

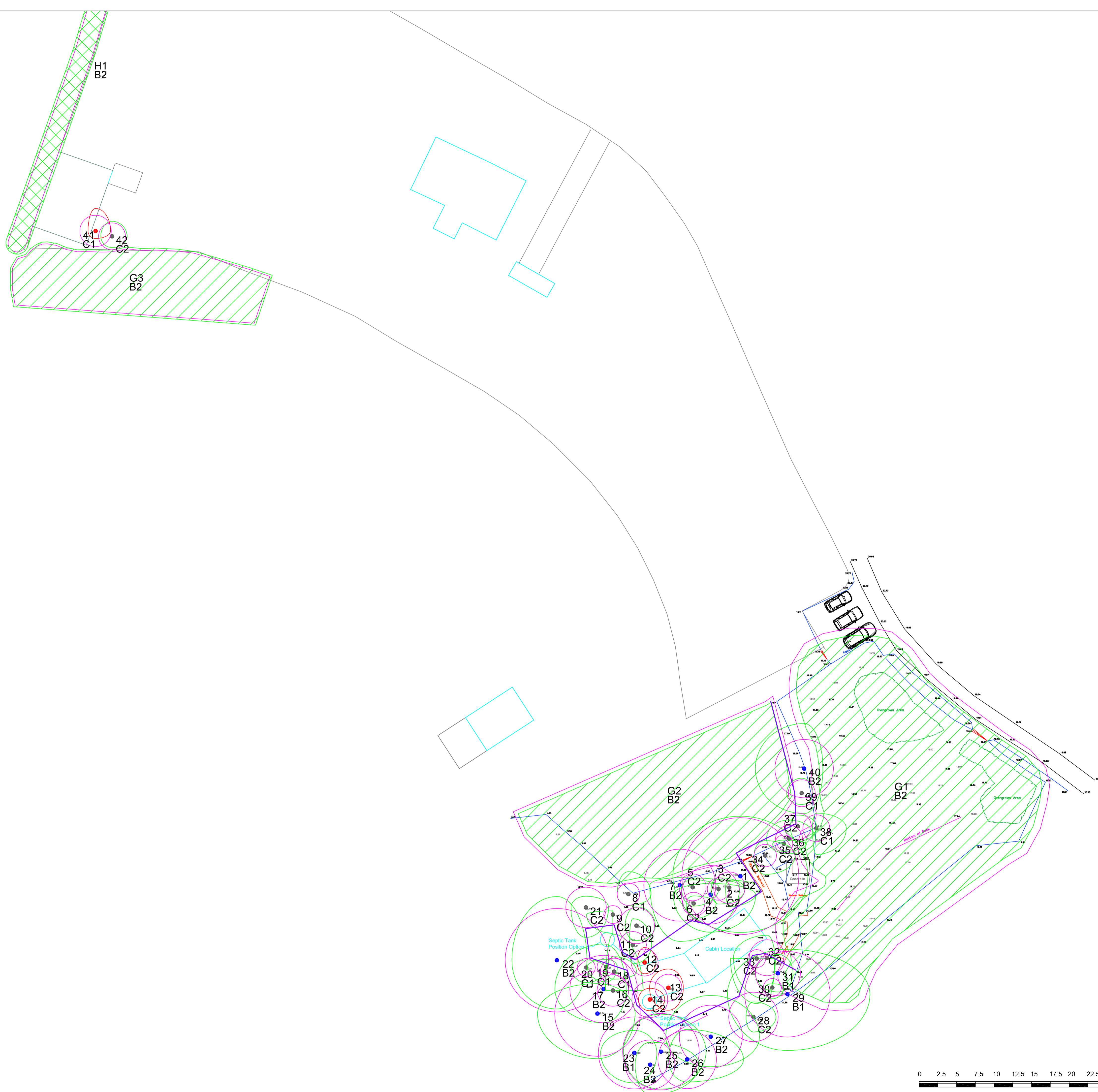
NYMNP










14/08/2019

From: Gareth Reed
Sent: 14 August 2019 12:54
To: Jill Bastow
Subject: Fwd: RE: Golden Grove

Hi Jill, outstanding arbs report for your information.

Gareth



-  Tree to be Removed
-  Tree Position Showing Crown Extents and BS5837 Category A
-  Tree Position Showing Crown Extents and BS5837 Category B
-  Tree Position Showing Crown Extents and BS5837 Category C
-  Tree Position Showing Crown Extents and BS5837 Category U
-  Root Protection Area - to remain free from disturbance
-  Group of Trees
-  Hedgerow
- 1/G1 Tree/Group
- A1/B1/
C1/U BS5837 Retention Category
-  Tree Protection Barrier (specification to be confirmed within Arboricultural Method Statement)

APPENDIX 3

Drawing Title: Arboricultural Impact Plan

Project: Valley View, Golden Grove, Whitby

Drawing Number: ARB/CP/2217/AIP

Date: August 2019

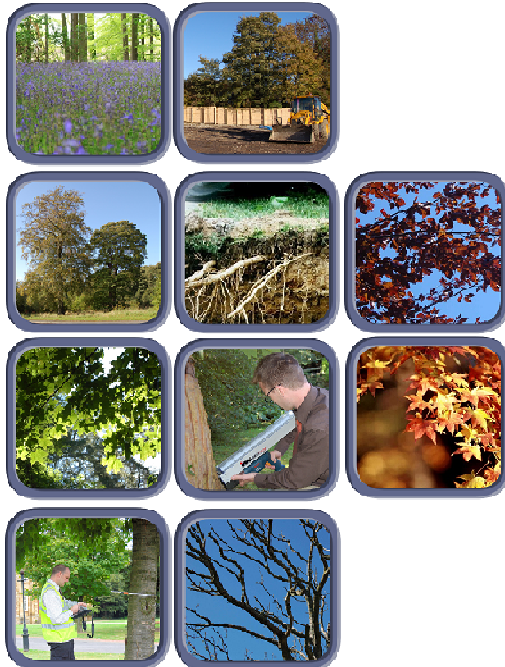
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elliottconsultancyltd.
arboricultural consultants

