IAN KEEN
LIMITED

ARBORICULTURAL REPORT

Part 1
Tree Survey
Part 2
Arboricultural Impact Assessment

RELATING TO PROPOSED DEVELOPMENT UPON LAND AT

15 PARK VILLAGE WEST
LONDON

Our Reference
JTK/9212/so

CLIENT
Mark Van Oss & Associates
Vicarage House
58-60 Kensington Church Street
London
W8 4DB

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Part 1

TREE SURVEY

OF LAND AT
15 PARK VILLAGE WEST
LONDON
NW1 4AE

Our Reference
JTK/9212/so

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1. Objective

1.1 To assess the condition of the trees and provide sufficient information to enable decisions to be made on planning aspects of the site and its potential development.

2. Notes

2.1 The assessment was carried out from ground level from within the site or from any adjacent public place.

2.2 The assessment has been carried out following the guidelines set out in *BS 5837:2012 Trees in relation to design, demolition and construction - Recommendations*

2.3 The survey was conducted by Jago Keen, MSc, Dip.Arb., MArborA, MICFor on the 12th May 2016.

2.4 This survey is intended for planning purposes only and may not include all shrubs and small trees on site. The survey is not suitable for the design of foundations.

3. Tree Identification and details

3.1 As annotated on the drawing. Please note that sketch drawings or drawings marked 'not to scale' are indicative only, and tree positions should not be relied upon for design or setting out.

3.2 Details of each individual tree are recorded in the Schedule of Trees at Appendix 1 of this report.

4. Site Description

4.1 The area subject of this survey consists of 15 Park Village West sited to the east of Albany Street in NW1 4AE. The site contains a detached villa in the northeast corner of the broadly square plot.

4.2 Most of the garden is hard surfaced although there are some established shrub beds at the periphery of the garden.

4.3 To the west of the villa is an attached sunken garden with retaining wall running parallel with Albany Street. Between the garage and the boundary with Albany Street the garden is paved and contains a row of predominantly lime trees.

4.4 Along the Albany Street boundary is a privet hedgerow.

5. Geology

5.1 This information is obtained from the (online) 'Geology of Britain Viewer' that contains British Geological Survey materials © NERC [2015]. The geological information given in this report should not be relied upon by other parties who are advised to carry out their own assessment of the site conditions to suit their own needs.

Bedrock Geology

5.2 London Clay Formation - Clay, silt and sand. Sedimentary Bedrock formed approximately 34 to 56 million years ago in the Palaeogene Period. Local environment previously dominated by deep seas.

Superficial deposits

5.3 None recorded.

6. General Guidance Notes for Development

6.1 These notes are provided as a guide to the designer. They represent my personal views of the tree stock, which trees should be retained and how they should be protected. The views expressed have not been subject to consultation or discussion with any other party.

6.2 Ideally, building lines should be at least 2m outside the root protection area to provide working space for construction however protection measures can be taken if such clearance, in isolated cases, is not achievable. Service runs should be routed outside the root protection area. Limited use may be made for parking, drives or hard surfaces within the root protection areas, subject to advice from a qualified arboriculturist.

6.3 On residential developments consideration must be given to future tree growth and orientation, i.e. adverse shading and blocked views from windows raise concerns for incoming residents, which may lead to pressure to fell or remove trees in the future. Wherever possible arrange or orientate windows to primary rooms parallel or tangentially to tree canopies to lessen the conflict.

Signed:  **16th May 2016**

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Appendix 1

SCHEDULE OF TREES
UPON LAND AT
15 PARK VILLAGE WEST
LONDON
NW1 4AE

Our Reference
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Key to Schedule of Trees

