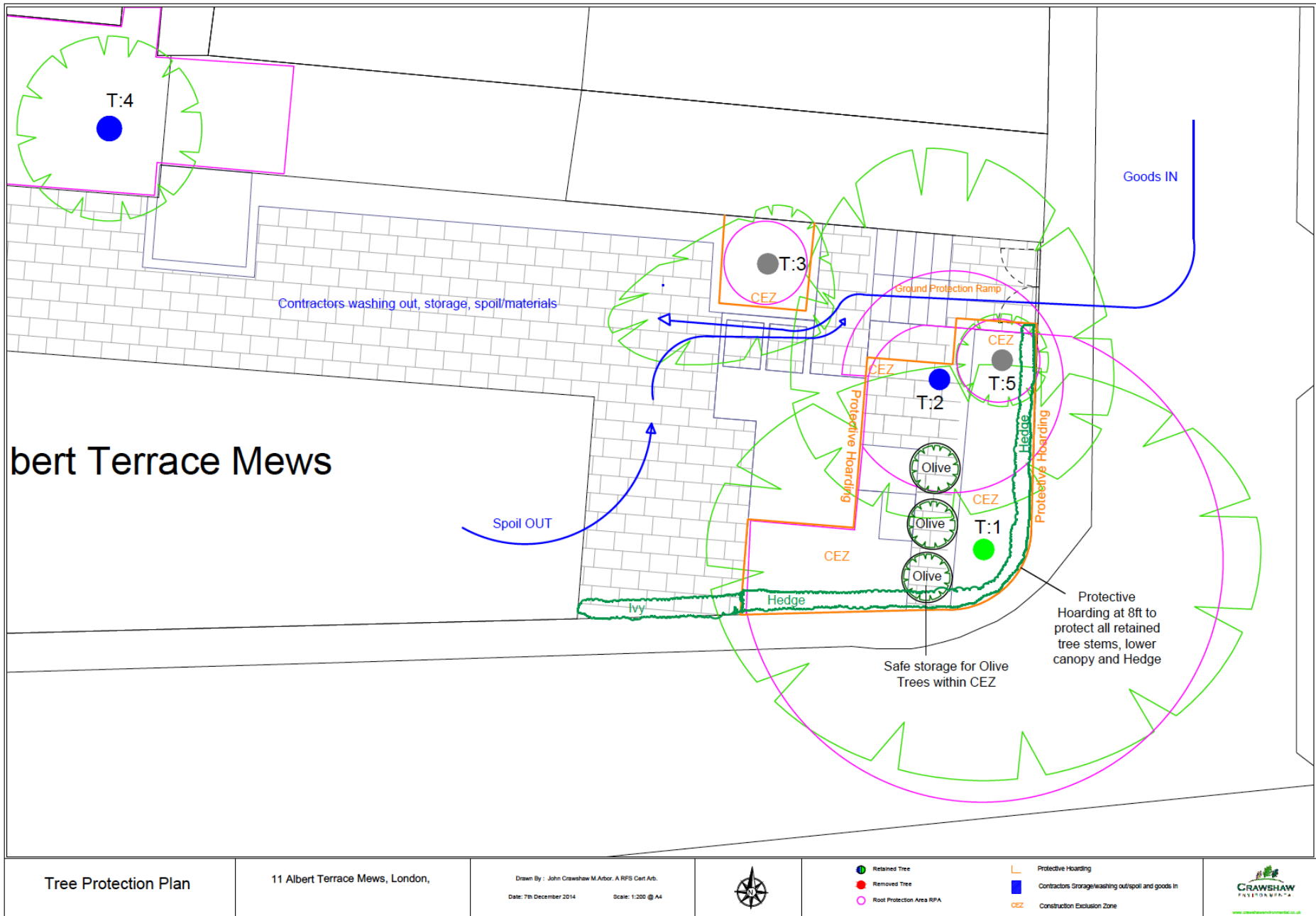
Trees to be retained – Green, Blue, Grey

Trees to be removed – Red

Protective fencing – Magenta

Root protection areas – Magenta

PDF's within this report may not be exactly to scale and should be used as a guide. Use AutoCAD version for accurate scaling.



## Appendix 1. Terms and Conditions

Any report is provided for the sole use of the named client and is confidential to the client and his professional advisors. The consultant accepts responsibility to the client alone for the stated purposes of the report, which will be prepared, with the skill, care and diligence reasonably expected of a competent Arboricultural Consultant, but no responsibility whatsoever is accepted to any person other than the client himself. Any other such person relies upon the report entirely at his own risk. Neither the whole nor any part of the report or any reference thereto may be included in any published document, circular or statement nor may it be published in any way without the Consultant's prior written approval of the form and context in which it may appear.

