Arboricultural Report and Arboricultural Implications

Site – **Little Oaks, Abridge Road, Abridge, Essex**

Client – **Mr and Mrs Aston**

Contact – M P Architects, Gt Bansons, Bansons Lane, Ongar, Essex, CM5 9AR

Date - **07-12-2020**

To be read in conjunction with – Tree Survey Plan Drawing No. MP/LOAK/01

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1.0 Instruction and client brief

1.1 MP Architects LLP requested a survey of the trees in the site at Little Oaks. The survey is to accompany the planning application for the new dwelling. The report should be read in conjunction with the tree constraints and protection plan, drawing number MP/LOAK/01.

1.2 The report was to:

- assess the trees in line with BS5837:2012
- advise of the arboricultural implications that the proposed building works will have on the existing trees, in line with BS5837:2012 based on the site layout provided.
- Address mitigation required as a result of the implications assessment.
- Provide an outline tree protection plan to demonstrate what level of retention and protection of the trees is feasible.

2.0 Scope of works and survey method

2.1 The trees were surveyed in line with the process laid out in BS5837:2012. The trees were assessed inline with the criteria laid out in the British Standard. Data was collated on species, age, height, crown spread, stem diameter at 1.5m high. A base line assessment of physiological and structural condition was made. All trees were categorised in line with BS5837:2012 guidance. Trees of the highest quality were rated 'A', good quality 'B'. Trees rated 'C; are worthy of retention but of lower quality. Those given an 'R' rating are poor quality with either less than 10 useful life years remaining, small and of limited significance in the wider landscape, or could easily be replaced in a new landscape scheme with a tree of similar size and impact. Greater detail on the rating is given in the key in section 5.
Trees under 75mm in diameter were not recorded in line with BS5837 guidance. The details of the trees as required under BS5837:012 were recorded in section 5 of this report.
Implications resulting from the proposed development are given in section 6 of the report and the tree constraints and protection plan.

2.2 The report is based on a ground level visual tree assessment, using recognised non-invasive techniques, (Mattheck). It is an external inspection only. Condition of the tree was assessed only on date of inspection. Physiological and structural assessments are valid for a period of no more 12 months. It remains valid only if no environmental changes occur around the tree. If any changes should occur, re-inspection should be carried out. Environmental changes around the tree will render the report invalid.
There has been no assessment of potential for indirect damage because of soil heave or subsidence that trees may have on existing properties, this is outside the remit of this report.
No internal diagnostic equipment was used, and no pest and disease samples were taken or sent away for analysis. No soil samples were taken for testing. If Soil analysis is required, a soil engineer should be employed. There has been no examination of existing drains or service runs for the presence of roots. No trail pits were dug to examine roots at the time of the tree survey.

2.4 There has been a check with the local authority of the tree protection status of the site. However, it remains the responsibility of the tree owner to check TPO status, prior to carrying out any works on the tree.

2.5 Any works to the trees should comply with BS3998:2010 Tree Work and be carried out by a suitably qualified and competent operative.

2.6 A topographical survey was not available for the tree positions within the site. The trees were measured using simple triangulation techniques. Though care is taken discrepancies can occur and if great accuracy is needed a topographical survey should be commissioned. The tree protection plan is based on this and the current proposed site lay out available at the time of writing the report.

3.0 Site

2.1 The site is to the west of Abridge Road. It is surrounded by agricultural land. The access is over a private drive off Abridge Road.

2.2 Most of the front garden is laid to hard surface with the trees along the southern boundary and within a central bed. Within the front garden there is a group of sycamores growing in close proximity to each other and of varying quality. There is a mature oak along the southern boundary. The rear garden is laid primarily to grass with a mature oak in the south western corner. There is also a large, good quality oak in the verge to the front of the site along the highway.

2.3 A check with the local authority showed there are no Tree preservation Orders on the site.

2.4 The ground levels within the site are relatively level.

Fig 1 – aerial view with site outlined in red

4.0 Proposed Development

4.1 The proposal is to demolish the existing house and construct a new dwelling and garage as shown on drawing 232-05 A by M P Architects LLP fig 3 below.

Fig 3 – floor plan,

4.2 No trees would require removal to facilitate the build but some have been suggested for removal on arboricultural ground. All other trees would be retained and protected in line with BS5837:2012. The removal of the garge would be within the crown spread and root zone of 2 trees, and a small section of the new dwelling encroaches into the area presently occupied by the garage. These works would be carried out in line with BS5837 recommendations. For details on the impact on each tree please see section 6 of the report.

