Tree survey & report

South Hill, Storrington Road, Thakeham, Pulborough RH20 3EN

Prepared by

Jonathan Rodwell Cert Arb L4(ABC); TechArborA

January 2023

CONTENTS

Appendices:
1- Tree survey schedule. 2 - Definition of terms. 3 - BS 5837 grading categories. 4 - Tree constraints plan. 5 – Area for potential development.

SUMMARY

- The quality of 59 individual trees within influence of an outline development proposal were assessed;
- the outline development proposal is for construction of five detached dwellings;
- an area for potential development that has little impact on the recorded trees was identified.

Details

- Date of tree survey - 26th January 2023
- Present at tree survey - Jonathan Rodwell Cert Arb L4(ABC); TechArborA
- Date of report - 30th January 2023

Contact Details

Local Planning Authority	Horsham District Council	**Tel -** 01403 215100 **Email** – planning@horsham.gov.uk
Architects	Twenty20 architecture	**Tel -** 01344 513514 **Email** - carlos@2020architecture.co.uk
Arboricultural Consultants	Beechdown Arboriculture Ltd	**Tel** – 01243 814740 **Email-** jonathan.rodwell@beechdown.com

References

Roberts, J. Jackson, N. Smith, M. (2006). *Tree Roots in the Built Environment.* The Stationery Office
BSI British Standards (2012) *BS 5837:2012 Trees in relation to demolition and construction – Recommendations, Fourth (Present) Edition.* BSI

Jonathan Rodwell Cert Arb L4(ABC); TechArborA
Beechdown Arboriculture Ltd 30th January 2023

1.0 Introduction

1.1 I have received instruction from Fran Lazenby, of Cygnature Homes Ltd, to provide arboricultural consultancy services with regard to proposed development at South Hill, Storrington Road, Thakeham, Pulborough RH20 3EN.

1.2 The purpose of the instruction was to:

- Assess the quality of any trees that could be affected by the proposed development.
- Provide plans showing the position of recorded trees, BS grading categories and root protection areas.
- Identify a potential developable area, in relation to constraints posed by trees desirable of retention, to inform planning feasibility studies and design options.

1.3 The survey was conducted and the report prepared with reference to the guidelines detailed in BS 5837:2012 "Trees in relation to design, demolition and construction – Recommendations" and according to good arboricultural practice.

1.4 Contents of the report are exclusively for the use of the client; liability does not extend to any third party without our written consent.

2.0 Documents Provided

2.1 Purchase order **SR/230113**.

2.2 Survey provided by McKenna Civil Engineering Ltd.

MCE31_OM_001	Topographical survey	Not to scale

3.0 Survey Format

3.1 Trees included in the survey were those within influence of the outline development and with a stem diameter, at 1.5m high, greater than 75mm. The trees were inspected from the ground only and no specialist decay detection was undertaken. Trees were assessed from within the site or from public areas.

3.2 The tree identification numbers used are for the purpose of this report and may not reflect numbering used in previous surveys.

3.3 Data was recorded on a handheld computer, the individual trees plotted via GPS and their positions marked on the 1:500 @ A3 tree constraints plan (Appendix 4).

3.4 A detailed tree survey sheet is shown as Appendix 1 with an explanation of the terms and categories covered as Appendix 2.

3.5 The extent of the survey was limited to collecting sufficient data to inform upon the feasibility of potential development, it was not a detailed tree hazard or risk assessment and, unless specified, no guarantee, expressed or implied, can be given regarding the safety of the trees or their suitability for safe long-term retention.

4.0 Grading Categories

4.1 The quality of the surveyed trees was assessed and they were categorised to reflect the criteria recommended in Table 1 of BS 5837:2012 as detailed at Appendix 3.

4.2 The following is a breakdown of the number of trees in each BS category.

Category U	1 tree
Category A	0 trees
Category B	28trees
Category C	30 trees

5.0 Statutory Controls

5.1 Consultation with the Local Planning Authority (LPA) confirmed that the application site is not within a designated Conservation Area and that no individual trees or groups of trees within influence of the development proposal are subject to a Tree Preservation Order.

6.0 Outline Development Proposal

6.1 The outline development proposal is for construction of five detached dwellings, associated infrastructure and landscaping.

7.0 Site Description

7.1 The site outlined for potential development (**Fig.1**) occupies around 0.5ha, with construction of the proposed dwellings planned for the broadly level field extending to the western boundary. Access from Storrington Road is via an unsurfaced but compacted driveway that slopes up to a gravel parking area in the north-east corner of the site. An unsurfaced track between the field and hedges on the eastern boundary continues down to the southern boundary hedge.

Fig.1 – South Hill (Image courtesy of Google Maps (map data © 2023 Google)

7.2 The site geology is recorded as Hythe Formation sandstone sedimentary bedrock while the superficial geology is described by the National Soils Resources Institute as a freely-draining, slightly acid loamy soil. No detailed analysis of the soil structure, composition or pH was undertaken and these details should not be relied on for design purposes.

