



Arboricultural Method Statement

Kilmarnock Farm

Charlwood Road

Ifield

Crawley

RH11 0JY

Client: PJ Brown (Construction) Ltd

Date: April 2019

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1. Introduction

- 1.1 The purpose of this method statement is to detail what actions need to be taken to prevent unacceptable damage occurring to the retained trees on this and the adjacent site during the proposed soil recycling and concrete crushing facility at Kilmarnock Farm, Charlwood Road, Ifield, Crawley RH11 0JY. This method statement complies with the recommendations of British Standard BS 5837: 2012, Trees in relation to design, demolition and construction – Recommendations (BS 5837).
- 1.2 This method statement is designed to reflect the principles of the tree protection required for the proposed development and should not be read as a definitive engineering or construction statement for this site. Matters relating to construction detail or engineering performance should be referred to a qualified architect or structural engineer for further information and specification.

2. Liaison & communication

- 2.1 The developer shall appoint an arboricultural consultant to ensure that the specified tree protection measures are carried out during the entire construction process.
- 2.2 Before any works of any description take place on the site, the developer shall convene a pre-start meeting. This should be attended by the developer's contract manager, the site manager, the groundwork contractor, the arboricultural consultant and, if appropriate, the LPA tree officer. The meeting will be led by the arboricultural consultant who will ensure that contact numbers are exchanged and that the methods of tree protection outlined in this statement are fully discussed and explained. Any modifications to this statement arising from this meeting will be recorded and the revisions circulated to all parties.
- 2.3 A copy of this method statement shall be given to all personnel who have control over works of any nature within the Root Protection Areas (RPAs) of the retained trees. The developer will ensure that adequate instruction is given for the implementation of the protection measures outlined within this statement.

3. Tree removals

- 3.1 Trees numbers 2-11 and Group G1 will be removed.
- 3.2 Tree felling will be carried out in accordance with British Standard BS 3998: 2010, Tree work - Recommendations.

4. Protective fencing

- 4.1 No vehicles of any kind shall enter the site, nor any works commence, until the root protection areas of the retained trees, as shown on the TPP, have been protected by the

erection of protective fencing to the specification found in BS 5837, Section 6.2. The location of the fencing is denoted by the continuous, bold purple lines on the TPP.

- 4.2 The fencing is to comprise of 2m tall welded mesh panels on rubber or concrete feet. Panels are to be joined together using a minimum of two anti-tamper couplers, installed so that they can only be removed from inside the fence. The panels should be supported on the inner side by stabiliser struts, which should be attached to a base plate and secured with ground pins. "Tree Protection Zone – Keep Out" will be attached with cable ties to every other panel.
- 4.3 No activity of any kind shall be undertaken behind this protective fencing; there shall be no storage of materials, no access for vehicles or personnel and no excavation or changes in soil level of any kind.
- 4.4 No fixtures of any nature shall be attached to the retained trees.
- 4.5 If the protective fencing is accidentally damaged or knocked over, the damaged sections shall be immediately marked with high visibility tape or with mesh fencing. The damaged sections shall be replaced or repaired to the original specification within 48 hours. All events of this nature must be recorded and reported to the arboricultural consultant.
- 4.6 When the installation of the protective fencing is complete, the arboricultural consultant shall be informed so he may come and inspect it.
- 4.7 The protective fencing will not be moved, dismantled or relocated without the prior approval of the arboricultural consultant. When the construction period is complete the fencing may then be removed, but only after first informing the arboricultural consultant of this intention.

5. Excavations for drainage and access road

- 5.1 Small sections of the proposed drainage route (wheel bath drainage) is within the RPA of off-site trees no. T18.
- 5.2 Accordingly, the first 750mm depth of these sections of the foundations, as denoted by continuous, bold, orange lines on the TPP, shall be excavated using hand tools and/or an airspade only, under direct arboricultural supervision.
- 5.3 All roots exposed during the excavations shall be cleanly severed by the arboricultural consultant, using secateurs or a sharp saw.
- 5.4 A small area of the proposed access road from Charlwood Road passes through the RPA of

