FLAC

Senior Director:
Julian Forbes-Laird
BA(Hons), Dip.GR.Stud, MICFor, MRICS, MEWI, Dip.Arb.(RFS)

Institute of Chartered Foresters
Registered Consultant

DOWNLANDS

RICS

HYBRID APPLICATION PLANNING SUBMISSION (ARBORICULTURE)

EXPERT WITNESS INSTITUTE

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- TREE SURVEY TO BS5837:2012
- *RAVEN* VETERAN TREE IDENTIFICATION
- PROPOSED TREE RETENTION & REMOVAL
- TREE PROTECTION PLAN & ARBORICULTURAL METHOD STATEMENT

Prepared for: Gleeson Land

FLAC Instruction ref: CC40-1020

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Technical Director
Patrick Stileman
BSc(Hons), MICFor ,MRICS, RC.Arbor.A, CUEW, Dip.Arb(RFS)

Operations Director
Andrew Colebrook
MICFor, M.Arbor.A, Dip.Arb(RFS)

Senior Associate Director
Ben Abbatt
BA(Hons), MICFor, MRICS, RC.Arbor.A, CEnv, Dip.Arb(RFS)

Dendron House
Barford Road • Blunham
Bedford • MK44 3ND
T 44 (0)1767 641648
F 44 (0)1767 660330
E enquiries@flac.uk.com
www.flac.uk.com

FLAC Instruction ref. CC40-1020
DOWNLANDS

Planning Submission (Arboriculture) -

Introduction

Here follows the several elements of our planning submission, prepared on instructions from Gleeson Land

This document comprises the following elements:

i) Text introducing the key points in relation to FLAC's baseline survey and arboricultural impacts of tree retention and removal based upon the *Illustrative Masterplan*

Appendix FLAC 1

ii) Explanatory key to aid interpretation of the tree survey data, including our representation of BS5837:2012 Table 1, *Cascade Chart for Tree Quality Assessment*

iii) BS5837:2012 compliant tree survey data, including *Proposal* column identifying tree retention and removal outcomes, to be cross-referenced to the colour-coded crown outlines on the following FLAC drawing

Appendix FLAC 2

iv) *RAVEN,* FLAC Principal Julian Forbes-Laird's field recognition method for identifying irreplaceable habitat trees (RAVEN: Recognition of Ancient, Veteran & Notable trees) RAVEN data recorder giving relevant details of identified veteran trees

v) RAVEN data recorder giving relevant details of identified veteran trees

Appendix FLAC 3

vi) Multi-sheet drawing presenting our Tree Survey & Retention and Removal Plan with parameter plan overlay, project drawing ending .02. Comprises an overview sheet NTS, then 5no. detail sheets 1:1000@A0 plus an additional inset sheet at 1:250 @ A0

vii) Multi-sheet drawing presenting our Tree Protection Plan and Arboricultural Method Statement with Illustrative Masterplan overlay, project drawing ending .03. Comprises an overview sheet NTS, then 5no. detail sheets 1:1000@A0 plus an additional inset sheet at 1:250 @ A0

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ARBORICULTURAL IMPLICATIONS ASSESSMENT (OUTLINE) -

KEY POINTS

1 Tree retention and removal - qualitative analysis

1.1 Trees subject of our survey have been assessed by FLAC according to the recommendations of BS5837:2012 *Trees in relation to design, demolition and construction - Recommendations*. As its title indicates, this document is specifically designed to inform and be used within the planning process.

1.2 A BS5837-compliant assessment includes differentiation of the quality of the trees according to that Standard's Table 1, which provides for trees to be placed into one of four quality categories:

A High quality
B Moderate quality
C Low quality
U Trees which are unretainable in viable condition, regardless of development

1.3 Following categorisation, the impact of any given set of proposals on a tree population can be assessed in terms of the retention or removal of trees within each quality category. The impact of proposals for existing trees (comprising both individual trees and trees within tree groups), woodland groups and hedgerows is summarised in figures 1 to 3 below.