5.0 Tree assessment

No.	Species English & Latin	Approx Height (M)	Dia. @1.5 (CM)	Spread (M)	Height Crown Clearance (m)	Age Class	Physiological condition	Structural condition	Preliminary management recommendation	Years remaining	Category grading
T1	*Lawson cypress* *Chaemacyparis lawsoniana*	9	12	N 1 S 1 E 0 W 1.5	1	em	fair	fair	na	10	C/U
	limited value in the wider landscape.										
T2	*Holly* *Ilex aquifolium*	4	9	N 2.0 S 1.5 E 2.5 W 1.5	0	em	fair	fair	na	20-40	C3
T3	*Oak* *quercus robur*	12	65	N 2.5 S 4.5 E 3.0 W 4.5	4.5 First main limb at 4.5m high north side	ma	fair	fair the tree has been reduced in the past	na	40+	B123
	A high water demand species under NHBC guidance.										
H1	*holly* *Ilex aquifolium*	2	<10	as plan	0	y	fair	fair	na	20-40	C3

No.	Species English & Latin	Approx Height (M)	Dia. @1.5 (CM)	Spread (M)	Height Crown Clearance (m)	Age Class	Physiological condition	Structural condition	Preliminary management recommendation	Years remaining	Category grading
T4	*Beech* *Fagus sylvayica*	12	48	N 3.6 S 4.6 E 3.5 W 3.0	4.8 First main limb at 4.8m high north side	Em	fair	fair main fork at 1.2m high with 3 main stems above this point	na	20	C3
	Small tree with limited value in the wider landscape.										
T5	*Sycamore* *Acer psuedoplatanus*	14	29 27 26	N 1 S 2.5 E 3.3 W 3.2	4.3 First main limb at 4.3m high east side	em	fair	poor the tree has 3 stems which have included bark and weak forks at the base. A cavity in the trunk at 3.5m high south side.	remove to allow more space for better trees in the group.	10-20	C/U
	One of a group of sycamore growing very close together, removal of the poorer quality trees would allow more space for the better trees to mature. Close to the existing drive it has historical damage to the trunk from being hit by vehicles.										
T6	*Sycamore* *Acer psuedoplatanus*	15	35	N 3 S 2.5 E 3.0 W 2.75	6.9	em	fair	fair	na	20-40	C3
	One of a group of sycamore growing very close together, removal of the poorer quality trees would allow more space for the better trees to mature.										
T7	*Sycamore* *Acer psuedoplatanus*	14	27	N 1 S 1 E 4 W 0	4.2	em	fair	poor no clear leader due to suppression.	fell to give space to the better trees in the group	20-40	C3
	One of a group of sycamore growing very close together, removal of the poorer quality trees would allow more space for the better trees to mature.										

No.	Species English & Latin	Approx Height (M)	Dia. @1.5 (CM)	Spread (M)	Height Crown Clearance (m)	Age Class	Physiological condition	Structural condition	Preliminary management recommendation	Years remaining	Category grading
T8	*Sycamore* *Acer psuedoplatanus*	15	35 32	N 6.8 S 2.5 E 4.5 W 3.6	4.5 The first main limb at 4.6m high on west side.	ma	fair	fair	na	20-40	C2,3
	One of a group of sycamore growing very close together, removal of the poorer quality trees would allow more space for the better trees to mature.										
T9	*Cedar*	8	25	0	0	em	dead	poor	fell	<10	U
	fell dead trunk.										
T10	*Silver birch* *Betula pendula*	10	17	N 2 S 1 E 2 W 2	2 First main limb at 4m high west side	y	fair	fair	na	20	C/U
	A small tree with limited value in the wider landscape.										
T11	*Oak* *Quercus robur*	14	103	N 7.5 S 9 E 9 W 9	3.2 first main limb at 2.2m high all sides	ma	good	fair	na	40+	A123
	Located on the bank outside the site in the highway verge. A high water demand species under NHBC guidance.										