8.0 Tree Survey

8.1 The recorded trees were within the site or immediately outside the boundaries in the garden of Plum Tree Cottage to the north, South Hill Farm to the south and on the bank above Storrington Road. Trees and shrubs too small to be recorded or beyond influence of the proposed development included those in the following groups marked on the tree constraints plan (Appendix 4) and noted below.

- **A** – 2.5m high clipped laurel hedge.
- **B** – 1.8m high clipped hawthorn hedge.
- **C** – ivy-covered mixed species hedgerow.
- **D** – ivy-covered hawthorn hedgerow.
- **E**– clipped laurel and hawthorn.
- **F** – ivy-covered mixed species hedgerow.
- **G** – flailed conservation mix farm hedgerow.

9.0 Tree Appraisal

9.1 Details and comments of individual trees and groups are listed in the appended BS 5837 survey schedule detailed at Appendix 1.

10.0 Design Layout & Development Potential

10.1 The root protection area (RPA) calculations have been produced using the information gathered from the tree survey and section 4.6.1 of BS 5837:2012. This indicates the RPA in m² and the minimum required all round radial distances for rooting zone protection and allows a view to be taken as to whether the trees can be retained safely without undue damage to their root systems. The RPA calculations are detailed in the appended tree survey and the initial dimensions marked on the 1:500 @ A3 tree constraints plan (Appendix 4).

10.2 No excavation, changes in soil level, construction, routing of service runs or permanent hard-surfacing should take place within the RPAs of retained trees.

10.3 Consideration should be given to the effects that the current tree size, future growth potential, shade levels and leaf and fruit nuisance may have on the

development proposal. Shading, restricted views and potential tree size may all increase pressure for future tree removal; building design that aligns windows parallel or tangentially to retained trees can reduce potential conflicts.

10.4 Tree height and crown spread measurements are detailed in the appended tree survey; the crown spread of the trees and the shadow pattern through the main part of the day is indicated on the tree constraints plan.

10.5 As a starting point the 1:500 @A3 area for potential development plan (Appendix 5) identifies a possible area for development based around all the recorded trees. The horizontal purple hatching shows the extent of the RPA – with a slight buffer - and identifies where excavation, construction, soil level changes, hard-surfacing and routing of service runs should not take place. The blue line shows the extent of the shade pattern throughout the day that is most likely to have an effect on light levels to principal rooms.

10.6 Access roads and driveways within the site should be located outside the RPA or utilise a no-dig construction technique.

11.0 Conclusion

- The outline development proposal can be achieved with little or no impact on retained trees.
- Site layout should consider that no excavation, changes in soil level, construction or routing of service runs should take place within the RPAs of retained trees; if possible, a 2m working margin should be maintained between the RPAs - or canopy spread if larger - and any proposed development to allow room for construction activity.
- Building design should consider current and future growth potential of the trees particularly in relation to light levels to principal rooms and seasonal nuisance i.e. leaf fall.
- An arboricultural review of the final site layout and design may mitigate justifiable tree removal or advise on technical solutions that allows tree retention and development to progress successfully.
- An arboricultural impact assessment, method statement and tree protection plan in support of the final design should accompany the planning application or discharge planning conditions or reserved matters.

BS5837:2012 Tree Survey

Beechdown Arboriculture Ltd
Club Cottage, Top Road
Slindon
Arundel
West Sussex
BN18 0RP
Phone: 01243 814740

Client: Cygnature Homes Ltd
Project: South Hill
Survey Date: 26/01/2023
Surveyor: Jonathan Rodwell Cert Arb L4(ABC); TechArborA

Tree and Tag No / Species	Hght (m)	Stems No	Stems Ø (mm)	Crown Spread (m)	Crown Clear (m)	Age	RP A (m²) R (m)	Phys Condition	Structural Condition	Preliminary Recommendations / Survey Comment	Cat ERC
T1											
Sycamore *Acer pseudoplatanus*	15	1	400	N 5 E 6 S 1.5 W 2	4 2 3 3	M	A: 72.4 R: 4.8	Good	C: Good S: Ivy B: Fair		**B.1.2** 20 to 40 yrs
T2											
Hybrid Black Poplar *Populus x canadensis*	17	1	240	N 1 E 1 S 2 W 3	6 4 5 5	SM	A: 26.1 R: 2.88	Fair	C: Fair S: Ivy B: Fair		**C.1.2** 10 to 20 yrs
T3											
Hybrid Black Poplar *Populus x canadensis*	22	1	380	N 3 E 2 S 3 W 4	6 6 6 6	M	A: 65.3 R: 4.55	Fair	C: Fair S: Ivy B: Fair		**B.1.2** 20 to 40 yrs
T4											
Sycamore *Acer pseudoplatanus*	17	1	420	N 3 E 5 S 6 W 5	5 3 3 3	M	A: 79.8 R: 5.03	Good	C: Good S: Ivy B: Fair		**B.1.2** 20 to 40 yrs