NYMNP

14/08/2019



Location:
**Valley View, Golden Grove,
Whitby**

Report Type:
Arboricultural Impact Assessment

Ref:
ARB/CP/2217

Date:
August 2019

Wrens Nest Underhill Glaisdale North Yorkshire YO21 2PF

Company Registration No: 5515572 VAT No: 889226571

Contents

- 1 Introduction
- 2 Site Details
- 3 Tree Category Evaluation
- 4 Constraints and Retention Considerations
- 5 Arboricultural Impact Assessment

Appendices

- 1 Tree Details
- 2 Tree Constraints Plans
- 3 Arboricultural Impact Plan
- 4 BS 5837 Tree Assessment Cascade Chart
- 5 Arboricultural Glossary

1 Introduction

- 1.1 Acting upon the request of the client a survey of trees at Valley View, Golden Grove, Whitby was carried out on the 12th of August 2019 to form the basis of this arboricultural impact assessment. The tree survey and report production were undertaken by Charles Prowse of Elliott Consultancy Ltd.
- 1.2 Scope of the report:
- This report provides arboricultural information and advice in relation to inform re-development decisions for the site.
 - All trees within the site were assessed and categorised with regard to their quality and a retention value was assigned using criteria outlined in British Standard 5837:2012 – ‘Trees in Relation to Design, Demolition & Construction’ (BS5837:2012). Appendix 4 provides information regarding the categorisation.
 - Matters pertinent to tree retention and protection are briefly discussed within Section 4. Following receipt of detailed engineering drawings providing service runs and ground level alterations all measures relating to tree removal, tree retention and protection should be finalised within an Arboricultural Method Statement.
 - Section 5 evaluates the proposals in context to the existing trees, with potential issues discussed and remedial options offered.
- 1.3 This report should be read in conjunction with the Tree Constraints Plans (Appendix 2) and the Arboricultural Impact Plan (Appendix 3).

2 Site Information

- 2.1 Two areas within the property of Valley View were surveyed. Figure 1 shows the extent of the areas.

Figure 1: Area Surveyed Highlighted



Map data ©Google Imagery

- 2.2 The areas are predominantly made up of native deciduous woodland on the hillside sloping down to Cock Mill Beck. In the larger area to the southeast are some footpaths, fences and a pig sty from when that section of woodland was used for keeping pigs. The area to the northwest contains a grazing paddock with a large agricultural style barn in the southwest corner. A hedgerow marks the western boundary to this area with woodland to the south.
- 2.3 On the day the site was surveyed the sky was overcast which presented only reasonable levels of light. Any visibility issues encountered are noted within Appendix 1).

3 Tree Category Evaluation

- 3.1 The criteria used for evaluating how suitable each tree is for retention within a development is that suggested within BS5837:2012; a copy of the categorisation sheet can be found within Appendix 4.
- 3.2 BS5837:2012 notes that all trees apart from those with stem diameters <150mm or classified as Category U should be considered for retention and viewed as a potential site constraint. When inspected, each tree and or group feature is assigned one of four categories that signify how suitable that tree/group would be for retention within any development proposals, and therefore the degree to which it should constrain the site. The four categories are as follows:
- 3.2.1 **Category A** (coloured green) trees are those of high quality and value, and of a condition whereby they could make a substantial contribution to the site. The retention of Category A trees should be considered during the design phase and afforded adequate physical protection during the construction phase in accordance with BS 5837:2012 where retained. This means keeping proposed features and alterations to ground levels outside of root protection areas and crown spreads so as to ensure that the tree remains in an adequate condition post-development. Root protection areas and crown spreads are displayed upon the Tree Constraints Plan, Appendix 2. None of the trees were classified as Category A.
- 3.2.2 **Category B** (coloured blue) trees are those of moderate quality and value, and of a condition that they make a substantial contribution to the site. The retention of Category B trees should be considered during the design phase and afforded adequate physical protection during the construction phase in accordance with BS 5837:2012 where retained. Fifteen individual trees, three groups of trees and one hedgerow were classified as Category B; their numbers being 1, 3, 4, 6, 8, 12 13 and Group 1.
- 3.2.3 **Category C** (coloured grey) trees are considered to be of low quality and value, but of an adequate condition to remain in the short-term. Trees with a stem diameter of less than 150mm (measured at 1.5m above ground level) are classified as Category C; these trees should also be retained where possible but where they form a significant constraint to development their removal should be permitted. Where they are to be retained they should be

afforded adequate consideration during the design phase and physical protection during the construction phase in accordance with BS 5837:2012. Twenty-seven were classified as Category C; their numbers being Trees 2, 5, 7, 9-11, and Group 2.

3.2.4 **Category U** (coloured red) trees are of such a condition that any existing value would be lost within 10 years. As a result it is recommended that Category U trees are not considered a constraint for development and are removed prior to construction commencing. None of the trees were classified as Category U.

3.2.5 In addition to the four main categories explained above, each tree/group is assigned a sub-category which signifies its overriding value as determined by the surveyor, which is noted by adding a suffix of 1, 2 or 3 alongside the category letter. 1 signifies that the trees/groups main value is arboricultural e.g. it may be a particularly good example or may be rare. 2 signifies that the overriding factor was due to the landscape value that the tree/group provides e.g. it may be part of a group feature such as a screen. 3 indicates that a cultural factor was the overriding value e.g. it may have historical or commemorative importance.

