

Arboricultural Method Statement



Elite Murphy Developments Ltd



20 Steele Close



Site:

20 Steele Close, Chandlers Ford,
Eastleigh, SO53 3AA



Ref:

Aug 2022
JFA0104



ARBORICULTURAL METHOD STATEMENT

Client:

Elite Murphy Developments Ltd

Site:

20 Steele Close,
Chandlers Ford, Eastleigh,
SO53 3AA

Arboricultural Consultant:

James Fuller *FdSc.Arb, BTEC Nat.Dip Arb*

Date:

August 2022

SUMMARY

The proposal is for the construction of one 2-bedroom bungalow located to the east of 20 Steele Close, Chandlers Ford, Eastleigh, SO53 3AA.

This Arboricultural Method Statement (AMS) demonstrates the protection measures for the retained trees and should be read in association with the Tree Protection Plan JFA0104.04A TPP appended at JF3. It follows the initial tree survey, implications assessment and on-going discussions to minimise the impact upon the existing tree stock.

The emphasis of the report is predominantly that of preservation and tree protection. It identifies methodologies to provide protection for the retained trees, to ensure their safe and healthy retention during and post development, as guided by BS5837:2012 and current best practice.

A total of 14 (fourteen) individual trees, 1 (one) Group of trees and 2 (two) hedges shall be retained adjacent to the site as detailed within this report.

1 (one) hedge (Hedge 2) shall be removed to facilitate the proposed design layout.

James Fuller Arboriculture believes that the trees highlighted for retention within this report can be retained without undue stress on their long-term health.

CONTENTS

Section Title

Page No.

PART 1

ARBORICULTURAL IMPLICATIONS ASSESSMENT

1.0	INTRODUCTION	3
2.0	CLIENT'S BRIEF	3
3.0	DESCRIPTION OF THE SITE	4
4.0	THE TREE STOCK.....	5
5.0	TREE PRESERVATION ORDER/CONSERVATION AREA	6
6.0	PROPOSED TREE RETENTION AND TREE LOSS.....	6
7.0	SUMMARY OF ARBORICULTURAL IMPLICATIONS.....	7

PART 2

ARBORICULTURAL/CONSTRUCTION METHOD STATEMENTS

8.0	PRE-COMMENCEMENT SITE MEETING.....	8
9.0	ADDITIONAL ARBORICULTURAL ADVICE FOR SITE PERSONNEL	8
10.0	PRE-COMMENCEMENT TREE WORKS.....	8
11.0	TREE PROTECTION MEASURES	9
12.0	'NO DIG' HARD SURFACE	10
13.0	AVOIDING DAMAGE TO STEMS AND BRANCHES.....	14
14.0	SITING OF TEMPORARY OFFICES, TOILETS AND MATERIAL STORAGE COMPOUNDS	14
15.0	GENERAL CONSIDERATIONS WITHIN AND OUTSIDE THE CEZ	15
16.0	CONCLUSIONS	15
17.0	CONTACT LIST	16
18.0	BIBLIOGRAPHY	16

SUPPORTING INFORMATION/APPENDICES:

JF1	Tree Survey Schedule
JF2	Tree Survey Plan JFA0104.01A TSP
JF3	Tree Protection Plan JFA0104.04A TPP
JF4	Pre-Commencement Tree Works Schedule

GUIDING PRINCIPLES/APPENDICES:

JF5	Tree Protection Guidance Leaflet
	Construction Exclusion Zone Site Notice
	Common Causes of Damage During Construction Works
JF6	Qualifications and Experience

PART 1

ARBORICULTURAL IMPLICATIONS ASSESSMENT

1.0 INTRODUCTION

- 1.1 There is a proposed application for the site of 20 Steele Close, Chandlers Ford. The site is located to the northeast end of Steele Close, to the north of Leigh Road (A335) and to the west of Oakmount Road and the M3 Motorway.
- 1.2 The proposal is for the construction of a 2-bedroom detached bungalow to the east of the existing dwelling that occupies 20 Steele Close.
- 1.3 Document disclosure provided:
- Existing Site Plan (Ref 16140)
 - Proposed Plans and Elevations by Solent Design (Ref SD-2208-01Rev B)
 - Planning, Design and Access Statement by Wessex Planning
- 1.4 The client provided the original site plans and the tree locations have been triangulated on site, and these have been used as the basis for the production of subsequent plans. Whilst James Fuller Arboriculture has had a limited input in defining the contents of the development plan, it broadly conforms to the requirements of BS5837:2012 *"Trees in Relation to Design, Demolition and Construction – Recommendations"* and current best practice advice.
- 1.5 Our advice has been sought on the principles of the proposed development in relation to the potential impact on the existing tree stock, to inform and to facilitate the proposed development from an arboricultural perspective.

2.0 CLIENT'S BRIEF

- 2.1 In line with our written quotation and verbal instructions, information has been compiled in accordance with BS5837:2012 and current best practice advice.
- To visit site and undertake a Tree Survey of all the existing trees on and adjacent to the site.
 - Produce a combined Tree Survey and Root Protection Area (RPA) schedule appended at JF1.
 - To produce a Tree Survey Plan (TSP) (Plan JFA0104.01A TSP appended at JF2).
 - To undertake an Arboricultural Implications Assessment (AIA) of the proposed development provided by the client to identify which trees can be retained, which will need to be removed and suggest mitigating build techniques in order to retain trees where feasible.
 - Based on the above and further on-going discussions, to provide an Arboricultural Method Statement (AMS) detailing the methodologies for the retention of the tree stock where feasible, in relation to the proposed design layout including a Tree Protection Plan JFA0104.04A TPP appended at JF3.

PART 1

ARBORICULTURAL IMPLICATIONS ASSESSMENT

- 2.2 The advice provided is in support of the current planning application and has been formulated through discussions with the main construction contractor. Amendments to this Method Statement may be required for construction purposes. All amendments will be assessed by the retained arboricultural consultant and approved in writing by Eastleigh Borough Council.

3.0 DESCRIPTION OF THE SITE

- 3.1 The site is located to the east of 20 Steele Close and is made up of a large side and rear garden. The site slopes up from south to north. There were no signs of existing standing water. The majority of the existing trees are located around the boundary of the site.

- 3.2 **Photograph 1:** A view of the site from the south



PART 1

ARBORICULTURAL IMPLICATIONS ASSESSMENT

3.3 Photograph 2: A view of the site from the south



4.0 THE TREE STOCK

- 4.1 A tree survey was undertaken by James Fuller of James Fuller Arboriculture on the 29th August 2022 that identified 14 (fourteen) individual trees, 1 (one) group of trees and 3 (three) hedges. The combined Tree Survey and Root Protection Area (RPA) Schedule is appended at JF1 and Tree Survey Plan JFA0104.01A TSP is appended at JF2.

4.2 Tree Categorisation Method

Category U = Trees in such a condition that any value would be lost within 10 years, or should be removed for reasons of sound arboricultural management.

There was 1 (one) 'U' grade tree adjacent to the site at the time of surveying (Tree 5).

Note: BS5837:2012 states -
"Category U trees are those in such a condition that they cannot realistically be retained as living trees in the context of the current land use for longer than 10 years."

Category B = Trees of moderate quality and value, capable of making a significant contribution for in excess of 20 years. There were 4 (four) individual 'B' grade trees and 1 (one) 'B' grade group of trees on or adjacent to the site at the time of surveying (Trees 8, 10, 12 and 14 and Group 1).

PART 1

ARBORICULTURAL IMPLICATIONS ASSESSMENT

Category C = Trees of low quality and value which might remain for a minimum of 10 years or young trees with stems of less than 150mm diameter. There were 10 (ten) individual 'C' grade trees and 3 (three) 'C' grade hedges on or adjacent to the site at the time of surveying (Trees 1-4, 6, 7, 9, 11 and 13 and Hedges 1-3).