Age Classifications: N Newly planted; Y Young; SM Semi-mature; EM Early Mature; M Mature; OM Over Mature

Condition: C Crown; S Stem; B Basal area

Stems: Ø Diameter; (Eq) Equivalent stem diameter using BS5837:2012 definition

ERC: Estimated Remaining Contributio

Tree and Tag No Species	Hght (m)	Stems No	Stems Ø (mm)	Crown Spread (m)	Crown Clear (m)	Age	RP A (m²) R (m)	Phys Condition	Structural Condition	Preliminary Recommendations Survey Comment	Cat ERC
T5											
Hybrid Black Poplar *Populus x canadensis*	25	1	450	N 4 E 2 S 6 W 5	2 2 4 6	M	A: 91.6 R: 5.39	Good	C: Good S: Ivy B: Fair		**B.1.2** 20 to 40 yrs
T6											
Hybrid Black Poplar *Populus x canadensis*	27	1	680	N 7 E 6 S 8 W 7	1 1 3 4	M	A: 209.2 R: 8.16	Good	C: Good S: Ivy B: Fair		**B.1.2** 20 to 40 yrs
T7										Estimated Measurements	
Goat Willow *Salix caprea*	8	1	400	N 1 E 6 S 5 W 6	1 1 1 1	M	A: 72.4 R: 4.8	Fair	C: Fair S: Ivy B: Fair	Off-site tree leaning to the south.	**B.1** 10 to 20 yrs
T8											
Sycamore *Acer pseudoplatanus*	17	1	480	N 6 E 6 S 7 W 6	2 2 5 6	M	A: 104.2 R: 5.75	Good	C: Good S: Ivy B: Fair		**B.1.2** 20 to 40 yrs
T9											
Silver Birch *Betula pendula*	19	2	461 (Eq)	N 5 E 3 S 5 W 6	0.5 4 3 2	M	A: 96.1 R: 5.53	Fair	C: Fair S: Ivy B: Fair		**C.1** 10 to 20 yrs
T10											
Silver Birch *Betula pendula*	7	1	240	N 3 E 1 S 3 W 3	2 6 3 2	SM	A: 26.1 R: 2.88	Decline	C: Poor S: Ivy B: Poor		**C.1** <10 yrs

Age Classifications: N Newly planted; Y Young; SM Semi-mature; EM Early Mature; M Mature; OM Over Mature

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T11										Estimated Measurements	
Sycamore *Acer pseudoplatanus*	20	1	600	N 6 E 8 S 8 W 5	2 2 4 5	M	A: 162.9 R: 7.2	Good	C: Good S: Ivy B:		**B.1.2** 20 to 40 yrs
T12										Estimated Measurements	
Horse Chestnut *Aesculus hippocastanum*	7	1	400	N 4 E 4 S 4 W 4	2 2 2 2	M	A: 72.4 R: 4.8	Fair	C: Poor S: Ivy B: Fair	Pollarded at 4m.	**C.1** 10 to 20 yrs
T13										Estimated Measurements	
Horse Chestnut *Aesculus hippocastanum*	6	1	450	N 3 E 3 S 3 W 3	1.5 1.5 1.5 1.5	M	A: 91.6 R: 5.39	Fair	C: Poor S: Ivy B: Fair	Pollarded at 3m.	**C.1** 10 to 20 yrs
T14										Estimated Measurements	
Horse Chestnut *Aesculus hippocastanum*	5	1	500	N 4 E 4 S 4 W 4	2 1.5 2 1.5	M	A: 113.1 R: 6	Fair	C: Poor S: Fair B: Fair	Pollarded at 3m.	**C.1** 10 to 20 yrs
T15										Estimated Measurements	
Weeping Willow *Salix chrysocoma*	9	1	550	N 5 E 5 S 3 W 4	2 2 2 2	M	A: 136.9 R: 6.6	Good	C: Fair S: Ivy B: Fair	Pollarded at 4m.	**B.1** 20 to 40 yrs
T16										Estimated Measurements	
Horse Chestnut *Aesculus hippocastanum*	5	1	550	N 3 E 3 S 3 W 3	2 2 2 2	M	A: 136.9 R: 6.6	Fair	C: Poor S: Ivy B:	Pollarded at 3m.	**C.1** 10 to 20 yrs

Age Classifications: N Newly planted; Y Young; SM Semi-mature; EM Early Mature; M Mature; OM Over Mature