Summary of Categories Awarded			
Category	Tree Numbers	Group Numbers	Hedgerow Numbers
A			
B	1, 4, 7, 15, 17, 22-27, 29, 31, 40	1-3	1
C	2, 3, 5, 6, 8-14, 16, 18-21, 28, 30, 32-39, 41, 42		
U			

3.3 Overall the majority of the trees within the site are of reasonable to good physiological and structural condition with few arboricultural issues noted. Specific details for trees and groups can be found within Appendix 1.

4 Constraints and Retention Considerations

- 4.1 Any tree retained within the design will require protection in accordance with *BS 5837 'Trees in relation to design, demolition and construction'* 2012 regardless of its initial retention category. This protection will usually require trees enclosed by a barrier in areas equal to the Root Protection Areas (As detailed within Appendix 2); this should be undertaken prior to any work beginning, including demolition and site preparation works. The specification for the fencing and for any other protection measures required must be provided within the **Arboricultural Method Statement** and approved by the Local Planning Authority.
- 4.2 Root protection areas should be considered sacrosanct from any disturbance throughout the entire development process - with no ground disturbance, material storage, or physical encroachment allowed. Where possible trees should be protected with continuous barriers protecting trees as groups rather than individual specimens – this is of particular merit around the periphery of the site to protect boundary trees on and off-site.
- 4.3 Areas that have been identified for post-development tree planting should also be protected to ensure that the soil does not become compacted or contaminated.
- 4.4 No new utility runs must be located within any of the retained trees root protection areas. Any works to existing utilities will be undertaken with regard for the retained tree cover and will be in accordance with NJUG (National Joint Utility Groups) guidelines.

5 Arboricultural Impact Assessment

- 5.1 This section concentrates on the proposed development and how it relates to the current tree population within the site. Any conflict issues between the proposed layout and existing trees are discussed and remedial options, where possible, suggested.
- 5.2 As shown within Figure 2 it is proposed that a single wooden cabin used for holiday accommodation will be constructed within the southeast area. It is also proposed that the existing barn in the northwest area will be replaced. Please refer to the Arboricultural Impact Plan (Appendix 3) for larger scale details.

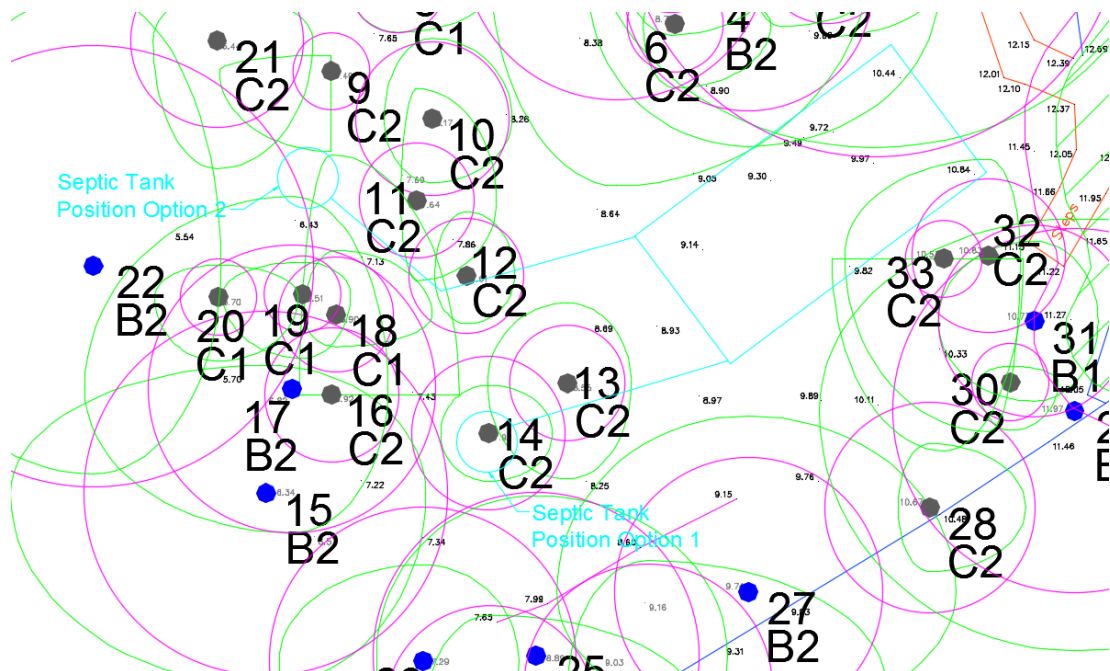


Figure 2: Proposed Layout

5.3 Conflict 1: Loss of trees due to the proposed layout.

It will be necessary only to remove a small number of saplings that were too small to be included within our survey to allow construction of the cabin. Beyond that, the client wishes to remove three small trees to install a septic tank and improve the outlook. In order to replace the barn, one tree is likely to be removed.

Mitigation / Countermeasure: Trees 12-14, all Hawthorn, are proposed for removal to create space for a septic tank and to improve the outlook from the cabin. The trees were classified as Category C so the arboricultural loss will be low. Being surrounded by numerous larger trees their loss will not be noticeable from outside of the

woodland and therefore the visual impact to the wider landscape will be negligible. In order to replace the barn it will be necessary to remove Tree 41, a semi-mature Hazel that was classified as Category C. Its removal will have a minor impact arboriculturally and also from a landscape visual perspective given that a backdrop of trees will be maintained when viewed from the road to the north.

5.4 **Conflict 2: Construction within root protection areas.**

There would be some encroachments from proposed structures within root protection areas of the trees within the woodland.

