



Arboricultural Report

**Planning and Development
To Accompany Planning Application At:**

Address: 1 Griggs Farm Court, Longmoor Road, Liphook, GU30 7NU

Date: 7th May 2022

Reference: RCG-GFC-01 v.1





Arboricultural Report

Purpose of the Report:

The report is designed to fulfil the recommended criteria for the provision of arboricultural information in validating planning applications or compliance with planning conditions.

Included Within the Contents of this Report is:

- Full Tree Survey (Compliant to British Standard BS 5837:2012 - Trees in Relation to Design, Demolition and Construction 2012)
- Tree Impact Assessment detailing the Arboricultural Implications and potential impact from the proposed development on the local tree population. Outline trees to be retained, trees to be removed, and appropriate tree protection measures to be implemented.
- Arboricultural Method Statement detailing any tree protection measures necessary, the implication of tree protection measures, phasing of works, and any special requirements.
- Sufficient information to accompany a planning application submitted to the relevant planning authority.

Date: 7th May 2022

Produced by: Russell Gibbons

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This report is for the exclusive use of the client and those involved in the submission and approval of the planning application to which the report relates and the implementation of the consented works. It may not be sold, lent, hired or divulged to any third party not directly involved in the subject matter without the express consent of RCG Arboriculture.



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1.0 Introduction

1.1 Proposal:

Installation of a new permanent single track driveway from Longmoor Road into 1 Griggs Farm Court, Liphook, GU30 7NU.

As part of the proposal I have been instructed to produce the following information for the client to accompany their planning submission.

- A tree survey and schedule in accordance with BS: 5837 2012 Trees in Relation to Design, Demolition and Construction 2012.
- Detail and review the arboricultural implications of the proposal, its potential impact on the surrounding tree population and local amenity value.
- Present an affective tree protection strategy for the duration of the development and method statement outlining such measures.
- Provide the necessary arboricultural information to accompany a planning application to the relevant authority.

1.2 Site Details:

1 Griggs Farm Court, Liphook, GU30 7NU

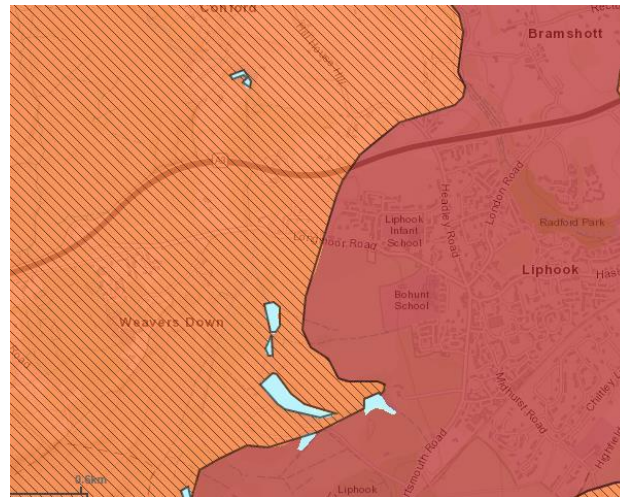




Soil and Bedrock Formations: Information from two sources about soil types for the area.

Cranfield Soil and Agrifoods Institute - **Soilscapes:**

- Soilscape 14 (Orange): Freely draining very acid sandy and loamy soils.
- Texture: Sandy, some loamy



British Geological Survey:

- Superficial Deposits: Alluvium – Clay, Silt, Sand and Gravel
- Bedrock Geology: Sandgate Formation - Sandstone, Siltstone and Mudstone.

Soils with moderate to high clay content are more vulnerable to soil compaction from development operations, whereas soils with little or no clay content are much less vulnerable to compaction.

1.3 Documents Provided:

The plans and information in this report are produced using the following documents.

Architectual Service - 11/166-003

Architectual Service - 11/166-004

1.4 Key Terms and Abbreviations:

A list of the key terms and abbreviations has been included to help explain some of the terminology which is found in appendix 3



1.5 Use of Report:

This report has been produced to support a submission and aid the determination of a planning application to the relevant authority. The report is to enable the authority to assess the arboricultural impact of the proposed development and enable the authority to make an informed decision. If permission is to be granted, the contents of the report are to be followed in full for the entirety of the development process to protect those trees identified for retention from start to finish.

1.6 Limitations of the Report:

The trees have been surveyed in accordance with the criteria set in the BS 5837: Trees in Relation to Design, Demolition and Construction 2012

A full hazard assessment of the trees (including assessment of decay or their defects and their implications), has not been undertaken as this is considered beyond the scope of this report. Any obvious hazards and defects have been identified were relevant in the Tree Survey Schedule and appropriate relating works have been recommended. Where relevant, trees not located within the legal property of the owner have been included and any works would be subject (where relevant by law, Statue and Common) to the owner's permission.

Where appropriate further investigative works to be undertaken have been detailed and recommended. This may include climbing inspections, below ground exploratory investigations and the use of specialist decay detection equipment.

Detailed ecological considerations are also beyond the scope of my expertise and have not been included in this report. UK and European Wildlife Legislation may affect the timing and even prohibit the enhancement of works and operations described in this report. Most of the information regarding wildlife can be found in the Wildlife and Countryside Act 1981 and amendments. This includes information of wild birds, bats, badgers and some insects. Bats in particular are afforded particular protection and a specialist is required to determine if bats are present or may be affected when carrying out tree works. Further information is available from Natural England www.gov.uk/government/organisations/natural-england

Tree work recommendations may be included where trees are visibly causing direct damage or potential damage from physical contact with structures or property. The assessment of indirect damage such as tree root related subsidence on clay soils has not been assessed. If tree root related subsidence is suspected, RCG Arboricultural would recommend contacting your household insurers to help investigate.



2. Tree Survey

2.1 Survey Method:

The trees were surveyed on 6th May 2022

The trees were inspected from ground level using widely accepted Visual Tree Assessment (VTA) as defined in Research for Amenity Tree Series books. Principles of Tree Hazard Assessment and Management by David Lonsdale research for Amenity Trees No.7 being one example

No climbing inspections were undertaken

No samples of soil, tree tissue or suspected pests, diseases and pathogens were taken. Heights of trees were estimated by eye and crown spreads by physical pacing. Diameters were measured in mm using a diameter tape measure.

Tree diameters were measured at 1.5m from ground level if they consisted of a single stem. Trees present with more than one stem below 1.5m were measured in accordance with BS 5837 2012.

Any photographs taken on site are done so using a digital camera.

Tools used when appraising trees were a metric diameter tape, binoculars, digital measuring device, hand lens and where appropriate, metal probe, trowel, and engineers mallet.

Locations of the trees were plotted with a laser using triangulation and trilateration techniques.

2.2 Legal Protection Status of Trees:

The information below was obtained from the local authority of East Hampshire District Council via telephone and/or via their online search facility and was accurate at the time of writing this report.

There are no Tree Preservation Orders currently covering the trees on the site indicated.

There is no Conservation Area coverage affecting the trees surveyed.



2.3 Tree Details:

All the information of the trees surveyed within this report can be found in appendix 1 along with the recommendations for proposed works. The trees surveyed have been broken down into categories set out in BS 5837:2012 which are also explained in appendix 1

2.4 Ancient Woodland:

Section 175 of the National Planning Policy Framework (NPPF) states planning permission should be refused for development resulting in the loss or deterioration of irreplaceable habitats, including ancient woodland and the loss of aged or veteran trees found outside ancient woodland, unless the need for, and benefits of, the development in that location clearly outweigh the loss.

Natural England Open Data: No Designated Ancient Woodland was identified at or adjacent to 1 Griggs Farm Court, Liphook, GU30 7NU

Veteran Trees: None of the trees surveyed on the site would be considered as Veteran trees.