Column Heading	Explanation
Tree No.	Unique number corresponding with number on plan
Species	English names
Ht (m)	Height in metres
Branch Spread	Crown radius in metres to cardinal points of the compass
Stem diameters (cm)	All measurements conform to Annex C of BS 5837:2012 Single stem - Stem diameter in centimetres measured at 1.5m above ground level. Multi-stemmed tree with 2 to 5 stems – Diameter of each stem Multi-stemmed tree with more than 5 stems – Average stem diameter and number of stems
Height of crown clearance	Height in metres between the ground and underside of canopy
Height of first major branch and direction of growth	Height from ground level to base of first major branch and the approximate direction of growth
Abbreviations as suffix to a dimension	*Suffix 'e' denotes an estimated dimension.* *Suffix 'av' denotes an average dimension*
Age class	Age Class definitions: Y = Young S = Semi-mature E = Early mature M = Mature O = Over mature
Category grading and Estimated remaining contribution (yrs)	Summary of BS 5837: 2012 categorisation: 1. Trees that do not warrant consideration for retention: U = those in such a condition that any existing value would be lost within 10 years and which should, in the current context, be removed for reasons of sound arboricultural management. 2. Trees to be considered for retention: A1, 2 or 3 = trees of high quality and value (substantial contribution >40 yrs) B1, 2 or 3 = trees of moderate quality and value (significant contribution >20 yrs) C1, 2 or 3 = trees of low quality and value (but adequate, ie >10 yrs or young trees – until new planting can be established)
Estimated remaining contribution	Useful estimated remaining contribution of the tree or tree group
Condition	Brief description including physiological and structural defects
Preliminary management recommendations	Describes current arboricultural requirement for the tree in its current context
Root protection radius	Radius of minimum root protection area in metres calculated from section 4.6 and Annex D of BS5837:2012
Root protection area	Total area of minimum root protection area extrapolated from root protection radius

SURVEY OF TREES AT 15 PARK VILLAGE WEST, LONDON, NW1 4AE

Tree No.	Species	Ht (m)	Branch Spread (m)				Stem diameters (cm)								Height of crown clearance (m)	Height of first branch (m) and direction (compass point)	Age class	Category grading	Estimated remaining contribution (yrs)	Condition Physiological / Structural	Preliminary management recommendations	Root protection radius (m)	Root protection area sq.m
			N	E	S	W	Single Stem	2-5 stems					More than 5 stems										
								Stem 1	Stem 2	Stem 3	Stem 4	Stem 5	Mean dia	No. stems									
1	Lime	15	7	5	4	5	58								2	4SE	MI	B2	>20	Prominent tree growing along edge of garden with Albany Street. Has been cut back in the past to maintain clearance from the building.		6.96	152
2	Lime	15	3	3	3	7	49								2	7W	MI	B2	>20	Established tree forming part of a line of similar sized trees growing at edge of garden against Albany Street. Abundant epicormic growth on main stem.		5.88	109
3	Lime	10	2	2	2	3	26								2	-	MI	C2	>10	Part of a row of larger trees at the edge of garden with Albany Street. This tree is of lower vitality than its neighbours with some sections of deadwood in the upper crown.		3.12	31
4	Lime	15	3	3	3	6	52								2	6S	MI	C2	>10	Of similar size to the others in the row adjoining Albany Street. Poor fork formation at circa 1.8 metres above ground level liable to separation if tree allowed to attain significant proportions. Appears as if it may have been pollarded at circa 5 to 6 metres above ground level, possibly to overcome this defect. Abundant epicormic growth on main stems.		6.24	122
5	Sycamore	16	5	4	6	7		50e	50e						5	5W	MI	B2	>20	Contributing to row of trees along Albany Street. Main stem forks at circa 1.2 metres above ground level with both stems densely covered in particularly thick ivy.		8.49	226
6	Row of leyland cypress	8av	3av				20av								2	2S	MI	C2	>10	Row of outgrown conifers that are now sparse at the base. Have been crown reduced in the past. Some stems smothered in ivy.		2.40	18
7	London plane	21	7	10	8	7	95e								10	9SW	MI	B1	>20	Large, visually significant tree growing within adjoining garden. Lower stem densely smothered in ivy. Appears to have been crown reduced on the western side at some point in the recent past and also appears to have been thinned, probably to increase light levels into adjoining dwellings and gardens.		11.40	408

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Part 2

ARBORICULTURAL IMPACT ASSESSMENT

RELATING TO PROPOSED DEVELOPMENT AT 15 PARK VILLAGE WEST LONDON

Our Reference
JTK/9212/so

1.0 Introduction

1.1 Instructions were received from Mark Van Oss & Associates to undertake an assessment of the impact upon or from trees of the proposed refurbishment of the dwelling and extension of the garage at 15 Park Village West, London.