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T17										Estimated Measurements	
Horse Chestnut *Aesculus hippocastanum*	5	1	550	N 3 E 3 S 3 W 3	2 2 2 2	M	A: 136.9 R: 6.6	Fair	C: Poor S: Ivy B:	Pollarded at 3m.	**C.1** 10 to 20 yrs
T18										Estimated Measurements	
Tree of Heaven *Ailanthus altissima*	25	1	650	N 8 E 9 S 10 W 7	10 12 10 9	M	A: 191.2 R: 7.8	Good	C: Good S: Ivy B:		**B.1.2** 20 to 40 yrs
T19										Estimated Measurements	
Common Lime *Tilia europaea*	20	1	500	N 6 E 7 S 6 W 5	2 2 2 2	M	A: 113.1 R: 6	Good	C: Good S: Fair B:		**B.1.2** 20 to 40 yrs
T20											
Wild Cherry *Prunus avium*	6	1	260	N 4 E 2 S 4 W 3	2 3 3 2	M	A: 30.6 R: 3.12	Fair	C: Fair S: Poor B: Fair	Pollarded at 4m; broken branch stubs and bark wounds low on stem.	**C.1** 10 to 20 yrs
T21										Estimated Measurements	
Cider Gum *Eucalyptus gunnii*	15	1	300	N 3 E 6 S 4 W 2	4 2 2 2	SM	A: 40.7 R: 3.59	Good	C: Good S: Fair B:		**B.1** 20 to 40 yrs
T22											
Sycamore *Acer pseudoplatanus*	12	1	400	N 3 E 5 S 4 W 4	3 2 4 4	M	A: 72.4 R: 4.8	Fair	C: Fair S: Ivy B: Fair		**B.1** 20 to 40 yrs

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T23											
Sycamore *Acer pseudoplatanus*	14	2	354 (Eq)	N 2 E 3 S 3 W 4	1 2 3 3	SM	A: 56.6 R: 4.24	Fair	C: Fair S: Ivy B: Fair		C.1 10 to 20 yrs
T24										Estimated Measurements	
Sycamore *Acer pseudoplatanus*	18	1	450	N 5 E 4 S 4 W 5	2 4 4 3	M	A: 91.6 R: 5.39	Good	C: Good S: Ivy B: Fair		B.1 20 to 40 yrs
T25										Estimated Measurements	
Sycamore *Acer pseudoplatanus*	18	1	350	N 3 E 6 S 5 W 4	8 6 6 5	M	A: 55.4 R: 4.19	Good	C: Fair S: Ivy B: Fair		B.1 20 to 40 yrs
T26										Estimated Measurements	
Sycamore *Acer pseudoplatanus*	16	3	456 (Eq)	N 5 E 6 S 4 W 4	2 2 3 4	M	A: 93.9 R: 5.46	Good	C: Poor S: Ivy B:	Off-site tree in declining condition.	C.1 10 to 20 yrs
T27											
Sycamore *Acer pseudoplatanus*	20	2	410 (Eq)	N 2 E 3 S 3 W 4	1 8 3 4	M	A: 76.2 R: 4.92	Fair	C: Good S: Ivy B: Fair		B.1 20 to 40 yrs
T28											
Sycamore *Acer pseudoplatanus*	20	1	480	N 3 E 3 S 3 W 4	3 6 8 3	M	A: 104.2 R: 5.75	Fair	C: Good S: Ivy B: Fair		B.1 20 to 40 yrs

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T29											
Sycamore *Acer pseudoplatanus*	20	1	280	N 6 E 4 S 3 W 2	8 9 10 10	M	A: 35.5 R: 3.36	Fair	C: Good S: Ivy B: Fair		**B.1** 20 to 40 yrs
T30											
Sycamore *Acer pseudoplatanus*	20	2	375 (Eq)	N 3 E 4 S 2 W 3	4 4 8 5	M	A: 63.6 R: 4.49	Fair	C: Fair S: Ivy B: Fair		**B.1** 20 to 40 yrs
T31										Estimated Measurements	
Norway Maple *Acer platanoides*	10	1	180	N 3 E 3 S 3 W 3	2 2 1 2	M	A: 14.7 R: 2.16	Good	C: Good S: Good B:		**B.1** 20 to 40 yrs
T32										Estimated Measurements	
English Oak *Quercus robur*	12	1	350	N 6 E 6 S 6 W 6	2 3 3 4	SM	A: 55.4 R: 4.19	Good	C: Good S: Good B:		**B.1** 20 to 40 yrs
T33											
Wild Cherry *Prunus avium*	11	1	180	N 3 E 2 S 3 W 2	3 2 2 3	SM	A: 14.7 R: 2.16	Good	C: Good S: Fair B: Fair		**B.1** 20 to 40 yrs
T34											
Sycamore *Acer pseudoplatanus*	8	1	260	N 1 E 1 S 1 W 1	2 2 2 2	SM	A: 30.6 R: 3.12	Fair	C: Poor S: Ivy B: Poor	Pollarded at 4m; bark wounds at base; raised and compacted soil level.	**C.1** 10 to 20 yrs

