HELLIS SOLUTIONS LIMITED

Arboricultural Method Statement

West Wantley Farm, Fryern Road, Storrington RH20 4BJ

SEPTEMBER 2023 V1.0



Report Name: Arboricultural Method Statement

Our Reference: 23/06/123/NH

Planning Application No: DC/23/1385

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Prepared for: Mark and Becca Doe

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Summary

This is an arboricultural method statement. This statement has been written following the recommendations and guidance given within British Standard 5837:2012 Trees in relation to design, demolition and construction.

The purpose of this report is to describe how the proposed construction activity can be undertaken with minimal risk of adverse impact on the retained trees.

The proposed development is the erection of a replacement storage building (Class B8 Use Excluding Distribution).

The project management team must instruct an arboricultural consultant to undertake the required monitoring and Horsham District Council must be advised of the appointment prior to the commencement of any works.

The project manager is responsible to ensure that the details of this arboricultural method statement and any agreed amendments are known and understood by all site personnel. Copies of the agreed documents must be kept on site and be readily available at all times. This method statement should form part of the site induction for all personnel.

Site meetings and site monitoring must be confirmed by formal written records circulated to all interested parties; a pro forma record of arboricultural monitoring is provided at Appendix 3.

The construction activity should not adversely impact upon any retained trees if the specified precautions detailed within this arboricultural method statement are followed.

Nicholas Hellis MArborA

Table of Contents

1.0 Instructions....3
2.0 Report Limitations....3
3.0 Introduction....3
4.0 Report Rationale....4
5.0 Arboricultural Method Statement....4
6.0 Tree Management....11
7.0 Useful Contact Details....12

Appendix 1 - Tree Survey and Tree Quality Assessment....i
Appendix 2 - Default Specification for a Protective Barrier....iv
Appendix 3 - Pro Forma Record of Arboricultural Site Supervision....vi
Appendix 4 - The Dirty Dozen....ix
Appendix 5 - Tree Protection Plan....xi

1.0 Instructions

1.1 I have been instructed in writing by Mrs Becca Doe to prepare an arboricultural method statement for the implementation of any aspect of development that has the potential to result in loss of or damage to a tree and to prepare a tree protection plan showing the finalized layout proposals, tree retention and tree and landscape protection measures detailed within the arboricultural method statement.

1.2 The proposed development is the erection of a replacement storage building (Class B8 Use Excluding Distribution)

2.0 Report Limitations

2.1 Trees are living organisms whose health and overall condition can change rapidly. The conclusions and recommendations contained within this report are valid for a period of three years. The period of validity may be reduced if significant changes occur to either the trees or to the landscape within the immediate proximity of the trees.

2.2 This report is neither intended nor suitable for any purpose other than the stated rationale.

3.0 Introduction

3.1 The report has been written following the recommendations and guidance given within British Standard 5837:2012 Trees in relation to design, demolition and construction - Recommendations (hereinafter BS:5837).

3.2 BS:5837 provides 'recommendations and guidance for arboriculturists, architects, builders, engineers, landscape architects …. and all others interested in harmony between trees and development in its broadest sense.'

3.3 BS:5837 also provides 'recommendations and guidance on the relationship between trees and design, demolition and construction processes', and it 'it sets out the principles and procedures to be applied to achieve a harmonious and sustainable relationship between trees and structures.

3.4 The report is intentionally concise with minimal background explanations. Where appropriate, further guidance and information is included as appendices.

3.5 The report contains the following appendices:

a) a Tree Survey and a Tree Quality Assessment at Appendix 1.

b) a default specification for a protective barrier at Appendix 2.

c) Pro Forma Record of Arboricultural Site Supervision at Appendix 3.

d) The Dirty Dozen - common causes of damage to trees on development sites at Appendix 4.

e) a Tree Protection Plan at Appendix 5.

4.0 Report Rationale

4.1 To describe within an arboricultural method statement how the proposed construction activity can be undertaken with minimal risk of adverse impact on the retained trees.

5.0 Arboricultural Method Statement

The purpose of this arboricultural method statement is to describe how the proposed construction activity can be undertaken with minimal risk of adverse impact on the retained trees.

5.1 to 5.10 inclusive set out the **general principles** of good arboricultural management for a proposed development site.

5.11 to 5.19 inclusive set out the management details that must be followed to ensure successful tree retention on **this specific site**.