3 Arboricultural Impact Assessment

3.1 Summary of trees:

Total Number of Trees Surveyed:

Individuals 11

Groups 1

Tree By Category	
Grade	No. Trees
A	0
B	5
C	4
U	3

3.2 Tree Works:

Any tree pruning operations being recommended are taking into consideration the condition the trees at the time of the survey and to accommodate for the proposed development. A full list of the recommended works can be found in the tree schedule in appendix 1.

Proposed Tree Works			
Tree No:	Grade	Proposed Works	Reasons for Works
T1	B	Sever Ivy at ground level.	To aid future inspections
T2	B	Sever Ivy at ground level.	To aid future inspections
T3	C	Fell to ground level	To accommodate the development
T5	U	Fell to ground level	Health and safety purposes. The tree is in a poor condition.
T6	U	Fell to ground level	Health and safety purposes. The tree is in a poor condition.
T7	B	Fell to ground level	To accommodate the development
T8	U	Fell to ground level	Health and safety purposes. The tree is in a poor condition.
T11	C	Fell to ground level	To accommodate the development
T12	C	Fell to ground level	To accommodate the development



3.3 Incursions in Root Protection Areas (RPAs)

The starting point for any proposed development design should be to avoid root protection areas completely. Consideration should also be given to provide adequate working space for construction activities, but where sufficient clearances are not possible protection measures can be taken.

Mitigate

Where intrusion into the RPA is unavoidable then its impact on the tree can be mitigated by specialist measures:

- Foundations that avoid trenching: screw piles, cantilevered, pile and beam, cast slabs at ground level or with voids beneath.
- New surfacing can be achieved while limiting the impact to the soil structure subject to advice from a suitably qualified arboriculturist. Cellular confinement is one method which enables hard surfacing to be constructed above existing soil levels to reduce soil compaction and retain a degree of porosity.
- Services that cannot be located outside root protection areas can be installed utilising thrust boring, directional drilling, air excavation or hand excavation. These operations are often required to be carried out under arboricultural supervision.

Compensate

Replacement planting can ensure that continuity for arboricultural amenity is planned for and where tree removal is unavoidable.

Proposed RPA Incursions

The table below details the number and nature of the incursions present within the current proposal affecting trees recommended for retention only.

RPA Incursions of Retained Trees		
Incursion	Trees Affected	Action Required
Installation of new permeable hard surface access road from Longmoor Road	T1, T2, T4, T9	No-dig cellular confinement system to be installed to limit impact on root systems.
Installation of new access gates and posts	T1, T2, T4	Post holes will be dug by hand to avoid damage to retained tree roots. See sections 4.9 and 4.12 of the AMS
Potential new boundary treatment	T1, T2, T4	Works to be carried out by hand in accordance with section 4.9 of the AMS.



3.4 Site Access & Demolition:

Site access will be from the Longmoor Road along the pre-existing access that leads to Griggs Court Farm to the East and through the location of the proposed new driveway.

The proposed new gate posts can be of a relatively light construction and the post holes for the gate piers can be dug by hand in accordance with section 4.9 of the Arboricultural Method Statement.

No demolition is proposed as part of the development.

3.5 Storage of Materials:

All materials should be stored outside of the Root Protection Areas where possible. Due to the location and limited space on the site, further ground protection can be utilised if required to provide room in the RPAs of retained trees.

3.6 Removal of Hard Surfacing:

The location of the proposed access has a line of concrete slabs from where the previous owners used to store a vehicle or caravan. They appear to be laid directly onto the ground with no subbase. They can be easily lifted by hand without the need of machinery.

3.7 New Hard Surfacing:

The proposed access will be of a permeable no dig design utilising a cellular confinement system to limit soil compaction while providing permeability and a load spreading surface.

The proposed new hard surfacing starts and finishes outside retained trees RPAs enabling the levels to match the existing of Longmoor Road. The location of the access drops away from the main highway making the installation of a no dig surface feasible.

The installation of the hard surface access inside the calculated root protection area will be constructed under direct arboricultural supervision in accordance with section 4.7 of the arboricultural method statement and section 8 of BS 5837:2012.

3.8 Light & Proximity:

There are no anticipated implications for light levels and proximity with this installation.

3.9 Boundary Treatment:

The installation of any new boundary treatment in the RPAs of retained trees will be carried out by hand to limit any root disturbance as in accordance with section 4.9 of the AMS.



3.10 Underground Services:

No details were provided on the location of any proposed new service routes. Any services to potential automated gates would need to be run above the existing soil level.

3.11 Foundations:

No foundation incursions are required for the driveway proposal.

3.12 Conclusion:

The proposal for the development is considered acceptable from an arboricultural perspective. One high B grade tree has been proposed for removal to accommodate the location of the new driveway. From discussions with the applicant the location has been proposed to provide the necessary visibility splays required to meet highways recommendations. All other trees proposed for removal are of a lower grade due to their young age or their poor condition and limited useful life expectancy.

To limit the impact of the new access on retained trees root systems a no dig solution will be required. The most common form would be to use a cellular confinement system which can be laid above ground which would provide an arboriculturally sensitive permeable load spreading surface.



4 Arboricultural Method Statement

4.1 Introduction:

As a general AMS are used to safeguard the retained trees both on and adjacent to the site during the development process. Any tree protection methods set out in the AMS will be adhered to. These will protect the below ground root systems and above ground stem and crown structures of the trees.

The essential principle is that the area inside the tree protective fencing and any ground protection used are to be preserved and protected at all times throughout the whole duration of the works being carried out.

Any specialist methods, supervision and inspections referred to in this AMS are to be implemented in full to ensure adequate protection and successful retention are maintained.

A COPY OF THIS DOCUMENT WILL BE SUPPLIED AND MAINTAINED ON SITE AT ALL TIMES AND MADE AVAILABLE TO ALL SITE PERSONNEL

4.2 Responsibilities:

All site personnel will be made aware of any key implications of this AMS. It is the responsibility of the developer to ensure that the details of the AMS and any agreed amendments are communicated to site personnel. As of 2005 local planning authorities have powers to serve Temporary Stop Notices if agreed tree protection measures are not carried out. Adhering to this AMS will ensure that such costly time consuming action is avoided.

4.3 Pre-Commencement Meeting:

A pre-commencement site meeting, involving the Site Manager, the Arboricultural Consultant, the client, developer and LPA Tree Officer is recommended to ensure that all aspects of the tree protection process are understood and agreed. Any potential problems can be discussed at this stage, along with the intended sequencing of events and the level of arboricultural supervision required.



4.4 Sequencing, Inspection and Supervision:

Sequencing of events and effective arboricultural inspection/supervision are important elements of the tree protection process.

The following recommendations for the sequencing of events helps to reduce foreseeable complications and problems from pre-planning to project completion. It is also understood that issues and complications that are unforeseeable will arise but can be limited by following the points below.

All the supervision and inspection recommendations within the AMS must be carried out by a suitably qualified arboricultural consultant to maintain the appropriate level of tree protection.

4.4.1 Sequencing and Inspection Key Stages:

- Consultation with projects managers/architects/contractors prior to seeking planning consent to help limit the amount of constraints resulting for arboricultural factors and maximise site efficiency
- AIA & AMS issued to Site Manager/Building Company/Client
- Pre-commencement site meeting.
- Any prior development investigation carried out and findings reported e.g. investigative trial holes
- AMS to be read by all site personnel to ensure full understanding of the implications. Any queries are to be addressed by the appointed Arboricultural Consultant.
- Recommended tree work operations (appendix 1) are to be carried out as specified in the tree schedule, preferably before the main contractors start on site
- Erection of the tree protection fencing, installation of ground protection, and no dig access as stated in the AMS.
- Proposed project/development to be undertaken and completed.
- Removal of the tree protection measures **ONLY** when all construction, ground work or any other works that would have an impact on the retained trees are finished
- Any landscaping and tree planting required is carried out



4.4.2 Summary of Recommended Arboricultural Inspection/Supervision:

Activity	Level of Monitoring/Supervision Required
Installation of the tree protection measures prior to construction or ground works commencing.	Inspection required to ensure the fencing and ground protection has been installed in the correct location to the correct specification.
Installation of no dig construction access to be undertaken	Supervision required ensuring installation is undertaken as specified.