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T35											
Sycamore *Acer pseudoplatanus*	7	1	250	N 1 E 1 S 2 W 1	2 2 2 2	SM	A: 28.3 R: 3	Fair	C: Poor S: Ivy B: Poor	Pollarded at 3m; damaged, broken stem; raised and compacted soil level.	C.1 10 to 20 yrs
T36											
Hornbeam *Carpinus betulus*	6	2	213 (Eq)	N 1 E 3 S 2 W 1	0.5 0.5 0.5 0.5	SM	A: 20.5 R: 2.55	Fair	C: Fair S: Ivy B: Fair	Pollarded at 3m.	C.1 10 to 20 yrs
T37											
Sycamore *Acer pseudoplatanus*	19	1	400	N 6 E 3 S 3 W 4	5 6 6 6	SM	A: 72.4 R: 4.8	Fair	C: Fair S: Ivy B: Fair		B.1.2 20 to 40 yrs
T38											
Sycamore *Acer pseudoplatanus*	7	1	180	N 1 E 1 S 3 W 1	4 3 2 3	SM	A: 14.7 R: 2.16	Fair	C: Poor S: Ivy B: Fair	Pollarded at 4m.	C.1 10 to 20 yrs
T39											
Sycamore *Acer pseudoplatanus*	22	1	380	N 2 E 3 S 2 W 4	7 4 2 1	M	A: 65.3 R: 4.55	Fair	C: Fair S: Ivy B: Fair		B.1.2 20 to 40 yrs
T40											
Sycamore *Acer pseudoplatanus*	20	1	390	N 6 E 4 S 3 W 3	5 5 2 6	M	A: 68.8 R: 4.67	Fair	C: Fair S: Ivy B: Fair		B.1.2 20 to 40 yrs

Age Classifications: N Newly planted; Y Young; SM Semi-mature; EM Early Mature; M Mature; OM Over Mature

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T41											
Sycamore *Acer pseudoplatanus*	18	1	270	N 2 E 2 S 4 W 2	4 3 2 3	SM	A: 33 R: 3.24	Fair	C: Fair S: Ivy B: Fair		**C.1** 10 to 20 yrs
T42											
Sycamore *Acer pseudoplatanus*	22	1	380	N 5 E 3 S 5 W 2	4 8 6 6	M	A: 65.3 R: 4.55	Fair	C: Fair S: Ivy B: Fair		**B.1.2** 20 to 40 yrs
T43											
Sycamore *Acer pseudoplatanus*	22	1	300	N 3 E 3 S 5 W 2	9 9 4 2	M	A: 40.7 R: 3.59	Fair	C: Fair S: Ivy B: Fair		**B.1.2** 20 to 40 yrs
T44											
Sycamore *Acer pseudoplatanus*	20	1	350	N 1 E 2 S 6 W 3	10 3 2 4	M	A: 55.4 R: 4.19	Fair	C: Fair S: Ivy B: Fair		**B.1.2** 20 to 40 yrs
T45											
Sycamore *Acer pseudoplatanus*	21	3	318 (Eq)	N 3 E 2 S 2 W 2	7 8 6 5	SM	A: 45.7 R: 3.81	Fair	C: Fair S: Ivy B: Fair		**C.1.2** 10 to 20 yrs
T46											
Sycamore *Acer pseudoplatanus*	20	1	300	N 1 E 2 S 6 W 3	5 6 1 5	M	A: 40.7 R: 3.59	Fair	C: Fair S: Ivy B: Fair		**C.1.2** 10 to 20 yrs

Age Classifications: N Newly planted; Y Young; SM Semi-mature; EM Early Mature; M Mature; OM Over Mature

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T47											
Sycamore *Acer pseudoplatanus*	22	1	580	N 7 E 4 S 5 W 3	3 4 2 5	M	A: 152.2 R: 6.96	Fair	C: Fair S: Ivy B: Fair		**C.1.2** 10 to 20 yrs
T48											
Sycamore *Acer pseudoplatanus*	22	2	389 (Eq)	N 2 E 1 S 7 W 3	9 9 2 7	M	A: 68.6 R: 4.67	Fair	C: Fair S: Ivy B: Fair		**C.1.2** 10 to 20 yrs
T49											
Sycamore *Acer pseudoplatanus*	22	1	300	N 3 E 3 S 2 W 1	8 5 2 3	M	A: 40.7 R: 3.59	Fair	C: Fair S: Ivy B: Fair		**C.1.2** 10 to 20 yrs
T50											
Sycamore *Acer pseudoplatanus*	22	1	400	N 1 E 3 S 6 W 3	8 6 2 3	M	A: 72.4 R: 4.8	Fair	C: Fair S: Ivy B: Fair		**C.1.2** 10 to 20 yrs
T51											
Sycamore *Acer pseudoplatanus*	22	1	380	N 2 E 2 S 6 W 2	7 8 6 8	SM	A: 65.3 R: 4.55	Fair	C: Fair S: Ivy B: Fair		**C.1.2** 10 to 20 yrs
T52											
Sycamore *Acer pseudoplatanus*	22	1	200	N 1 E 1 S 1 W 1	10 8 8 8	SM	A: 18.1 R: 2.4	Fair	C: Fair S: Ivy B: Fair		**C.1.2** 10 to 20 yrs