General Principles

5.1 Construction within root protection areas should accord to the principle that the tree and soil structure take priority. Soil structure should be preserved at a suitable bulk density for root growth and function (of particular importance for soils of a high fines content), and existing rootable soil retained and roots themselves protected.

5.2 The Tree Plan shows the existing trees numbered and categorised in the context of proposed development. The Tree Plan also shows the approximate location of the proposed protective measures for both existing trees and areas of structural landscaping, as necessary. This plan should only be used for dealing with the tree issues and all scaled measurements should be checked against original documents.

5.3 A default specification for barrier design, taken from BS: 5837, is included at Appendix 2.

5.4 Any root protection areas outside the protective barriers must be covered by ground protection, assuming no suitable existing hard surfacing, based on the recommendations within BS: 5837 if there is a significant risk of damage from the demolition and/or construction activity. The precise design and the sequencing of the installation and removal should be agreed with Horsham District Council on site before any construction activity starts.

5.5 It is often difficult to clearly establish the detail of services until the construction is in progress. Where possible, existing services should be used, and all new services ought to be outside root protection areas of retained trees. However, where existing services within root protection areas require upgrading or new services have to be installed in root protection areas, trenchless insertion methods ought to be used with entry and retrieval pits being sited outside the root protection areas. Provided that roots can be retained and protected, excavation using hand-held tools might be acceptable for shallow service runs.

5.6 All site storage areas, cement mixing and washing points for equipment and vehicles must be outside root protection areas unless otherwise agreed with the local planning authority. Where there is a risk of polluted water runoff into root protection areas, heavy-duty plastic sheeting and sandbags must be used to contain the runoff and prevent contamination.

5.7 Tree protection cannot be reliably implemented without arboricultural input. The nature and extent of that input varies according to the complexity of the issues and the resources available on site. The project management team must instruct an arboricultural consultant to oversee the implementation of the protective measures and management proposals set out in this arboricultural method statement.

5.8 Arboricultural planning conditions can only be reliably and effectively discharged with supervision by an arboricultural consultant. Such supervision must be confirmed by formal written records circulated to all interested parties. These records will form an auditable system of site monitoring and thus enable planning conditions to be discharged. The project management team must instruct an arboricultural consultant to undertake the required supervision.

The following table outlines the stages and nature of participation of the project arboriculturist to ensure successful tree retention.

Time Frame	Attendees	Action
Pre-Commencement	Arboricultural Consultant LPA Tree Officer Site Manager	To discuss tree protection measures, arboricultural supervision, and notification of interested parties
In Progress	Arboricultural Consultant Site Manager	Supervision and notification of agreed tree protection measures.
Post Completion	Arboricultural Consultant	Inspection of retained trees and notification as agreed

5.9 It is the site manager's responsibility to ensure that the details of this arboricultural method statement and any agreed amendments are known and understood by all site personnel. Copies of the agreed documents must be kept on site and be readily available at all times. This method statement should form part of the site induction for all personnel.

This Specific Site

5.10 The following sets out the management details that must be followed to ensure successful tree retention. It is based on the guidelines and recommendations set out in BS: 5837 and the National Joint Utilities Group: Guidelines for the planning, installation, and maintenance of utility services in proximity to trees. Volume 4, issue 2. London: NJUG, 2007. (NJUG 4).

5.11 Protective Barriers: the location for the protective barriers is shown on the Tree Protection Plans at Appendix 5.

The protective barriers must be installed post 'top down, pull back' demolition of the existing barn (under arboricultural observation) and prior to construction of the replacement barn.

No activities whatsoever shall take place within the protective barriers without the prior written agreement of Horsham District Council.

The protective barriers must be fit for the purpose of excluding demolition and construction activity and appropriate to the degree and proximity of work taking place around the retained tree/s.

The protective barriers must be maintained to ensure that they remain rigid and complete.

The project arboriculturist must visit the site to confirm the protective barriers are installed as per the agreed Tree Protection Plan and formal written records of supervision must be circulated to all interested parties.

Signs must be attached to the protective barriers, at regular and frequent intervals, that clearly explain their purpose.

5.12 Ground protection within the root protection areas of retained trees:

None.

5.13 Demolition (including underground structures but excluding hard surfacing) within the root protection areas of retained trees:

Access facilitation pruning should be undertaken as necessary to prevent injurious contact between demolition plant and the tree(s). In some cases, working space may be provided by temporarily tying back tree branches.