In addition to the direct supervision detailed in the table above, telephone can be maintained between the Site Manager, Project Manager and the Arboricultural Consultant to ensure that the operation progresses smoothly and that compliance with the AMS is being achieved.

4.5 Tree Work Operations:

All works will be carried out in accordance with B.S. 3998: 2010 'Recommendations for Tree Work' (as amended) and current arboricultural industry best practice. Tree works will be carried out by a suitably qualified and experienced Arboricultural Contractor holding the necessary insurance cover. A list of such approved contractors is available from the Arboricultural Association at www.trees.org.uk

If at any time during the development a need for additional tree works is required e.g. to facilitate the proposed works or access for machinery/plant, the Arboricultural Consultant will be contacted to advise on appropriate works and liaise with the LPA as necessary. No works shall be undertaken without the prior approval of the LPA.

All the recommended tree works have been listed in the tree schedule in Appendix 1 and the location of the trees are viewed on the Tree Constraints Plan in Appendix 2 (larger copies available in pdf)



4.6 Tree Protection Measures:

Tree protection measures are used to ensure that the above and below ground structures of the trees are not damaged by construction/ development operations and the soil structure within RPA's of retained trees is safeguarded. The different specifications of Tree Protection Fencing/Barriers all depend on the factors listed below

- Proximity of operations to retained trees and their RPAs
- Intensity of operations around retained trees and their RPAs
- Type and weight of traffic moving in and around RPAs
- Size, age, physiology and vitality of the retained trees

All of the above factors will have to be considered when recommending the use of Tree Protection Barriers and Ground Protection for each proposed development. If tree protection measures are necessary a specification will be provided which **MUST** be adhered to throughout the development process

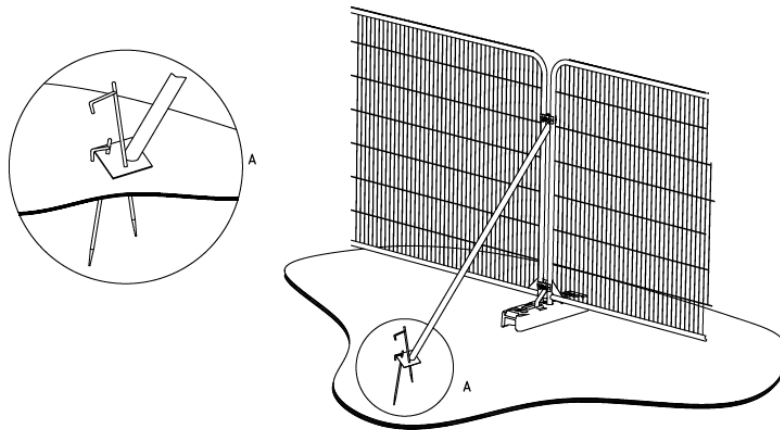
4.6.1 Tree Protection Fencing/Barriers:

Tree protection fencing will be required in this project to protect the trees throughout the construction process. The location of the fencing required can be viewed on **1 Griggs Farm Court, Tree Protection Plan** in appendix 2. The specification for the protection is based around the recommendations in BS 5837:2012. Given the ground conditions and proximity of the development works to the retained trees, the recommended specification for this project will be the **Alternative specification a)**.

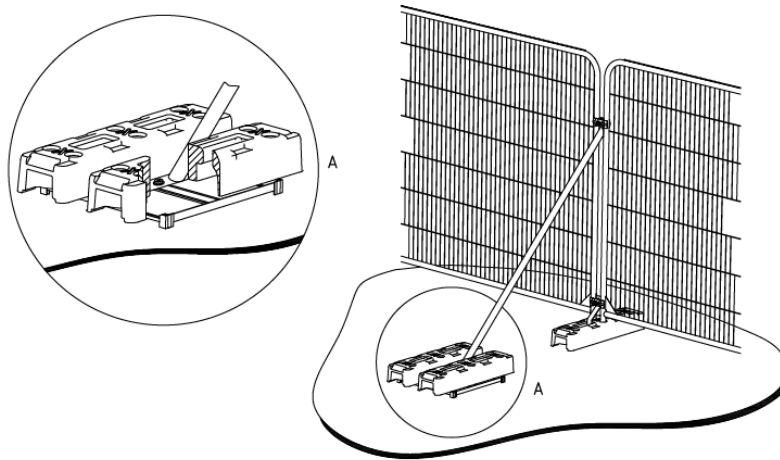
Both the specification a) and b) consist of 2m tall weldmesh panels (e.g. Heras panels) that sit in rubber, resin or concrete feet. The panels need to be secured to each other with a minimum of two anti-tamper couplers installed so that they can only be removed from the inside (RPA side) of the fence. The couplers need to be spaced at least 1m apart and should ideally be uniform throughout the fence. The fencing needs to be supported with 45° stabilizing struts attached at a minimum of every other panel. Where ground conditions permit the stabilizing struts need to be secured to the ground with suitably sized ground pins to prevent them from moving if struck (diagram a).



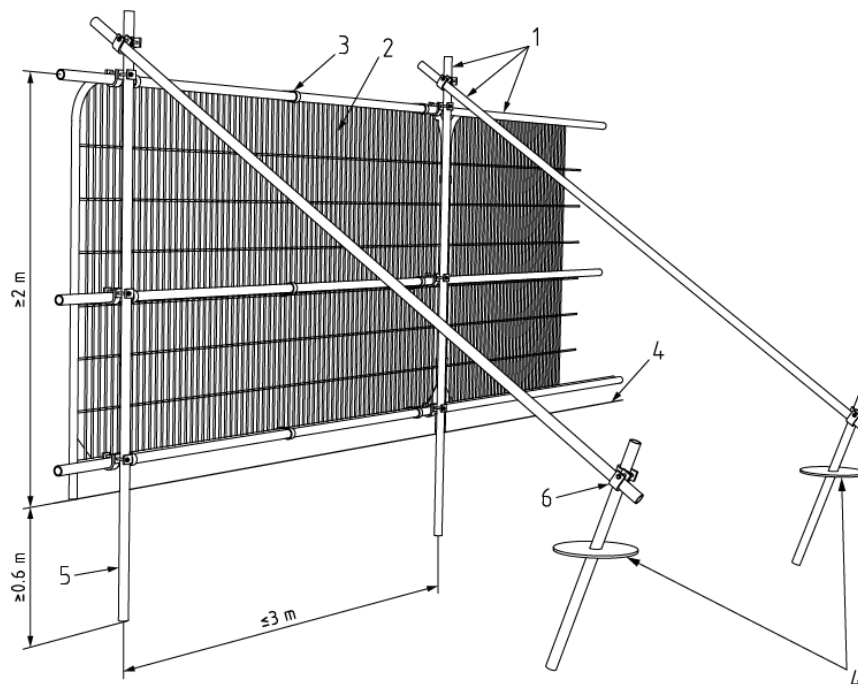
Alternative specification – Tree Protection Barrier



a) Stabilizer strut with base plate secured with ground pins



b) Stabilizer strut mounted on block tray



Key

- 1 Standard scaffold poles
- 2 Heavy gauge 2 m tall galvanized tube and welded mesh infill panels
- 3 Panels secured to uprights and cross-members with wire ties
- 4 Ground level
- 5 Uprights driven into the ground until secure (minimum depth 0.6 m)
- 6 Standard scaffold clamps



Signage

All tree protection fencing needs to have signs attached at 4-6m intervals. Below are examples of the signage that needs to be attached to the tree protection barrier.