No.	Species English & Latin	Approx Height (M)	Dia. @1.5 (CM)	Spread (M)	Height Crown Clearance (m)	Age Class	Physiological condition	Structural condition	Preliminary management recommendation	Years remaining	Category grading
T12	*Silver birch* *Betula pendula*	3	5 5	N 1.5 S 1.5 E 1.5 W 1.5	2	y	fair	fair	na	20	C/U
	Located in the verge at the front of the site close to the large oak tree										
T13	*Silver birch* *Betula pendula*	5	11	N 2 S 2 E 2 W 2	4	y	fair	fair	na	20	C/U
	Located in the verge at the front of the site close to the large oak tree										
T14	*Oak* *Quercus robur*	14	54	N 2 S 5 E 7 W 4.5	3.2 First main limb at 3.2m high north side	ma	fair	fair	na	40	B23
	A high water demand species under NHBC guidance.										
G1	*Oak x 3*	14	55 x 3	N 7 S 2 E 4.5 W 4.5	3.2	ma	fair	fair	na	40	B23
	3 trees forming one crown, located in the highway verge to the front of the site.										

No.	Species English & Latin	Approx Height (M)	Dia. @1.5 (CM)	Spread (M)	Height Crown Clearance (m)	Age Class	Physiological condition	Structural condition	Preliminary management recommendation	Years remaining	Category grading
T15	*Hazel* *Corylus avellana*	3	7 x 8cm	N 2 S 2 E 2 W 2	1	em	fair/poor	fair/poor	na	10	C/U
T16	*Hazel* *Corylus avellana*	3	7 x 8cm	N 2 S 2 E 2 W 2	1	em	fair/poor	fair/poor	na	10	C/U
T17	*Hazel* *Corylus avellana*	3	9 x 5cm	N 2 S 2 E 2 W 2	1	em	fair/poor	fair/poor	na	10	C/U
G2	*Hawthorn*	4	3 x 15cm	N-S 4 E- W 4	1.8	ma	fair	fair	na	20	C3
G3	*Hawthorn*	4	3 x 15cm	N-S 4 E- W 4	1.8	ma	fair	fair	na	20	C3
	A high water demand species under NHBC guidance.										

No.	Species English & Latin	Approx Height (M)	Dia. @1.5 (CM)	Spread (M)	Height Crown Clearance (m)	Age Class	Physiological condition	Structural condition	Preliminary management recommendation	Years remaining	Category grading
H1	*Lawson cypress*	5	12	as plan	0	em	fir	fair	na	10-20	C
	A high water demand species under NHBC guidance.										
T18	*Oak* *quercus robur*	10	45	N 4.8 S 5.0 E 4.5 W 4.5	4 first main limb at 2m high south side	em	fair	fair	na	40+	B23
	A high water demand species under NHBC guidance.										
T19	*Oak* *Quercus robur*	7	67	N 3.8 S 4.8 E 3.0 W 5.0	2.2 first main limb at 2.2m high all sides	ma	fair	fair large amount of dead wood on north side	na	40	B23
	A high water demand species under NHBC guidance.										
H3	*Lawson cypress*	6	21	as plan	0	em	fair	fair	na	10	C/U
	A high water demand species under NHBC guidance										
G3	*Lawson cypress*	4	15	as plan	0	em	fair	fair	na	10-20	C/U

Key to survey schedule

Tree number on plan - T1 individual tree on the site

BS 5837:2012 Age class

Y – Young first third of life expectancy, EM – Early mature second third of life expectancy, Ma – Mature final third of life expectancy, OM – Over mature showing signs of senescence, V – Veteran over mature and of special conservation value

Remaining years in age bands - <10, 10-20, 20-40, >40

Physiological or structural condition - Good no significant health problems, or no significant structural problems, **Fair** some symptoms of ill health, or currently insignificant or remediable structural problems, **Poor** significant symptoms of ill health, or significant structural problems
Moribund (physiological only in serious and irreversible decline, **Dead** (physiological only) not alive

Other Abbreviations.

Esti estimated
M/S multi stem the number of stems and diameter are given in line with BS5837:2012 requirements.
N north, E east, S south, W west

BS 5837:2012 Category of quality/retention

Category	Description		
A Green	Trees of high quality A1 – Mainly arboricultural value A2 - Mainly landscape value A3 – Mainly cultural value, including conservation	C Grey	Trees of low quality C1 – Mainly arboricultural value C2 - Mainly landscape value C3 – Mainly cultural value, including conservation
B Blue	Trees of moderate quality B1 – Mainly arboricultural value B2 - Mainly landscape value B3 – Mainly cultural value, including conservation	U red	Trees that are in a poor condition, so that any existing value will be lost in the next 10 years, and should, for reasons of sound arboricultural management, be removed.