The demolition must be undertaken inwards within the footprint of the existing structure/s (often referred to as "top down, pull back").

In general, it is preferable to leave underground structures in situ, as their removal could damage adjacent tree roots.

5.14 Construction (excluding hard surfacing and new infrastructure) within the root protection areas of retained trees:

The foundations of the replacement barn sit almost entirely within the footprint of the existing barn. New foundations, if required, should not require special engineering.

5.15 Installation or removal of hard surfacing within the root protection areas of retained trees:

Where the existing slab foundation is scheduled for removal, care should be taken not to disturb tree roots that might be present beneath it. Hand-held tools or appropriate machinery should be used (under arboricultural observation) to remove the existing slab foundation, working backwards over the area, so that the machine is not moving over the exposed ground.

5.16 Soft landscaping within the root protection areas of retained trees:

Soft landscaping, within root protection areas, must accord to the principle that the tree and soil structure take priority. Soil structure must be preserved at a suitable bulk density for root growth and function (of particular importance for soils of a high fines content), and existing rootable soil retained and roots themselves protected.

5.17 Installation of new services and/or repair of existing services below ground and within root protection areas or above ground and within the crown spread of retained trees:

Where possible, existing services should be used, and all new services should to be located outside of the root protection areas of retained trees. Additionally, whenever possible, existing services should always be diverted or re-aligned outside the root protection areas.

New underground services, within the root protection area/s of retained tree/s must be installed using:

- either trenchless insertion methods with entry and retrieval pits being sited outside the root protection areas,
- or hand dug broken trenches,
- or hand dug continuous trenches.

Hand dug continuous trenches should be acceptable for shallow service runs. Excavation for shallow service runs must be undertaken carefully, using hand-held tools and preferably by compressed air soil displacement.

To avoid damage to tree roots:

- Existing ground levels must be retained within the root protection areas and topsoil within the root protection areas must be retained in situ.

- Roots, whilst exposed, should immediately be wrapped, or covered to prevent desiccation and to protect them from rapid temperature changes. Any wrapping should be removed prior to backfilling, which should take place as soon as possible.

- Roots smaller than 25 mm diameter may be pruned back, making a clean cut with a suitable sharp tool (e.g., bypass secateurs or handsaw), except where they occur in clumps. Roots occurring in clumps or of 25 mm diameter and over should be severed only following consultation with the project arboriculturist, as such roots might be essential to the tree's health and stability.

- Prior to backfilling, retained roots should be surrounded with topsoil or uncompacted sharp sand (builders' sand should not be used because of its high salt content, which is toxic to tree roots), or other loose inert granular fill, before soil or other suitable material is replaced. This material should be free of contaminants and other foreign objects potentially injurious to tree roots.

Insertion methods

'Trenchless insertion' refers to a family of methods which includes mini-horizontal directional drilling, micro-tunnelling and other methods for the new installation, replacement, and refurbishment of existing underground services with minimal disruption to surface traffic, business and other activities, as opposed to trenching and its associated disturbance of surface activities.

'Broken trench' insertion combines hand dug trench sections with trenchless insertion, where excavation is shallow or unavoidable. Open sections of trench should only be long enough to allow access for linking to the next section. The length of sections will be determined by local conditions, especially soil texture and cohesiveness, as well as the practical needs for access. In all cases the open sections should be kept as short as possible and outside of the Prohibited Zone.

'Continuous trench' insertion is only acceptable for shallow service runs The use of this method must be considered only as a last resort if works are to be undertaken by agreement within the Prohibited Zone. The objective being to retain as many undamaged roots as possible. Hand digging within the Prohibited or Precautionary zones must be undertaken with great care requiring closer supervision than normal operations.

5.18 Work within areas of designated structural landscaping:

There are no areas of designated structural landscaping on this site.

5.19 Site monitoring:

The project management team must instruct an arboricultural consultant to undertake the required monitoring and Horsham District Council must be advised of the appointment prior to the commencement of any works.

The project manager is responsible to ensure that the details of this arboricultural method statement and any agreed amendments are known and understood by all site personnel. Copies of the agreed documents must be kept on site and be readily available at all times. This method statement should form part of the site induction for all personnel.

Monitoring falls into four categories, namely, meetings, supervision, observation, and inspection.