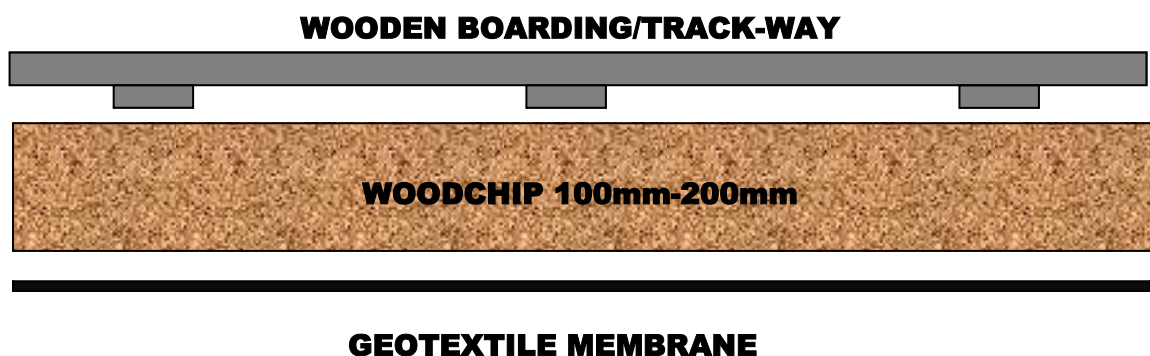
Above: Three examples of tree protection fencing signage ranging from a simple sign (*left*) attached with zip ties to more in-depth signs (*middle & right*) explaining the limitations and legal protection status of the trees being protected

4.6.2 Ground Protection:

Ground protection is required during the development process to protect the retained trees Root Protection Areas from construction operations. This can be where permanent working space is needed or temporary access is justified within the RPA, which would involve setting back the tree protection barrier.

Where possible existing hard surfaces within RPAs need to be utilised or retained for as ground protection rather than being removed during demolition operations. Where tree protection barriers are set back from the perimeter of the RPA exclusion zone exposing unmade ground to construction damage, new temporary ground protection will be installed prior to construction starting.

Specification for ground protection:





4.7 Installation of Hard Surfacing Inside RPA:

The following installation shall be required to install the new driveway access into the property.

- All vegetation should be sprayed with a suitable herbicide or manually removed and the ground should be raised up to provide a suitable level surface using a granular aggregate like angular stone or sharp sand but without compaction. Turf can be stripped but only to a maximum depth of 50mm.
- Once a suitably level base has been created without damaging the retained roots, a permeable non-woven polypropylene geotextile membrane needs to be laid of the surface such as Treetex™ with overlapping dry joins of 300mm.
- A cellular confinement or suitable load bearing system such as CellWeb TRP needs to be laid out and fixed into place with steel pins or connectors.
- Base course for cellular confinement infill is a 20 – 40mm (Type 3) no fines.
- Wearing Course can be a permeable tarmac, block paver, resin bound gravel, or grass containment system which is laid on a second layer of geotextile membrane.
- Edging can be either treated timber pinned into position or precast concrete kerbs that sit on existing ground level, or graded with topsoil.

4.8 General Site Precautions:

The following points will be observed at all times

- No fires will be lit within 10m of the canopies of retained trees.
- No access will be permitted inside the tree protection fencing.
- No material, equipment or debris will be stored within the tree protective fencing of RPA's of retained trees.
- Notice boards, telephone cable or other above ground services will not be attached to any part of retained trees.
- Materials that contaminate the soil (e.g. concrete mixings, diesel oil, and vehicle washings) will not be permitted to enter the RPA's of retained trees.
- No materials will be stored in such a fashion that will incur damage of any form to retained trees.
- Vehicles will not be parked within the RPA's of retained trees on site.



4.9 Fencing, Posts, and Small Piers:

Where construction of the fencing does not require a strip or wall foundation and only the use of posts and small piers, the installation should have very little impact on the soil and root structure if the following methodology is followed. When installing posts or piers inside the RPA the smallest feasible hole possible must be used when excavating to reduce the impact to the RPA. Any roots up to 25mm in diameter may be severed using a sharp saw or secateurs, but if possible the hole should be widened or moved to enable retention of the whole root(s). Any roots 25mm+ should be retained where possible but may be severed after consulting the appointed arboriculturist. The proposed location of the fence line should be sited so post holes are dug as far away from the main stem as possible. This reduces the possibility of larger diameter roots being damaged and a lesser detrimental impact on the whole root system. Post holes must be lined with a heavy duty plastic to prevent the post mix from contaminating the soil and any live roots.

4.10 Foundations:

No foundations are required on this project.

4.11 Site Huts & Welfare Units:

All temporary site huts and welfare should ideally where possible be located outside the RPA's of retained trees. However, this is not always possible with site constraints and the units can be placed in the RPA to double as tree protection if located on sleepers to limit soil compaction. Care must be taken when installing the units in and around trees to prevent and physical damage to the crown and stem structures. Facilitation pruning may be required to allow for transportation and installation of the units. Final locations can be agreed in the pre start meetings

4.12 Excavations Inside RPAs and Root Retention:

Any excavations carried out within the RPA must be done so by hand using spades, forks and trowels, taking care to limit the amount of damage caused to the outer bark and woody structure of the roots. The fork should be used to loosed the soil in the excavation area and help locate any substantial roots (25mm-100mm diameter). A trowel can then be used to remove the soil from around the roots taking care as not to damage the bark.

Once the roots have been exposed, those that are to be removed (any roots up to a diameter of 25mm) can be done using sharp secateurs or a hand saw. Any roots above 25mm diameter, where possible, need to be retained and protected from drying out and temperature extremes by wrapping or covering them in a suitable material e.g. hessian, spare membrane material, plastic. This wrapping needs to be removed before any back filling takes place. Some roots over larger areas of excavation can be displaced where possible to bend round any new structures or pipework whilst remaining intact. Roots with a diameter of 25m-100mm should



only be cut in exceptional circumstances and roots above 100mm should only be cut after consultation with the appointed arboriculturist.

Alternatively compressed air to displace the soil is preferable more affective over larger areas or to remove soil quicker while keeping roots intact. This may be part of the specification and would be included within the Arboricultural Method Statement.

4.13 Amendments:

Issues may arise on the development site that requires amendments to the previously agreed tree protection details. Any amendments in this AMS will be approved in writing by the LPA prior to being implemented. Copies of the paperwork relating to any amendments will be communicated by the Arboricultural Consultant to the Client and LPA.



Appendices

Appendix 1:

Tree Survey Schedule Key Terms

Tree Survey Schedule (including tree works recommendations)

Appendix 2:

Tree Location Plan

Tree Protection Plan

Appendix 3:

Key Terms and Abbreviations



Appendix 1: Tree Schedule Key Terms & Tree Survey Schedule:

Tree Reference Number: Identification number allocated to each tree or group of trees which is illustrated on the plan or physically tagged to the trees

Species: Botanical and/or Common name of the tree done from visual identification. If the species of the tree is queried an sp. is written after the genus e.g. Prunus sp (Cherry Species)

Height: Estimated height of the tree in meters

Diameter: Diameter of the stem(s) measured using a diameter tape at 1.5m from ground level or in the case of multiple stems, uneven ground, abnormal growth the stems were measures in accordance with the BS 5837 2012.