6.0 Arboricultural Impact Assessment

6.1 The arboricultural impact is based on the following parameters

- All trees that are to be retained will be protected by tree protection fencing in line with BS5837:2012 section 6.2
- Should be read in conjunction with Tree Constraints and Protection Plan drawing number MP/LOAK/01.

6.2 The root protection area (RPA) is an area of ground around the tree that should be retained, undisturbed, for the benefit of the tree roots. The RPA is calculated, as set out in BS5837:2012. This determines the square metres of ground area that should be retained. This is often shown as a circle, with a radius as determined by the calculation. However, it is not always essential that this is a circle and, in some situations, the geography of the site can make an alternative shape more appropriate. It must still equate to the same area as the circle calculated under the approved calculation.

Tree no.		RPA m/sq	Radi of RPA (M)	Tree implications assessment	Mitigation
T1	*Lawson cypress*	U	U		
T2	*Holly*	9.5	1.7	The new dwelling and garage are outside the crown spread and root protection area access will be required over the existing drive which covers part of the root protection area.	Protect the tree with an exclusion zone, for the duration of the build enclosed with tree protection fencing, see section 6.3 below The drive will act as ground protection for the build, however if it is removed it will be replaced with additional ground protection inline with BS5837 see section 6.4 below
T3	*Oak*	191	7.8	The new dwelling and garage are outside the crown spread and root protection area access will be required over the existing drive which covers part of the root protection area.	The tree has good ground clearance of 4.5m high. Protect the tree with an exclusion zone, for the duration of the build enclosed with tree protection fencing, see section 6.3 below The drive will act as ground protection for the build, however if it is removed it will be replaced with additional ground protection inline with BS5837 see section 6.4 below

H1	*Holly*		1.2	The new dwelling and garage are outside the crown spread and root protection area access will be required over the existing drive which covers part of the root protection area.	Protect the tree with an exclusion zone, for the duration of the build enclosed with tree protection fencing, see section 6.3 below The drive will act as ground protection for the build, however if it is removed it will be replaced with additional ground protection inline with BS5837 see section 6.4 below
T4	*Beech*	102	5.7	The existing garage is to be demolished within the root zone and crown spread A small section of the footings will be within the root area, a section that is already under the garage. It is expected that the existing garage footings will have acted as a partial root barrier.	The demolition will be carried out in line with section 6.7 below Protect the tree with an exclusion zone, for the duration of the build enclosed with tree protection fencing, see section 6.3 below The footings should be dug in line with section 6.10 below.
T5	Sycamore	99	5.6	The tree is low quality with weak forks. Remove to give better trees space to grow	
T5	Sycamore	U	U		
T6	Sycamore	55	4.2	The new dwelling and garage are outside the crown spread and root protection area access will be required over the existing drive which covers part of the root protection area.	Protect the tree with an exclusion zone, for the duration of the build enclosed with tree protection fencing, see section 6.3 below The drive will act as ground protection for the build, however if it is removed it will be replaced with additional ground protection inline with BS5837 see section 6.4 below
T7	Sycamore	U	U		
T8	Sycamore	100	5.7	The new dwelling and garage are outside the crown spread and root protection area access will be required over the existing drive which	Protect the tree with an exclusion zone, for the duration of the build enclosed with tree protection fencing, see section 6.3 below

				covers part of the root protection area.	The drive will act as ground protection for the build, however if it is removed it will be replaced with additional ground protection inline with BS5837 see section 6.4 below
T9	Dead	U	U		
T10	Silver birch	14	2.1	The new dwelling and garage are outside the crown spread and root protection area access will be required over the existing drive which covers part of the root protection area.	Protect the tree with an exclusion zone, for the duration of the build enclosed with tree protection fencing, see section 6.3 below The drive will act as ground protection for the build, however if it is removed it will be replaced with additional ground protection inline with BS5837 see section 6.4 below
T11	Oak	707	15.0	The new dwelling and garage are outside the crown spread access will be required over the existing drive which covers part of the root protection area.	Protect the tree with an exclusion zone, for the duration of the build enclosed with tree protection fencing, see section 6.3 below The drive/ garage floor will act as ground protection for the build, however if it is removed it will be replaced with additional ground protection in line with BS5837 see section 6.4 below
T12	Silver birch	U	U	outside site and will not be affected.	
T13	Silver birch	U	U	outside site and will not be affected.	
T14	Oak	137	6.6	Distant enough from the proposals not to be affected.	Protect the tree with an exclusion zone, for the duration of the build enclosed with tree protection fencing, see section 6.3 below and drawing MP/LOAK/01
G1	Oak	137	6.6	Distant enough from the proposals not to be affected.	Protect the tree with an exclusion zone, for the duration of the build enclosed with tree protection fencing, see section 6.3 below and drawing MP/LOAK/01