- Meetings are an assembly of interested parties to agree arboricultural matters affecting the development site.
- Supervision is an act or instance of directing, managing, or oversight of arboricultural matters affecting the development site.
- Observation is the continuous visual observance of works with the potential to damage retained trees.
- Inspection is the systematic and formal evaluation of arboricultural matters affecting the development site.

The following table describes the phase of works, the activity, the level, and frequency of monitoring that is required for this project.

Phase of Works	Activity	Monitoring	Frequency of Monitoring
Pre-commencement	Site access for personnel (staff, contractors, and visitors), traffic (staff, contractors, and visitors), and delivery vehicles. Location of the site office, the welfare facilities, the mixing and washing out area/s, fire site, storage area, and parking area for machinery (tele handler, excavator, dumper truck etc). Barriers - the location, installation, and signage	Site meeting	One-off
Demolition	Demolition of existing barn and removal of existing slab foundation	Observation	Duration
Construction	Ongoing maintenance of protective barriers, signage	Supervision	Every other month
Post-construction	Inspection of retained trees and root protection areas	Inspection	One-off

Site monitoring must be confirmed by formal written records circulated to all interested parties; a pro forma record of arboricultural monitoring is provided at Appendix 3.The formal written records will form an auditable system of site monitoring and thus enable planning conditions to be discharged.

6.0 Tree Management

Pre-development tree work

6.1 A schedule of tree works, including root pruning, is included within the Tree Survey and Tree Quality Assessment at Appendix 1. Tree works required to enable or facilitate the proposed development are noted within Appendix 1 in **bold orange** text. Additionally, recommended tree works to manage the existing tree stock are noted in ***bold blue*** italic text.

6.2 All pre-development tree works must be carried out in accordance with British Standard 3998:2010 Tree Works. Recommendations.

Specific wildlife species and their habitats are protected by law. Intentionally or recklessly damaging or destroying them, their nests, roosts, or their habitats is a criminal offence. If works are proposed to a tree where protected species reside or the tree forms a habitat for protected species, the appropriate advisory body should be consulted e.g. Natural England, Bat Conservation Trust etc.

Post-development management for existing trees

6.3 In the absence of specific proposals, the post development management of existing trees should follow the guidance contained within 'Managing trees for safety,' written by the National Tree Safety Group and published by the Forestry Commission in 2011.

6.4 In general, trees should be inspected following severe weather conditions, typically:

a) strong winds (especially of gale force 8 or greater), particularly from an atypical direction,
b) heavy rain reducing root adhesion due to soil saturation, and
c) heavy snowfall leading to branch failure.

7.0 Useful Contact Details

7.1 Useful contact details:

Nick Hellis	Arboricultural Consultant	01935 814 110 [redacted]
Tree Section	Planning and Development Horsham District Council	01403 215 515 trees@horsham.gov.uk
Charlotte Catton-Giltinane	Planning Consultant | Planning Batcheller Monkhouse	01798 877 555 [redacted]

Signed: [redacted]

Dated: *21st September 2023*

Nicholas Hellis MArborA
Arboricultural Consultant

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Appendix 1 - Tree Survey and Tree Quality Assessment

Tree Survey and Tree Quality Assessment

Tree No.	Species	Height (m)	Stem Diameter (mm)	Average Crown Spread NESW (m)	Height of Canopy (m)	Life Stage	Observations Recommendations Management	Contribution in years	Category	RPA radius (m)
G1	Ash, elm, and sycamore	up to 15.0	up to 400	5.0	4.0	Young	A group or belt of self-set native and naturalised trees but without this conferring on them significantly greater collective landscape value. Low branches touching the existing structure/s **Access facilitation pruning should be undertaken as necessary to prevent injurious contact between demolition plant and the tree(s)**	40+	C 2	Defined by the foundations of the existing structure/s

agl: above ground level #: estimated dimension
tree works required by proposed development are noted in **bold orange** type
recommended tree works to manage the existing tree stock are noted in ***bold blue*** italic text
T: Individual tree **H:** Hedgerow or garden hedge **G:** Cohesive group of trees **W:** Woodland

Tree survey schedule:

a) a sequential reference number for each tree or group of trees (also recorded on the Tree Plan).

b) species (common names only).

c) estimated height in metres.

d) stem diameter measured in millimetres typically at 1.5 metres above ground level.

e) estimated branch spread in metres taken at the four cardinal points, as appropriate; (also recorded on the Tree Plan, as appropriate).

f) height of canopy above ground level, typically over an access, or the site.

g) life stage as follows,

   i. young - a tree in the first third of average life expectancy for species.
   ii. middle - a tree in the middle third of average life expectancy for species.
   iii. mature - a tree in the last third of average life expectancy for species.
   iv. over mature - a mature tree, which by reason of its physical or structural condition, has an estimated remaining contribution of less than 20 years
   v. ancient /veteran - 'a tree which, because of its great age, size or condition is of exceptional value culturally, in the landscape or for wildlife' English Nature.

h) observations, particularly of structural and/or physiological condition, as appropriate and pertinent to the matter being considered.

i) management recommendations, as appropriate.