Mitigation / Countermeasure: The cabin will be completely constructed on site with all materials brought by hand along the existing footpath which will be repaired beforehand. The cabin will be raised off the ground using stilts anchored into the ground or by utilising adjustable foundation supports such as Swift Plinths (https://swiftfoundations.co.uk/swift_plinth/). Either system should allow for minimal impact upon the woodland floor and raising the cabin will allow for root retention beneath the structure. In order to prevent the soil beneath the cabin becoming dry a rainwater harvesting system which distributes water through perforated irrigation hoses will be installed. The cabin has been positioned within a natural clearing and given that no mechanical plant will be utilised during its construction we believe that it could be installed with only minor disruption and without a significantly detrimental impact upon the retained trees. It will be necessary to install a septic tank and two possible locations have been identified on site, as indicated upon the Arboricultural Impact Plan, Appendix 3. The client intendeds to hand excavate the site chosen to position the tank with the spoil being distributed to avoid build up in any one area. Either position identified on the plan should allow for tank installation without a detrimental impact on the surrounding trees.

5.5 **Conflict 3: Location of utilities.**

Damage can be caused to root tissue during the installation of utilities runs.

Mitigation / Countermeasure: It is the intention to route an above ground electricity cable from the existing cabin. Some minor branch pruning may be required to facilitate this but should have a negligible arboricultural impact. All pruning operations would be undertaken in accordance with BS 3998:2010 Tree work, Recommendations. Water will be routed beneath the existing footpath. Because the footpath requires rebuilding it makes sense to utilise that route to bury the water pipe,

with any large diameter roots being routed above or below. As such it should be possible to provide the necessary services with only minimal impact to the trees.

5.6 Potential Conflict 4: Damage to trees within site during demolition and construction.

Trees may be damaged due to a variety of reasons during a demolition and development process.

Mitigation / Countermeasure: A physical demarcation will be created between the retained trees and demolition/development areas to ensure that the trees and the medium within which they are rooting are protected from damage. The actual method of creating the demarcation might vary, where appropriate, but will typically be a physical barrier. The barrier, along with any additional tree protection requirements should be specified within an Arboricultural Method Statement prior to **any** site works commencing.

5.7 Potential Conflict 5: Pruning trees to create clearance to structures.

Trees overhanging the barn from the woodland to the south and hedgerow to the west will require pruning operations in order to facilitate its replacement.

Mitigation / Countermeasure: Pruning operations would primarily be limited to crown lifting of the trees over the proposed barn but with minor branch shortening were necessary. All pruning operations would be undertaken in accordance with BS 3998:2010 Tree work. Recommendations.

5.8 Potential Conflict 6: Damage to structures from trees.

Trees are capable causing damage to structures either directly, such as physical contact damage or indirectly given the right conditions, such as subsidence.

Mitigation / Countermeasure: Chapter 4.2 'Building near Trees' of the NHBC Standards should be consulted by those responsible regarding building foundation depths required according to the species of adjacent trees, and for suitable species to be planted given their intended positions to new and existing structures.

Appendix 1 Tree Details

Key for Tree & Group Data tables:

No.	Tree Number
Species	Tree Name (common)
Age	Y = Young; SM = Semi-mature; EM = Early-mature M = Mature; OM = Over-mature; V = Veteran; D = Dead
DBH	Diameter at Breast Height (measured at 1.5m above ground level to the nearest cm)
Stems	The number of stems the tree has
Height	Overall tree height measured in metres
Crown Spread	Measured along the four cardinal points in metres
CH	Canopy Height (height of crown above ground)
1st Branch	The height and aspect of the 1 st significant limb e.g. 2 NE = 1 st limb at 2m growing in a north-easterly direction.
EstD	Indication of whether any of the trees dimensions were estimated: Y=Yes, N=No.
General Observations	Appraisal of trees general condition
EstCont	Estimated remaining contribution (years)
BS Cat	British Standard 5837:2012 retention category
Recommendation	Remedial works that may be required should the tree be retained (Note: these recommendations do not relate to proposed development requirements – such recommendations should be covered within the Arboricultural Method Statement)

Tree Survey Data

No.	Species	Age	DBH	Stems	Height	Crown Spread				CH	EstD	General Observations	EstCont	BS Cat	Recommendation
						N	S	E	W						
1	Ash	EM	64	2-5	17	8	8	9	9	5	N	Codominant stems with included bark union(s) at base. Moderate deadwood. Continuous canopy with adjacent tree(s).	40+	B2	Crown clean.
2	Hawthorn	EM	18	1	7	1	3	4	0.5	0.5	N	Slightly suppressed form.	40+	C2	No work required
3	Hazel	Y	13	1	4	2	2	4	1	1	N	Suppressed form.	40+	C2	No work required
4	Ash	SM	33	1	15	2	5	6	5	7	N	Branch failure stubs. Minor deadwood. Continuous canopy with adjacent tree(s).	40+	B2	No work required
5	Hawthorn	SM	15	1	7	1	3	4	2	1.5	N	Ivy covered stem limited the inspection. Slightly suppressed form.. Continuous canopy with adjacent tree(s).	40+	C2	No work required
6	Hawthorn	SM	13	1	6	1	2	3	1	1.5	N	Ivy covered stem limited the inspection. Slightly suppressed form.. Continuous canopy with adjacent tree(s).	40+	C2	No work required
7	Ash	SM	39	1	15	1	8	8	4	7	N	Branch failure stubs. Minor deadwood. Continuous canopy with adjacent tree(s).	40+	B2	No work required
8	Hazel	Y	12	1	6	3	2	3	2	0	N	Multi-stemmed at base. Continuous canopy with adjacent tree(s).	40+	C1	No work required
9	Hawthorn	SM	11	1	5.5	0.5	3	0	4	2	N	Stem leaning 15 degrees. Ivy covered stem limited the inspection.	40+	C2	No work required