Age Classifications: N Newly planted; Y Young; SM Semi-mature; EM Early Mature; M Mature; OM Over Mature

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T53											
Sycamore *Acer pseudoplatanus*	22	1	330	N 1 E 6 S 4 W 2	10 4 2 8	M	A: 49.3 R: 3.96	Fair	C: Fair S: Ivy B: Fair		**C.1.2** 10 to 20 yrs
T54											
Sycamore *Acer pseudoplatanus*	21	1	300	N 1 E 3 S 3 W 2	10 4 2 6	M	A: 40.7 R: 3.59	Fair	C: Fair S: Ivy B: Fair		**C.1.2** 10 to 20 yrs
T55										Estimated Measurements	
Sycamore *Acer pseudoplatanus*	22	1	400	N 4 E 6 S 3 W 3	4 4 4 5	M	A: 72.4 R: 4.8	Fair	C: Fair S: Ivy B: Fair		**C.1.2** 10 to 20 yrs
T56										Estimated Measurements	
Sycamore *Acer pseudoplatanus*	22	1	350	N 5 E 6 S 2 W 3	2 10 10 5	M	A: 55.4 R: 4.19	Fair	C: Fair S: Ivy B: Fair		**C.1.2** 10 to 20 yrs
T57										Estimated Measurements	
Sycamore *Acer pseudoplatanus*	20	1	200	N 1 E 3 S 1 W 2	10 10 11 10	SM	A: 18.1 R: 2.4	Fair	C: Fair S: Ivy B: Fair		**C.1.2** 10 to 20 yrs
T58										Estimated Measurements	
Sycamore *Acer pseudoplatanus*	6	1	200	N 4 E 3 S 1 W 4	3 4 2 4	SM	A: 18.1 R: 2.4	Poor	C: Poor S: Ivy B: Fair	Pollarded at 4m.	**C.1** 10 to 20 yrs

Age Classifications: N Newly planted; Y Young; SM Semi-mature; EM Early Mature; M Mature; OM Over Mature

Condition: C Crown; S Stem; B Basal area

Stems: Ø Diameter; (Eq) Equivalent stem diameter using BS5837:2012 definition

ERC: Estimated Remaining Contributio

Tree and Tag No Species	Hght (m)	Stems No	Stems Ø (mm)	Crown Spread (m)	Crown Clear (m)	Age	RP A (m²) R (m)	Phys Condition	Structural Condition	Preliminary Recommendations Survey Comment	Cat ERC
T59										Estimated Measurements	
English Elm *Ulmus procera*	10	1	220	N 1 4 E 1 4 S 1 4 W 1 4		Dead	A: 21.9 R: 2.64	Dead	C: Poor S: Ivy B: Poor	Dead tree on bank above road.	**U** n/a

Age Classifications:	N	Newly planted	EM	Early Mature	**Condition:**	C	Crown	**Stems:**	Ø Diameter
	Y	Young	M	Mature		S	Stem		(Eq) Equivalent stem diameter using BS5837:2012 definition
	SM	Semi-mature	OM	Over Mature		B	Basal area	**ERC:**	Estimated Remaining Contributio

Tree ID/tag -	Identification number and/or tree tag number.	
Species -	Common and/or scientific name.	
Height (m) -	To the nearest 0.5m below 10m; to the nearest 1m above 10m.	
Ø (mm)/No. of stems -	Stem diameter measured at 1.5m or equivalent with reference to Annex C of BS5837:2012.	
First branch -	Height above ground level and direction of first significant branch.	
Crown spread (m) -	Measured at the cardinal points.	
Canopy height/clearance -	Crown clearance in metres above ground level at the cardinal points.	
RPA -	Root protection area (m^2) and length of radial protection (m).	
Age class:	*Young* -	Less than approximately 10 years old.
	Semi-Mature -	Less than 1/5 of typical life expectancy.
	Mature -	Between 1/5 and 5/5 of typical life expectancy.
	Over-Mature -	Tree having reached its maximum life span and declining in health and size.
	Veteran -	A tree that is of interest biologically, aesthetically or culturally because of its age, size or condition.
Structural/physiological condition:	General condition of tree crown, stem and basal area structure and form - assessed as:	
	Good -	Good form, structure and vitality; no apparent signs of decay, structural weakness, decline in health, pests or diseases.
	Fair -	Moderate form and structure.
	Poor -	Poor form or structure; significant decay, structural weakness or decline in vitality.
BS 5837 category -	BS grading category detailed at Appendix 3.	
ERC -	Estimated remaining contribution.	

Trees Unsuitable for Retention

Category U	Trees in such a condition that they cannot realistically be retained as living trees in the context of the current land use for longer than 10 years – shown in dark red on plans.