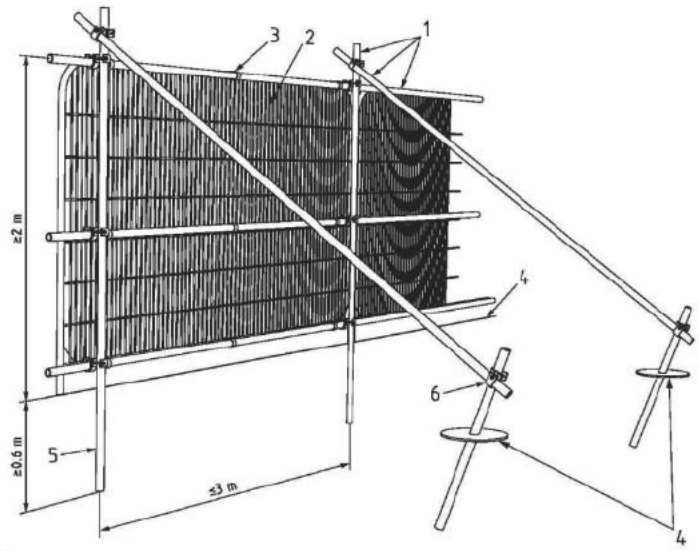
j) estimated remaining contribution in years e.g. less than 10, 10+, 20+, 40+.

k) a category is allocated to each tree or group of trees depending in part upon the information gathered in the tree survey, it depends in part upon the 'cascade chart for tree quality assessment' and it is in part, subjective; and

l) root protection area is based on the guidance given within BS: 5837.

Appendix 2 - Default Specification for a Protective Barrier

Default Specification for a Protective Barrier



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

The default specification should consist of a vertical and horizontal scaffold framework, well braced to resist impacts, as illustrated. The vertical tubes should be spaced at a maximum interval of 3 m and driven securely into the ground. Onto this framework, welded mesh panels should be securely fixed.

Reference: BS 5837:2012 Section 6.2.2 Barriers



Appendix 3 - Pro Forma Record of Arboricultural Site Supervision

Record of Arboricultural Site Monitoring

Planning Application No: DC/23/1385
Site Address: West Wantley Farm, Fryern Road, Storrington, West Sussex
Proposal: Erection of a replacement storage building (Class B8 Use Excluding Distribution)
Client: Mr and Mrs Doe
Agent: Batcheller Monkhouse
Local Authority: Horsham District Council
Tree Consultant: Nick Hellis, Hellis Solutions Ltd
Copy to: Client, Agent, Local Authority
No. of Photographs provided: ….

Phase of Works	Attendees	Activity	Comment	Level of Site Monitoring	Date of Site Monitoring
Pre - commencement		Site access for personnel (staff, contractors, and visitors), traffic (staff, contractors, and visitors), and delivery vehicles. Location of the site office, the welfare facilities, the mixing and washing out area/s, fire site, storage area/s, and parking area for machinery (tele handler, excavator, dumper truck etc). Barriers - the location, installation, and signage		Site meeting	

The attendance of the tree consultant is assumed

Phase of Works	Attendees	Activity	Comment	Level of Site Monitoring	Date of Site Monitoring
Demolition		Demolition of existing barn and removal of existing slab foundation		Observation	
Construction		Ongoing maintenance of protective barriers and signage		Supervision	
Post-construction		Inspection of retained trees and root protection areas		Inspection	