Table 1. Tree numbers by quality and value categories, after impacts by the proposals

Grade	Trees before	Trees after	Trees lost	Percentage of grade lost	Percentage of grade retained
U	63	0	63	100	0
A	129	128	1	1	99
B	617	550	67	11	89
C	660	575	85	13	87

Table 2. Woodland retention and removal by area and percentage, after impacts by proposals

Total area of woodland on site (m^2)	Retained woodland area (m^2)	Retained woodland area (%)	Removed woodland area (m^2)	Removed woodland area (%)
567500	562887	99.2	4613	0.8

Note 1: Woodland clearance is associated with the principal vehicle access within WG7008 and WG7009, non-ancient woodland.

Table 3. Hedgerow retention and removal by length and percentage, after impacts by proposals

Total length of hedgerow on site (m)	Retained hedgerow length (m)	Retained hedgerow length (%)	Removed hedgerow length (m)	Removed hedgerow length (%)
164	164	100	0	0

2 Veteran tree identification

2.1 The appended RAVEN Recorder lists all trees considered by FLAC to be ancient or other veteran trees (AVTs). FLAC veteran trees confirmed by application of RAVEN (for Recognition of Ancient, Veteran & Notable Trees) is a systematized, transparent, repeatable, evidence-based methodology, and is based four-square on a) the governing criteria within the Annex 2 definition; and b) on the necessary presence (or absence) of specific habitat features on the trees concerned, the method is also appended. Annex 2 of the NPPF (Feb 2019) states

> *Ancient or veteran tree: A tree which, because of its age, size and condition, is of exceptional biodiversity, cultural or heritage value. All ancient trees are veteran trees. Not all veteran trees are old enough to be ancient, but are old relative to other trees of the same species. Very few trees of any species reach the ancient life-stage.*

2.2 All veteran trees are a) retained by proposals and b) afforded their 15 x stem diameter veteran tree buffers (VTBs) in accordance with Natural England's Standing Advice.

FLAC

APPENDIX FLAC 1

TREE SURVEY :
EXPLANATORY INFORMATION & DATA

FLAC

KEY TO TREE SURVEY DATA SCHEDULE

Note

This survey has been undertaken in compliance with BS5837:2012; it is not intended to be a tree safety survey. Any notes offered on structural integrity of trees are incidental, though where trees are considered to be in immediately hazardous condition (identified by red font in the *Structural condition & Notes* column, see below*)*, our recommendations given for immediate intervention should be put in hand by the owner / site manager as soon as can be arranged.

Trees are dynamic living organisms capable of achieving considerable size and structural complexity. They are exposed to and can become damaged by the elements and by human activity, and have co-evolved with decay-causing organisms that can degrade and sometimes destroy their structural integrity. Due to genetic characteristics and local microenvironmental factors this integrity can be innately uncertain. The laws and forces of nature dictate a natural failure rate even among trees that are healthy and structurally sound. By their very nature, therefore, trees cannot be considered entirely hazard-free.

Tree surveys and / or tree inspections are, inherently, only a snapshot in time of the physiological and structural condition of the trees concerned.

Unless otherwise stated in our reporting material, all such surveys and inspections are undertaken from ground level and no internal inspections or tests have been undertaken. Any structural defects present might be not be visible, for example being masked by vegetation, whether the tree's foliage, plants growing round the base of the tree, or climbing plants growing on the stem and into the crown.

Unless otherwise states, the survey data should be considered time-limited **for planning purposes** to a maximum of three years (absent revisions of BS5837, which render pre-existing data obsolete).

FLAC Ref. No.

Tree numbers per relevant FLAC dwg

In line with the advice of BS5837:2012, where trees occur as a cohesive group feature (prefixed TG for tree group or WG for woodland group), they are assessed as such

Size data for TG or WG are given as mean figures for trees at roughly the 80 percentile of the population concerned. Trees in the 90-100 percentile range for the group are identified on the TSP

Trees within TG / WG boundaries that have more than one stem and which are sub-dominant within the TG / WG (i.e. <80 percentile) are subsumed within the TG / WG data; dominant multi-stemmed trees (i.e. >80 percentile) within TG / WG boundaries are listed as individual trees