T15	Hazel	20	2.5	Distant enough from the proposals not to be affected.	Protect the tree with an exclusion zone, for the duration of the build enclosed with tree protection fencing, see section 6.3 below and drawing MP/LOAK/01
T16	Hazel	20	2.5	Distant enough from the proposals not to be affected.	Protect the tree with an exclusion zone, for the duration of the build enclosed with tree protection fencing, see section 6.3 below and drawing MP/LOAK/01
T17	Hazel	20	2.5	Distant enough from the proposals not to be affected.	Protect the tree with an exclusion zone, for the duration of the build enclosed with tree protection fencing, see section 6.3 below and drawing MP/LOAK/01
G2	Hawthorn	30	3.0	Distant enough from the proposals not to be affected.	Protect the tree with an exclusion zone, for the duration of the build enclosed with tree protection fencing, see section 6.3 below and drawing MP/LOAK/01
G3	Hawthorn	30	3.0	Distant enough from the proposals not to be affected.	Protect the tree with an exclusion zone, for the duration of the build enclosed with tree protection fencing, see section 6.3 below and drawing MP/LOAK/01
T18	Oak	92	5.4	**Crown** The new dwelling is on edge of the crown spread. **Roots** access will be required over the existing drive which covers part of the root protection area. Demolition of the existing garage is within the root area and crown spread of the tree. A small section of the footings will be within the root area, a section that is already under the garage.	Reduce the crown on the building side by 1.5m to clear the side of the house. Protect the tree with an exclusion zone, for the duration of the build enclosed with tree protection fencing, see section 6.3 below The drive/ garage floor will act as ground protection for the build, however if it is removed it will be replaced with additional ground protection in line with BS5837 see section 6.4 below The demolition will be carried out in line with section 6.7 below

				It is expected that the existing garage footings will have acted as a partial root barrier.	The footings should be dug inline with section 6.10 below.
T19	Oak	206	8.1	Distant enough from the proposals not to be affected.	Protect the tree with an exclusion zone, for the duration of the build enclosed with tree protection fencing, see section 6.3 below and drawing MP/LOAK/01
H3	Lawson cypress		2.4	Distant enough from the proposals not to be affected.	Protect the tree with an exclusion zone, for the duration of the build enclosed with tree protection fencing, see section 6.3 below and drawing MP/LOAK/01
H4	Lawson cypress		2.1	Distant enough from the proposals not to be affected.	Protect the tree with an exclusion zone, for the duration of the build enclosed with tree protection fencing, see section 6.3 below and drawing MP/LOAK/01
G4	Lawson cypress		2.1	Distant enough from the proposals not to be affected.	Protect the tree with an exclusion zone, for the duration of the build enclosed with tree protection fencing, see section 6.3 below and drawing MP/LOAK/01

6.3 Tree protection fencing

The root protection areas (RPA) of retained trees should be protected for the duration of the works with tree protection fencing, in line with BS5837:2012, prior to the developer commencing on site. The fencing is to be of 1.8m steel mesh, heras fencing, to be installed as detailed in BS5837:2012 section 6.3.2 figure 3. (See appendix 1). Once erected, the fencing will have all weather notices attached to the barrier worded “Construction Exclusion Zone –Keep out”. The fencing should not be taken down until all construction of cabins and any hard surfaces near to the trees is completed, see appendix 1

6.4 Additional ground protection

Where access is required over an RPA to facilitate the build, additional ground protection in line with BS5837:2012. This should be as follows: For pedestrian access only, a single thickness of scaffold board either, suspended on a driven scaffold frame to form a suspended walkway, or on a non-compressible layer (e.g. 100mm layer of bark mulch) laid over a geotextile.

For pedestrian operated plant, up to a gross weight of 2t, proprietary inter linked ground protection boards, placed on a non-compressible layer (e.g. 100mm layer of bark mulch) laid over a geotextile.