The attendance of the tree consultant is assumed

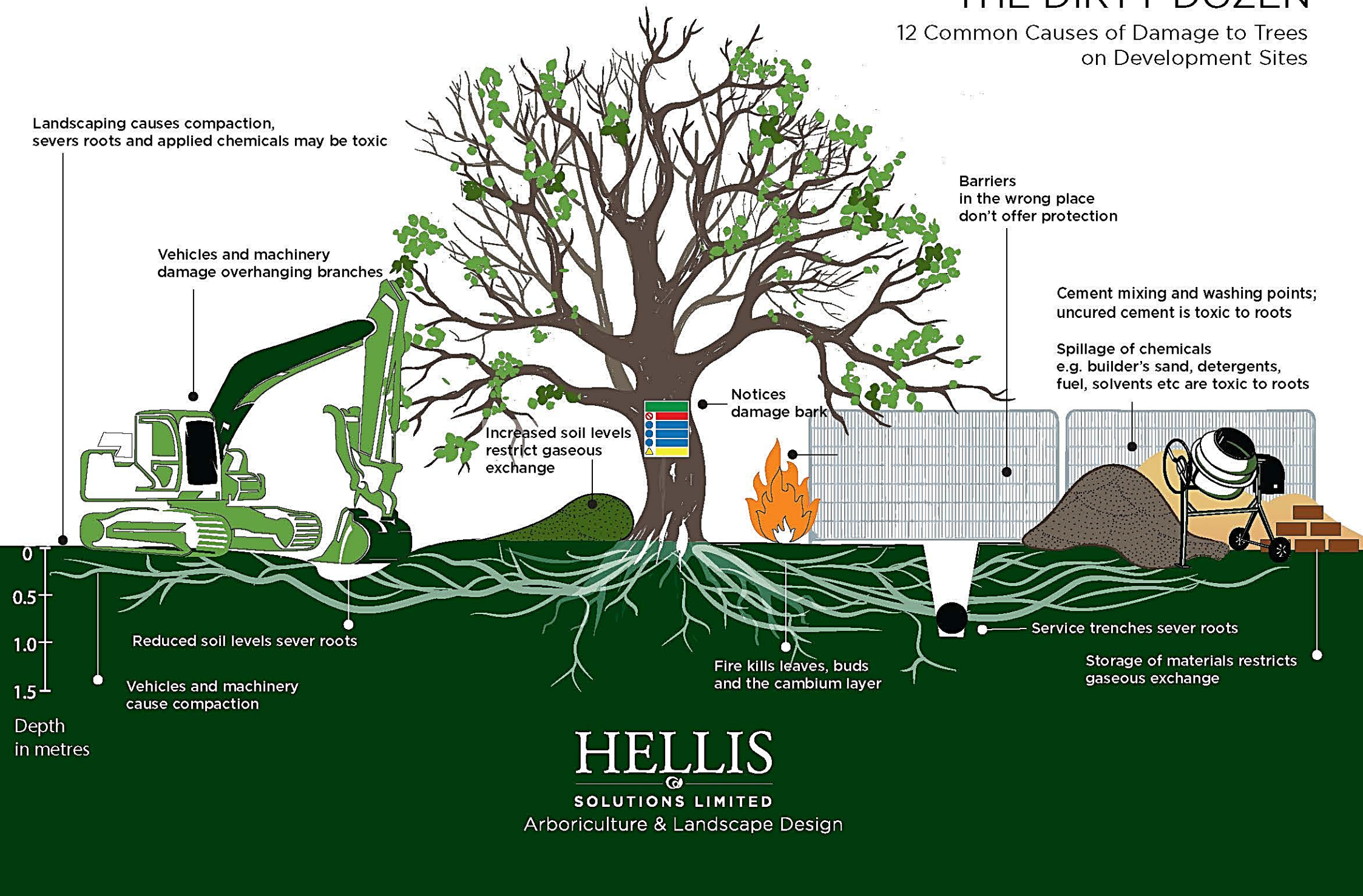
Monitoring falls into four categories, namely meetings, supervision, observation, and inspection.

- Meetings are an assembly of interested parties to agree arboricultural matters affecting the development site.
- Supervision is an act or instance of directing, managing, or oversight of arboricultural matters affecting the development site.
- Observation is the continuous visual observance of works with the potential to damage retained trees.
- Inspection is the systematic and formal evaluation of arboricultural matters affecting the development site.