Note:

Trees under these categories are trees that should be a material consideration in the development process; the subcategories are intended to reflect arboricultural, landscape and cultural values respectively.

- 4.3 For more details of the existing tree stock, refer to the Tree Survey Schedule (appended at JF1).

5.0 TREE PRESERVATION ORDER/CONSERVATION AREA

- 5.1 Following consultation with Eastleigh Borough Council, James Fuller Arboriculture has been made aware that the site is not located within a Conservation Area.
- 5.2 Following consultation with Eastleigh Borough Council, James Fuller Arboriculture has been made aware that trees 7-14 are protected by a Woodland Tree Preservation Order (Ref 482). If it is intended to carry out works to these trees prior to the granting of Full Planning Consent and Discharge of Planning Conditions or, in excess of those shown within this method statement, it will be necessary to obtain written consent from Eastleigh Borough Council.

6.0 PROPOSED TREE RETENTION AND TREE LOSS

- 6.1 In accordance with the recommendations contained within BS5837:2012, an experienced arboriculturist has assessed the requirements for tree protection and the Root Protection Area (RPA). The implications of the proposed development are detailed below, along with any mitigating measures to ensure the retention of these trees.
- 6.2 As part of the assessment, dimensions have been scaled from the proposed design layout drawings (Ref SD-2208-01 Rev B) Solent Design, which have been prepared and modified, to include the relevant Tree Survey data and the information as shown on Plan JFA0104.04A TPP, appended at JF3.
- 6.3 1 (one) hedge (Hedge 2) will be removed to facilitate the proposed design layout. Hedge 2 is a low quality section of hedge, the loss of this hedge will not have an impact on the visual appearance of the site or the local area.
- 6.4 It is recommended that Tree 5 is removed as it is a declining Ash tree. However this tree is not under the control of the site owner. This tree should be removed regardless of any proposed design layouts as it poses a risk to the garden area.

7.0 SUMMARY OF ARBORICULTURAL IMPLICATIONS

7.1 Tree Works

All the proposed tree works are detailed within the Tree Works Schedule (TWS) appended at JF4. The tree works shall be carried out as an initial phase of works, prior to any other works taking place on site. Once the tree works have been completed the Tree Protection Barriers shall be erected.

It is recommended that Trees 10 and 12, which are protected by a Woodland TPO are reduced on their southern sides. These trees have extremely long heavily weighted branches on their southern sides overhanging the garden. It has become increasingly apparent that Oak trees are susceptible to heavily weighted branches failing. A local council have taken steps to try and reduce the likelihood of failure by reducing the heavily weighted branches. It is recommended that these branches are reduced regardless of any design proposals for the site.

7.2 Tree Protection Barriers and Ground Protection

Tree Protection Barriers shall be erected following the completion of the tree works. The barriers shall be constructed as detailed within section 11 of this report and positioned as specified on the Tree Protection Plan JFA0104.04A TPP appended at JF3.

Tree Protection for the site can be erected and then left in situ for the duration of the works. The Tree Protection Barriers will be located as specified on the Tree Protection Plan JFA0104.04A TPP appended at JF3 to provide sufficient working space for the contractors.

7.3 Construction Works

The proposed footprint of the bungalow is located outside of the theoretical RPA's for the retained trees and will be constructed in a traditional manner.

7.4 Drive and Parking Bays

One parking bay encroaches into the RPA's of Trees 2-4. It has been recognised that traditionally constructed hard surfacing in these areas would result in significant root loss. Therefore it has been recommended that the proposed parking bay will be of a 'No Dig' construction incorporating a load suspension system and porous surface. The 'No Dig' hard surface shall be installed as detailed in section 12 of this report.

Tree Protection shall be moved for the duration of the installation of the hard surfacing. It is not known at what stage the 'No Dig' hard surfacing will be installed however, the areas within the RPA's will be protected with either Tree Protection Barriers or the 'No Dig' hard surface. At no stage will the areas within the RPA's be left open and used as extra space for storage of materials or tracking plant machinery.

7.5 Services

It is thought that all new services shall be connected to the existing. No new services will be required within the RPA's of existing/retained trees.

PART 2

ARBORICULTURAL/CONSTRUCTION METHOD STATEMENTS

8.0 PRE-COMMENCEMENT SITE MEETING

- 8.1 It is recommended that a pre-commencement site meeting should be held prior to any works commencing on site, to agree all proposed processes with the arboricultural consultant, the construction personnel and Eastleigh Borough Council. This meeting could be used to formally agree the methods of work, position of site offices, material storage, compounds, parking and tree protection measures prior to commencement of the development and the associated clearance work.
- 8.2 **General Site Management:** It is the developer's responsibility to ensure that the details of this arboricultural statement and any agreed amendments are known, understood and carried out by all site personnel.

9.0 ADDITIONAL ARBORICULTURAL ADVICE FOR SITE PERSONNEL

- 9.1 To provide site personnel with additional information regarding the requirements of Tree Protection, a leaflet (appended at JF5) shall be issued to all staff at the time of their site induction. Spare copies of this leaflet shall be available in the site office as replacements.
- 9.2 In order to inform site personnel of the purpose of the barriers, information notices shall be fixed to the barriers at 5m intervals. These notices shall be of all-weather construction and shall be substantially in the form of the specimen provided at appendix JF5 and replaced as and when necessary.

10.0 PRE-COMMENCEMENT TREE WORKS

- 10.1 All tree works will be undertaken prior to the commencement of site preparation and construction works.
- 10.2 **All permitted or proposed tree work** should be carried out in accordance with the British Standard "*Recommendations for Tree Work*" BS3998:2010, by suitably qualified and experienced professional tree surgeons. Under no circumstances shall site personnel undertake any tree pruning operations. All tree surgery works should be carried out prior to the development of the site, and erection of protective barriers.
- 10.3 If any works are required to retained trees protected by a TPO (Trees 7-14), prior to full planning permission being granted, written approval must be obtained in advance from Eastleigh Borough Council.
- 10.4 Consideration should be given to the timing of the proposed tree works to avoid the active growing period of trees. Therefore, all tree work should ideally be carried out during the dormant period from November through to February and then again from June to August.
- 10.5 Due to the official bird nesting season considered to be from 1st March through to the 31st July (Natural England) depending on weather conditions, consideration must also

PART 2

ARBORICULTURAL/CONSTRUCTION METHOD STATEMENTS

be given to the potential for nesting birds. Therefore if tree work is to be carried out within June, July or August the project ecologist must be consulted to:

- Complete or advise on a pre-works survey, which needs to be carried out by a suitably competent person. As a general rule, it should be assumed that birds will be nesting in trees, and it is down to contractors to assess, record and confirm that any works carried out in the management of trees and other vegetation has not disturbed actively nesting birds*.

10.6 Should additional tree works become apparent during the construction process; written consent will be required from Eastleigh Borough Council prior to these additional works being undertaken.

10.7 All tree works that are required to facilitate the development are detailed within the Pre-Commencement Tree Works Schedule appended at JF4.

11.0 TREE PROTECTION MEASURES

11.1 Tree Protection

Before starting works on site tree protection will be installed in accordance with Tree Protection Plan JFA0104.04A TPP (appended at JF3). This will occur immediately following the completion of tree works and prior to any site preparation works starting.

