

Arboricultural Survey

Wandleys Lane
Fontwell
West Sussex

28th February 2018



PJC ref: 4789/18-01 Rev -

This report has been prepared by
PJC Consultancy Ltd
on behalf of
Welbeck Strategic Land II LLP

**Prepared
by**

Peter Davies FdSc Arboriculture M.Arbor.A

Peter has a Foundation Degree in Arboriculture from the University of Brighton and is a professional member of the Arboricultural Association. He has over ten years experience in the arboricultural industry, originally working as a groundsman and feller, and progressing into consultancy. He is a Lantra accredited professional tree inspector.

**Checked
by**

Nick Betts HND For M.Arbor.A

Nick has attained an HND in forestry management and is a professional member of both the Arboricultural Association and the Consulting Arborists Society. He has worked in the arboricultural and forestry industries for 17 years. He started his career as a forestry worker before qualifying as a tree surgeon, working in both the private and commercial sectors. He has been a practising consultant since 2004. He is a Lantra accredited professional tree inspector.

Sussex office:

Chapter House, Priesthawes Farm
Hailsham Road, Polegate
East Sussex, BN26 6QU
Tel: 01323 832120

E: contact@pjconsultancy.com

Kent office:

Unit 1, Hanover Mill,
Mersham, Ashford,
Kent, TN25 6NU
Tel: 01233 225365

W: www.pjconsultancy.com



CONTENTS

1 Introduction

2 Site visit and survey methodology

3 Site details and survey findings

4 Recommendations

Appendices:

1. Tree Constraints Plan
2. Tree Survey Schedule
3. Cascade Chart for tree quality assessment
4. Photographs

1 INTRODUCTION

1.1 Instruction: PJC Consultancy has been instructed by Welbeck Strategic Land II LLP to provide an initial arboricultural survey of Wandleys Lane in Fontwell. The survey is to be undertaken in accordance with BS5837: 2012 '*Trees in relation to design, demolition and construction – Recommendations*'.

1.2 Survey objectives: This survey has been undertaken with the following objectives:

- To record a schedule of significant trees (dimensions and locations) situated at the prospective development site.
- To assess the quality and value of the existing tree stock in terms of arboricultural, landscape, historical/conservation, or public amenity value.
- To provide information relating to planning constraints that may restrict works to trees at the site.
- To provide an assessment of the material constraints posed by the existing tree stock on potential future developments at the site.
- To aid the design process, ensuring prospective developments integrate appropriately with the existing tree stock, to maximise the potential of the proposed development site.

1.3 Scope of this report: This report is concerned with all significant trees and arboricultural features located on both sides of Wandleys Lane from the property named Lashburn to the junction with West Walberton Lane. Additionally, trees located in the private gardens on each side of the road have also been surveyed where their crown spreads and/or root protection areas encroach highways land.

1.4 Contents of report: This report includes the following:

- A summary of the existing tree stock and notable arboricultural features.
- Tree Constraints Plan in accordance with BS5837: 2012.
- Tree Survey Schedule containing the relevant measurements and information for each tree or tree group as required in BS5837: 2012.

1.5 Documents and information provided: The following documents were used to aid the preparation of this report:

- Drawing ref. ENC-310516-0W6 – Topographical Survey
- West Sussex Highways Boundary Plan

2 SITE VISIT AND SURVEY METHODOLOGY

2.1 Site visit: A site visit was carried out on 5th February 2018. The weather conditions at the time were light cloud and dry with no wind. The visibility was adequate for visual tree inspection from ground level.

2.2 Tree survey information: The following information was recorded in the Tree Survey Schedule for each individual tree (average dimensions are recorded for groups):

- Tree reference number. (T=tree, G=group, H=hedgerow). Tree numbers suffixed with PA on the Tree Constraints Plan indicate the trees location was not included on the site plan provided so the tree's position was approximated on site.
- Species (common and scientific name).
- Overall tree height (m).
- Stem diameter (mm) per stem or average diameter for multi-stemmed trees with six or more stems.
- Branch spread (m) measured to the four cardinal points.
- Existing height (m) above ground level of lowest significant branch and direction of growth (for individual trees only).
- Existing height (m) above ground level of canopy.
- Age class (young, semi mature, early mature, mature, over mature or veteran).
- Physiological condition (good, fair, poor).
- Structural condition (good, fair, poor).
- Comments (general description of tree(s) including any notable features).
- Preliminary management recommendations (prescriptions for tree management processes based on the current land use and not related to the prospective development).
- Tree categorisation (see below).
- Root protection area (m²).
- Root protection radius (m).

2.3 Tree categorisation: The condition and value of each tree was evaluated based on the current land use. Each tree or tree group has been awarded either category A, B, C or U and a sub category of either 1,2 or 3 or a combination of the sub categories.

2.4 Tree categorisation summary:

- A – Trees of good condition and high arboricultural, landscape or conservation value. Must have a potential life span in excess of forty years.
- B – Trees of moderate condition, with minor defects or sub-optimal form but are still of modest arboricultural, landscape or conservation value. Must have a potential life span in excess of twenty years.
- C – Unremarkable trees of poor condition or form with limited arboricultural, landscape or conservation value, or trees with a stem diameter under 150mm. Must have a potential life span in excess of ten years.
- U – Trees of such impaired condition that they cannot realistically be retained as living trees in the context of the current land use for more than ten years. These trees do not need to be removed if they are not dangerous and do not conflict with the proposed development, but should not be considered a constraint to development.

2.5 Tree sub categorisation summary:

- 1 – Trees have mainly arboricultural value, e.g. trees of good condition, form and vitality or rare tree species.
- 2 – Trees have mainly landscape value, e.g. trees of landscape prominence, that serve to screen unsightly views or that are required for privacy. Also trees present in groups that attain higher collective rating than they would as individuals.
- 3 – Trees with mainly cultural value including conservation, e.g. commemorative trees, trees of historical significance or veteran trees.

2.6 Each tree can only be categorised as A, B or C but may comply with more than one sub category. A cascade chart further explaining how tree categorisation is decided is included in Appendix 3.