No.	Species	Age	DBH	Stems	Height	Crown Spread				CH	EstD	General Observations	EstCont	BS Cat	Recommendation
						N	S	E	W						
10	Hawthorn	SM	21	1	6.5	3	2	3	2	2	N	Codominant stems at 1.3m. Continuous canopy with adjacent tree(s).	40+	C2	No work required
11	Hazel	SM	14	2-5	5.5	4	3	3	0.5	2	N	Multi-stemmed at base.	40+	C2	No work required
12	Hawthorn	Y	15	2-5	6	2	2	2	1	0	N	Codominant stems at 0.5m. Continuous canopy with adjacent tree(s).	40+	C2	No work required
13	Hawthorn	SM	15	2-5	6	3	3	2	3	1.5	N	Ivy covered stem & crown limited the inspection. Continuous canopy with adjacent tree(s).	40+	C2	No work required
14	Hawthorn	SM	21	2-5	5	2	2	2	2	1.5	N	Ivy covered stem & crown limited the inspection. Continuous canopy with adjacent tree(s).	40+	C2	No work required
15	Ash	EM	47	2-5	18	4	6	5	8	5	N	Twin-stemmed. Ivy covered stem & crown limited the inspection. Branch failure stubs. Minor deadwood. Continuous canopy with adjacent tree(s).	40+	B2	No work required
16	Ash	Y	17	1	12	8	0	4	1	5	N	Stem leaning 25 degrees. Continuous canopy with adjacent tree(s).	40+	C2	No work required
17	Ash	SM	38	2-5	16	6	5	3	7	6	N	Codominant stems at base. Ivy covered stem & crown limited the inspection. Continuous canopy with adjacent tree(s).	40+	B2	No work required
18	Field Maple	Y	14	1	6	2	1	3	1	2	N	Multi-stemmed. Continuous canopy with adjacent tree(s).	40+	C1	No work required

No.	Species	Age	DBH	Stems	Height	Crown Spread				CH	EstD	General Observations	EstCont	BS Cat	Recommendation
						N	S	E	W						
19	Elm spp	Y	9	1	5.5	1	2	2	3	2.5	N	Continuous canopy with adjacent tree(s).	40+	C1	No work required
20	Elm spp	Y	9	1	5.5	1	2	3	2	1.5	N	Continuous canopy with adjacent tree(s).	40+	C1	No work required
21	Hawthorn	EM	23	1	6.5	2	4	3	2	3	N	Stem leaning 15 degrees. Continuous canopy with adjacent tree(s).	40+	C2	No work required
22	Sycamore	EM	57	1	18	9	7	4	6	0	N	Codominant stems at 1.8m. Ivy covered stem & crown. Continuous canopy with adjacent tree(s). Position not located on the topo.	40+	B2	No work required
23	Holly	M	39	1	7.5	3	4	3	5	0.5	N	Continuous canopy with adjacent tree(s).	40+	B1	No work required
24	Ash	SM	27	1	14	3	4	7	2	5	N	Stem leaning 15 degrees. Continuous canopy with adjacent tree(s).	40+	B2	No work required
25	Ash	EM	42	2-5	16	5	5	6	5	6	N	Multi-stemmed at base. Ivy covered stem & crown. Continuous canopy with adjacent tree(s).	40+	B2	No work required
26	Ash	SM	32	1	15	4	3	8	3	3	N	Stem leaning 10 degrees. Ivy covered stem & crown. Continuous canopy with adjacent tree(s).	40+	B2	No work required
27	Elm spp	SM	34	1	16	6	4	7	6	3	N	Stem leaning 10 degrees. Ivy covered stem & crown. Continuous canopy with adjacent tree(s).	20+	B2	No work required
28	Hawthorn	EM	27	1	5	2	2	3	1	1.5	N	Canopy shaded out by Ivy	20+	C2	Sever ivy.

No.	Species	Age	DBH	Stems	Height	Crown Spread				CH	EstD	General Observations	EstCont	BS Cat	Recommendation
						N	S	E	W						
29	Ash	EM	48	1	19	6	8	11	8	7	N	Surface roots. Minor deadwood. Continuous canopy with adjacent tree(s).	40+	B1	No work required
30	Hawthorn	Y	11	1	2.5	0.5	2	2	1	1	N	Multi-stemmed at base. Slightly suppressed form.	40+	C2	No work required
31	Hawthorn	M	25	2-5	7	3	3	2	3	1.5	N	Codominant stems at base. Ivy covered stem & crown.	40+	B1	No work required
32	Elm spp	Y	21	1	7.5	3	6	1	5	2	N	Stem leaning 10 degrees. Continuous canopy with adjacent tree(s).	20+	C2	No work required
33	Elm spp	Y	11	1	5	0	6	3	4	2	N	Stem leaning 20 degrees. Slightly suppressed form.	20+	C2	No work required
34	Hawthorn	SM	13	2-5	5	2	3	4	2	2.5	N	Codominant stems at base. Stem leaning 10 degrees.	40+	C2	No work required
35	Hawthorn	SM	11	2-5	5	0.5	1	3	2	2.5	N	Codominant stems at 0.5m. Suppressed form.	40+	C2	No work required
36	Hawthorn	SM	15	1	5	3	2	4	3	3	N	Stem leaning 10 degrees. Continuous canopy with adjacent tree(s).	40+	C2	No work required
37	Hawthorn	SM	14	2-5	5	2	2	3	1	3	N	Codominant stems at base. Position not located on the topo.	40+	C2	No work required
38	Elm spp	Y	15	1	8	2	4	4	0.5	3	N		20+	C1	No work required
39	Hawthorn	SM	14	1	5	2	2	2	2	2.5	N	Position not located on the topo.	40+	C1	No work required

No.	Species	Age	DBH	Stems	Height	Crown Spread				CH	EstD	General Observations	EstCont	BS Cat	Recommendation
						N	S	E	W						
40	Ash	SM	32	1	16	6	6	3	7	6	N	Stem leaning 10 degrees. Minor dieback within lower crown. Minor deadwood.	40+	B2	No work required
41	Hazel	SM	18	1	6	3	1	2	1	1	N	Multi-stemmed at base. Crown encroaching building.	40+	C1	No work required
42	Holly	SM	15	1	5.5	2	2	2	2	2	N	Stem leaning 10 degrees.	40+	C2	No work required