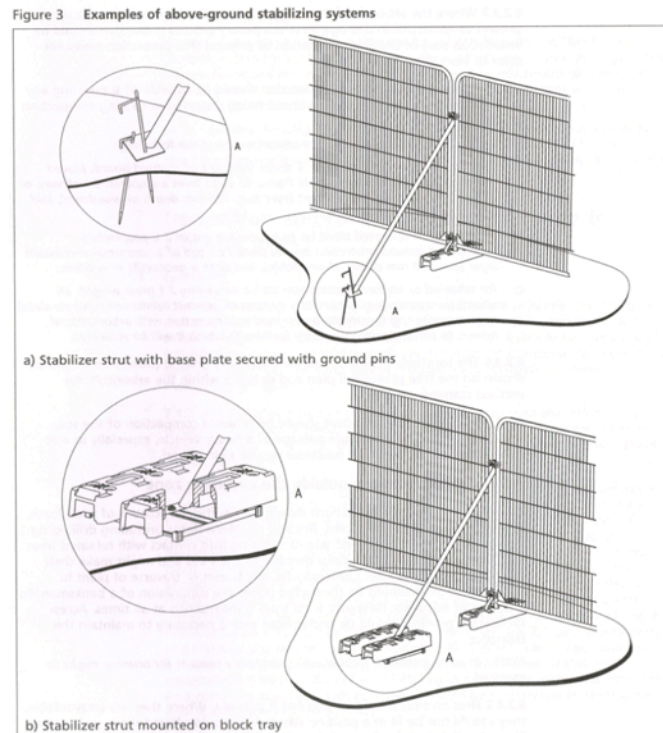
It is recommended that a copy of the Tree Protection Plan is made available on site to act as a point of reference for all site operatives.

11.2 Tree Protective Barrier

Trees 1-14 are adjacent to areas of significant construction activity and will be protected by installing the following protective barrier in the locations specified on the Tree Protection Plan JFA0104.04A TPP. 2m tall welded mesh panels on rubber or concrete feet, joined together using a minimum of two anti-tamper couplers, installed so that they can only be removed from inside the barrier. The distance between the couplers should be at least 1m and be uniform throughout the barrier. The panels should be supported on the inner side by stabilizing struts, which should be attached to a base plate and secured with ground pins.

Figure 2:

Example of weld mesh panels and ground stabilising systems taken from BS5837:2012



Once the barriers are in place they must remain *in-situ* throughout the following:

- Contractor occupancy
- Plant and Materials delivery
- Construction works
- Installation of porous surfacing
- Utility installation
- Completion of development
- Landscaping

The area within the Tree Protection Barriers shall be known as the Construction Exclusion Zone (CEZ) and will be regarded as **sacrosanct**. The tree protective barriers shall not be taken down or relocated at any time without the written approval of Eastleigh Borough Council. An example of a CEZ notice is appended at JF5.

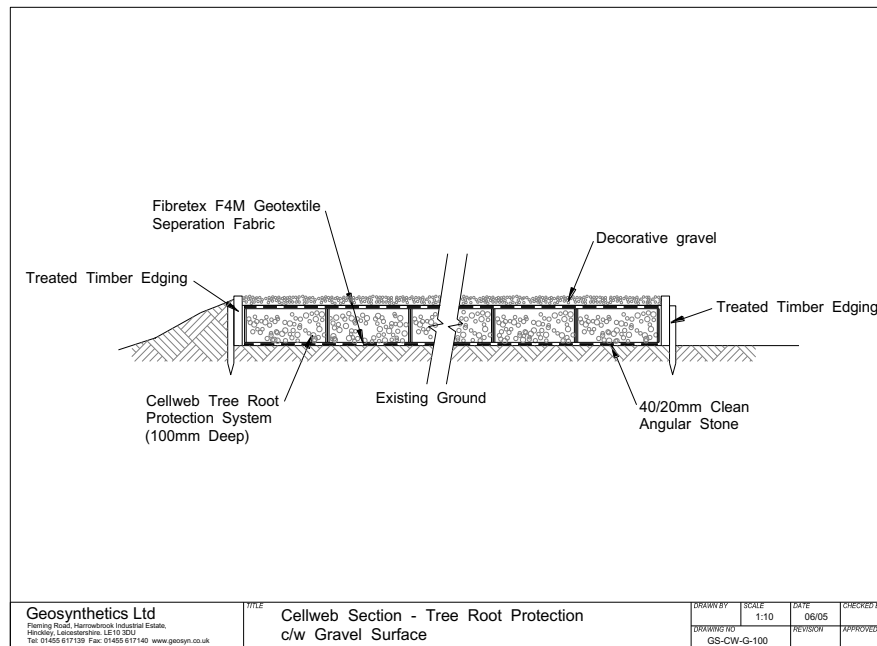
12.0 'NO DIG' HARD SURFACE

- 12.1 Plan JFA0104.04A TPP appended at JF3 indicates where no-dig hard surfaces are to be installed within the RPA's of retained trees. The 'No Dig' hard surface shall be created from Geosynthetics Cellular Confinement system, Cellweb or similar product.
- 12.2 The 'No Dig' hard surface shall be installed in accordance with the manufacturers method statement. New surfacing is proposed within the RPA's of Trees 2-4, which

has the potential to cause harm if not specified and implemented with care. I have reviewed the levels in this area and it would be feasible to install a custom designed 'No Dig' specification surface without causing significant disturbance to the RPA's.

12.3 I am confident that the proposed 'No Dig' hard surface can be installed without causing significant harm to the existing trees. This surface solution is within the recommendations set out in BS5837:2012 and would be appropriate in this situation.

12.4 **Figure 2:** Cross section of 'No Dig' hard surface



12.5 Introduction

This guidance describes the procedure required to undertake the construction of hard surfacing, i.e. patio, whilst exerting no adverse effects on the roots of trees to be retained. It is essential to maintain adequate supplies of water and oxygen for trees through the soil. Porosity is important, particularly where the new hard surface covers an area of previously unmade ground, under which tree roots may have developed. Where hard surfacing passes beneath the tree's canopy, or where it encroaches upon the Construction Exclusion Zone (CEZ) of retained trees, a porous 'no dig' method of construction will be required. The construction has been engineer designed and consists of a non-clogging gas and water permeable surface and sub-base. This will incorporate a three-dimensional cellular confinement system to prevent future rutting and underlying ground compaction.

The Tree Protection Plan JFA0104.04A TPP (appended at JF3) outlines areas where hard surfacing will be installed using a 'no-dig' specification.

12.6 Method of working

Responsibilities:

- The Site Supervisor shall be responsible for the overall implementation of this Method Statement
- The Site Supervisor shall be responsible for ensuring the work area has been CAT scanned, and services identified on the ground by a responsible person using equipment within calibration. All relevant service drawings will be checked, and any necessary trial holes will be excavated, but only under arboricultural on site supervision.
- James Fuller Arboriculture have assessed the increase in levels and do not believe that it will have a detrimental impact on the retained trees.
- Under no circumstances, shall there be a decrease in levels through excavation within the Root Protection Areas of the trees.
- The Site Supervisor shall be responsible for the safe handling and distribution of materials around the site.
- The Site Supervisor shall be responsible for providing a completed Quality Assurance document at the conclusion of the scheme.

Materials:

- PPE as required by the Site Supervisor
- Cellular confinement system
- Stapler and staples
- Staking pins
- Separation geotextile membrane
- Edge restraints
- **Infill aggregate (angular granular 40-20mm no fines)**
- Wearing course – to be agreed

12.7 Method of Preparation

The Site Supervisor will set out the exact location of the area to receive the new surfacing.

Tree protective barriers shall be erected as per Tree Protection Plan (JFA0104.04A TPP, appended at JF3).

Following the CAT scan, the site supervisor will direct the implementation of the hard surfacing as per the following details.

The Site Supervisor shall ensure the prepared surface meets the necessary strength requirements prior to following works.

The Site Supervisor shall provide the setting out of any edging requirements.