Trees To Be Considered for Retention

Category A	Trees of high quality with an estimated remaining life expectancy of at least 40 years - shown in light green on plans.
	1 - Mainly arboricultural qualities – trees that are good examples of their species, especially if rare or unusual; or those that are essential components of groups, formal or semi-formal arboricultural features. *2 - Mainly landscape qualities* – trees, groups or woodlands of particular visual importance as arboricultural and/or landscape features. *3 - Mainly cultural values, including conservation* – trees, groups or woodlands of significant conservation, historical, commemorative or other value.
Category B	Trees of moderate quality with an estimated life expectancy of at least 20 years - shown in mid blue on plans.
	1 - Mainly arboricultural qualities – trees that might be included in category A but are downgraded because of impaired condition (e.g. presence of significant but remediable defects) to the extent that they are unlikely to be suitable for retention beyond 40 years; or trees lacking the particular quality necessary for category A designation. *2 - Mainly landscape qualities* – trees present in numbers, usually growing as groups or woodlands, that attract a higher collective rating than they might as individuals; or groups of trees situated so as to make little visual contribution to the wider locality. *3 - Mainly cultural values, including conservation* – trees with material conservation or other cultural values.

Category C	Trees of low quality with an estimated remaining life expectancy of at least 10 years, or young trees with a stem diameter under 150mm - shown in grey on plans.
	1 - Mainly arboricultural qualities – unremarkable trees of very limited merit or such impaired condition that they do not qualify in higher categories. *2 - Mainly landscape qualities* – 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 landscape benefits. *3 - Mainly cultural values, including conservation* – trees with no material conservation or other cultural values.

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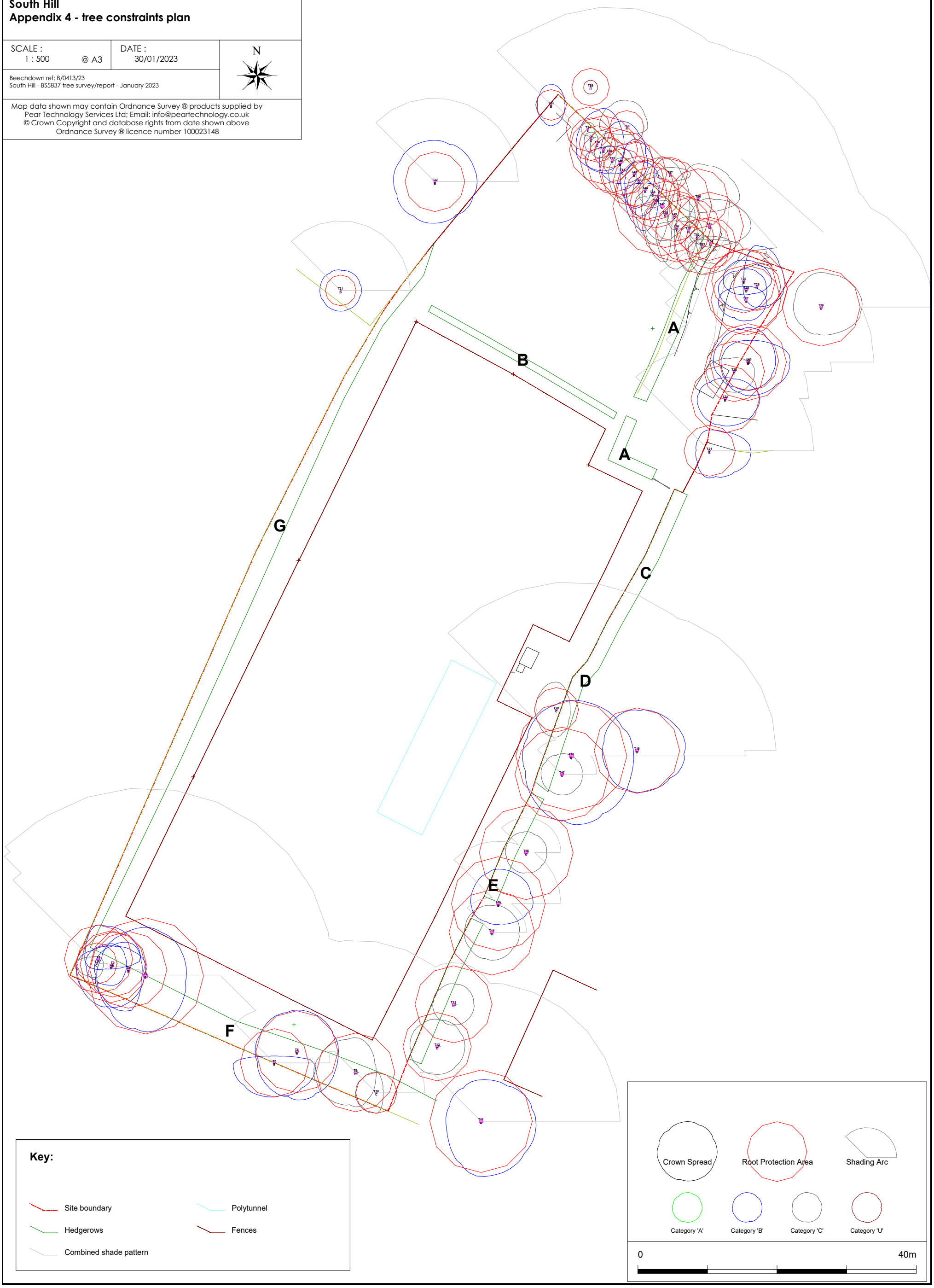
South Hill
Appendix 4 - tree constraints plan