Group Data

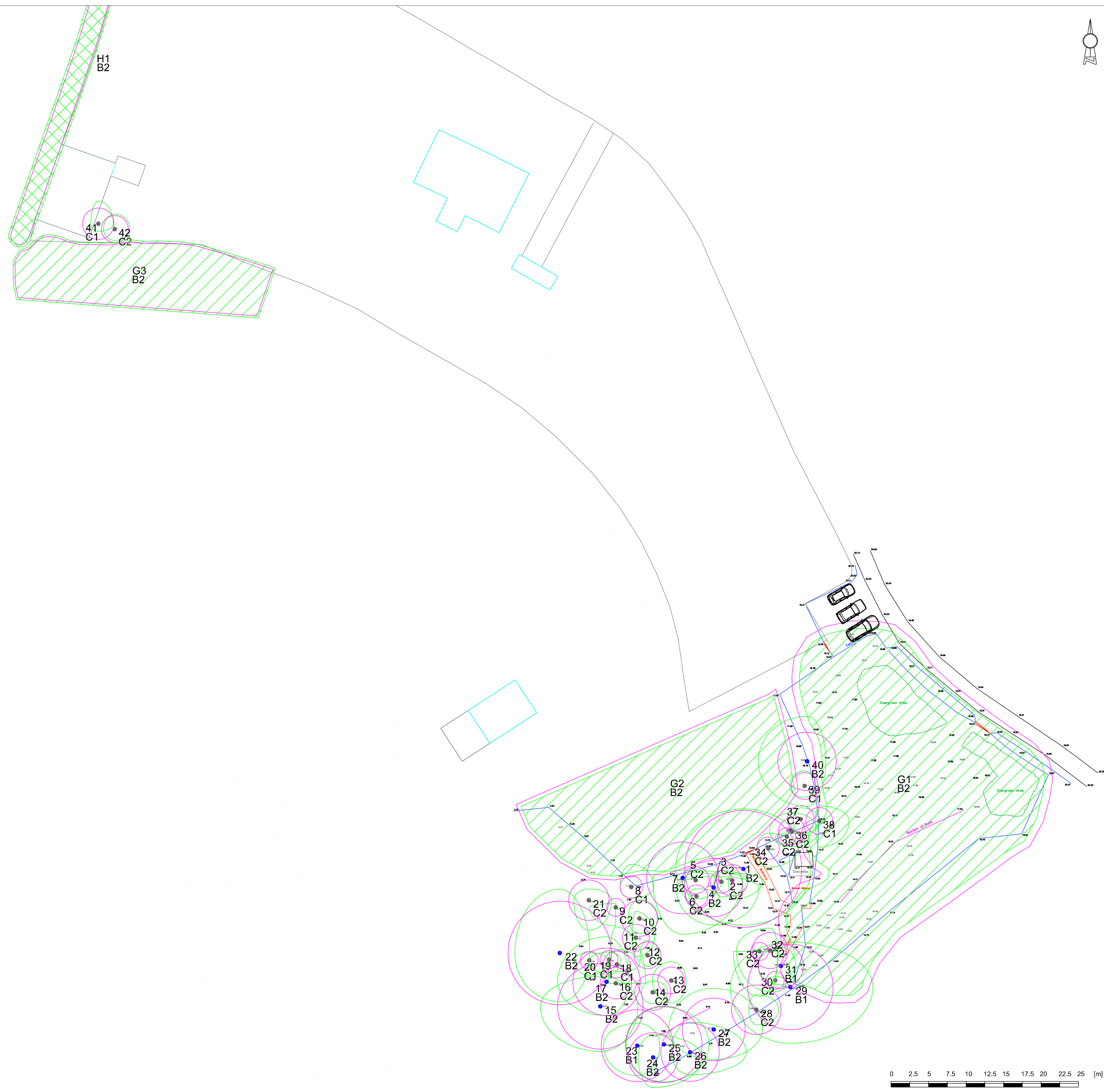
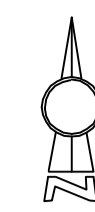
Group Number	Dominant Species	Lesser Species	DBH	Average Height	Age	Average Spread	Condition/Comments	Recommendations	EstCont	BS Cat
1	Ash Hawthorn Elm spp	Holly Sycamore	35	15	Y-M	5	Wooded group above proposed build area. Closed canopy. Sparse herb layer.	No work required	40+	B2
2	Hawthorn Hazel Elm spp	Oak spp Sycamore Ash	20	12	Y-EM	2.5	Wooded group. Closed canopy. Mostly small trees towards proposed build area. Position not located on the topo.	No work required	40+	B2
3	Hawthorn Elder Field Maple Ash	Elm spp	25	8	Y-M	3	Woodland on bank down to beck. Branches in contact with exiting building. Ivy covered stems. Continuous canopy with adjacent tree(s). Only small number of trees close to the building.	No work required	40+	B2








Elliott Consultancy Ltd

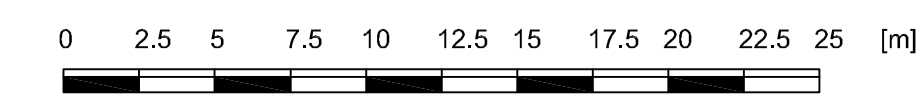
Note: Recommendations are arboriculturally based and do not relate to any development proposals at this stage. Such information would be detailed within an Arboricultural Method Statement

Hedgerow Data

Hedge Number	Dominant Species	Lesser Species	Age	Average Height	Average Depth	Historically Managed Height	Historically Managed Depth	Condition/Comments	Recommendations	EstCont	BS Cat
1	Hawthorn	Elder Holly Elm spp	M	3.5	1.5	Unknown	0.5	Outgrown hedgerow with small gaps.	No work required	40+	B2