12.8 Preparation of the surface for the cellular confinement system

Prior to the installation of a new ground surface, existing ground cover vegetation should be killed/destroyed using an appropriate herbicide (see Pesticide Handbook). Specialist advice should be sought in order to determine the most suitable herbicide treatment, due to the potential for leaching through the soil.

The soil surface will not be skimmed to establish new surfaces at the former ground level, as this has the potential to cause root damage. Therefore, loose organic matter and/or turf will be removed carefully using hand tools, and the new surface established above the former ground level, using a granular fill where required.

The ground levels are to be raised within the Root Protection Area (RPA). This will be achieved by the use of a granular material, which does not inhibit vertical gaseous diffusion. Examples of suitable granular materials include, no-fines gravel, washed aggregate, or cobbles.

No-fines granular materials should be used wherever fill or a sub-base is required, to ensure adequate gaseous diffusion.

to avoid Excess water in the Root Protection Area a permeable surface has been chosen as the final surface treatment.

12.9 Edge Supports

Timber edge – 50mm x 50mm tanalised timber stakes shall be hammered into the ground along the setting out line, at 900mm centres and at changes in direction. The finished level of the stakes shall be 25mm below the finished level of the edging timbers. Tanalised 25mm x 125mm timber rails shall be fixed across the stakes with appropriate fixings. The finished top of timber level shall be approximately 25mm lower than the adjacent finished ground level.

12.10 Construction

Lay geotextile membrane over prepared surface between edgings, ensuring overlaps of 300mm minimum. Temporarily retain geotextile with either stakes or weights.

Expand the cellular confinement system over the geotextile and anchor open with pins during infilling.

The expanded cellular confinement system panels shall be in-filled with the appropriate aggregate by hand, under the direction of the site supervisor. The cellular confinement system shall be overfilled by 50mm, to create a surcharge over the product, which protects the leading edges of the cells.

The infill aggregate shall be rolled or whacked to ensure cohesion of components.

12.11 Finishes

The Site Supervisor shall conduct a visual inspection of the finished surface structure prior to the application of any wearing course.

PART 2

ARBORICULTURAL/CONSTRUCTION METHOD STATEMENTS

Any chosen porous wearing course for the car parking and driveways should be applied as per the instructions of the manufacturers involved.

A sacrificial surface shall be laid for the duration of the site works, which, once complete shall be removed and replaced with the chosen final surface.

12.12 Signing off

The Site Supervisor shall ensure that all waste material is removed from site.

The Site Supervisor shall provide the associated Quality Assurance document to the client.

The arboriculturist shall also sign off the works if present throughout the process to oversee the implementation.

13.0 AVOIDING DAMAGE TO STEMS AND BRANCHES

- 13.1 Care shall be taken when planning site operations, to ensure that wide or tall loads or plant with booms, jibs and counterweights can operate without coming into contact with retained trees. Such contact could result in serious damage to them, and might make their safe retention impossible. Consequently, any transit or traverse of plant in close proximity to trees, will be conducted under the supervision of a banksman, in order to ensure adequate clearance from trees is maintained at all times.

14.0 SITING OF TEMPORARY OFFICES, TOILETS AND MATERIAL STORAGE COMPOUNDS

- 14.1 It is anticipated that all storage materials and deliveries shall make use of the existing access and hard surfaces within the site confines, in order to avoid unnecessary damage to tree roots.
- 14.2 The locations for the delivery, storage and movement of all essential facilities, as well as aspects such as temporary contractor vehicle parking and site location of chemical mixing (e.g. concrete), will be outside of the RPAs, and avoid areas where 'run off' of chemicals may flow down hill into the RPAs of retained trees.

14.3 Site Huts

All site huts (if required) that are to be situated on ground that is not existing hard surfacing, shall have appropriate footings or be situated on a temporary surface, which will aid in reducing the potential for compaction of the ground, where they are in close proximity to the existing tree protective barrier line. Site huts can be used as part of the protective barrier boundary, and in some cases, can be beneficial where installation does not conflict with the aerial parts of the tree.

PART 2

ARBORICULTURAL/CONSTRUCTION METHOD STATEMENTS

14.4 Material Storage

This shall be accommodated outside of the CEZ, particularly to avoid harmful spillages of fuel, or phytotoxic substances that may damage the health of retained trees.

15.0 GENERAL CONSIDERATIONS WITHIN AND OUTSIDE THE CEZ

15.1 Inside the CEZ formed by the protective barrier, the following prohibitions shall apply:

- No construction activity will occur within the CEZ unless otherwise stated in this report, or agreed in writing with Eastleigh Borough Council prior to the specific activity taking place.

15.2 In addition to the above, further precautions are necessary adjacent to trees outside the CEZ:

- Materials, which will contaminate the soil e.g. concrete mixing, diesel, oil and vehicle washings, shall not be discharged within 10 metres of the tree stem, branches, foliage or RPA. This should take into consideration the topography of the site, to avoid liquids such as concrete washings running down hill towards the retained trees.
- Fires shall not be lit in a position where their flames can extend to within 10 metres of foliage, branches or trunk. This will depend on the size of the fire and the wind direction.
- Notice boards, telephone cables or other services shall not be attached to any part of the tree. (See appendix JF5 Common Causes of Damage During Construction Works)

16.0 CONCLUSIONS

16.1 The development proposals for the construction of one 2-bedroom detached bungalow at 20 Steele Close, Chandlers Ford has been assessed broadly in accordance with BS5837:2012 *"Trees in Relation to Design, Demolition and Construction – Recommendations"*.

16.2 It is our opinion that the trees identified for retention can be afforded due respect and provided adequate protection, ensuring their safe and healthy retention during the development process.

16.3 A total of 14 (fourteen) individual trees, 1 (one) Group of trees and 2 (two) hedges shall be retained within the site as detailed within this report. 1 (one) hedge shall be removed to facilitate the proposed design layout.

16.4 It is our opinion that the loss of the 1 (one) hedge will not have a detrimental effect on the local visual amenity or significantly alter the visual treed character of the local area.

PART 2

ARBORICULTURAL/CONSTRUCTION METHOD STATEMENTS

- 16.5 Provided the recommendations included within this report are strictly adhered to, James Fuller Arboriculture believes the trees highlighted for retention within this report can be retained without undue stress on their long-term health.

17.0 CONTACT LIST

- 17.1 It is suggested that points of contact and lines of communication are established prior to commencement of the works on site including:-
- Arboricultural Consultant
 - Project Architect
 - Highways Engineer
 - Structural Engineer
 - Drainage Engineer
 - Landscape Architects
 - Eastleigh Borough Council's Tree Officer
 - Eastleigh Borough Council's Planning Case Officer
 - Site Supervisor and Foreman
- 17.2 It is advised that the site supervisor establishes their own listing of contact details at the pre-start site meeting, and displays this in their office for general use as necessary.

18.0 BIBLIOGRAPHY

- British Standard 5837:2012 –
"Trees in Relation to Design, Demolition and Construction - Recommendations"
- British Standard 3998:2010 –
"Recommendations for Tree Work"
- National Joint Utilities Group Publication Volume 4 –
"Guidelines for the planning, installation and maintenance of utility services in proximity to trees"
- Wildlife and Countryside Act 1981
- Conservation of Habitats and Species Regulations 2010 (as amended)
- Town and Country Planning Acts



TREE SURVEY NOTES

This Tree Survey has been undertaken in accordance with the recommendations set out in British Standard 5837:2012 and current arboricultural best practice.