6. Supervision & monitoring

- 6.1 The arboricultural consultant shall visit the site on a regular basis, as agreed with the local planning authority at the pre-start meeting, or when specifically required as set out in Table 2 below, to ensure that the tree protection measures are kept in place and functioning as designed. Regular contact will be maintained with the site manager to determine any forthcoming operations that may make an impact on these tree protection measures and if arboricultural supervision is required. A record of these monitoring visits will be kept, and copies sent to the developer and the LPA.
- 6.2 The site manager shall give at least 48 hours' notice to the arboricultural consultant of any operations, which may make an impact on the RPAs of the retained trees.
- 6.3 Any alterations or variations in drawings for the site that are in, or within, the RPAs of the retained trees shall be referred in the first instance to the arboricultural consultant for his advice. If these changes make any kind of impact on the retained trees the arboricultural consultant shall suggest changes that will either avoid damage to the retained trees or offer solutions to minimize the impact. Following this consultation, the arboricultural consultant shall issue revised Tree Protection Plans that reflect the changes.
- 6.4 Where any operations carried out by the developer deviate substantially from this method statement, a meeting will be convened between the developer, the arboricultural consultant and the site manager to determine the best method to mitigate any damage that may have occurred.

Visit no.	Timing of visit	Function carried out
1	Prior to any development works.	To lead pre-start meeting.
2	Following tree felling and the erection of protective fencing.	To check protective fencing has been installed in the correct locations and to the correct standard.
3	During the excavation for the drainage route within the RPA of T18.	To supervise the manual excavation of the pipe installation.
4	Every four weeks during the construction phase.	To check the protective fencing & ground protection are in place and that activities which would be harmful to trees are not being carried out.
5	At any other time which is sensitive in arboricultural terms.	To ensure retained trees are protected from development activities.

Table 1 - Timings of Supervision and Monitoring Visits.

Matt Rew | Technical Manager

April 2019



APPENDIX 1 – Tree Schedule

Notes for the Tree Schedule

This schedule is based on an inspection carried out by Michael Roberts on Tuesday the 26th February 2019. Weather conditions at the time were clear, dry and bright. Deciduous trees were not in leaf.

The information contained in this schedule reflects the conditions of those specimens at the time of inspection. They were inspected from the ground only; they were not climbed and no internal investigations were undertaken, thus no guarantee may be given as to their structural integrity.

As trees are dynamic organisms and subject to continual change no dimensions expressed in this schedule may be relied upon for development purposes for more than 24 months from the date of survey. Estimated dimensions are marked 'est'.

1. **No:** Expressed in sequential order starting from number 1 – woodlands, groups & hedges are prefixed as W, G, & H respectively.
2. **Species:** The common name as given in "Collins Tree Guide", Johnson & More (2004).
3. **Height:** Estimated with the aid of a 'Disto' laser range finder and expressed in metres.
4. **Trunk Diameter:** Measured at 1.5m above ground level and expressed in millimetres to the nearest 10mm; where multiple stems are present they are measured individually and a cumulative total calculated in accordance with BS5837 (2012).
5. **Radial Crown Spread:** Distance in metres from the centre of the trunk to each cardinal point of the compass and rounded up to the nearest half metre.
6. **Crown Clearance:** Mean height from adjacent ground level to the lowest point of the crown.
7. **Height to First Branch:** Height, in metres, of the first significant branch (100mm) or to crown break from ground level.
8. **Life Stage:** Young, Semi mature, Mature, Veteran/Ancient.
9. **Physiology:** Health and condition of the tree in comparison to a typical specimen of species and age: Good, Average, Below Average, Poor, Dead.
10. **Structure:** The structural condition of the tree based on an assessment of any visible roots, trunk and crown, noting the presence of any defects or decay: Good, Moderate, Indifferent, Poor, Hazardous.
11. **Landscape Value:** Reflecting the importance of the tree in the local landscape. High, Moderate, Low, Nil.
12. **Estimated Years:** Estimate of remaining contribution expressed in years <10, 10-20, 20-40, 40+.
13. **Comments:** Notes relating to health and condition, structure and form, estimated life expectancy and importance within the local landscape.
14. **Category:** - A rating given to individual trees based on Table 1 in the British Standard, BS 5837 (2012) "*Trees in relation to design, demolition and construction - Recommendations*".

Category 'U' - Trees in such a condition that any existing value would be lost within 10 years and which should, in the current context, be removed for reasons of sound arboriculture management.