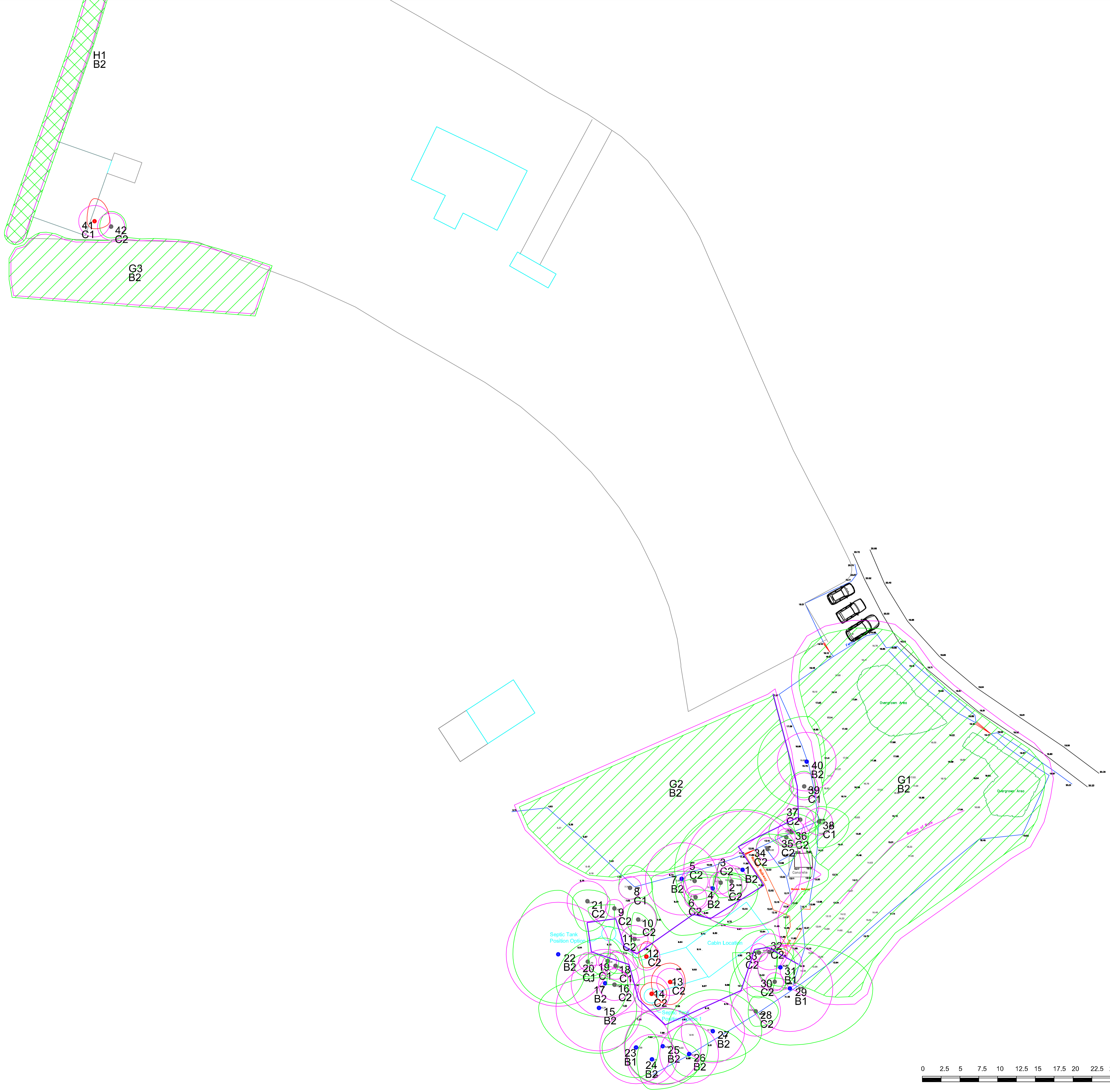
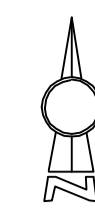













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C1/U BS5837 Retention Category



APPENDIX 2

Drawing Title: Tree Constraints Plan
 Project: Valley View, Golden Grove, Whitby
 Drawing Number: ARB/CP/2217/TCP
 Date: August 2019
 Scale: 1:250 @ A1



-  Tree to be Removed
-  Tree Position Showing Crown Extents and BS5837 Category A
-  Tree Position Showing Crown Extents and BS5837 Category B
-  Tree Position Showing Crown Extents and BS5837 Category C
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APPENDIX 3