- Each tree has been numbered sequentially and recorded on the Tree Survey Plan.
- Due to variations of existing ground levels through the site, height dimensions are estimated and are given in metres. Accurate heights, measured with the aid of optical instruments can be provided where instructed.
- Trunk/stem diameters are measured in millimetres (mm) at 1.5 metres above ground level, using a diameter measuring tape, unless otherwise stated.
- Estimated branch spread is taken in metres from the centre of the trunk, at the four cardinal points of a compass, to achieve an accurate representation of the crown shape which is recorded on the tree survey plan.
- An assessment of a tree's age classification is made in terms of its maturity within the site's landscape and defined as:

Y	=	young trees
SM	=	semi-mature trees
EM	=	early mature trees
M	=	mature trees
OM	=	over-mature trees

- An assessment of a tree's physiological condition is defined as:

Good	=	fully functioning biological system showing average vitality i.e. normal bud growth, leaf size, crown density and wound closure
Fair	=	fully functioning biological system showing below average vitality i.e. reduced bud growth, smaller leaf size, lower crown density and reduced wound closure

Poor = a biological system with limited functionality showing significantly below average vitality i.e. limited bud growth, small and chlorotic leaves, low crown density and limited wound closure

Dead = dead

➤ An assessment of a tree's structural condition is defined as:

Good = no significant structural defects

Fair = structural defects which could be alleviated through remedial tree surgery or management practices

Poor = structural defects which cannot be alleviated through tree surgery or management practices

Dead = dead

➤ An assessment of a tree's future life expectancy is defined as: **<10, 10+, 20+ or 40+ years.**

Categorisation of Trees

The category for each tree is assessed in accordance with the recommendations of BS5837:2012. The assessment has not considered any site-specific development proposals, but will have considered any changes on or off-site which may have an effect on the conditions surrounding the surveyed trees.

The trees have been classified into one of the following categories (and one or more sub-categories [this will not increase the value of the tree]) and are indicated on the associated drawings by colours as indicated.

Category U		Identification colour on plan		
Trees in such a condition that they cannot realistically be retained as living trees in the context of the current land use for longer than 10 years		- Trees that have a serious, irremediable, structural defect, such that their early loss is expected due to collapse, including those that will become unviable after removal of other category U trees (e.g. where, for whatever reason, the loss of companion shelter cannot be mitigated by pruning) - Trees that are dead or are showing signs of significant, immediate, and irreversible overall decline - Trees infected with pathogens of significance to the health and/or safety of other trees nearby, or very low quality trees suppressing adjacent trees of better quality		
Category A		1 – Mainly arboricultural values	2 – Mainly landscape values	3 – Mainly cultural values
Trees of high quality with an estimated remaining life expectancy of at least 40 years		Trees that are particularly good examples of their species, especially if rare or unusual; or those that are essential components of groups or formal or semi-formal arboricultural features (e.g. the dominant and/or principal trees within an avenue	Trees, groups of woodlands of particular visual importance as arboricultural and/or landscape features	Trees, groups or woodlands, of significant conservation, historical, commemorative or other value (e.g. veteran trees or wood-pasture)
		Identification colour on plan		
		LIGHT GREEN		

Category B	1 – Mainly arboricultural values	2 – Mainly landscape values	3 – Mainly cultural values	Identification colour on plan
Trees of moderate quality with an estimated remaining life expectancy of at least 20 years	Trees that might be included in category A, but are down-graded because of impaired condition (e.g. presence of significant through remediable defects, including unsympathetic past management and storm damage), such that they are unlikely to be suitable for retention for beyond 40 years; or trees lacking the special quality necessary to merit the category A designation	Trees present in numbers, usually growing as groups or woodlands, such that they attract a higher collective rating than they might as individuals; or trees occurring as collectives but situated so as to make little visual contribution to the wider locality	Trees with material conservation value or other cultural value	MID BLUE
Category C	1 – Mainly arboricultural values	2 – Mainly landscape values	3 – Mainly cultural values	Identification colour on plan
Trees of low quality with an estimated remaining life expectancy of at least 10 years, or young trees with a stem diameter below 150mm	Unremarkable trees of very limited merit or such impaired condition that they do not qualify in higher categories	Trees present in groups or woodlands, but without this conferring on them significantly greater collective landscape value; and/or trees offering low or only temporary/transient landscape benefits	Trees with no material conservation or other cultural value	GREY

Clients are advised that Tree Surveys are a basic data collection exercise and record of tree condition at the time of survey. It will identify any visible signs of ill-health or major defects, advising a further detailed investigation where appropriate. This will most often take the form of a request for either “*full ground level inspection*” or “*climbing inspection required*”. There may also be a further reference to the need for “*decay detection equipment*” to aid diagnosis. A tree survey does not include a comprehensive schedule or specification of remedial tree works, but may contain a guide to the work which might be undertaken by a prudent tree owner, purely for reasons of health and safety.

A Tree Survey should not be confused with a Tree Inspection or Arboricultural Implication Assessment, which are totally separate exercises.

	BS5837 – Tree Survey			
	Client:	Elite Murphy Developments Ltd	Site:	20 Steele Close, Chandlers Ford, Eastleigh, Hampshire
	Date:	July 2022	Consultant:	James Fuller FdSc Arb, BTEC Nat.Dip Forestry & Arb
	Tagged:	No	Weather:	Warm and Clear

Notes:-

1. It may be advised that some trees should have the ivy removed to enable a re-survey to be carried out. This would also alleviate the tree from becoming suppressed; carrying additional weight that increases the chance of windthrow due to a larger dense crown area; and only receiving restricted light. Unless otherwise stated, in order to prevent regrowth, it is only necessary to remove a 300mm section of ivy and clear around the base.
2. It may be advised that it was only possible to estimate the diameter of some trees because of ivy smothering, dense vegetation, or trees located off-site with no access.
3. The estimated remaining contribution in years, and the tree grading category have been calculated for the current situation and may alter where further investigation works are advised.
4. Some trees or groups may have been given an interim grade. The reason for the interim grading is addressed in the timescales given as this may have a bearing on health and safety and/or any development proposals.
5. Tree Groups have been assessed with estimated and representative data.
6. This is not a Tree Works Schedule. Any preliminary management recommendations are listed in the interests of health and safety and should be carried out by a prudent tree owner.
7. Any management recommendations are suggested for reasons of health and safety only, regardless of development proposals at this stage. However, the defects requiring remedial tree surgery are by their very nature potential wildlife habitats, including protected species, which needs consideration prior to any tree surgery works commencing.
8. Any tree numbers that are followed by a * are indicatively plotted and their locations should be verified on site by a land surveyor.
9. Tree data colours: -
 - U Grade Trees Highlighted in RED
 - A Grade Trees Highlighted in Green
 - B Grade Trees Highlighted in Blue
 - C Grade Trees Highlighted in Grey

James Fuller Arboriculture has checked Eastleigh Borough Councils website and has been informed that the site is not located within a Conservation Area. James Fuller Arboriculture has checked Eastleigh Borough Councils website and has confirmed that there is a Woodland Tree Preservation Order (TPO) (Ref 482) to the north of the site.