Category 'A' - Trees of high quality and value; in such a condition as to be able to make a substantial contribution (Normally a minimum of 40 years).

Category 'B' - Trees of moderate quality and value; those in such a condition as to make a significant contribution (Normally a minimum of 20 years).

Category 'C' - Trees of low quality and value; currently in adequate condition to remain until new planting could be established (Normally a minimum of 10 years), or young trees with a stem diameter below 150mm.

Sub-categories (where appropriate); 1 – Mainly arboricultural qualities: 2 – Mainly landscape qualities: 3 – Mainly cultural values, including conservation.

No.	Species	Height	Trunk Dia.	Radial Crown Spread	Crown Clearance	Height to 1st Branch	Life Stage	Physiology	Structure	Landscape Value	Est. Years	Comments	Category
1	Ash	13.5m	335mm	5m	SW1m	5m NW	Semi-mature	Average	Moderate	Moderate	40+	Off-site tree; crown has been lifted in past; tree of moderate visual importance; no significant defects found.	B (12)
2	English Oak	14m	300mm ivy 600mm ivy	4.5m	9m	5m NW	Over-mature	Dead	Hazardous	Low	<10	Off-site hazardous tree; should be removed for sound arboricultural management reasons.	U
3	English Oak	9.5m	200mm	NE3m SE2m SW2.5m NW4m	1.5m	1.5m NW	Young	Average	Moderate	Low	40+	Of moderate quality, but currently of low value due to small size; drainage ditch at base of trunk.	C (12)
4	Ash	16m	270mm	N4.5m NE5m E4.5m S4.5m W4.5m	N6m	6m NE	Semi-mature	Average	Moderate	Moderate	40+	Drawn-up with high crown; drainage ditch at base of trunk, possible historic root severance from retrenching.	C (1)
5	Ash	15.5m	130mm 200mm	NE3m SE4.5m SW5m NW2m	NE6m	6m NE	Semi-mature	Below average	Indifferent	Moderate	10-20	Twin stemmed from base; sub-dominant stem previously pollarded at 3m ; drawn-up specimen with height/diameter ratio greater than 50: at risk of failure if companion shelter removed.	C (1)
6	English Oak	14.5m	335mm	NE6m SE2m SW3m NW6m	NW3m	2m NW	Semi-mature	Average	Poor	Low	10-20	Cavity at base; drainage ditch at base of trunk; one-sided crown as suppressed by adjacent specimens; of short term potential only.	C (1)
7	Hornbeam	11m	255mm	N4.5m E4m S3m W2m	N3m	3m N	Semi-mature	Average	Indifferent	Moderate	40+	Previously part of the hedgerow, now lapsed into tree; has been lifted and cut back from adjacent structures.	C (1)
8	English Oak	14m	620mm	N7.5m E5m S2.5m W3m	9m	8m N	Over-mature	Poor	Hazardous	Moderate	<10	In significant, immediate & irreversible overall decline; should be removed for sound arboricultural management reasons.	U