The client shall pay the consultant his fee for the report regardless of any outcome. In addition, the client will reimburse the Consultant the cost of all reasonable out of pocket expenses which he may incur. Payment in full of the total amount due must be paid within 30 days and the Consultant shall be entitled to charge interest both before and after any judgement of the amount unpaid, at the rate of 10% per month from time to time, until payment in full is made (a part of the month shall be treated as a full month for the purpose of charging interest). No discount nor retention or set off against the same due is allowed unless previously agreed by the Consultant in writing. The report is valid from the date of the report for one year following the receipt of payment in full for the services provided.

In making the report, the following assumptions will be made by the Consultant (and these are therefore matters for which no responsibility can be accepted by the Consultant):

- (i) that the land, which is the subject of the inspection or survey, is not subject to any unusual or especially onerous restrictions, encumbrances or outgoing and that good title can be shown
- (ii) that the land and its value are unaffected by any matters which might be revealed by a local land search or replies to conveyance enquiries or by any statutory notice and that neither the land nor its condition nor its uses nor its intended uses is, or will be unlawful or contrary to planning or building regulations
- (iii) that inspection of those parts of the land or soil strata or any tree which have not been inspected would neither reveal material defects nor cause the Consultant to alter his opinion materially
- (iv) that there are not underground pipes, wires, cables or others services or installations which might be damaged as a result of work recommended or necessary
- (v) that no tree is the subject of or protected by a Tree Preservation Order or the terms of a planning consent, in relation to which the Client must make his own enquiries of the Local Planning Authority responsible.

The Consultant will provide his opinion on those matters in respect of which he has given the Client express written confirmation and subject to the limitations and conditions then stated.

It is possible that the report will suggest further investigation works to be carried out by a specialist firm or person e.g. Structural Engineer, Surveyor, drain or electrical engineer. On no account will liability be accepted by the consultant in respect of matters on which the client is recommended to obtain such other specialist advice or if the client proceeds or acts without obtaining and acting upon the relevant further advice.

The report will not purport to express an opinion about or to advise upon the condition of un-inspected parts of the land or trees and should not be taken as making any implied representation or statements about sum parts.

The consultant will carry out such work with the skill, care and diligence that can reasonably be expected of a competent arboricultural consultant, always bearing in mind the limitations of the inspection.

Preliminary surveys are visual inspections that do not include any information on engineering, no root or soil samples are taken for analysis and trees are not climbed.

The consultant will inspect as much of the land and trees as is practicable given the scope of his instructions and the level of fee agreed. He will be under no obligation to inspect those areas that are unexposed or not readily accessible.

Except where the contrary is stated, parts of the land or of the trees which are covered, unexposed without excavation or inaccessible without climbing, will not be inspected.

Without specific written instructions, the consultant will not report on the condition of other parts of the land or trees.

The report shall provide information as to the overall condition of the land and trees and is not intended to be an inventory of every single defect that might insignificantly affect the clients' proposal.

Any verbal information given by the consultant prior to the clients' receipt of the written report shall not be construed as a representation or warranty and should not be relied or acted upon.

(i) Subject as expressly provided in these conditions, and except where the client is sold to a person dealing as a consumer (within the meaning of the Unfair Contract Terms Act 1977) all warranties, conditions or other terms implied by the statute or common law are excluded to the fullest extent permitted by law.

(ii) Any claim by which the *client* is based on any defect in the nature or quality of the consultant's services shall be notified to the consultant within 7 days from the date of supply.

(iii) Except in respect of death or personal injury caused by the consultant's negligence, the consultant shall not be liable to the client by reason of any representation, or implied warranty, condition or other term, or any duty at common law, or under the express terms of any contract, for any consequential loss or damage (and whether caused by the negligence of the consultant, his employees or agents or otherwise) which arise out of or in connection with the consultant's services, except as expressly provided in these conditions.

(iv) The consultant shall not be liable to the client or be deemed to be in breach of the contract by reason of any delay in performing, or any failure to perform, any of the consultant's Obligations in relation to the services he renders if the delay or failure was due to any cause beyond the consultant's control.

Each provision of these conditions limiting or excluding liability operates separately in itself and survives independently of the others.

Any dispute arising out of or in connection with the contract between the client and the consultant shall be referred to the arbitration or a single arbitrator appointed by agreement between the parties or, in default of agreement, nominated on the application of either party to the Arboricultural Association. The consultant reserves the right to refuse work(s) if a conflict of interest is identified or arises. Quotations are valid for 28 days from the date of the quotation.

The contract between the client and the consultant shall be governed by the laws of England.