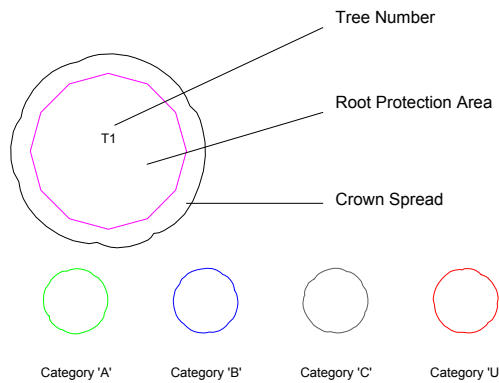
Tree No	Species	H't (m)	Single/ Multi-Stemmed (S or MS)	Stem Diam (mm)	Root Protection Area (m ²)	Root Protection Distance (m)	Branch Spread (m)	H't of Crown AGL (m)	Life Stage	Physiological Condition	Structural Condition and General Observations	Preliminary Management Recommendations	Est. Rem. Contrib. (Yrs)	Cat
1	Silver Birch <i>Betula pendula</i>	16	S	500	113	6.0	N 6 E 2 S 5 W 6	N 3 E 6 S 5 W 2	Early Mature	Good	Structural Condition - Fair Boundary line tree, Ivy on trunk, Minor deadwood in crown, Crown shape distorted due to group pressure, Offsite tree Bifurcated at 3m above ground level,	None required at time of survey	20+	C1+2
2	Silver Birch <i>Betula pendula</i>	15	S	375	64	4.5	N 2 E 3 S 3 W 4	N 6 E 6 S 6 W 2	Early Mature	Fair	Structural Condition - Fair Boundary line tree, Ivy on trunk, Trunk and crown shape distorted, Minor deadwood in crown, Offsite tree	None required at time of survey	10+	C1+2
3	Silver Birch <i>Betula pendula</i>	15	S	400	72	4.8	N 2 E 0 S 1 W 7	N 6 E 0 S 6 W 3	Early Mature	Fair	Structural Condition - Fair Boundary line tree, Ivy on trunk and in crown, Trunk and crown shape distorted, Minor deadwood in crown, Offsite tree Long slender low branch on west side	None required at time of survey	10+	C1+2
4	Silver Birch <i>Betula pendula</i>	15	S	375	64	4.5	N 4 E 0 S 2 W 6	N 3 E 0 S 3 W 3	Early Mature	Fair	Structural Condition - Fair Boundary line tree, Offsite tree, Ivy on trunk, Trunk and crown shape distorted, Minor deadwood in crown	None required at time of survey	20+	C1+2

Tree No	Species	H't (m)	Single/ Multi-Stemmed (S or MS)	Stem Diam (mm)	Root Protection Area (m²)	Root Protection Distance (m)	Branch Spread (m)	H't of Crown AGL (m)	Life Stage	Physio-logical Condition	Structural Condition and General Observations	Preliminary Management Recommendations	Est. Rem. Contrib. (Yrs)	Cat
5*	Common Ash <i>Fraxinus excelsior</i>	15	S	350	-	-	N 5 E 0 S 2 W 6	N 6 E 0 S 6 W 1.5	Semi-mature	Poor	Structural Condition - Fair Offsite tree, Boundary line tree, Ivy on trunk, Crown shape distorted due to group pressure, Minor deadwood in crown Bifurcated at 2.5m above ground level, Suppressed by Group 1, In decline, Ash Dieback	Advise Removal – Inform owner of Duty of Care	<10	U
6	Common Ash <i>Fraxinus excelsior</i>	18	S	650	191	7.8	N 0 E 9 S 9 W 1	N 0 E 6 S 5 W 8	Early Mature	Fair	Structural Condition - Fair Boundary line tree, Trunk and crown shape distorted, Ivy on trunk and in crown, Major deadwood in crown, Basal suckers Suppressed by T7, Large broken branch in crown on south side over garden	Remove broken branch – 1 Week	10+	C1+2
7 TPO	Pedunculate Oak <i>Quercus robur</i>	17	S	750	255	9	N 6 E 8 S 4 W 0	N 5 E 8 S 8 W 0	Early Mature	Fair	Structural Condition - Fair Offsite tree, Ivy on trunk and in crown, Crown shape distorted due to group pressure, Major deadwood in crown, Growing on bank	None required at time of survey	20+	C1+2
8 TPO	Pedunculate Oak <i>Quercus robur</i>	19	S	800	290	9.6	N 3 E 5 S 10 W 6	N 10 E 10 S 6 W 6	Early Mature	Good	Structural Condition - Good Offsite tree, Ivy on trunk and in crown, Crown shape distorted due to group pressure, Major deadwood in crown, Branch tear Broken hanging branches in crown, Numerous failed branches on east side	Remove major deadwood and stubs – Inform owner of duty of care 12 months	20+	B1+2

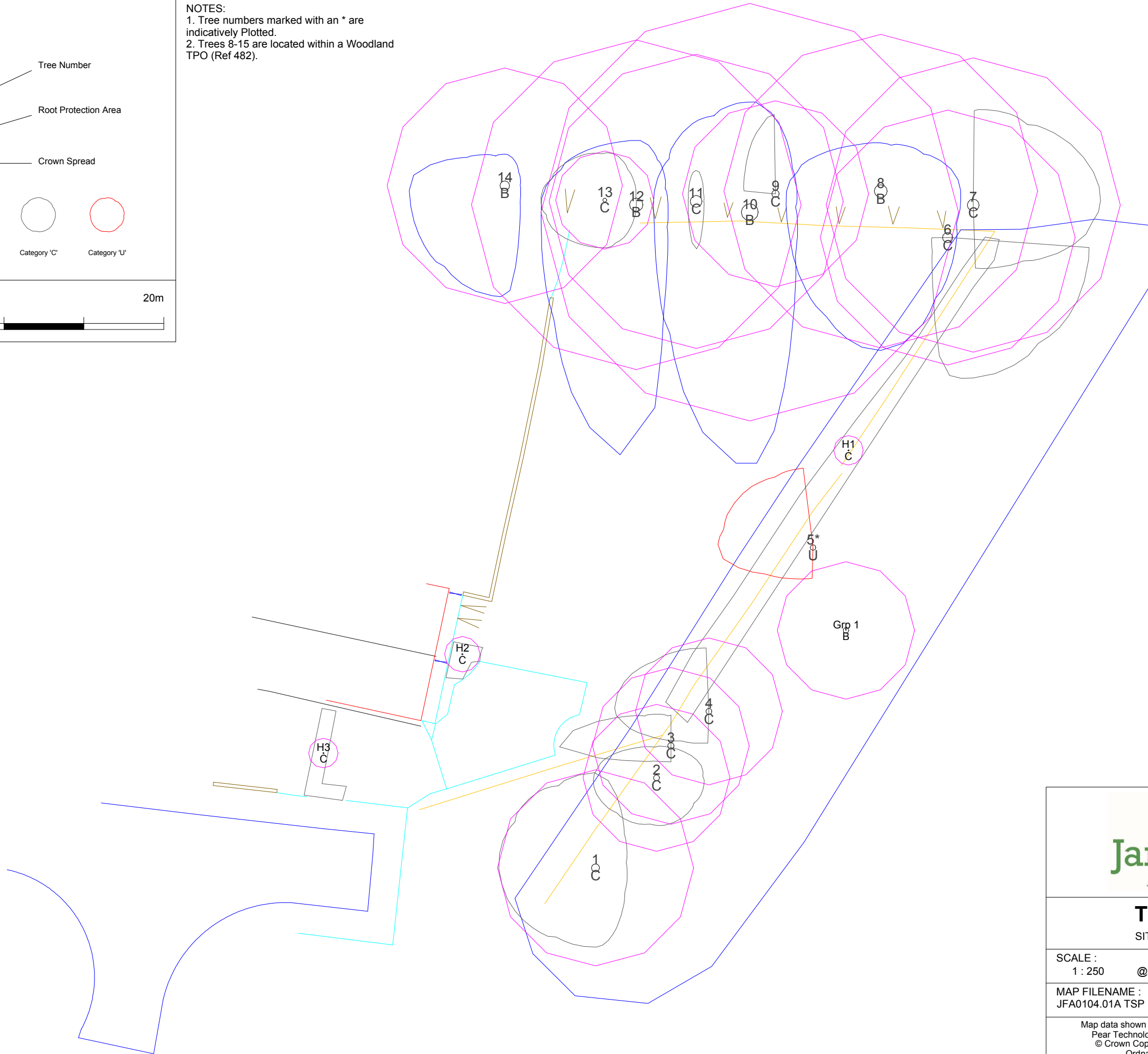
Tree No	Species	H't (m)	Single/ Multi-Stemmed (S or MS)	Stem Diam (mm)	Root Protection Area (m²)	Root Protection Distance (m)	Branch Spread (m)	H't of Crown AGL (m)	Life Stage	Physiological Condition	Structural Condition and General Observations	Preliminary Management Recommendations	Est. Rem. Contrib. (Yrs)	Cat
9 TPO	Pedunculate Oak <i>Quercus robur</i>	8	S	475	102	5.7	N 5 E 0 S 0 W 2	N 3 E 0 S 0 W 2	Early Mature	Poor	Structural Condition - Fair Offsite tree, Boundary line tree, Trunk and crown shape distorted, Branch tearout wound, Poor quality tree Suppressed by T10,	None required at time of survey	10+	C1+2
10 TPO	Pedunculate Oak <i>Quercus robur</i>	19	MS	925 525	519	12.9	N 7 E 3 S 16 W 6	N 6 E 6 S 3 W 8	Mature	Good	Structural Condition - Good Offsite tree, Boundary line tree, Ivy on trunk and in crown, Major deadwood in crown, Branch tearout wound, Crown shape distorted due to group pressure Unable to verify health and safety due to Ivy on Trunk, Long heavily weighted branches on south side over garden	Remove major deadwood and stubs – Inform owner of duty of care	40+	B1+2
11 TPO	Pedunculate Oak <i>Quercus robur</i>	15	S	775	272	9.3	N 2 E 0 S 3 W 0	N 5 E 0 S 7 W 0	Early Mature	Fair	Structural Condition - Fair Offsite tree, Boundary line tree, Ivy on trunk and in crown, Branch tearout wound, Crown shape distorted due to group pressure, Major deadwood in crown, Poor quality tree Suppressed by larger trees	Remove major deadwood and stubs – Inform owner of duty of care	10+	C1+2