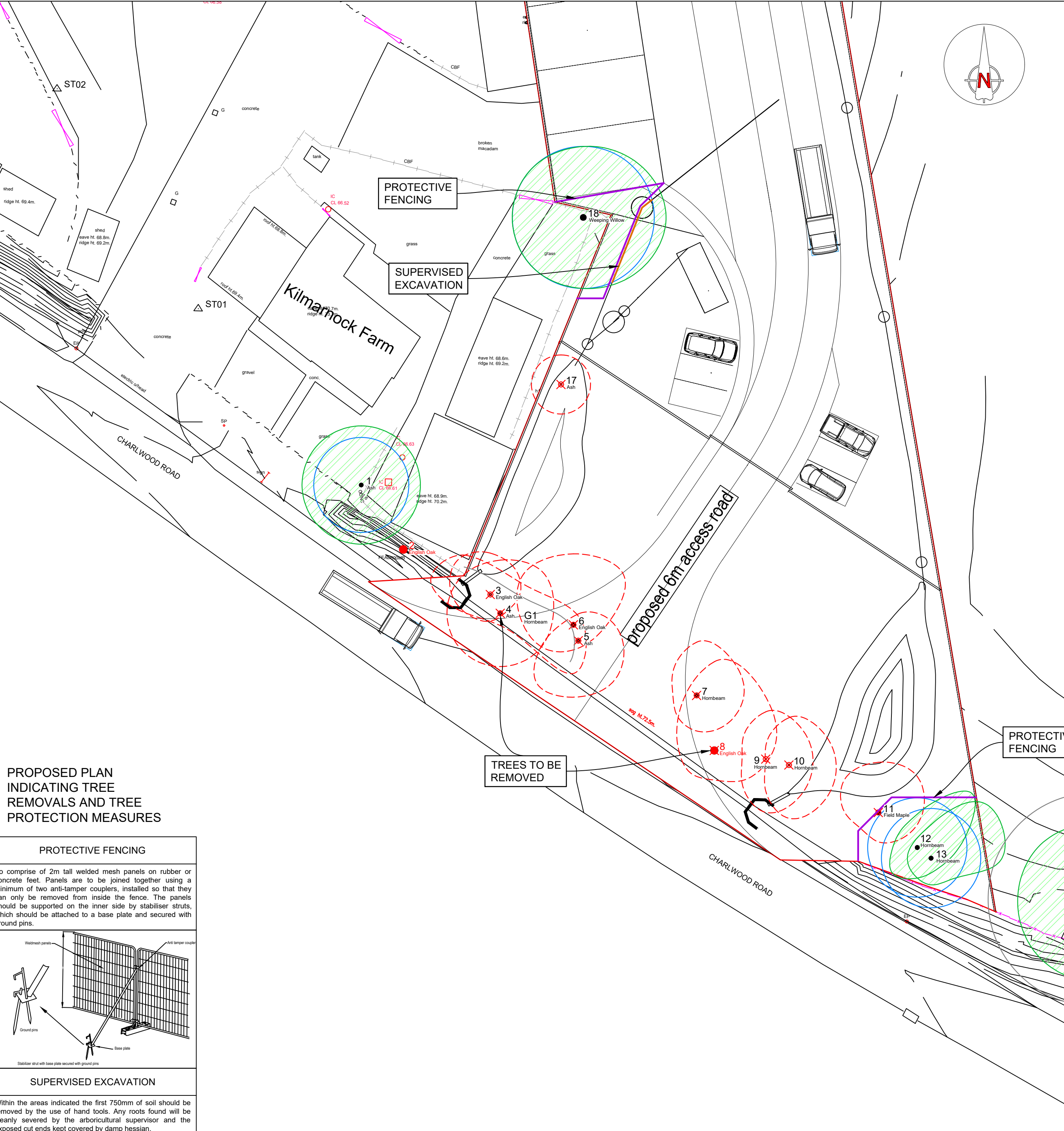
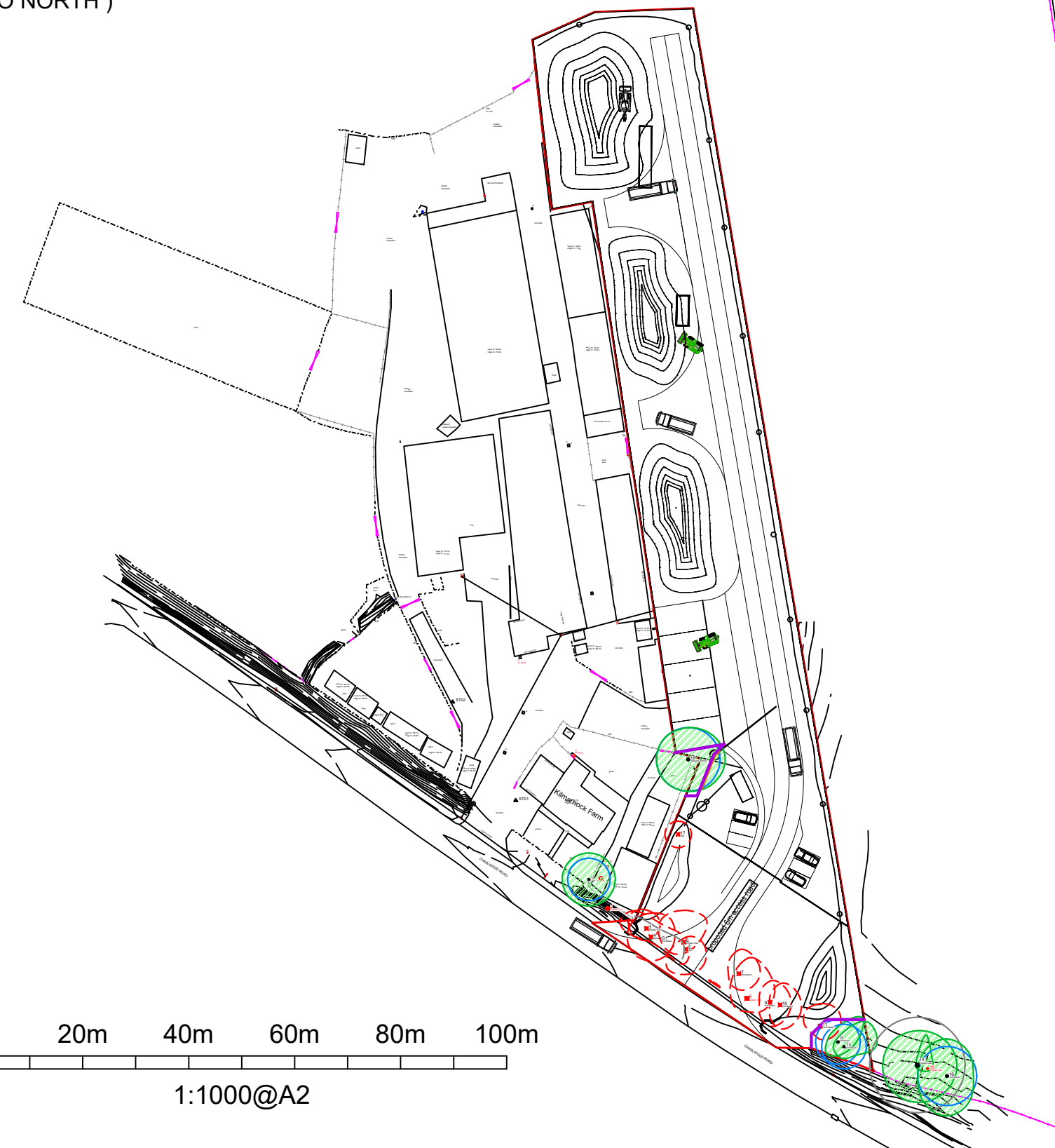
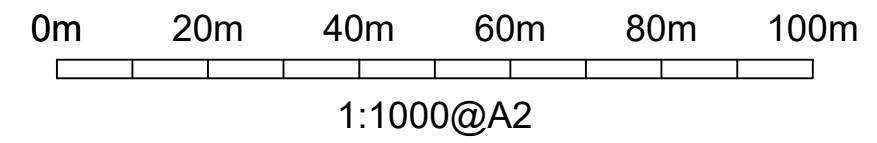
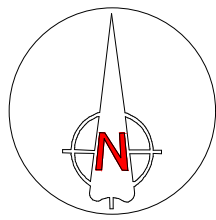
No.	Species	Height	Trunk Dia.	Radial Crown Spread	Crown Clearance	Height to 1st Branch	Life Stage	Physiology	Structure	Landscape Value	Est. Years	Comments	Category
9-10	Hornbeam	#T9 7m #T10 7m	#T9 100mm est #T9 180mm est #T10 160mm est #T10 140mm est	N4m E4m S4.5m W2m	1m	1m	Semi-mature	Average	Indifferent	Low	20-40	Previously topped beneath powerlines.	C (12)
11	Field Maple	13m	2 stems @ 150mm est 2 stems @ 250mm est	NE4.5m SE3m SW2m NW4m	2m	1m NW	Mature	Average	Indifferent	Moderate	20-40	Previously part of the hedgerow, now lapsed into tree; severely cut back from powerlines; one-sided crown.	C (1)
12	Hornbeam	15.5m	350mm	NE6.5m SE2.5m SW3m NW2m	NE2m SW0.5m	0.5m SW	Semi-mature	Average	Moderate	Moderate	40+	Severely cut back from powerlines; one-sided crown.	B (2)
13	Hornbeam	13.5m	350mm est	NE6.5m E6m SE2.5m SW2m NW2m	NE2m SW0.5m	0.5m SW	Semi-mature	Average	Moderate	Moderate	40+	Previously part of the boundary hedgerow, now lapsed into tree.	B (2)
14	English Oak	16.5m	750mm est	N6.5m E7.5m S7m W6.5m	6m	7m S	Mature	Below average	Poor	Moderate	10-20	Animal on N side of trunk from base to 2m in height, damage near base; notably reduced shoot extension growths.	C (1)
15	English Oak	7.5m	250mm	N6m E1m S0.5m W2m	2m	3m NW	Semi-mature	Average	Poor	Low	<10	Extensive animal damage to trunk; one-sided crown as suppressed by adjacent specimens; should be removed for sound arboricultural management reasons.	U