SCALE :	DATE :
1 : 500 @ A3	30/01/2023

Beechdown ref: B/0413/23
South Hill - BS5837 tree survey/report - January 2023



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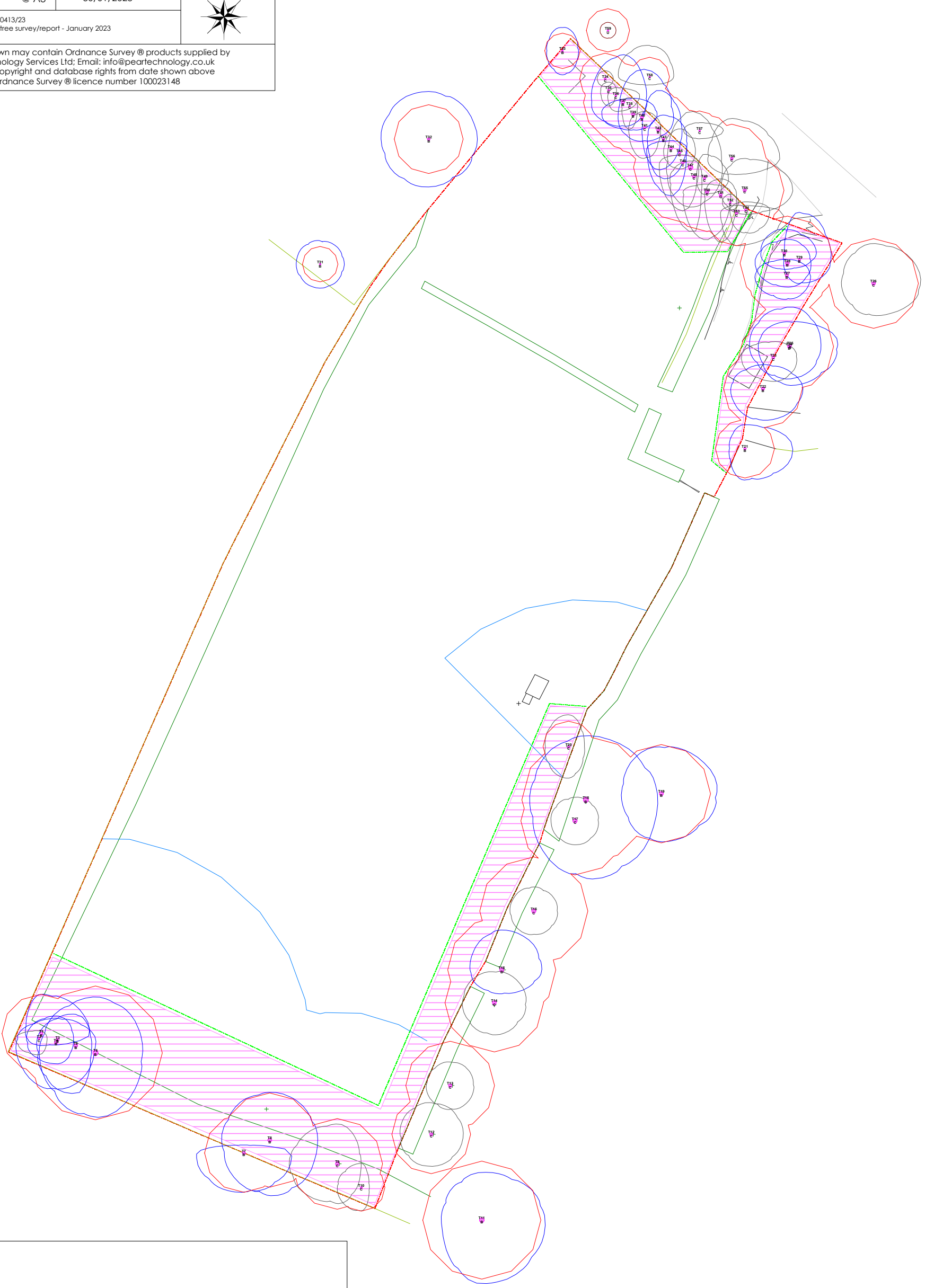
South Hill
Appendix 5 - area for potential development

SCALE :	DATE :
1 : 500 @ A3	30/01/2023

Beechdown ref: B/0413/23
South Hill - BS5837 tree survey/report - January 2023

N



Key:

- Construction exclusion zones
- Site boundary
- Protective barriers
- Shade
- Hedgerows
- Combined RPA