2.7 Root protection areas: A root protection area represents the minimum amount of root growth required to support a tree. It is a standardised calculation based on the stem diameter(s) measured at 1.5m and is not necessarily representative of the actual or total rooting area. The formulas used to calculate root protection areas are shown below:

Table 1: Root protection area formulas

For single stemmed trees

$$\text{Root protection area (m}^2\text{)} = \frac{(\text{stem diameter (mm)} \times 12)^2 \times \pi}{1000}$$

For trees with two to five stems, a combined stem diameter is calculated as follows:

$$\sqrt{(\text{stem diameter 1})^2 + (\text{stem diameter 2})^2 \dots + (\text{stem diameter 5})^2}$$

For trees with more than five stems, the combined stem diameter is calculated as follows:

$$\sqrt{(\text{mean stem diameter})^2 \times \text{number of stems}}$$

2.8 The root protection areas are plotted onto the Tree Constraints Plan in Appendix 1, and recorded in the Tree Survey Schedule in Appendix 2. These are represented as a circle on the plan (unless significant rooting constraints are present), and are colour coded depending on the category the tree has been awarded. Where existing site conditions/features are present that are deemed likely to have affected the root morphology, the root protection areas have represented as a polygon of equivalent area.

2.9 The proposed layout should avoid level changes or the placement of new buildings and areas of hard surfacing within the root protection areas of retained trees. In certain situations, engineered solutions are available to allow construction within the root protection areas however further input from an arboriculturalist should be sought regarding their site-specific viability before these methods are relied upon.

2.10 The disturbance of a tree's root system can result in crown dieback and even death of the tree. Roots are used to support the tree structurally as well as the absorption of moisture and nutrients from the soil. They also act as storage and transport for water and nutrients.

2.11 Direct damage such as root severance can lead to ill health, as can compaction of the soil by construction traffic, heavy plant and storage of materials. Changing the nature of the surface above the growing medium, (i.e. from porous to non-porous), can alter the resources available to the tree, which in turn can lead to its decline.

2.12 The majority of root growth is usually found within the top 600mm-1000mm of soil. As such, even shallow disturbance within root protection areas can potentially have a significant impact on the trees.

2.13 The root protection areas must be left free from excavation and disturbance, and protected from compaction or contamination during any proposed works. Any construction works within a root protection area required for the proposed layout must be justifiable within the arboricultural impact assessment.

2.14 **Limitations of survey:** The survey methodology was restricted to a visual tree assessment from ground level. No tree climbing or ground investigation was carried out for this report. Where existing site constraints are present such as ivy covered trees, a very dense under-storey, or where trees are located on third party land to which access was not granted, tree dimensions were estimated by eye as accurately as possible.

2.15 This survey represents a preliminary overview of the condition and value trees at the site. It is not a detailed assessment of any individual tree and although preliminary management recommendations are included, this report will not be sufficient to be used as a detailed condition and safety survey.

2.16 The information and measurements in this report are representative of the date of the site visit. The tree survey data will need to be updated to reflect tree growth and changes in the condition of trees after prolonged periods.

3 SITE DETAILS AND SURVEY FINDINGS

3.1 Site location: Wandleys Lane extends in a south-west orientation from West Walberton Road to Fontwell Avenue in Fontwell. The site comprises approximately the top third of the road, extending between OS national grid references SU956068 to SU954067. The surrounding land use is comprised of suburban residential development on both sides at the east end of the site and farmland at the west end. Permission has been granted for the farmland to the north of the road to be developed for residential use. The location of the site within its environs is shown in figure 1.



Figure 1: Location of Site and Environs

3.2 Site layout: The site comprises a two-way rural road fronted by residential properties on both sides at its east end. The properties on the road have private driveways, as such there was generally no parking on the road at the time of the survey. There is an existing pavement along the north side of the road for most of the residential section of the site. The western section of the site located adjacent to existing farmland has no pavement, however does have roadside verges with trees and shrubs.

3.3 Appraisal of tree stock: There is a wide variety of trees and vegetation located along the length of the site. The west section of the site, adjacent to the farmland has mature trees on the north side of the road, (many of which are located in quite close proximity to the edge of the road), with an under-storey of predominantly hazel. The hazel has in part historically been maintained as a hedgerow, with other sections not maintained at all. There is also an overhead power line that runs parallel with the north side of the road, and almost all trees and vegetation located in proximity to this service has historically been pruned to avoid conflict.

3.4 The south side of the road, adjacent to Wandleys Farm, is comprised of an over-mature, unmanaged hazel hedgerow with a small number of mature oak and ash trees (generally set further back the road than those on the north side) and dense cherry laurel shrubs. The vegetation on both sides of the road provides a visual screen between the road and the surrounding farmland (although these are not currently in my opinion unsightly views), and also adds to the rural character of the road.

3.5 The trees at the east end of the site are almost all located in private gardens. It should be noted that access was not provided into these gardens to undertake the survey so the trees were only viewed from the road. Again the range of trees and vegetation in this section of the site is varied, including both low formal garden hedgerows as well as taller belts of dense semi-managed vegetation and also trees of various sizes and condition.

3.6 Three third party oaks (T1, T37 and T39) adjacent to the residential section of the site have been awarded category A for their arboricultural, landscape and/or conservation value. T1 has been relatively heavily pruned in the past but has a very large stem diameter and could justifiably be considered a veteran tree. Its root protection area has been capped at 15m, but has also been amended to reflect the likely rooting constraint posed by the houses at 25-26 Wandleys Lane. As a veteran tree T1 will require special protection. As such it is recommended that any works on Wandleys Lane completely avoid the root protection area of T1.

3.7 The root protection areas of several trees encroach the existing tarmac surface and/or pavement of Wandleys Lane. These surfaces appear to be impermeable tarmac, which would likely result in less favourable rooting conditions than the surrounding unsurfaced ground. However given the size and proximity of the trees it is anticipated that tree roots will still extend beneath the surfaces. As such the root protection areas on the Tree Constraints Plan have not been amended to exclude the road.

3.8 Measurements and further information for each tree can be viewed in the Tree Survey Schedule in Appendix 2.

3.9 **Tree categorisation summary:** A total of twenty-five trees, fifteen tree groups and eleven hedgerows were surveyed and recorded in the Tree Survey Schedule.