Branch Spread: Branch spread was estimated at the four points of reference from the base of the stem

Height of Crown Clearance: Height of crown clearance has been estimated to the first substantial branch.

Age Class: Determined from visual estimation considering species and experience

Y= Young

EM= Early Mature

SM= Semi Mature

M= Mature

OM= Over Mature

Physiological Condition: The trees physiological state and general vitality is rated as Good, Reasonable, Poor or Dead

Structural Condition: Structural condition rated as either Good, Reasonable, Poor and any notable structural defects or characteristics

Preliminary Management Recommendations: A recommendation for tree works based on the visual inspection of the tree and/or recommendations based on the potential impact from the proposed development.

Category Grading Definition:

Category A: (LIGHT GREEN) Trees of a high quality with an estimated remaining life expectancy of at least 40 years

Category B: (MID BLUE) Trees of a moderate quality with an estimated remaining life expectancy of at least 20 years

Category C: (GREY) Trees of a low quality with an estimated remaining life expectancy of at least 10 years, or young trees with a stem diameter below 150 mm

Category U: (DARK RED) Trees in such a condition that they cannot realistically be retained as living trees in the context of current land use for longer than 10 years



Site: Griggs Court Farm

Date: 6th May 2022

Surveyor: R. Gibbons

Type	Tree No.	Tag No:	Species	Age Class	Height (m)	Crown Height	DBH (mm)	No. Stems	Crown N	Crown E	Crown S	Crown W	Physiological Condition	Structural Condition	RPA (r'm)	RPA (m ²)	Observations	Work Recommendations	BS Cat
T	1		Alnus glutinosa (Alder)	M	15	2.5	580	1	4	7	3	1	Typical	Fair	6.96	152	Tree is in close proximity to T2. Due to the base of the stems being very close the tree has a phototropic growth pattern with a lean towards the east. Ivy growing up the main stem into the crown . Minor deadwood visible. Lowest branch is on the east side.	Sever Ivy at ground level.	B1
T	2		Alnus glutinosa (Alder)	M	17	5	665	2	4	6	6	3	Typical	Fair	7.98	200	2 x stems measured at 490 and 450. The main stem bifacates at 1m from ground level with a good U shaped union. Some past crown reduction work has been carried out on the north side over the property. Ivy growing up the main stem into the crown.	Sever Ivy at ground level.	B1
T	3		Crataegus monogyna (Hawthorn)	SM	8	0.5	200	4	1	4	2	1	Typical	Fair	2.40	18	130 200 120 80. Four stems originate from ground level. One stem is growing into T2 and rubbing against the stem. Ivy growing up the main stem into the crown.	Sever Ivy at ground level. Remove the stem on the North side which is rubbing (Fell to accommodate development)	C1
T	4		Alnus glutinosa (Alder)	M	17	7	540	1	4	5	5	5	Typical	Good	6.48	132	Recent crown lifting works have been undertaken and some minor deadwood visible in the middle crown.	No works required	B1



Site: Griggs Court Farm

Date: 6th May 2022

Surveyor: R. Gibbons

Type	Tree No.	Tag No:	Species	Age Class	Height (m)	Crown Height	DBH (mm)	No. Stems	Crown N	Crown E	Crown S	Crown W	Physiological Condition	Structural Condition	RPA (r ² m)	RPA (m ²)	Observations	Work Recommendations	BS Cat
T	5		Alnus glutinosa (Alder)	SM	5	1.5	240	1	2	0	1	4	Typical	Poor	2.88	26	Small tree with significant lean towards west due to proximity of T4. Small hanger caught in the top of the crown. Top has previously snapped out leaving a degrading dead stub and wound with visible longitudinal split.	Fell to ground level	U
T	6		Alnus glutinosa (Alder)	EM	6	4.5	360	1	0	0	2	1	Poor	Poor	4.32	59	Tree has a significant lean towards the south. The stem has two cavities at 3m with visible degradation and decay. The stem has been reduced to a 5m with very little upper growth. Likely retained for habitat value.	Fell to ground level	U
T	7		Acer pseudoplatanus (Sycamore)	EM	15	5	400	1	3	5	7	5	Good	Good	4.80	72	Typical of the species with no notable defects. Has been recently crown lifted to 5m. Growing through the wooden boundary fence with a slight lean towards the east.	Remove to accommodate development	B1
T	8		Alnus glutinosa (Alder)	EM	14	3	410	1	1	1	4	3	Poor	Poor	4.92	76	Tree has a large canker on the main stem at 4m with a visible weakening of the structural wood on the tension side of the stem. Old pruning wound with cavity present on south side at 5m. Stem leans towards the south west.	Fell to ground level	U
T	9		Alnus glutinosa (Alder)	EM	17	5m	470	1	0	1	7	6	Typical	Fair	5.64	100	Tree has a pronounced lean towards the south west due to phototropic growth and proximity of other trees.	No works required	C1



Site: Griggs Court Farm

Date: 6th May 2022

Surveyor: R. Gibbons

Type	Tree No.	Tag No:	Species	Age Class	Height (m)	Crown Height	DBH (mm)	No. Stems	Crown N	Crown E	Crown S	Crown W	Physiological Condition	Structural Condition	RPA (r'm)	RPA (m ²)	Observations	Work Recommendations	BS Cat
G	10		Alnus glutinosa (Alder)	M	19	4	400	1	4	4	4	4	Typical	Fair	4.80	72	Group of Alders growing in a similar woodland setting. One closest to the road has a lean towards the south west. The three stemmed Alder closer to the property has 3 main stems originating from ground level.	No works required.	B1
T	11		Prunus species (Cherry)	Y	4	2	110	1	1	1	1	1	Typical	Fair	1.32	5.5	Young Cherry	Remove to accommodate development	C1
T	12		Malus species (Apple)	Y	3	0.5	30	1	1	1	1	1	Typical	Fair	0.36	0.4	Young apple	Remove to accommodate development	C1