Appendix 4 - The Dirty Dozen

THE DIRTY DOZEN

12 Common Causes of Damage to Trees on Development Sites



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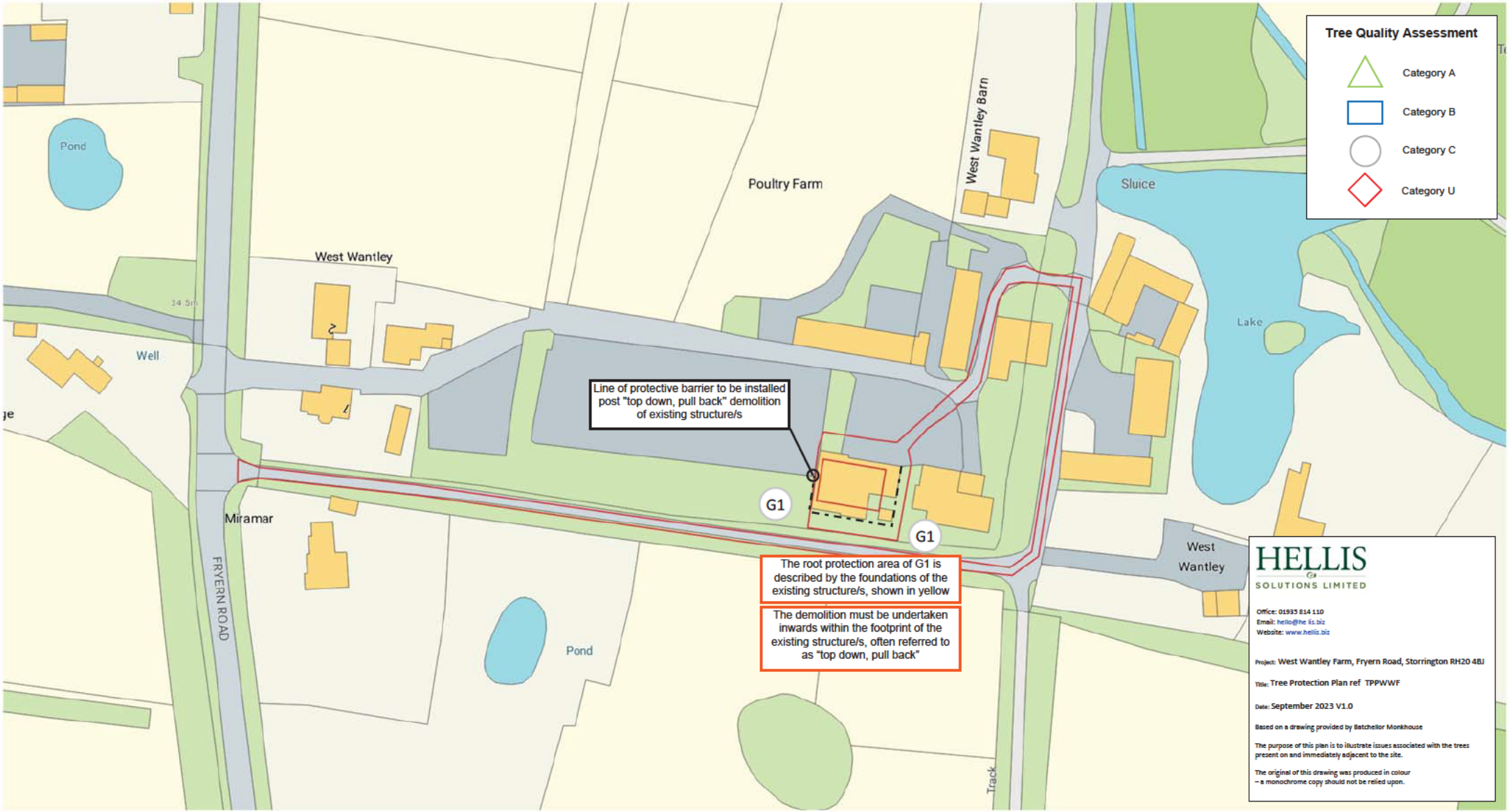
Arboriculture & Landscape Design

Appendix 5 - Tree Protection Plan

Batcheller Monkhouse



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Office: 01935 814 110
Email: hello@he ls.biz
Website: www.hellis.biz

Project: West Wantley Farm, Fryern Road, Storrington RH20 4BJ

Title: Tree Protection Plan ref TPPWWF

Date: September 2023 V1.0

Based on a drawing provided by Batchellor Monkhouse

The purpose of this plan is to illustrate issues associated with the trees present on and immediately adjacent to the site.

The original of this drawing was produced in colour – a monochrome copy should not be relied upon.

Produced on Jun 27, 2023.
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50 m
Scale 1:1250 (at A4)

N



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