Table 2: Tree categorisation summary

Categorisation	Individual tree	Tree group	Hedgerow
A	4	-	-
B	16	1	-
C	4	14	11
U	1	-	-
Total	25	15	11

3.10 **Statutory tree protection:** Arun District Council's online mapping tool was used on 21st February 2018 to establish restrictions to tree works at the site. The site is not located within a conservation area, however four separate tree preservation orders cover properties located on either side of Wandleys Lane. These are TPO/WA/2/14 (covering farmland north of the west section of the site), TPO/WA/1/99 (covering Wandleys Cottage), TPO/WA/1/89 (covering Cedar Cottage) and TPO/WA/3/15 (covering 25 Wandleys Lane).

3.11 Arun District Council's planning department have been e-mailed to request copies of the above TPO schedules and plans so the specific protected trees can be identified, however due to the timing of this report and response has not yet been received.

3.12 Any persons proposing to undertake tree works at or adjacent to the site must therefore check the status of the trees with the local authority, and gain the necessary consent before the works are undertaken. Financial penalties and/or criminal proceedings can result if tree works are carried out on a protected tree without consent. The entirety of the tree is protected, both above and below ground.

4 RECOMMENATIONS

4.1 Arboricultural input to planning application: To comply with BS5837: 2012, an arboricultural impact assessment should be produced when the proposed layout has been fixed. The arboricultural impact assessment should include a schedule of trees to be retained or removed as well as access facilitation pruning required to enable the construction works. It should also evaluate the likely effects of the construction works on retained trees including post development pressures and provide recommendations on mitigation measures to be implemented.

4.2 It is recommended that input is sought from the project arboriculturalist into the proposed layout before it is fixed. This will help ensure the proposed layout integrates well with the retained tree stock, and will allow potential areas of conflict that may not be identified by non-arboricultural professionals to be rectified whilst the layout is being developed.

4.3 The arboricultural impact assessment should be accompanied by an arboricultural method statement and a dimensioned Tree Protection Plan to show how retained trees will be protected whilst the development is constructed.

4.4 Arboricultural considerations for proposed layout: The proposed layout should take into account the following considerations related to trees:

- The proposed layout should seek to retain higher quality trees, particularly those that cannot easily be replaced. Where tree removal is necessary to facilitate the wider regeneration benefits associated with development, a tree replacement strategy could be implemented to mitigate tree loss. A net loss in tree cover within a development site will not be looked on favourably when determining a planning application.
- The proposed layout should take into account the root protection areas of retained trees. These should be left free of construction activities including hard landscaping unless the project arboriculturalist confirms engineered solutions or sympathetic construction methodology will be a viable option to mitigate the encroachment.
- The proposed layout should take into account the shade cast by trees. Over-shading of gardens and buildings (notably habitable rooms) can result in future pressures to prune or remove additional trees post development and will be a material consideration for the local authority when determining a planning application.
- The proposed layout should also take into account other common potential nuisances resulting from trees including nuisance caused by leaf/fruit drop or honeydew drip (particularly onto footpaths, parking areas or roof guttering) and an over-bearing presence of large trees.
- Allowance should be made for future canopy growth of both existing and newly planted trees. Trees growing in areas of limited space may require regular future pruning works. The suitability of different species for regular crown reductions, the affect on their amenity value and the cost of future tree works (as well as who would be responsible for undertaking the works) should be considered.

4.5 If further tree planting does occur within the development site, consideration should be given to species selection (in relation to form and potential size) and planting locations to ensure their successful integration into the new development. Recommendations for mitigation tree planting may be included in the arboricultural impact assessment, or a more thorough landscaping strategy may be provided by a landscape designer/architect.

4.6 The final design should show service locations and their routing. New utilities should be located outside of the trees root protection areas where they are underground and outside of the anticipated area of mature crown spread where above ground. If this is not possible, recommendations outlined in NJUG10 '*Guidelines for the planning, installation and maintenance of utilities in proximity to trees*' should be followed. Advice should also be sought from the project arboriculturalist.

Contact details

Sussex office:

Chapter House
Priesthawes Farm
Hailsham Road
Polegate
East Sussex
BN26 6QU



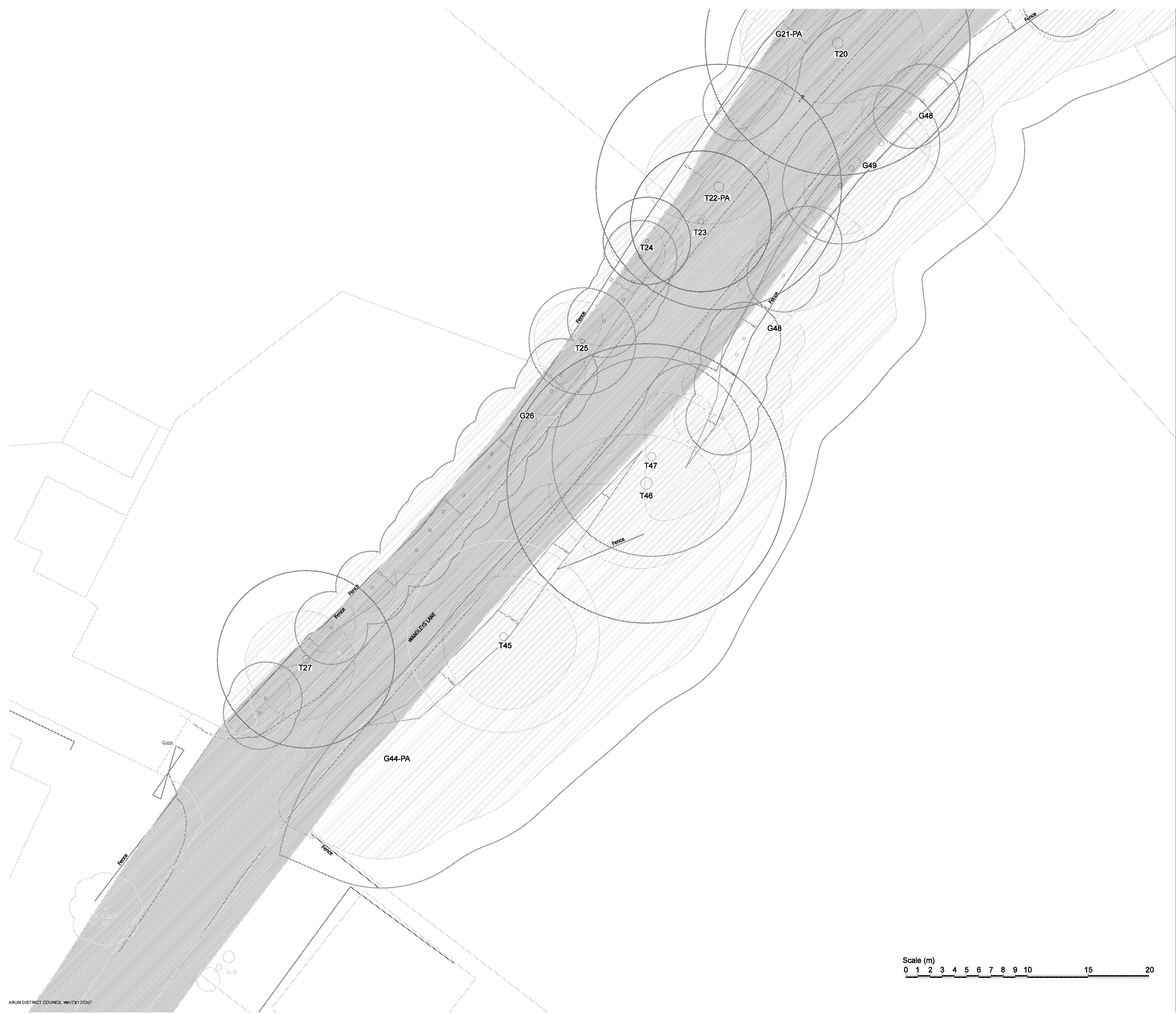
Author: Peter Davies

Date: 28th February 2018



APPENDIX 1

Tree Constraints Plan



Key:

- RPA for CAT A* tree
- RPA for CAT B* tree
- RPA for CAT C* tree
- RPA for CAT U* tree
- Tree canopy
- Extents of highways land

* Tree categorised in accordance with BS 5837:2012 'Trees in relation to design, demolition and construction - Recommendations'.

Appendix 2, (Tree Survey Schedule) contained within the arboricultural report ref. PJC/4789/18-01 contains further information for each tree.

This drawing should be viewed in colour.

Tree numbers suffixed with PA indicate the tree position is approximate.

Drawing no: PJC/4789/18/A

Rev: 01

Sheet number: 1 of 4

Client and site:

Welbeck Strategic Land II LLP

Wandleys Lane

Fontwell

West Sussex

Drawing title: Tree Constraints Plan

Date drawn: 06/02/2018

Scale: 1:200 at A2

Drawn by: PD

Checked by: NB



PJC

Consultancy

Arboricultural, Ecological & Landscape Consultancy



N

PJC Consultancy

Chapter House, Priestshaws Farm, Hailsham Road, Polegate, East Sussex, BN26 6QU.

01323 832120

contact@pjcconsultancy.com

www.pjcconsultancy.com

ARUN DISTRICT COUNCIL WWT/317/OUT



- Key:**
- RPA for CAT A* tree
 - RPA for CAT B* tree
 - RPA for CAT C* tree
 - RPA for CAT U* tree
 - Tree canopy
 - Extents of highways land

* Tree categorised in accordance with BS 5837:2012 'Trees in relation to design, demolition and construction - Recommendations'.

Appendix 2, (Tree Survey Schedule) contained within the arboricultural report ref. PJC/4789/18-01 contains further information for each tree.

This drawing should be viewed in colour.

Tree numbers suffixed with PA indicate the tree position is approximate.

Drawing no: PJC/4789/18/A Rev: 01 Sheet number: 2 of 4

Client and site:
Welbeck Strategic Land II LLP

Wandleys Lane
Fontwell
West Sussex

Drawing title: Tree Constraints Plan

Date drawn: 06/02/2018

Scale: 1:200 at A2

Drawn by: PD

Checked by: NB



PJC Consultancy
Chapter House, Priestshaws Farm, Hailsham
Road, Polegate, East Sussex, BN26 6QU.
01323 832120
contact@pjcconsultancy.com
www.pjcconsultancy.com



- Key:**
- RPA for CAT A* tree
 - RPA for CAT B* tree
 - RPA for CAT C* tree
 - RPA for CAT U* tree
 - Tree canopy
 - Extents of highways land