1.2 This assessment has been made by Jago Keen, MSc, Dip. Arb., MArborA, MICFor on the 23rd May 2016.

1.3 This assessment will consider the impact upon trees of implementing the proposals and, vice versa, the effect of trees upon the proposals shown on the drawings, and with reference to the documents, listed below.

1.4 Drawings upon which this assessment has been made:

Originator	Drg No	Title	Scale
Charles Brice Limited	885 PL01	Lower Ground Floor Plan - As Proposed	1:50 @ A1
Ian Keen Limited	9212/01	Tree Constraints Plan	1:100 @ A1
Ian Keen Limited	9212/02	Tree Protection Plan	1:100 @ A1

1.5 Documents referred to in this report:

Originator	Title/Reference
British Standards Institute	*BS5837:2012 Trees in relation to design, demolition and construction – Recommendations*
Trees and Design Action Group	*Trees in the townscape: A guide for decision makers*
Department for Communities and Local Government	*National Planning Policy Framework*

1.6 A tree survey was undertaken by Ian Keen Limited on the 12th May 2016 and the details of each tree are presented in the tree survey and shown on the Ian Keen Limited Tree Constraints Plan listed above.

1.7 Along the Albany Street frontage is a row of predominantly limes that provide an attractive tree feature to the locality. A large plane tree stands in an adjoining garden to the south east. The applicant enjoys the tree cover and is keen to ensure they are retained alongside the achievement of these proposals.

2.0 General overview of development proposals

2.1 The Charles Brice Ltd drawings set out the proposals for the refurbishment of the existing dwelling and extension of the garage.

2.2 Amendments contained within the extent of the existing dwelling, and the two proposed lightwells to the front of the existing dwelling, have no potential to impact upon trees. The proposed extension to the garage may have had the propensity to cause harm to the adjoining trees but careful investigations have revealed no significant roots within the proposed footprint.

2.3 No trees are proposed to be removed to accommodate these proposals.

2.4 Retaining existing trees ensures a resource of trees in places where residents and visitors alike will enjoy multiple benefits provided by the tree stock. In so doing the tree stock will be able to withstand climate change, protecting and enhancing the resources of soil, air, water, landscape, amenity value, culture and biodiversity, and increasing the contribution that trees make to the quality of life. In that respect the proposals are in line with the very latest guidance, in terms of integrating trees with built form, contained in *Trees in the townscape: A guide for decision makers* produced by the Trees and Design Action Group.

2.5 The relationship between proposed garage extension and trees is discussed further below.

3.0 Relationship of proposals to the trees

3.1 The proposed extension to the western side of the garage is proximate to the row of retained trees. To investigate whether significant roots of the trees extended within the zone of the proposed extension trial investigations were undertaken by others. Hand excavation revealed there to be no significant roots (see photographs at Appendix 1) and only fine rooting in the upper 450mm of soil.

3.2 Consequently, it is clear that the proposed extension to the garage may proceed without leading to significant root loss and therefore no material harm to the trees.

3.3 Care will need to be exercised during construction to ensure work activity does not encroach on the retained trees or the rooting area they currently enjoy. For instance, the existing hard surface around the trees can be retained to provide a stable working surface and each trunk can be protected by a timber box to avoid direct damage to it.

4.0 Opportunities for new tree planting

4.1 In this instance no trees are required to be removed hence there is no requirement to plant replacements.

5.0 Effect upon the amenity of the trees and their surrounds

5.1 As no trees are to be removed the retained trees will continue to provide the same level of amenity as at present.

6.0 Relationship of proposed drainage, mechanical and electrical installations upon the trees

6.1 The location and route of underground service corridors or drainage runs are not shown on the proposed layout, however these should be routed outside the retained root protection area of the trees.

6.2 Where such services and drainage, that might ordinarily require trenching, cannot be located outside optimum root protection areas specialist techniques such as moling, thrust-boring, broken trench or excavation by AirSpade can be considered in conjunction with an arboriculturist.

6.3 No other installations, including mechanical and electrical equipment, are proposed in an area that would be of detriment to trees.

7.0 Requirements of the construction process and its relationship to the trees

7.1 Guidance within *BS5837:2012: Trees in relation to design, demolition and construction* requires us to consider the effect of the construction process upon the retained trees and the spaces in which new trees will be incorporated.