For wheeled or tracked plant over 2t in gross weight, an alternative system (e.g. proprietary system or pre-cast reinforced concrete slabs) to an engineering specification, designed to accommodate the likely load it will be subject to, is required.

6.5 New hard surface

Any new hard surface within the root zone should also be a no-dig construction. They should be designed by the architect or engineer to comply with the following within the RPA of the retained trees.

The grass sward is to be removed by hand. A geotextile will be laid over the surface of the soil, at the existing level. Any low areas should be built up using sharp sand. There should be no excavation into the soil within the root protection area. A cellular sub base, such as of cellweb, or similar, root protection system, should be laid over the area. This should be filled with granite chips with no fines. This should not be tipped within the root area and should be spread from one end, by hand. The edgings are to be a timber board held in place with timber pegs, so that the roots are not damaged. The surface finish will be a porous finish, allowing water and air to percolate through the joints.

6.6 Service runs

Any Utilities trenches should where possible avoid the RPA's of retained trees. If a service route cannot avoid the RPA of a retained tree, it should be installed in one of the following two ways, to avoid excavation with machinery in the RPA or precautionary area:

For short runs, the service trench will be carefully excavated by hand. Any roots over 25mm will be retained and protected by wrapping in damp Hessian. Any roots less than 25mm in diameter, which cannot be preserved, will be pruned cleanly with a sharp saw or secateurs or hand saw, by a suitably qualified person. Exposed roots will be covered with damp Hessian and sharp sand. Back fill is to be of excavated soil or an inert granular fill.

For long runs, a trenchless installation method, such as directional drilling or impact moling, is to be used. Retrieval and access chambers should be located outside the RPA of the trees.

The works should comply with current safety practices for excavating trenches.

6.7 Demolition

The existing building will be demolished within the root protection area and the crown. Demolition of the building will be carried out off existing hard surface and from outside the RPA. It will be undertaken to work inwards within the footprint and away from the tree 'top down, pull back'. If there is significant build up of dust on the foliage, it will be hosed down to wash the dust off. Where there are under ground structures within the RPA, they will be left in situ if possible, if not they will be removed to a depth of 300mm to minimize damage to surrounding roots.

6.8 Removal of the exiting hard surface

Where the hard surface is to be removed within the RPA this will be undertaken using handheld tools or appropriate machinery. Care should be taken to ensure roots are not damaged. Excavation will be no deeper than the existing subbase. The works should be carried out off the existing hard surface and work 'backwards' to remove material over the remaining hard surface.

6.9 Ground levels

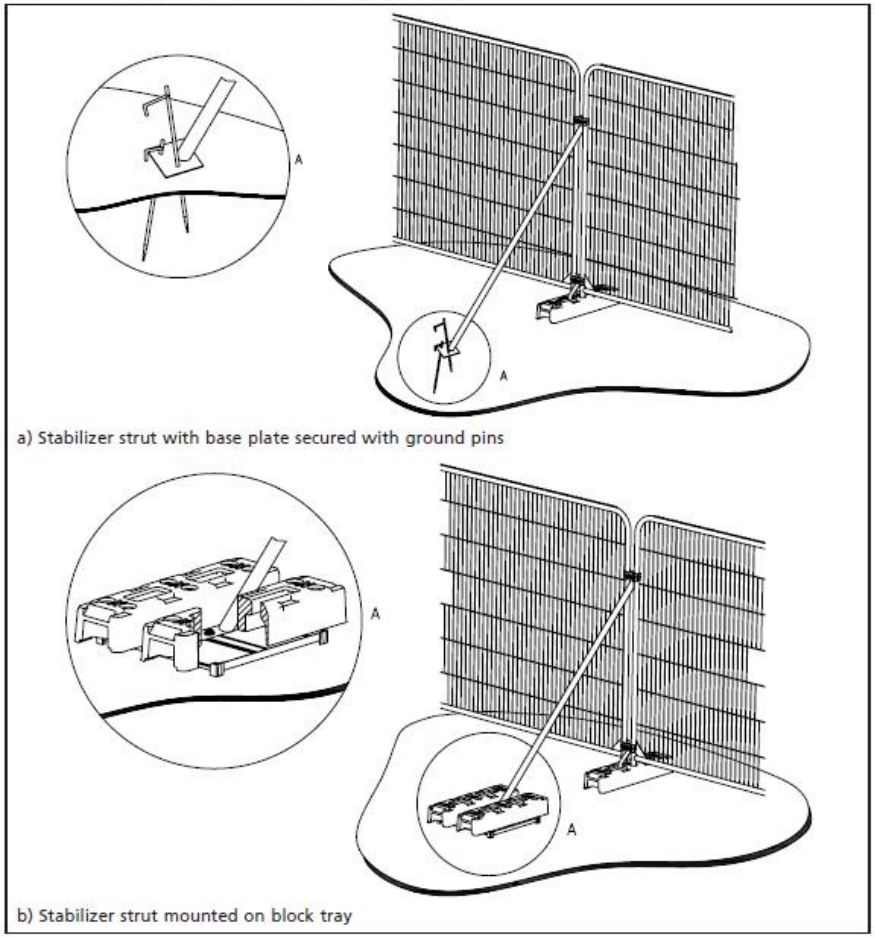
Ground levels within the root zone should not be changed.