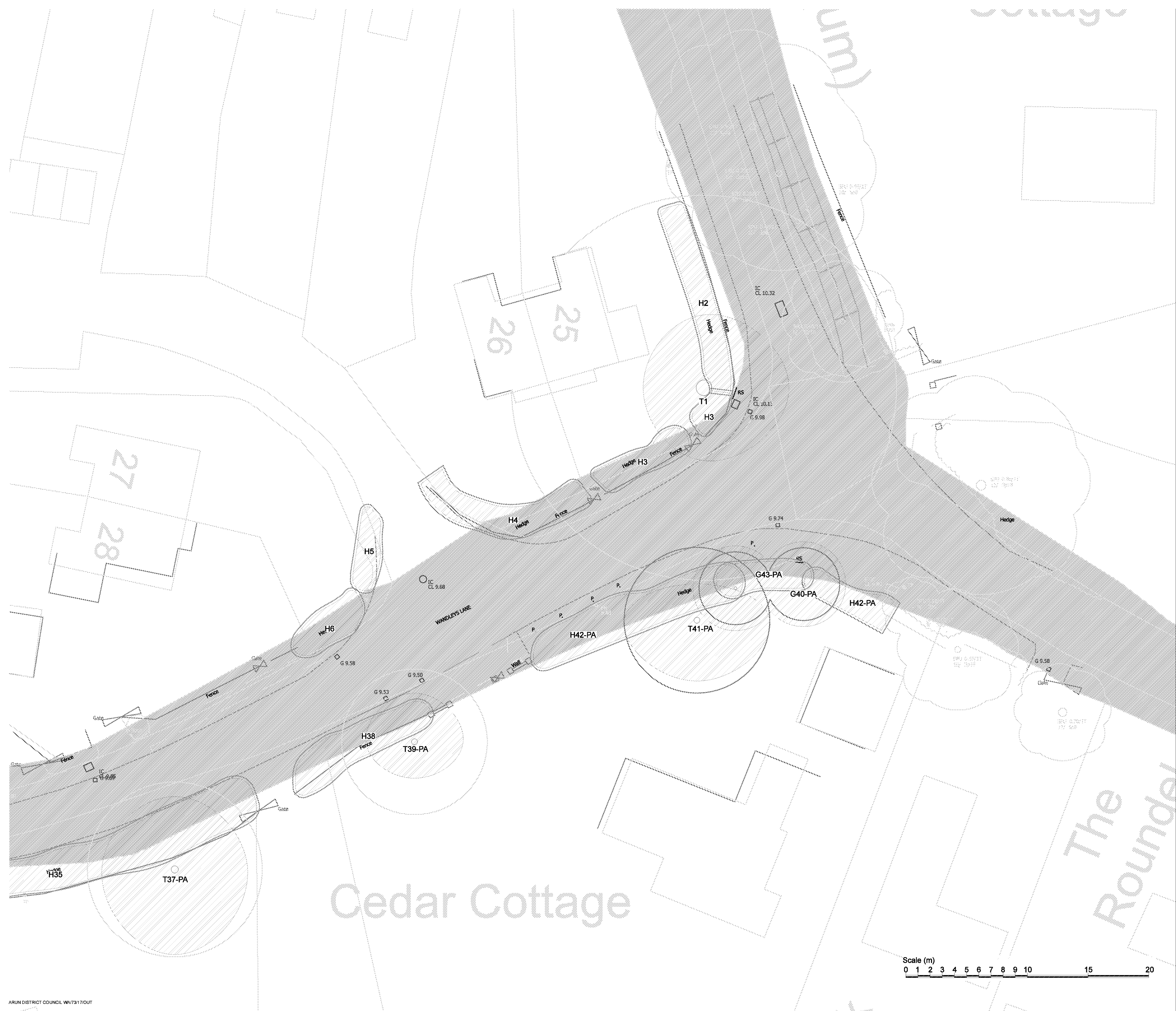
* Tree categorised in accordance with BS 5837:2012 'Trees in relation to design, demolition and construction - Recommendations'.

Appendix 2, (Tree Survey Schedule) contained within the arboricultural report ref. PJC/4789/18-01 contains further information for each tree.

This drawing should be viewed in colour.

Tree numbers suffixed with PA indicate the tree position is approximate.

Drawing no: PJC/4789/18/A	Rev: 01	Sheet number: 3 of 4
Client and site: Welbeck Strategic Land II LLP		
Wandleys Lane Fontwell West Sussex		
Drawing title: Tree Constraints Plan		
Date drawn: 06/02/2018		
Scale: 1:200 at A2		
Drawn by: PD	Checked by: NB	



- Key:**
- RPA for CAT A* tree
 - RPA for CAT B* tree
 - RPA for CAT C* tree
 - RPA for CAT U* tree
 - Tree canopy
 - Extents of highways land

* Tree categorised in accordance with BS 5837:2012 'Trees in relation to design, demolition and construction - Recommendations'.

Appendix 2, (Tree Survey Schedule) contained within the arboricultural report ref. PJC/4789/18-01 contains further information for each tree.

This drawing should be viewed in colour.

Tree numbers suffixed with PA indicate the tree position is approximate.

Drawing no: PJC/4789/18/A	Rev: 01	Sheet number: 4 of 4
Client and site: Welbeck Strategic Land II LLP		
Wandleys Lane Fontwell West Sussex		
Drawing title: Tree Constraints Plan		
Date drawn: 06/02/2018		
Scale: 1:200 at A2		
Drawn by: PD	Checked by: NB	



PJC Consultancy
Chapter House, Priestshaws Farm, Hailsham
Road, Polegate, East Sussex, BN26 6QU.
t: 01323 832120
e: contact@pjcconsultancy.com
w: www.pjcconsultancy.com

APPENDIX 2

Tree Survey Schedule

Client: Welbeck Strategic Land II LLP

Site: Wandleys Lane, Fontwell

Survey date: 05/02/2018

Surveyor: Peter Davies

Tree Survey Schedule



Tree ref.	Species	Height (m)	Stem diameter (mm)	Branch spread (m)	Crown clearance (m)	Age class	Physiological condition	Structural condition	Comments	Preliminary management recommendation	Category grading	Root Protection Area (m ²)	Root Protection Radius (m)
T1	Pedunculate oak (Quercus robur)	19	1300 est	N: 6 E: 7 S: 6 W: 5	Crown: 4 east Branch: 4 east	Veteran	Good	Fair	Large third party tree in private garden. Only viewed from road. Large enough to be considered a veteran.	Special care to be taken for any potential works occurring within root protection area.	A1/2/3	707.0	15.0 (amended on Tree Constraints Plan)
H2	Leyland cypress (Cuprocyparis leylandii)	2 average	Under 75 average	0.5 average	0 average	Semi mature	Good	Good	Third party clipped hedgerow.	No action required on date of survey.	C2	2.5 average	0.9 average
H3	Cherry laurel (Prunus laurocerasus)	2 average	Under 75 average	0.5 average	0 average	Semi mature	Good	Good	Clipped hedgerow.	No action required on date of survey.	C2	2.5 average	0.9 average
H4	Leyland cypress (Cuprocyparis leylandii)	2 average	Up to 100 average	0.5 average	0 average	Semi mature	Good	Fair	Part third party clipped hedgerow. Bare patches resulting from over pruning on roadside.	No action required on date of survey.	C2	4.5 average	1.2 average
H5	Lonicera (Lonicera nitida)	2 average	Under 75 average	0.5 average	0 average	Semi mature	Good	Good	Third party clipped hedgerow.	No action required on date of survey.	C2	2.5 average	0.9 average
H6	Mixed (cherry laurel, holly and ash)	2-5 average	Up to 100 average	0.5-2 average	0 average	Semi mature	Good	Fair	Hedgerow with trees saplings. Pruned laterally from road.	No action required on date of survey.	C2	4.5 average	1.2 average