7.2 Application of *BS5837:2012: Trees in relation to design, demolition and construction,* through careful construction management, can ensure the construction process has the minimum effect upon the trees

7.3 In this instance protection measures, as shown on the Ian Keen Limited Tree Protection Plan listed above, can be installed before work commences to ensure the trees are adequately protected.

8.0 Conclusions

8.1 The only aspect of the proposals that has a potential bearing on trees is the proposed extension to the western elevation of the garage however trial investigations have revealed no significant roots within the proposed footprint.

8.2 The proposed garage extension may therefore be constructed without material harm to the retained trees.

8.3 Construction activity is proposed in the vicinity of the retained trees hence protection measures are required and detailed on a Tree Protection Plan.

Signed:  **23rd May 2016**

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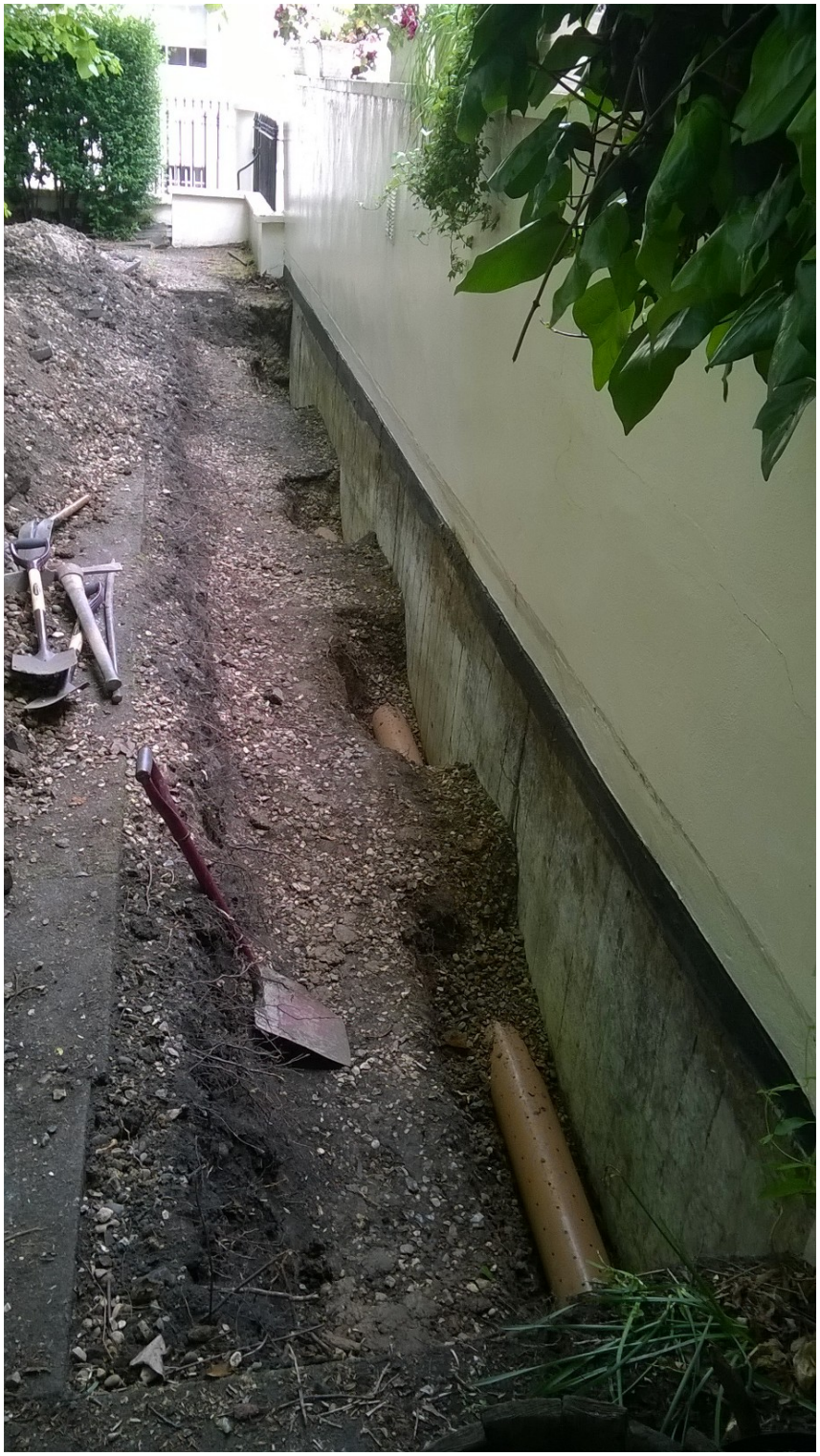
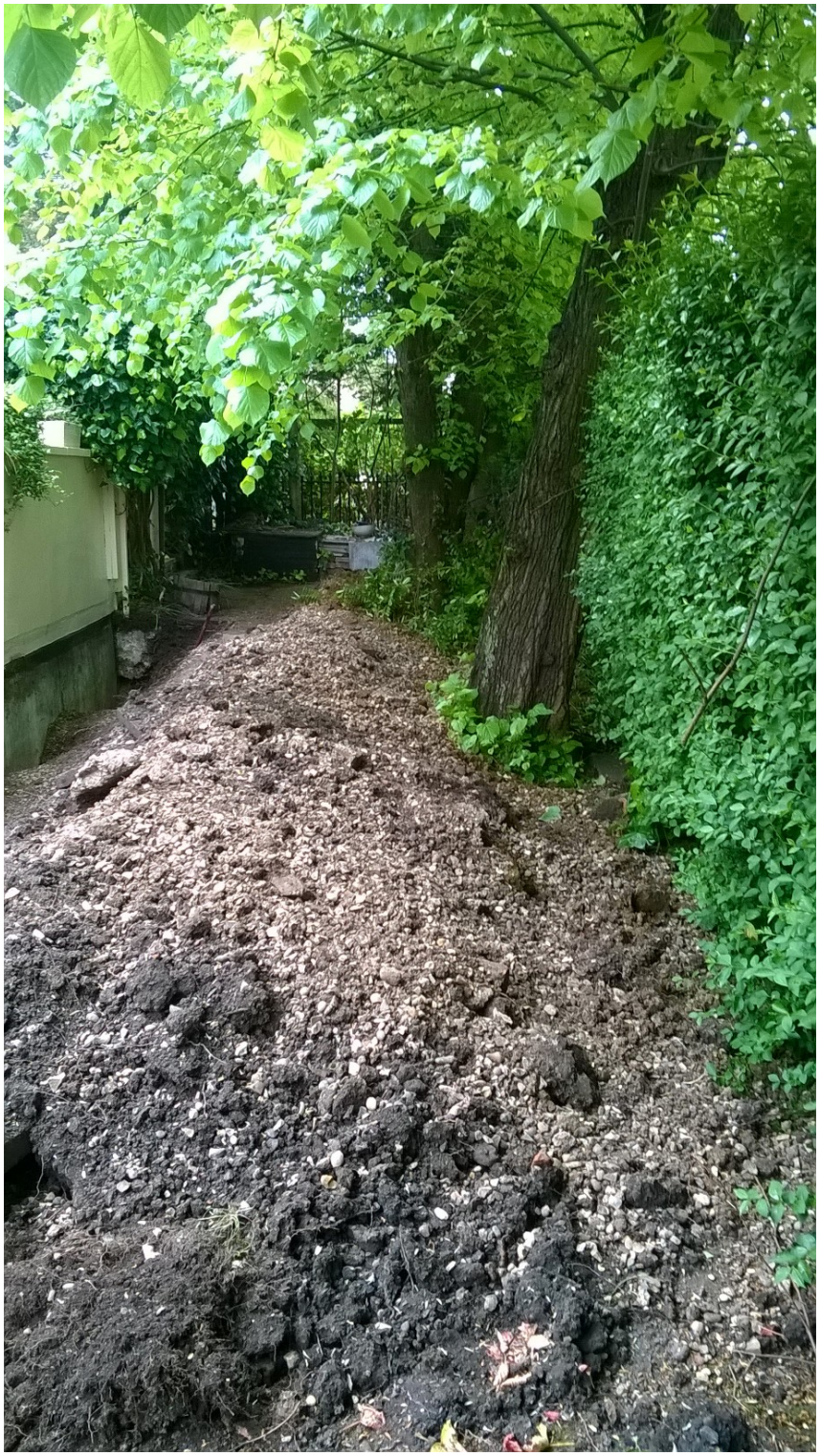
Appendix 1