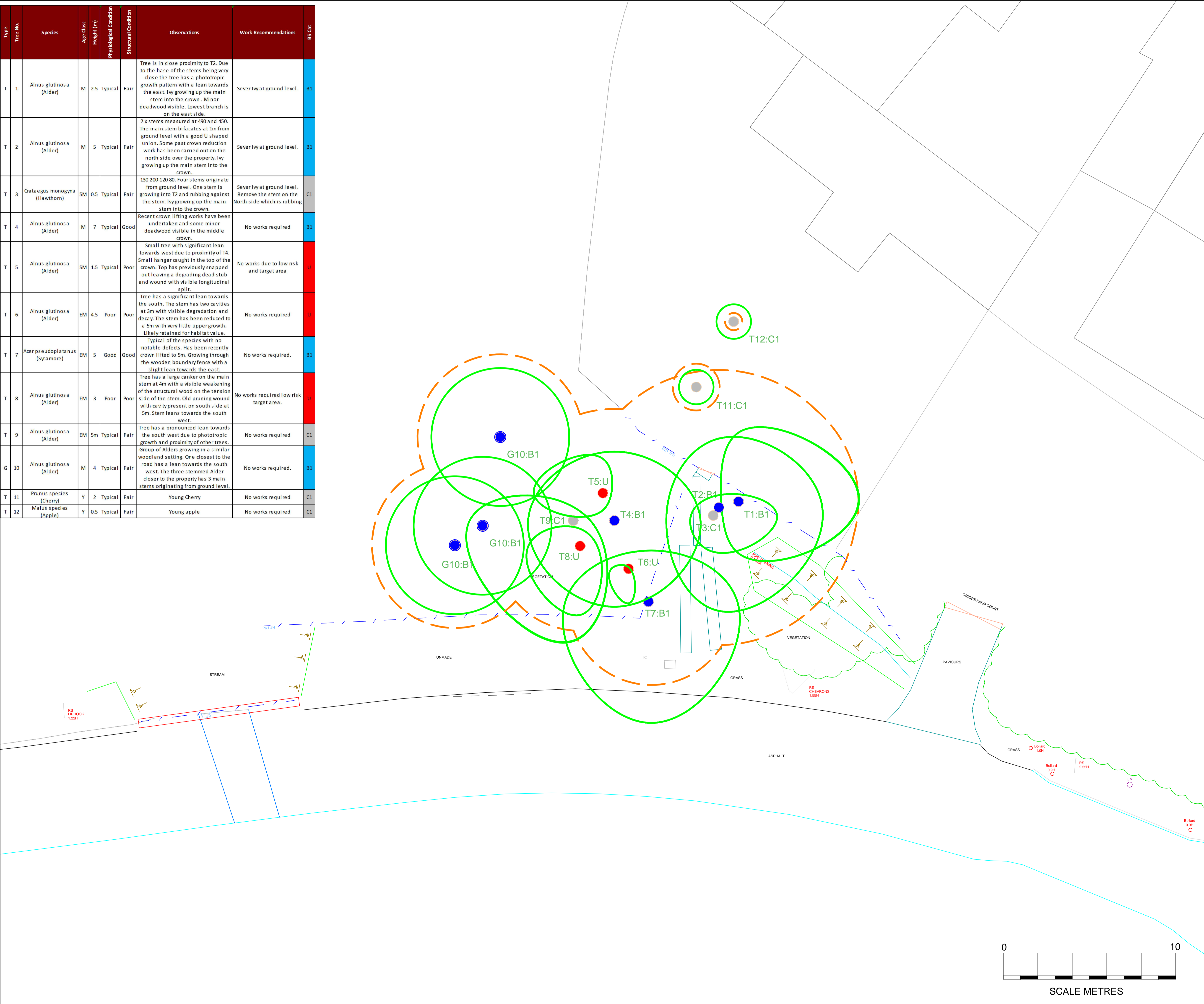
Appendix 2: Tree Location & Protection Plans

NOTES:
 ORIGINAL PLANS SUPPLIED BY ARCHITECTURAL SERVICES DRAWING REFERENCE NO: 11/166-004.
 ALL TREE NUMBERS AND GRADES ARE TO BE REFERENCED FROM THE ARBORICULTURAL IMPACT ASSESSMENT & METHOD STATEMENT WHICH THIS DRAWING MUST BE READ IN CONJUNCTION WITH.
 THIS DRAWING SHOULD NOT BE REPRODUCED WITHOUT THE PRIOR WRITTEN APPROVAL OF RCG ARBORICULTURE.

KEY

	BRITISH STANDARD 5837 2012 A CATEGORY TREE	T1:B2	INDIVIDUAL TREE NUMBER AND BS5837 2012 GRADING
	BRITISH STANDARD 5837 2012 B CATEGORY TREE	G1:B2	TREE GROUP NUMBER AND BS5837 2012 GRADING
	BRITISH STANDARD 5837 2012 C CATEGORY TREE		TREE CANOPY DIMENSIONS
	BRITISH STANDARD 5837 2012 U CATEGORY TREE		CALCULATED ROOT PROTECTION AREA

Type	Tree No.	Species	Age Class	Height (m)	Physiological Condition	Structural Condition	Observations	Work Recommendations	BS Cat.
T	1	Alnus glutinosa (Alder)	M	2.5	Typical	Fair	Tree is in close proximity to T2. Due to the base of the stems being very close the tree has a phototropic growth pattern with a lean towards the east. Ivy growing up the main stem into the crown. Minor deadwood visible. Lowest branch is on the east side.	Sever Ivy at ground level.	B1
T	2	Alnus glutinosa (Alder)	M	5	Typical	Fair	2 x stems measured at 490 and 450. The main stem bifurcates at 1m from ground level with a good U shaped union. Some past crown reduction work has been carried out on the north side over the property. Ivy growing up the main stem into the crown.	Sever Ivy at ground level.	B1
T	3	Crataegus monogyna (Hawthorn)	SM	0.5	Typical	Fair	130 200 120 80. Four stems originate from ground level. One stem is growing into T2 and rubbing against the stem. Ivy growing up the main stem into the crown.	Sever Ivy at ground level. Remove the stem on the North side which is rubbing	C1
T	4	Alnus glutinosa (Alder)	M	7	Typical	Good	Recent crown lifting works have been undertaken and some minor deadwood visible in the middle crown.	No works required	B1
T	5	Alnus glutinosa (Alder)	SM	1.5	Typical	Poor	Small tree with significant lean towards west due to proximity of T4. Small hanger caught in the top of the crown. Top has previously snapped out leaving a degrading dead stub and wound with visible longitudinal split.	No works due to low risk and target area	U
T	6	Alnus glutinosa (Alder)	EM	4.5	Poor	Poor	Tree has a significant lean towards the south. The stem has two cavities at 3m with visible degradation and decay. The stem has been reduced to a 5m with very little upper growth. Likely retained for habitat value.	No works required	U
T	7	Acer pseudoplatanus (Sycamore)	EM	5	Good	Good	Typical of the species with no notable defects. Has been recently crown lifted to 5m. Growing through the wooden boundary fence with a slight lean towards the east.	No works required.	B1
T	8	Alnus glutinosa (Alder)	EM	3	Poor	Poor	Tree has a large canker on the main stem at 4m with a visible weakening of the structural wood on the tension side of the stem. Old pruning wound with cavity present on south side at 5m. Stem leans towards the south west.	No works required low risk target area.	U
T	9	Alnus glutinosa (Alder)	EM	5m	Typical	Fair	Tree has a pronounced lean towards the south west due to phototropic growth and proximity of other trees.	No works required	C1
G	10	Alnus glutinosa (Alder)	M	4	Typical	Fair	Group of Alders growing in a similar woodland setting. One closest to the road has a lean towards the south west. The three stemmed Alder closer to the property has 3 main stems originating from ground level.	No works required.	B1
T	11	Prunus species (Cherry)	Y	2	Typical	Fair	Young Cherry	No works required	C1
T	12	Malus species (Apple)	Y	0.5	Typical	Fair	Young apple	No works required	C1



RCG ARBORICULTURE
 30 Rowan Close, Guildford, Surrey, GU1 1PW
 Email: rcgarboriculture@gmail.com Tel: 07595 773453

Project :
 1 Griggs Farm Court, Longmoor Road, GU30 7NU

Title :
 Tree Location Plan

Client :
 Mr E. Sadzevicius

Scale :
 1:100 @ A1

Date :
 07-05-2022

Drawn by :
 R. G.