Client: Welbeck Strategic Land II LLP

Site: Wandleys Lane, Fontwell

Survey date: 05/02/2018

Surveyor: Peter Davies

Tree Survey Schedule



Tree ref.	Species	Height (m)	Stem diameter (mm)	Branch spread (m)	Crown clearance (m)	Age class	Physiological condition	Structural condition	Comments	Preliminary management recommendation	Category grading	Root Protection Area (m ²)	Root Protection Radius (m)
H7	Cherry laurel (Prunus laurocerasus)	2-3 average	Under 75 average	1-2 average	0 average	Semi mature	Good	Good	Clipped hedgerow.	No action required on date of survey.	C2	2.5 average	0.9 average
G8	2x beech (Fagus sylvatica)	8 average	Up to 150 average	3 average	3 average	Semi mature	Good	Fair	2x trees growing in close proximity resulting in slender growth habits. Canopy extends around power line.	Will require cyclical pruning from phone line in the future. No action required on date of survey.	C2	10.2 average	1.8 average
T9	Variegated holly (Ilex aquifolium spp.)	5	150 est	N: 1 E: 2 S: 2 W: 2	Crown: 2 average Branch: 2 average	Early mature	Good	Good	Previously crown lifted. No major visible defects.	No action required on date of survey.	C2	10.2	1.8
G10	3x hazel (Corylus avellana)	5-7 average	Up to 250 average	2-3 average	0-1 average	Semi mature-mature	Good	Fair	Previously coppiced hazel clumps.	No action required on date of survey.	C2	28.3 average	3.0 average
T11	Poplar (Populus spp.)	7	230	N: 2 E: 0 S: 0 W: 3	Crown: 3 west Branch: 3 west	Semi mature	Good	Fair	Narrow, upright growth habit result of suppression from adjacent hazels.	No action required on date of survey.	C2	23.9	2.8
G12	Holly (Ilex aquifolium)	2-5 average	Under 75 average	N: 3 E: 2 S: 1 W: 2	Crown: 0 average Branch: 0 average	Young	Good	Fair	Multi-stemmed holly clump growing around base of dead horse chestnut stump.	No action required on date of survey.	C1	2.5 average	0.9 average

Client: Welbeck Strategic Land II LLP

Site: Wandleys Lane, Fontwell

Survey date: 05/02/2018

Surveyor: Peter Davies

Tree Survey Schedule



Tree ref.	Species	Height (m)	Stem diameter (mm)	Branch spread (m)	Crown clearance (m)	Age class	Physiological condition	Structural condition	Comments	Preliminary management recommendation	Category grading	Root Protection Area (m ²)	Root Protection Radius (m)
T13	Pedunculate oak (Quercus robur)	15	890 over ivy	N: 7 E: 5 S: 4 W: 6	Crown: 3 south Branch: 3 south	Mature	Good	Fair	Deadwood and minor cavities observed throughout crown. Heavily reduced from power line.	No action required on date of survey.	B1/2	358.3	10.7
G14	Hazel (Corylus avellana)	3-4 average	Up to 200 average est	2-3 average	0 average	Semi mature	Good	Good	Hazel coppice on roadside verge.	No action required on date of survey.	C2	18.1 average	2.4 average
T15	Lime (Tilia x europaea)	13	540	N: 6 E: 6 S: 6 W: 5	Crown: 4 south Branch: 2 south	Mature	Good	Good	Crown lightly pruned from power line, but good overall form. Minor deadwood in crown result of suppression.	No action required on date of survey.	B1	131.9	6.5
T16	Sycamore (Acer pseudoplatanus)	15	330 over ivy	N: 4 E: 2 S: 2 W: 3	Crown: 2 west Branch: 3 west	Semi mature	Good	Fair	Ivy clad stem. Drawn up growth habit. No major visible defects.	Sever ivy around base.	B2	49.3	4.0
G17	Hazel (Corylus avellana)	4-6 average	Up to 300 average est	N: 3 E: 2 S: 3 W: 2	0-1 average	Mature	Good	Fair	Unmanaged hazel coppice along roadside verge. Snapped stems and deadwood present.	No action required on date of survey.	C2	40.7 average	3.6 average
T18	Ash (Fraxinus excelsior)	17	800, 650 est	N: 8 E: 9 S: 7 W: 7	Crown: 0 east Branch: 3 east	Mature	Good	Fair	Dual stemmed. Ivy clad buttress and stem. Minor defects in crown. Crown lifted over power line. Large low lateral limb.	Sever ivy and clear vegetation around base.	B1/2	480.7	12.4

Client: Welbeck Strategic Land II LLP

Site: Wandleys Lane, Fontwell

Survey date: 05/02/2018

Surveyor: Peter Davies

Tree Survey Schedule



Tree ref.	Species	Height (m)	Stem diameter (mm)	Branch spread (m)	Crown clearance (m)	Age class	Physiological condition	Structural condition	Comments	Preliminary management recommendation	Category grading	Root Protection Area (m ²)	Root Protection Radius (m)
T19	Pedunculate oak (Quercus robur)	15	500 over ivy	N: 5 E: 5 S: 5 W: 7	Crown: 4 south Branch: 3 west	Mature	Good	Good	Good overall condition. Lower crown suppressed by hazel and lifted over road/power line.	No action required on date of survey.	B1/2	113.1	6.0
T20	Pedunculate oak (Quercus robur)	13	910 over ivy	N: 7 E: 7 S: 5 W: 8	Crown: 3 east Branch: 3 average	Mature	Good	Good	Ivy clad. Minor deadwood from suppression (some over road and power line). Crown reduced from power line.	Remove deadwood over 75mmØ or 500mm length that overhangs road.	B1/2	374.6	10.9
G21	Mixed (holly and hazel)	3-6 average	Up to 250 average est	2-3 average	0 average	Semi mature-mature	Good	Fair	Unmanaged shrubs forming informal hedgerow.	No action required on date of survey.	C2	28.3 average	3.0 average
T22	Pedunculate oak (Quercus robur)	14	840 over ivy	N: 6 E: 4 S: 3 W: 6	Crown: 2 north Branch: 3 north	Mature	Good	Fair	Asymmetric crown historically reduced from road/power line. Minor deadwood from suppression.	No action required on date of survey.	B1/2	319.2	10.1
T23	Pedunculate oak (Quercus robur)	8	480 over ivy	N: 0 E: 0 S: 0 W: 1	Crown: N/A Branch: 2 west	Dead	Poor	Poor	Standing dead tree on road side.	Fell to ground level.	U	104.2	5.8
T24	Pedunculate oak (Quercus robur)	12	300 est	N: 2 E: 3 S: 3 W: 3	Crown: 6 east Branch: 4 east	Early mature	Good	Fair	Drawn up growth habit due to suppression from hazel.	No action required on date of survey.	B2	40.7	3.6