No.	Species	Height	Trunk Dia.	Radial Crown Spread	Crown Clearance	Height to 1st Branch	Life Stage	Physiology	Structure	Landscape Value	Est. Years	Comments	Category
16	Hornbeam	17m	185mm est 425mm est	N7m E5m S7.5m W5.5m	N2m S8m	3m N	Mature	Good	Moderate	Moderate	40+	Good example of species; no significant defects found.	B (12)
17	Ash	7m	165mm	2.5m	2m	2m	Young	Average	Moderate	Low	40+	Small self-seeded specimen.	C (1)
18	Weeping Willow	14m	500mm est	N6m E7m S6m W6m	1m	4.5m	Mature	Average	Moderate	Low	20-40	Off-site tree; good example of species.	B (1)
G1	Hornbeam	Min 6m Max 9m	Avg 125mm est	2.5m	1m	1m	Semi-mature	Average	Indifferent	Low	40+	Off-site group of trees; pollarded in the past to keep height beneath power lines.	C (12)



APPENDIX 2 – Tree Protection Plan

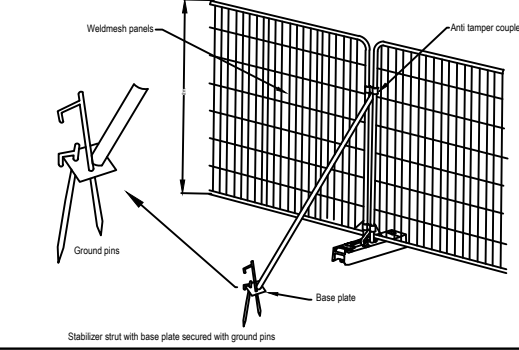
ENTIRE SITE PLAN
(NO TREES BEYOND
T18 TO NORTH)



**PROPOSED PLAN
INDICATING TREE
REMOVALS AND TREE
PROTECTION MEASURES**

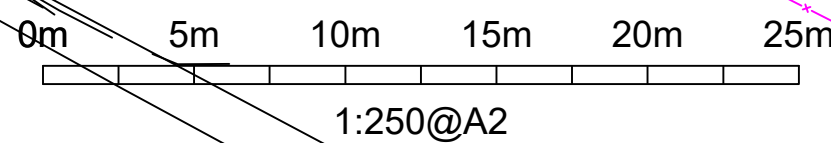
PROTECTIVE FENCING

To comprise of 2m tall welded mesh panels on rubber or concrete feet. Panels are to be joined together using a minimum of two anti-tamper couplers, installed so that they can only be removed from inside the fence. The panels should be supported on the inner side by stabiliser struts, which should be attached to a base plate and secured with ground pins.



SUPERVISED EXCAVATION

Within the areas indicated the first 750mm of soil should be removed by the use of hand tools. Any roots found will be cleanly severed by the arboricultural supervisor and the exposed cut ends kept covered by damp hessian.



DAVID ARCHER ASSOCIATES
ARBORICULTURAL CONSULTANCY

Project: Kilmarnock Farm
Charlwood Road
Ifield
Crawley RH11 0JY

Client: PJ Brown (Construction) Ltd

Drawing: TREE PROTECTION PLAN

Based on: PJB development plan

Drawing No: TPP 02	Rev: ----
Date: Apr 2019	Scale: 1:250 @ A2
Tree nos.: ● 1	Canopies of trees:
Category 'B' RPA:	Category 'C' RPA:
Protective fencing:	Supervised excavation:
	Trees to be removed:

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