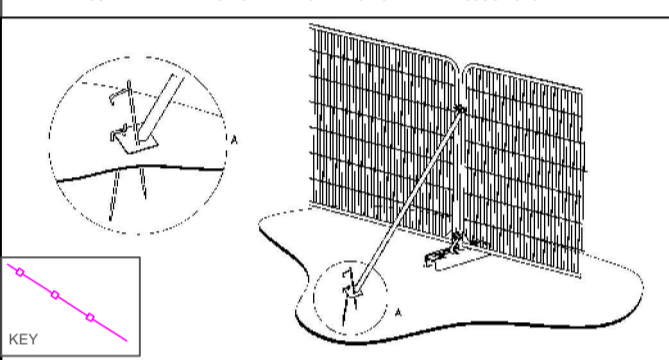
Dwg No. :
 RCG - GCF - TLP

Revision :
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Type	Tree No.	Species	Age Class	Height (m)	Physiologic Condition	Structural Condition	Work Recommendations	BS Code
T	1	Alnus glutinosa (Alder)	M	15	Typical	Fair	Severely at ground level.	B1
T	2	Alnus glutinosa (Alder)	M	17	Typical	Fair	Severely at ground level.	B1
T	3	Crataegus monogyna (Hawthorn)	SM	8	Typical	Fair	Severely at ground level. Remove the stem on the North side which is rubbing (Fall to accommodate development)	C1
T	4	Alnus glutinosa (Alder)	M	17	Typical	Good	No works required	B1
T	5	Alnus glutinosa (Alder)	SM	5	Typical	Poor	Fell to ground level	C1
T	6	Alnus glutinosa (Alder)	EM	6	Poor	Poor	Fell to ground level	C1
T	7	Acer pseudoplatanus (Sycamore)	EM	15	Good	Good	Remove to accommodate development	B1
T	8	Alnus glutinosa (Alder)	EM	14	Poor	Poor	Fell to ground level	C1
T	9	Alnus glutinosa (Alder)	EM	17	Typical	Fair	No works required	C1
G	10	Alnus glutinosa (Alder)	M	19	Typical	Fair	No works required.	B1
T	11	Prunus species (Cherry)	Y	4	Typical	Fair	Remove to accommodate development	C1
T	12	Malus species (Apple)	Y	3	Typical	Fair	Remove to accommodate development	C1

GENERAL SITE RESTRICTIONS

- THE FOLLOWING PRECAUTIONS WILL BE FOLLOWED AT ALL TIMES:
- NO FIRES ARE TO BE LIT WITHIN WITHIN 5M FROM THE STEM, CANOPY LINE OR ANY PART OF RETAINED TREES.
 - NO DEMOLITION, GROUND WORKS OR CONSTRUCTION SHALL COMMENCE UNTIL ALL THE TREE PROTECTION BARRIERS AND GROUND PROTECTION HAVE BEEN INSTALLED IN ACCORDANCE WITH THE APPROVED TREE PROTECTION PLAN.
 - NO VEHICULAR ACCESS SHALL BE PERMITTED INSIDE / BEHIND THE TREE PROTECTION BARRIERS UNLESS SUITABLE GROUND PROTECTION MEASURES ARE IN PLACE.
 - NO VEHICLES ARE TO BE PARKED WITHIN ROOT PROTECTION AREAS OF RETAINED TREES WITHOUT SUITABLE GROUND PROTECTION MEASURES BEING IN PLACE.
 - NO MATERIALS, EQUIPMENT, DEBRIS OR SPOIL IS TO BE STORED INSIDE / BEHIND THE TREE PROTECTION BARRIERS.
 - NO NOTICE BOARDS, CABLES, LIGHTING, CAMERAS OR ANY OTHER ITEM OR SERVICE SHALL BE ATTACHED TO ANY PART OF A RETAINED TREE.
 - ALL MATERIALS WHICH CONTAMINATE THE SOIL (CONCRETE, DIESEL OIL, VEHICLE WASHINGS, ETC) MUST BE CONTAINED AND NOT PERMITTED TO ENTER OR SPILL INTO ROOT PROTECTION AREAS.
 - NO MATERIALS SHALL BE STORED IN SUCH A FASHION THAT WILL INCUR DAMAGE TO ANY RETAINED TREE OR PART THEREOF.
 - NO UNDERGROUND SERVICES, DRAINAGE OR SOAK-AWAYS SHALL BE LOCATED IN ANY PART OF THE ROOT PROTECTION AREA WITHOUT PRIOR APPROVAL OF THE LOCAL PLANNING AUTHORITY.
 - ANY APPROVED TREE PRUNING MUST BE CARRIED OUT BY A SUITABLY QUALIFIED AND COMPETENT ARBORIST AND TO BRITISH STANDARD 3998:2010.



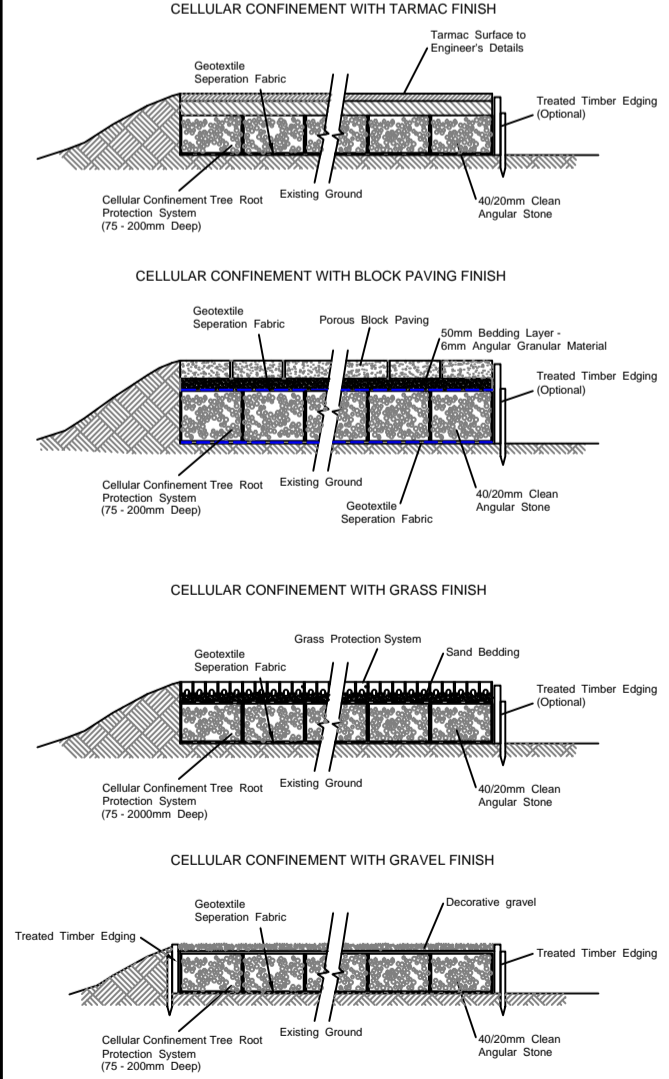
ALTERNATIVE SPECIFICATION A) TREE PROTECTION BARRIER
HEAVY GAUGE 2M TALL GALVANISED TUBE AND WELD MESH INFILL PANELS
PANELS WELD UPRIGHT USING RESIN BLOCKS/FEET
PANELS TO BE ATTACHED TO AC SUPPORTING STRUTS
SUPPORTING STRUTS TO BE SECURED IN PLACE USING PINS/PIEGS

NO DIG CONSTRUCTION

IS TO BE USED WHEN PERMANENT HARD SURFACING IS REQUIRED OR WHEN HEAVY CONSTRUCTION TRAFFIC IS NEEDED TO TRAVEL OVER ROOT PROTECTION AREAS. A NO DIG SOLUTION PROVIDES A LONG SPREADING, ARBORICULTURALLY SENSITIVE PERMEABLE SURFACE.

- CELLULAR CONFINEMENT SYSTEMS ARE ONE EXAMPLE AND GENERAL SPECIFICATIONS HAVE BEEN INCLUDED ON THIS PLAN WITH DIFFERENT FINISHED SURFACES.
- CELLULAR CONFINEMENT SHOULD ALWAYS BE INSTALLED AS PER THE MANUFACTURERS SPECIFICATION AND GUIDANCE. BELOW IS A GENERAL INSTALLATION GUIDE:
- TURF CAN BE STRIPPED OFF TO A MAXIMUM DEPTH OF 70MM OR SUITABLE HERBICIDE USED TO REMOVE THE VEGETATION.
 - A SUITABLE GRANULAR AGGREGATE LIKE SHARP SAND CAN BE USED TO INFILL TO GAIN A LEVEL SURFACE.
 - ONCE A SUITABLE LEVEL BASE HAS BEEN CREATED WITHOUT DAMAGING RETAINED ROOTS, A NON-WOVEN POLYPROPYLENE GEOTEXTILE MEMBRANE NEEDS TO BE LAID ON THE SURFACE WITH OVERLAPPING DRY JOINS OF 300MM.
 - THE CELLULAR CONFINEMENT SYSTEM IS THEN LAID OUT ON TOP AND FIXED INTO PLACE WITH PINS OR CONNECTORS.
 - FILL THE CELLULAR CONFINEMENT WITH A 20 - 40MM ANGULAR STONE WITH NO FINES.
 - APPLY SUITABLE WEARING COURSE
 - EDGING CAN BE TREATED TIMBER PINNED IN POSITION OF PRE-CAST CONCRETE KERBING.