Client: Welbeck Strategic Land II LLP

Site: Wandleys Lane, Fontwell

Survey date: 05/02/2018

Surveyor: Peter Davies

Tree Survey Schedule



Tree ref.	Species	Height (m)	Stem diameter (mm)	Branch spread (m)	Crown clearance (m)	Age class	Physiological condition	Structural condition	Comments	Preliminary management recommendation	Category grading	Root Protection Area (m ²)	Root Protection Radius (m)
T25	Pedunculate oak (Quercus robur)	12	370	N: 3 E: 1 S: 4 W: 4	Crown: 4 west Branch: 4 west	Early mature	Poor	Fair	Historically reduced from power line. Some crown dieback and minor bark necrosis on stem.	No action required on date of survey.	C1	61.9	4.4
G26	Mixed (hazel dominant and holly)	6-7 average	Up to 250 average est	N: 3 E: 2 S: 2 W: 3	0-1 average	Semi-early mature	Good	Fair	Previously reduced from road. Historically but not recently topped beneath power line.	No action required on date of survey.	C2	28.3 average	3.0 average
T27	Field maple (Acer campestre)	11	480, 380	N: 4 E: 4 S: 5 W: 5	Crown: 2 north Branch: 2 west	Mature	Good	Good	Dual stemmed. Crown reduced from power line. No major visible defects.	No action required on date of survey.	B1/2	169.6	7.3
G28	Cherry (Prunus avium)	8-11 average	Up to 300 average est	1-2 average	5 average	Mature	Fair	Fair	Part third party trees. Crowns heavily reduced. Western 2x trees exhibit crown dieback.	No action required on date of survey.	C2	40.7 average	3.6 average
H29	Mixed (Leyland cypress and cherry laurel)	4-5 average	Up to 100 average est	1-3 average	0 average	Semi mature-mature	Good	Good	Clipped hedgerow. Some bare patches from over pruning cypresses.	No action required on date of survey.	C2	4.5 average	1.2 average
H30	Leyland cypress (Cuprocyparis leylandii)	2-3 average	Up to 100 average est	0.5-1 average	0 average	Semi mature	Good	Fair	Third party clipped hedgerow. Some bare patches from over pruning.	No action required on date of survey.	C2	4.5 average	1.2 average

Client: Welbeck Strategic Land II LLP

Site: Wandleys Lane, Fontwell

Survey date: 05/02/2018

Surveyor: Peter Davies

Tree Survey Schedule



Tree ref.	Species	Height (m)	Stem diameter (mm)	Branch spread (m)	Crown clearance (m)	Age class	Physiological condition	Structural condition	Comments	Preliminary management recommendation	Category grading	Root Protection Area (m ²)	Root Protection Radius (m)
T31	Beech (Fagus sylvatica)	13	350 est	N: 3 E: 3 S: 4 W: 4	Crown: 3 south Branch: 2 average	Mature	Good	Good	Third party tree. Crown lifted over road. No major visible defects.	No action required on date of survey.	B1/2	55.4	4.2
T32	Beech (Fagus sylvatica)	13	300, 300, 300, 200 est	N: 3 E: 2 S: 4 W: 4	Crown: 4 south Branch: 4 south	Mature	Good	Fair	Third party tree. Multi-stemmed. Suppressed form.	No action required on date of survey.	B2	140.2	6.7
T33	Beech (Fagus sylvatica)	14	500, 350 est	N: 4 E: 4 S: 3 W: 5	Crown: 4 north Branch: 2 west	Mature	Good	Fair	Third party tree. Dual stemmed. Crown lifted over road.	No action required on date of survey.	B1/2	168.5	7.3
G34	Mixed (Leyland cypress and cherry laurel)	6-7 average	Up to 150 average est	1-3 average	0-3 average	Mature	Good	Fair	Large third party shrubs and small trees. Pruned laterally from road.	No action required on date of survey.	C2	10.2 average	1.8 average
H35	Mixed (cherry laurel, holly and privet)	2-6 average	Up to 100 average est	1-3 average	0 average	Semi mature	Good	Fair	Part third party semi managed hedgerow with tree saplings.	No action required on date of survey.	C2	4.5 average	1.2 average
T36	Pedunculate oak (Quercus robur)	14	400 est	N: 4 E: 4 S: 5 W: 5	Crown: 6 north Branch: 6 west	Mature	Good	Fair	Third party tree. Crown lifted over power line and road. Fence and understorey inhibit view of stem.	No action required on date of survey.	B1/2	72.4	4.8

Client: Welbeck Strategic Land II LLP

Site: Wandleys Lane, Fontwell

Survey date: 05/02/2018

Surveyor: Peter Davies

Tree Survey Schedule



Tree ref.	Species	Height (m)	Stem diameter (mm)	Branch spread (m)	Crown clearance (m)	Age class	Physiological condition	Structural condition	Comments	Preliminary management recommendation	Category grading	Root Protection Area (m ²)	Root Protection Radius (m)
T37	Pedunculate oak (Quercus robur)	14	600 est	N: 6 E: 6 S: 7 W: 6	Crown: 3 north Branch: 5 north	Mature	Good	Good	Third party tree. Understorey and fence inhibit view of stem. Open grown habit. Minor defects in crown.	No action required on date of survey.	A1/2	162.9	7.2
H38	Mixed (spotted laurel, holly, Euonymus and cherry laurel)	2 average	Under 75 average	1-2 average	0 average	Semi mature	Good	Good	Third party clipped hedgerow.	No action required on date of survey.	C2	2.5 average	0.9 average
T39	Pedunculate oak (Quercus robur)	14	500 est	N: 4 E: 4 S: 3 W: 4	Crown: 2 average Branch: 4 west	Mature	Good	Good	Third party tree. Ivy clad stem. Open grown habit. No major visible defects.	No action required on date of survey.	A1/2	113.1	6.0
G40	2x yew (Taxus baccata)	7 average	250 average est	3-4 average	1-2 average	Early mature	Good	Good	Third party trees of reasonable condition.	No action required on date of survey.	B1/2	28.3 average	3.0 average
T41	Pedunculate oak (Quercus robur)	15	500 est	N: 3 E: 6 S: 5 W: 6	Crown: 3 west Branch: 4 west	Over mature	Fair	Fair	Third party tree. Senescent and heavily reduced from road/power line.	No action required on date of survey.	B1/2	113.1	6.0
H42	Mixed (cherry laurel and privet)	1-2 average	Under 75 average	0.5-1 average	0 average	Semi mature	Good	Good	Part third party clipped hedgerow.	No action required on date of survey.	C2	2.5 average	0.9 average