Drawing Title: Arboricultural Impact Plan

Project: Valley View, Golden Grove, Whitby

Drawing Number: ARB/CP/2217/AIP

Date: August 2019

Scale: 1:250 @ A1

Appendix 4 BS 5837 Tree Quality Assessment Chart

Table 1 Cascade chart for tree quality assessment

Category and definition	Criteria (including subcategories where appropriate)	Identification on plan
Trees unsuitable for retention (see Note)		
Category U Those in such a condition that they cannot realistically be retained as living trees in the context of the current land use for longer than 10 years	<ul style="list-style-type: none"> Trees that have a serious, irremediable, structural defect, such that their early loss is expected due to collapse, including those that will become unviable after removal of other category U trees (e.g. where, for whatever reason, the loss of companion shelter cannot be mitigated by pruning) Trees that are dead or are showing signs of significant, immediate, and irreversible overall decline Trees infected with pathogens of significance to the health and/or safety of other trees nearby, or very low quality trees suppressing adjacent trees of better quality <p><i>NOTE Category U trees can have existing or potential conservation value which it might be desirable to preserve; see 4.5.7.</i></p>	See Table 2
Trees to be considered for retention		
1 Mainly arboricultural qualities		
Category A Trees of high quality with an estimated remaining life expectancy of at least 40 years	Trees that are particularly good examples of their species, especially if rare or unusual; or those that are essential components of groups or formal or semi-formal arboricultural features (e.g. the dominant and/or principal trees within an avenue)	Trees, groups or woodlands of particular visual importance as arboricultural and/or landscape features
Category B Trees of moderate quality with an estimated remaining life expectancy of at least 20 years	Trees that might be included in category A, but are downgraded because of impaired condition (e.g. presence of significant though remediable defects, including unsympathetic past management and storm damage), such that they are unlikely to be suitable for retention for beyond 40 years; or trees lacking the special quality necessary to merit the category A designation	Trees present in numbers, usually growing as groups or woodlands, such that they attract a higher collective rating than they might as individuals; or trees occurring as collectives but situated so as to make little visual contribution to the wider locality
Category C Trees of low quality with an estimated remaining life expectancy of at least 10 years, or young trees with a stem diameter below 150 mm	Unremarkable trees of very limited merit or such impaired condition that they do not qualify in higher categories	Trees with material conservation or other cultural value
2 Mainly landscape qualities		
3 Mainly cultural values, including conservation		
Trees present in groups or woodlands, but without this conferring on them significantly greater collective landscape value; and/or trees offering low or only temporary/transient landscape benefits		
Trees with no material conservation or other cultural value		

Table excerpt from BS5837:2012

Appendix 5 Arboricultural Glossary

Abiotic Factors – Nonliving factors of the environment, including temperature & wind.

Age-class – A general classification of the tree into either - young, semi-mature, early-mature, mature, over-mature, or senescent.

Amenity Value – A general classification based on the trees contribution to local amenity. Factors such as location and visibility from public spaces, size, maturity and species are taken into account.

Apical Bud/Shoot – The apical bud, also known as the leading shoot, is responsible for shoot extension and is dominant.

Apical Dominance – A singular, leading shoot remains dominant.

Biotic factors - Living factors. For example, animals and pathogens.

Bottle Butt – Term used to describe shape of stem base, usually associated with an internal defect – refer to 'Reaction Wood' below.

Branch union/junction - The point at which a branch joins a larger stem. Can be a point of weakness, especially in certain species.

Cambium - A lateral meristem (see below) in vascular plants located just beneath the bark responsible for secondary growth, e.g. production of annual growth rings.

Canker – A clearly defined area of dead and sunken or malformed bark, caused by bacteria or fungi. Can have a bearing on structural integrity of infected limb(s) depending on size and location.

Chlorosis/Chlorotic – Abnormal yellow or yellow-green coloration of usually green leaves. Essentially a reduction of chlorophyll levels often as a result disease or nutrient deficiency.

Co-dominant stems - A growth characteristic, where two or more stems of similar size grow from the same point. Can create an inherent weakness.

Coppice - The method of managing trees by cutting the stems at between 1.0 inch and 1.0 foot from the ground level on a regular cycle, the cut stumps of the trees or shrubs are allowed to re-grow many new stems.

Crown spread - Gives distances between extreme limits of the crown and the stem, usually along the four compass points. Helps to show crown symmetry.

Crown Reduction – The removal of branch ends to reduce the extreme limits of a trees branch spread and height.

Crown Thin – The removal of selected branches within the crown to thin the internal branch structure.

D.B.H. - 'Diameter at Breast Height', an industry standard to gauge tree stem size and development. Within arboriculture, breast height is taken to be 1.5m above ground level.

Dieback - The reduction in crown vigour and extension growth progressing to death of distal parts; often associated with decline.

Epicormic/adventitious growth - New growth from dormant buds that can often form tenuous attachments. Although some species readily form such shoots, it can be an indication of stress.

Hanger – Term used to describe a branch that has become detached and is being supported by other branches. Can be a hazard to persons and property below.

Hazard Beam – After the loss of a distal part, a limb concentrates growth upwards creating adverse end weights that can render the limb susceptible to failure.

Hyphae – Fine branching tubes that make up the body (or mycelium) of a multi-cellular fungus.

Included bark – Growth characteristic usually caused when two or more stems/branches growing in close proximity ‘fuse’ together entrapping the bark from when the parts were separate in the middle, creating a potential structural weakness. Some trees are able to strengthen such ‘weakened’ unions with adaptive growth.

Meristem - The undifferentiated plant tissue from which new cells are formed, such as that at the tip of a stem or root.

Meristematic Disorder – A growth disorder caused by a disruption of the meristem (see above) from any of a number of biotic factors (see above). Manifests as growths such as ‘Witches Brooms’ & ‘Galls’.

Mycelium – Mass of hyphae that constitutes the vegetative part of a fungus.

Necrosis/Necrotic – Death of tissues usually characterised by a blackening in colour.

Occlusion/Occluded – Normally used to describe the overgrowth of a wound. Also, immovable foreign objects in contact with a tree part can become encased or ‘occluded’ by the tree as it grows incrementally.

Pathogen - An agent that causes disease, especially a living micro-organism such as a bacterium or fungus.

Pollard – The removal and subsequent regular re-removal of the crown of a tree above animal browsing height. Can be an effective method of controlling the size of trees in urban areas. This is ideally begun in the trees early stages and maintained throughout its life.

PSULE – Potential Safe Useful Life Expectancy. A general classification as to the trees life expectancy.

Reaction wood - Essentially additional wood laid down by the tree to compensate for structural defects such as a cavities.

Ring barking/Girdling – the removal of bark around the entire circumference of a stem or branch, causing the death of all distal parts.

Rhizomorphs – Dense bundles of mycelium, blackened by melanin for protection, that aid in the spread of the fungus.

Root Protection Area – An area, usually represented as a circle, around each tree which should remain free from disturbance during a development in order to protect the roots of a tree.

Saprophyte – An organism which exists on dead plant material.

Scaffold branches - The main structural branches within the crown.

Veteran tree – Tree that, by recognised criteria, shows 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.

Vigour - A general classification, as to the present and future potential growth and development of a tree. A comment regarding the health status of the tree specific to its species.