Tree No	Species	H't (m)	Single/ Multi-Stemmed (S or MS)	Stem Diam (mm)	Root Protection Area (m²)	Root Protection Distance (m)	Branch Spread (m)	H't of Crown AGL (m)	Life Stage	Physio-logical Condition	Structural Condition and General Observations	Preliminary Management Recommendations	Est. Rem. Contrib. (Yrs)	Cat
12 TPO	Pedunculate Oak <i>Quercus robur</i>	19	S	840	319	10.1	N 4 E 2 S 16 W 6	N 5 E 5 S 3.5 W 8	Mature	Good	Structural Condition - Good Offsite tree, Boundary line tree, Ivy on trunk and in crown, Major deadwood in crown, Crown shape distorted due to group pressure, Branch tearout wound Long heavily weighted branches on south side	Remove major deadwood and stubs	20+	B1+2
13 TPO	Common Holly <i>Ilex aquifolium</i>	9	S	250	28	3	N 3 E 2 S 3 W 4	N 1 E 1 S 1 W 1	Semi-mature	Fair	Structural Condition - Fair Offsite tree, Boundary line tree, Basal suckers, Trunk and crown shape distorted Multi-stemmed at ground level, Only one main stem remains,	None required at time of survey	10+	C1+2
14 TPO	Pedunculate Oak <i>Quercus robur</i>	15	S	600	163	7.2	N 2 E 1 S 7 W 6	N 4 E 4 S 3 W 3	Early Mature	Fair	Structural Condition - Fair Offsite tree, Boundary line tree, Crown shape distorted due to group pressure, Minor deadwood in crown Bifurcated at 2m above ground level, Lower branches removed on south side	None required at time of survey	20+	B1+2
Grp 1	Silver Birch, Pedunculate Oak, Common Ash, Common Sycamore	14	S	350	55	4.2	N - E - S - W -	N - E - S - W -	Early Mature	Good	Structural Condition - Good Growing on bank, Ivy on trunk and in crown, Crown shape distorted due to group pressure Boundary edge group, Off site group, Mixed species,	None required at time of survey	20+	B2

Tree No	Species	H't (m)	Single/ Multi-Stemmed (S or MS)	Stem Diam (mm)	Root Protection Area (m ²)	Root Protection Distance (m)	Branch Spread (m)	H't of Crown AGL (m)	Life Stage	Physiological Condition	Structural Condition and General Observations	Preliminary Management Recommendations	Est. Rem. Contrib. (Yrs)	Cat
H1	Hawthorn, Hazel, Cotoneaster,	2	S	75	3	0.9	N - E - S - W -	N - E - S - W -	Young	Fair	Structural Condition - Fair Boundary edge hedge, Unmanaged hedge, Would benefit from being pruned	None required at time of survey	20+	C2
H2	Privet	2	S	90	4	1.1	N - E - S - W -	N - E - S - W -	Young	Fair	Structural Condition - Fair Garden edge hedge, Provides screening to garden, Unmanaged hedge	None required at time of survey	20+	C2
H3	Privet	2	S	75	3	0.9	N - E - S - W -	N - E - S - W -	Young	Good	Structural Condition - Good Boundary edge hedge, Provides screening between front gardens	None required at time of survey	20+	C2



NOTES:
1. Tree numbers marked with an * are
indicatively Plotted.
2. Trees 8-15 are located within a Woodland
TPO (Ref 482).



Tree Survey Plan

SITE: 20 Steele Close, Chandlers Ford

SCALE :
1 : 250 @ A3

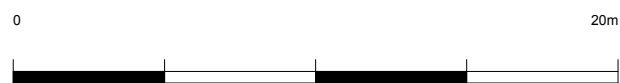
DATE :
29/07/2022

MAP FILENAME :
JFA0104.01A TSP

BASE PLAN:
16140



Map data shown may contain Ordnance Survey ® products supplied by
Pear Technology Services Ltd; Email: info@peartechology.co.uk
© Crown Copyright and database rights from date shown above
Ordnance Survey ® licence number 100023148



2025N +



20

Map data shown may contain Ordnance Survey® products supplied by
Pear Technology Services Ltd; Email: info@peartechology.co.uk
© Crown Copyright and database rights from data shown above
Ordnance Survey® licence number 100023148

	TREE WORKS SCHEDULE		
	Client:	Elite Murphy Developments Ltd	Site: 20 Steele Close, Chandlers Ford, Eastleigh, SO53 3AA
	Date:	August 2022	Consultant: James Fuller <i>FdSc Arb BTEC Nat.Dip Arb</i>

Tree No.	Species	Recommended Works
1	Birch	• N/A
2	Birch	• N/A
3	Birch	• Crown lift to 4m on west side
4	Birch	• Crown lift to 4m on west side
5	Ash	• Inform owner of duty of care – Advise Removal
6	Ash	• Remove broken branch
7	Oak	• N/A
8	Oak	• Remove major deadwood on south side
9	Oak	• N/A
10	Oak	• Reduce south side branches by 4m • Remove major deadwood on south side
11	Oak	• Remove major deadwood
12	Oak	• Reduce south side branches by 4m • Remove major deadwood on south side
13	Holly	• N/A
14	Oak	• N/A
Grp 1	Mixed Species	• N/A
H1	Hawthorn, Hazel, Cotoneaster	• N/A
H2	Privet	• Remove
H3	Privet	• N/A

- All tree works are advised to be carried out between July and September or November and February. Tree works should also avoid the season for nesting birds.
- All tree works should be carried out in accordance with current best practice guidelines and BS3998 – Tree Works. Only natural target pruning method to be used.