Client: Welbeck Strategic Land II LLP

Site: Wandleys Lane, Fontwell

Survey date: 05/02/2018

Surveyor: Peter Davies

Tree Survey Schedule



Tree ref.	Species	Height (m)	Stem diameter (mm)	Branch spread (m)	Crown clearance (m)	Age class	Physiological condition	Structural condition	Comments	Preliminary management recommendation	Category grading	Root Protection Area (m ²)	Root Protection Radius (m)
G43	Hawthorn (Crataegus monogyna)	1-4 average	Up to 100 average est	1-3 average	1-2 average	Young-semi mature	Poor	Poor	Third party shrubs. Suppressed by yews and smothered by ivy.	No action required on date of survey.	C1	4.5 average	1.2 average
G44	Cherry laurel (Prunus laurocerasus)	3-6 average	Up to 200 average est	1-4 average	0 average	Early mature	Good	Fair	Broad belt of vegetation on road frontage.	No action required on date of survey.	C1	18.1 average	2.4 average
T45	Pedunculate oak (Quercus robur)	15	420, 510	N: 5 E: 6 S: 6 W: 5	Crown: 2 average Branch: 3 south	Mature	Good	Good	Co-dominant stems from 1m. Cherry laurel inhibits inspection of crown. No major visible defects.	No action required on date of survey.	A1	197.5	7.9
T46	Ash (Fraxinus excelsior)	20	660, 690	N: 4 E: 6 S: 7 W: 8	Crown: 6 west Branch: 4 west	Over mature	Good	Fair	Large tree on road frontage. Co-dominant stems from base. Previously crown lifted. Deadwood in crown.	Remove deadwood over 75mmØ or 500mm length if frequency of use in target area increases.	B1/2	412.4	11.5
T47	Ash (Fraxinus excelsior)	15	480, 490	N: 5 E: 7 S: 5 W: 0	Crown: 8 east Branch: 6 east	Over mature	Good	Poor	Co-dominant stems from base with bark inclusion to 1m. Suppressed by T46. Decayed limb on east side over shrubs.	No action required on date of survey.	C1/2	212.8	8.2
G48	8x hazel (Corylus avellana)	6-8 average	250 average est	N: 3 E: 5 S: 3 W: 4	0-2 average	Over mature	Good	Fair	Hazel coppice on road frontage.	No action required on date of survey.	C2	28.3 average	3.0 average

Client: Welbeck Strategic Land II LLP

Site: Wandleys Lane, Fontwell

Survey date: 05/02/2018

Surveyor: Peter Davies

Tree Survey Schedule



Tree ref.	Species	Height (m)	Stem diameter (mm)	Branch spread (m)	Crown clearance (m)	Age class	Physiological condition	Structural condition	Comments	Preliminary management recommendation	Category grading	Root Protection Area (m ²)	Root Protection Radius (m)
G49	3x field maple (Acer campestre)	10-12 average	400 average est	N: 3	1 average	Mature	Good	Fair	Multi-stemmed trees on road frontage. Drawn up growth habits. Ivy clad. Abundant small deadwood.	No action required on date of survey.	C2	72.4 average	4.8 average
				E: 4									
				S: 4									
				W: 3									
G50	8x hazel (Corylus avellana)	7-9 average	300 average est	N: 5	0-2 average	Over mature	Good	Fair	Hazel coppice on road frontage.	No action required on date of survey.	C2	40.7 average	3.6 average
				E: 4									
				S: 4									
				W: 4									
T51	Pedunculate oak (Quercus robur)	16	860	N: 7	Crown: 2 south	Over mature	Fair	Good	Low branches overhanging shed deformed due to conflict with elder trees. Minor dieback on north side.	No action required on date of survey.	B1/2	334.6	10.3
				E: 6									
				S: 8									
				W: 7									

APPENDIX 3

Cascade Chart for Tree Quality Assessment

Cascade chart for tree quality assessment

Category and definition	Criteria (including subcategories where appropriate)			Identification on plan
Trees unsuitable for retention				
Category U Those in such a condition that they cannot realistically be retained as living trees in the context of their current land use for longer than 10 years.	• 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 the 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. Note Category U trees can have existing or potential conservation value which it might be desirable to preserve			Red
	1 Mainly arboricultural qualities	2 Mainly landscape qualities	3 Mainly cultural values, including conservation	
Trees to be considered for retention				
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 that might be included in category A, but are downgraded because of impaired condition (e.g. presence of significant though remedial 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, groups or woodlands of particular visual importance as arboricultural and/or landscape features.	Trees, groups or woodlands of significant conservation, historical, commemorative or other value (e.g. veteran trees or wood--pasture).	Green
Category B Trees of moderate quality with an estimated remaining life expectancy of at least 20 years.		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.	Trees with material conservation or other cultural value.	Blue
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 150mm.	Unremarkable trees of very limited merit or such impaired condition that they do not qualify in higher categories.	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.	Grey

APPENDIX 4

Photographs



Photograph 1 – Tree T1



Photograph 2 – Trees T37 and T39



Photograph 3 – Trees T15-T18



Photograph 4 – Trees T20-T23



Photograph 5 – Trees T18-T20



Photograph 6 – Trees T15 and T16



Photograph 7 – Tree T13



Photograph 8 – Tree T36