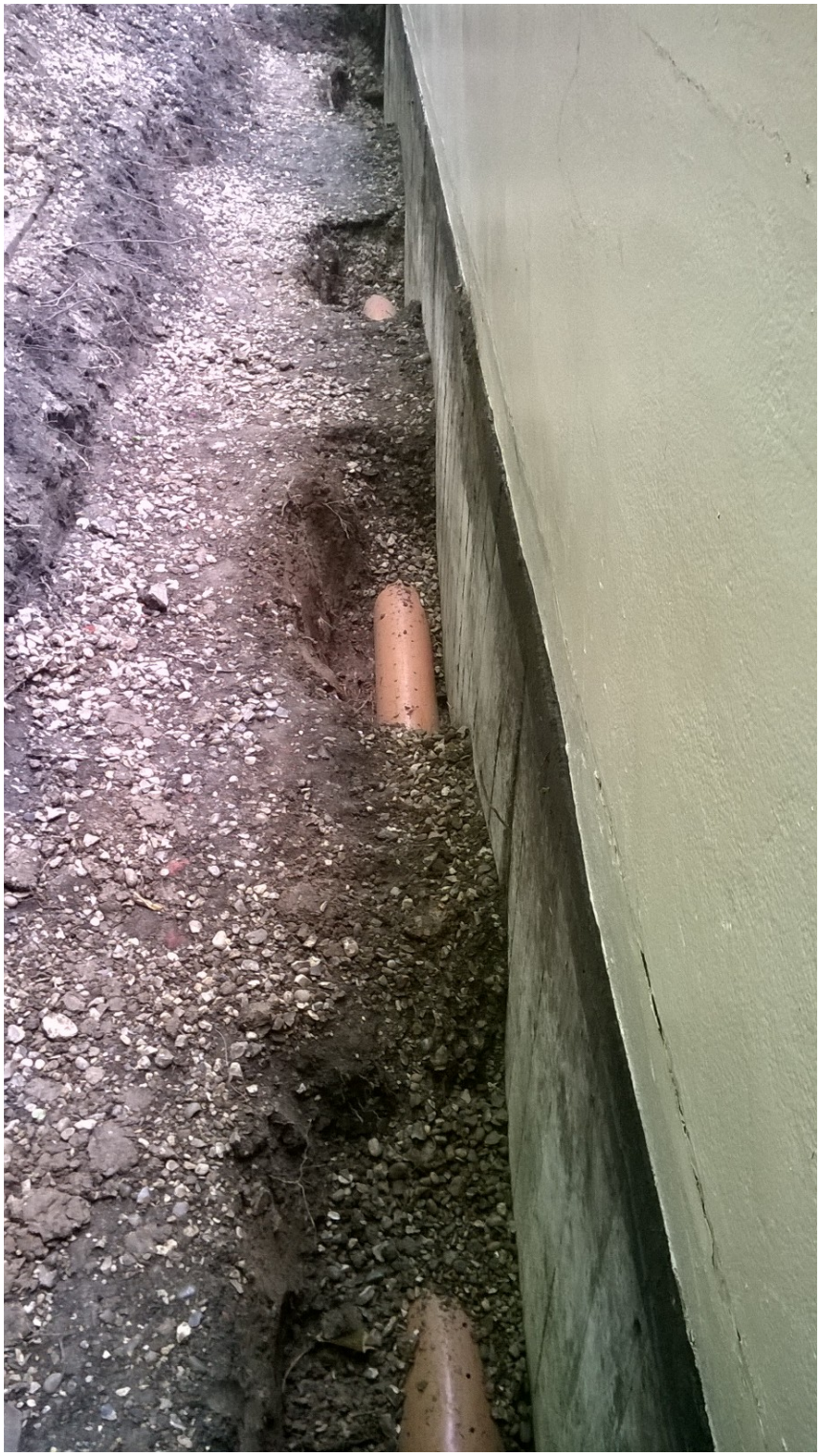
Photographs



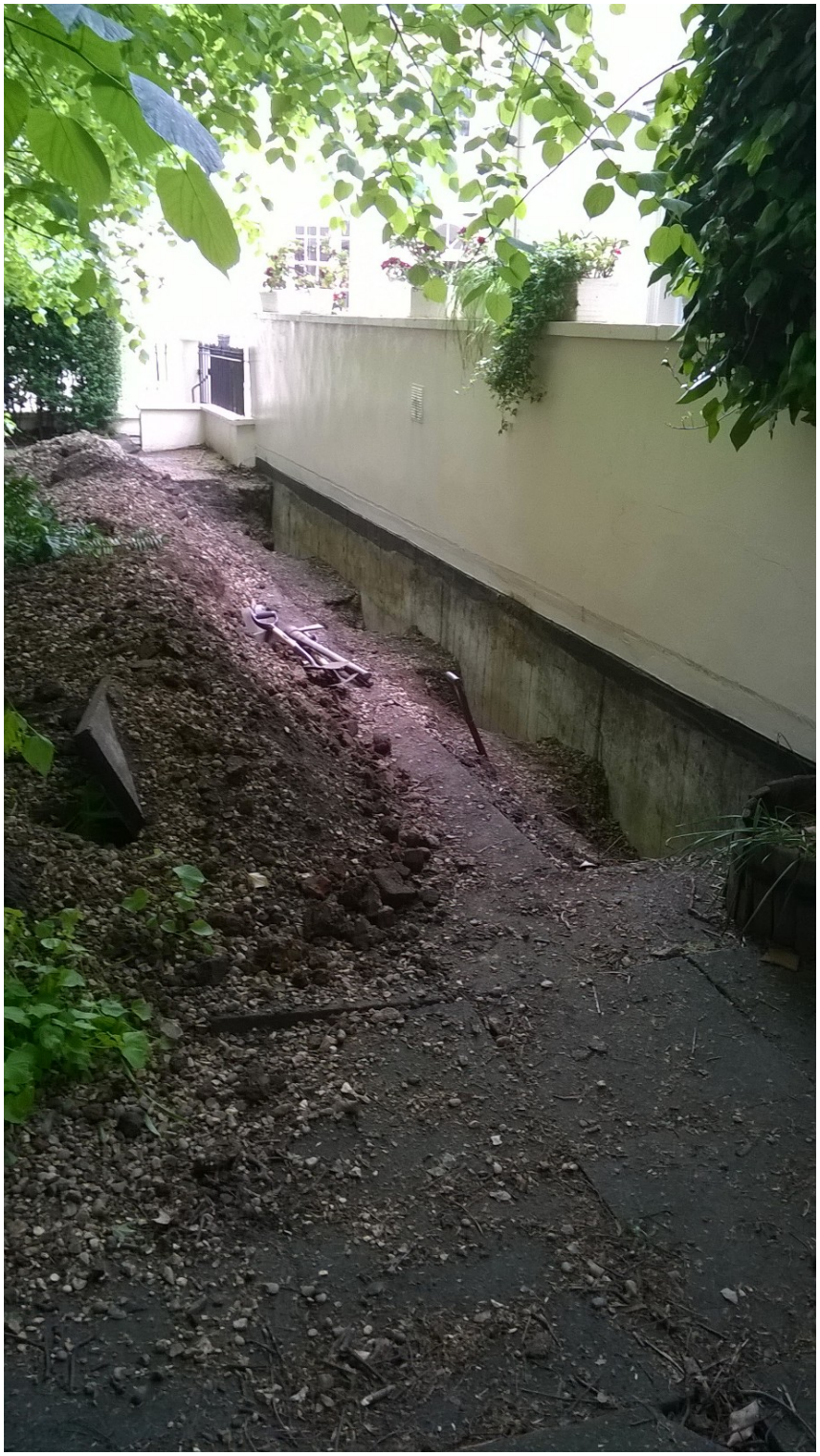
Photograph 1 – Hand excavated trench revealing no significant roots. Drainage pipe is lying on top of concrete foundation.



Photograph 2 – Temporary placement of soil excavated from trench. No severed significant roots in soil.



Photograph 3 – Some fine roots seen in upper soil horizons and in gravel/soil mix around drainage pipe.



Photograph 4 – General view of trench alongside garage wall