NO DIG CELLULAR CONFINEMENT SPECIFICATION OPTIONS



NOTES:

ORIGINAL PLANS SUPPLIED BY ARCHITECTURAL SERVICES DRAWING REFERENCE NO: 11/166-004.

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THIS DRAWING SHOULD NOT BE REPRODUCED WITHOUT THE PRIOR WRITTEN APPROVAL OF RCG ARBORICULTURE.

TREE PROTECTION MEASURES MUST BE INSTALLED ONSITE PRIOR TO THE START OF ANY DEVELOPMENT WORKS.

EXACT LOCATIONS WILL BE AGREED ONSITE WITH THE APPOINTED ARBORIST TO PREVENT ANY CONFUSION AND MAXIMIZE THE AMOUNT OF AVAILABLE WORK SPACE.

ALL TREE PROTECTION MUST STAY IN-SITU UNTIL EITHER ALL CONSTRUCTION WORKS ARE COMPLETE OR WRITTEN APPROVAL HAS BEEN PROVIDED BY THE APPOINTED ARBORIST/LOCAL AUTHORITY.

KEY

	BRITISH STANDARD 5837 2012 A CATEGORY TREE	T1:B2	INDIVIDUAL TREE NUMBER AND BS5837 2012 GRADING
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	BRITISH STANDARD 5837 2012 C CATEGORY TREE		TREE CANOPY DIMENSIONS
	BRITISH STANDARD 5837 2012 U CATEGORY TREE		CALCULATED ROOT PROTECTION AREA
	TREE PROTECTION BARRIER		TEMPORARY GROUND PROTECTION
	NO DIG CONSTRUCTION		TREE SENSITIVE MANUAL EXCAVATIONS
	MATERIALS STORAGE		

RECOMMENDED SEQUENCING OF EVENTS

- ARBORICULTURAL IMPACT ASSESSMENT, ARBORICULTURAL METHOD STATEMENT AND TREE PROTECTION DETAILS TO BE ISSUED TO SITE MANAGER, CONTRACTORS AND SITE OWNER.
- PRE-COMMENCEMENT MEETING WITH ALL PARTIES AND RECOMMENDED TO HAVE A REPRESENTATIVE FROM THE LOCAL PLANNING AUTHORITY PRESENT.
- ARBORICULTURAL METHOD STATEMENT AND TREE PROTECTION DETAILS TO BE REVIEWED BY SITE MANAGER AND PERSONNEL.
- ANY RECOMMENDED TREE WORK OPERATIONS ARE CARRIED OUT AS SPECIFIED IN THE APPROVED ARBORICULTURAL REPORT.
- ANY PRIOR DEVELOPMENT INVESTIGATIONS COMPLETED SUCH AS TRIAL HOLES OR EXPLORATORY EXCAVATIONS. THESE MAY BE UNDER ARBORICULTURAL SUPERVISION IF IN CLOSE PROXIMITY TO RETAINED TREES.
- ERECTION AND INSTALLATION OF ALL NECESSARY TREE PROTECTION BARRIERS, GROUND PROTECTION AND NO DIG ACCESS AS OUTLINED IN THE ARBORICULTURAL METHOD STATEMENT AND TREE PROTECTION PLAN. THIS MUST BE COMPLETED BEFORE ANY DEMOLITION, CONSTRUCTION OR GROUND WORKS TAKE PLACE.
- APPROVED DEVELOPMENT TO BE UNDERTAKEN WITH ANY ARBORICULTURAL SUPERVISION COMPLETED AND DOCUMENTED.
- REMOVAL OF TREE PROTECTION MEASURE ONLY WHEN ALL CONSTRUCTION ACTIVITIES HAVE BEEN COMPLETED AND ANY OTHER WORKS WHICH MAY IMPACT ON RETAINED TREES.
- ANY LANDSCAPING AND TREE PLANTING REQUIRED CAN BE CARRIED OUT BUT CARE SHOULD BE TAKEN NOT TO DAMAGE ANY RETAINED TREES OR THEIR ROOT SYSTEMS.

RCG ARBORICULTURE
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Email: rgarboriculture@gmail.com Tel: 07595 773453

Project :
1 GRIGGS FARM COURT, LONGMOOR ROAD, GU30 7NU

Title :
TREE PROTECTION PLAN

Client :
Mr E. Sadzevicius

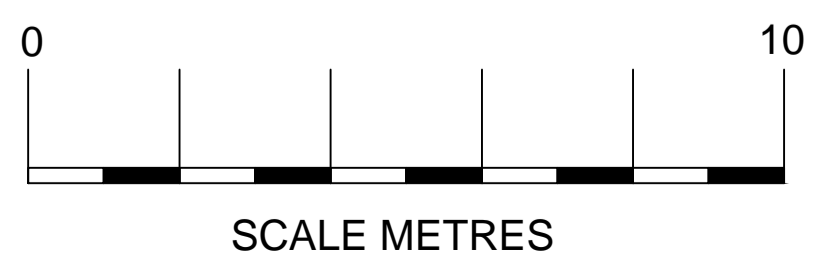
Scale :
1:100 @ A1

Date :
07-05-2022

Drawn by :
R. G.

Dwg No :
RCG - GCF - TPP

Revision :
A





Appendix 3: Key Terms & Abbreviations

Arboricultural Implication Assessment (AIA): An assessment of the arboricultural impact of the specific proposal on a given area

Arboricultural Method Statement (AMS): Contains references to tree protection information

Arboriculturalist: Person who has through relevant education, education and training , gained expertise in the field of trees and trees in relation to construction

British Standard 5837 2012 Trees in Relation to Construction (BS 5837): British Standard document outlining best practice and guidelines for the arboricultural and construction industry with relation to developments.

British Standard 3998 2012 Tree Work Recommendations (BS 3998): British Standard document outlining best practice for Tree Works to the arboricultural industry.

Competent Person: Person who has training and experience relevant to the matter being addressed and an understanding of the requirements of the particular task being approached

Construction: Site Based operations with the potential to affect existing trees

Construction Exclusion Zone: Area based on the root protection area from which access is prohibited for the extent of the project.

Root Protection Area (RPA): Layout design tool indicating the minimum area around a tree deemed to contain sufficient roots and rooting volume to maintain the trees viability, and where the protection of the roots and soil structure is treated as a priority.

Service(s): Any above or below ground structure or apparatus required for utility provision e.g. drainage, gas supply, water, ground source heat pumps, soak-a-ways, CCTV, telecommunications, water, electric..etc.

Stem: Principle above ground structural component(s) of a tree that supports the branches/crown

Structure: Manufactured object such as a building, carriageway, path, wall, Service run, and built or excavated earthworks.

Tree Protection Plan: Scale drawing, informed by descriptive text where necessary, based upon the finalized proposals, showing the trees for retention and illustrating the tree and landscape protection measures.

Veteran Tree: Tree that by recognized criteria, show the features of biological, cultural or aesthetic value that are characteristic of, but not exclusive to, individuals surviving beyond the typical age range for the species concerned.

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