6.10 Footings

A small section of the house footing is within the root protection areas (RPA) of retained tree. This area is already under the garage. The footings should adhere to the following in line with BS5837:2012. Any trench required for footings will be carefully excavated by hand. Any roots less than 25mm and over 5mm in diameter, which cannot be preserved, will be pruned cleanly with a sharp saw or secateurs or hand saw, by a suitably qualified person. Exposed roots will be covered with damp Hessian and sharp sand until the trench is back filled.

Appendix 1 – Protective fencing

Figure 3 **Examples of above-ground stabilizing systems**



Tree protection fencing should be installed in the position as shown in the tree constraints and protection plan for the site.


PROTECTIVE FENCING. THIS FENCING MUST BE MAINTAINED IN ACCORDANCE WITH THE APPROVED PLANS AND DRAWINGS FOR THIS DEVELOPMENT.


TREE PROTECTION AREA
KEEP OUT !
(TOWN & COUNTRY PLANNING ACT 1990)
TREES ENCLOSED BY THIS FENCE ARE PROTECTED BY PLANNING CONDITIONS AND/OR ARE THE SUBJECTS OF A TREE PRESERVATION ORDER.
CONTRAVENTION OF A TREE PRESERVATION ORDER MAY LEAD TO CRIMINAL PROSECUTION
ANY INCURSION INTO THE PROTECTED AREA MUST BE WITH THE WRITTEN PERMISSION OF THE LOCAL PLANNING AUTHORITY

Appendix 2 – Temporary ground protection

If the drive is removed the root area within it, shown on drawing MP/LOAK/01, will be protected using additional ground protection, prior to commencing building and demolition works.
This will protect the roots, and the soil around them, from damage by compaction, spillage and excavation.

For pedestrian access, only, a single thickness of scaffold board either suspended on a driven scaffold frame to form a suspended walkway, or on a non compressible layer (eg 100mm layer of bark mulch) laid over a geotextile.

For pedestrian operated plant, up to a gross weight of 2 ton, proprietary inter linked ground protection boards, placed on a non compressible layer (e.g. 100mm layer of bark mulch) laid over a geotextile.

For wheeled or tracked plant over 2 ton is gross weight, an alternative system (e.g. proprietary system or pre-cast reinforced concrete slabs) to an engineering specification designed to accommodate the likely load it will be subject to.

Appendix 3 – Report Caveats

1. The report is based on a ground level visual tree assessment (Mattheck).
2. No soil samples were taken for testing. If Soil analysis is required a soil engineer should be employed.
3. No pest and disease samples were taken or sent away for analysis.
4. It remains the responsibility of the tree owner to check TPO status prior to carrying out any works on the tree.
5. Physiological and structural assessments are valid for a period of 12 months. It is an external inspection only.
6. VTA of the tree was assessed only on date of inspection; it remains valid only if no environmental changes around the tree. If any changes should occur re-inspection should be carried out.
7. Environmental changes around the tree will render the report invalid.
8. No internal diagnostic equipment was used.
9. Any works to the trees should comply with BS3998:2010 Tree Work

Appendix 4 – References

BS5837:2012 Trees in relation to design, demolition and construction – Recommendations.

NHBC Chapter 4.2 Building near trees

D Lonsdale ‘Principles of Tree Hazard Assessment and Management’
Forestry Commission 2007

Strouts and Winter ‘Diagnosis of ill health in trees’
Forestry Commission 2007

C Mattheck and H Breloer ‘Body Language of Trees’