**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)

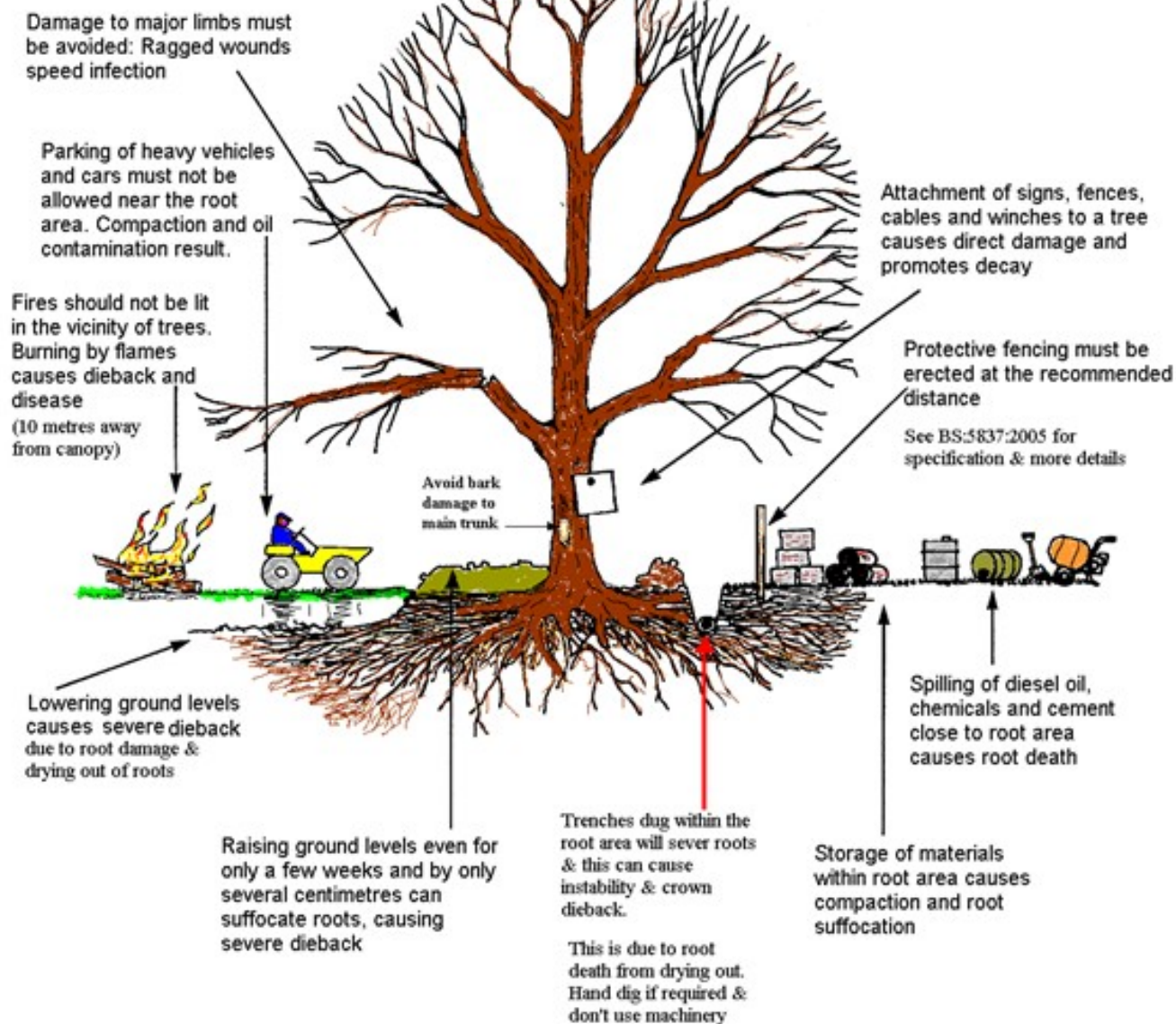
**TREES ENCLOSED BY THIS FENCE ARE PROTECTED BY
PLANNING CONDITIONS AND/OR ARE THE SUBJECTS OF A
TREE PRESERVATION ORDER.**

**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**

Common causes of Tree Death

The use of properly positioned protective fencing can prevent tree deaths occurring.



Please use copies of this as an on-site poster for personnel

(Source: Arboricultural Information Exchange website, 2005)





TREES AT _____ :

SUMMARY OF TREE PROTECTION MEASURES

Introduction

This leaflet shall be issued to all site personnel as part of their induction briefing.

It describes in summary form the precautions that site personnel shall at all times follow, to ensure that the existing trees on the site come to no harm.

The precautions described are neither arbitrary nor reducible and must be adhered to in full.

These precautions are necessary because unprotected trees are very vulnerable to damage during demolition and construction works.

Furthermore, many of the trees on the site are under **LEGAL PROTECTION** and damaging them can result in heavy fines.

Two common misconceptions about trees:

MYTH: Trees have deep taproots and so shallow excavations will not harm the tree.

FACT: 90% of all tree's roots are found in the top 600mm of soil; all excavations near to trees are likely to cause root damage which can kill the tree.

MYTH: Trees will quickly heal over any bark wound, with no ill effect.

FACT: Bark wounds take years to heal and larger ones never do; missing bark can lead to disease and even the death of the tree.

Tree Protection

All trees adjacent to unsupervised work areas have been protected by fencing.

This fencing must be respected at all times and no attempts shall be made to damage, bypass or ignore it.

In areas designated for supervised working, no works shall be undertaken without the supervisor being present or without him/her issuing a "carry on" chit.

Prohibitions Adjacent to Trees

Inside the exclusion area of the tree protection, the following prohibitions shall apply.

- **No** digging or scraping
- **No** storage of plant or materials
- **No** vehicular access
- **No** fire lighting
- **No** handling, discharge or spillage or any chemical substance
- **No** water-logging

In addition to the above, further precautions shall be taken near to trees.

- A 10m separation distance shall be observed between trees and any substance injurious to their health, including fuels, oil, bitumen, cement (including washings) builders' sand, concrete mixing and other chemicals.
- No fire shall be lit such that flames come within 5m of any foliage; this shall be taken to mean a fire separation distance to the leaved of 20m.

Avoiding Damage to Stem and Branches

Care shall be taken when planning site operations to ensure that wide or tall loads or plant with booms, jibs and counterweights, can operate without coming into contact with trees.

Consequently, any transit or traverse of plant in proximity to trees shall be conducted under the supervision of a spotter to ensure that adequate clearance is at all times maintained.

In some circumstances, it may be impossible to achieve this, necessitating the pruning of the tree.

If this is necessary, a specialist team shall be called in following referral to the project Arboriculturist.

No tree pruning shall be undertaken by demolition or construction personnel.

Asking for Help

If you see any damage to a tree or its protective fencing, or if you need a tree pruning for plant clearance, contact **the retained Arboriculturist**

REMEMBER:

**ALL TREE DAMAGE IS
AVOIDABLE –**

SO AVOID IT!



Qualifications of James Fuller

James Fuller, has over 17 years experience within the field of Arboriculture and has attained a Foundation Degree in Arboriculture (FDSc Arb.) and a BTEC National Diploma in Forestry & Arboriculture (BTEC Nat.Dip. Forestry & Arb.).

James is also a Professional Member of the Arboricultural Association (MArborA) and has successfully completed the Professional Tree Inspector's, Capital Asset Value for Amenity Trees (CAVAT), Quantified Tree Risk Assessment (QTRA) and Visual Tree Assessment (VTA) Courses.

James previously worked as an Arboricultural Consultant, providing professional advice in relation to trees for one of the leading arboricultural consultancy practices in the country. As part of this role James was instrumental in providing clients with advice from the initial Tree Survey through to site completion and sign off.

James has experience of working on a variety of sites throughout the UK, from individual Visual Tree Assessments (VTA) to large development sites (BS5837: 2012) with 1'000s of trees.

James is now building an ever-growing portfolio of private clients whilst providing consultancy advice to local arboricultural companies and their clients.