TG / WG outlines follow the mapping base (typically either topographical survey or geo-rectified aerial imagery)

Hedges (domestic) are recorded prefixed H and are always excluded from the provisions of the Hedgerows Regulations 1997

Hedgerows (rural) are recorded prefixed HR and possibly fall within the provisions of the Hedgerows Regulations 1997

All numbering starts from *x*001 **for each type of vegetation**, where *x* identifies the surveyor (3000 series = AJC). Thus:

3000	Individual tree
TG3000	Tree group
WG3000	Woodland group
H3000	Domestic hedge
HR3000	Rural hedgerow

The addition of the FLAC instruction ref. ahead of the tree number provides a unique, non-repeated reference number for the particular tree in question

Any trees omitted from the topo survey are listed on the referenced plan, though their positions are only shown indicatively. Off-site trees are included where deemed relevant, though their positions are also shown indicatively if omitted from the topo base

TPO Ref.

Statutory protection listing for individual trees, TG and WG
ATTENTION: SEE NOTE IMMEDIATELY BELOW

Note
This column is only completed in cases where FLAC has been instructed to undertake a TPO search and correlation to FLAC reference numbers. The absence of data in this column **must not** be taken to indicate that the trees concerned are not under TPO protection. Statutory protection may also arise from the trees' location within a Conservation Area. Further statutory control over tree removal may be conferred by the Forestry Act 1967

Species

Tree species as listed in the schedule by common name. Species present are:

Common name	*Botanical name*	*Provenance*	*Notes*
Alder	Alnus glutinosa	Native	
Apple	Malus domestica	Native	
Ash	Fraxinus excelsior	Native	
Aspen	Populus tremula	Exotic	
Beech	Fagus sylvatica	Native	
Blackthorn	Prunus spinosa	Native	
Cherry laurel	Prunus laurocerasus	Exotic	
Cider gum	Eucalyptus gunnii	Exotic	
Coast redwood	Sequoia sempervirens	Exotic	
Common lime	Tilia x europaea	Native	
Copper beech	Fagus sylvatica 'Purpurea'	Native (cultivar)	
Corsican pine	Pinus maritima var. laricio	Exotic	
Downy birch	Betula pubescens	Native	
Elder	Sambucus nigra	Native	
Elm	Ulmus procera	Native	
European larch	Larix decidua	Native	
False acacia	Robinia pseudoacacia	Exotic	
Field maple	Acer campestre	Native	
Gean	Prunus avium	Native	
Goat willow	Salix caprea	Native	
Hawthorn	Crataegus monogyna	Native	
Hazel	Corylus avellana	Native	
Holly	Ilex aquifolium	Native	
Hornbeam	Carpinus betulus	Native	
Horse chestnut	Aesculus hippocastanum	Naturalised	
Japanese cherry	Prunus serrulata 'Kanzan'	Exotic	
Laburnum	Laburnum anagyroides	Exotic	
Lawson cypress	Chamaecyparis lawsoniana	Exotic	
Leyland cypress	x Cupressocyparis leylandii	Exotic	
Monterey cypress	Cupressus macrocarpa	Exotic	
Norway spruce	Picea abies	Exotic	
Pedunculate oak	Quercus robur	Native	

Plum	Prunus domestica	Native
Portuguese laurel	Prunus lusitanica	Exotic
Rhododendron	Rhododendron ponticum	Exotic
Rowan	Sorbus aucuparia	Native
Scots pine	Pinus sylvestris	Native
Silver birch	Betula pendula	Native
Smooth Japanese maple	Acer palmatum	Exotic
Sweet chestnut	Castanea sativa	Naturalised
Sycamore	Acer pseudoplatanus	Naturalised
Turkey oak	Quercus cerris	Exotic
Weeping willow	Salix x sepulcralis 'Chrysocoma'	Exotic
Western hemlock	Tsuga heterophylla	Exotic
Wych elm	Ulmus glabra	Native
Yew	Taxus baccata	Native

Tree Count

For trees assessed as groups (ident. prefix TG), number of trees present, according to:

2-10 trees	Accurate count
11-50 trees	Close estimate
51-100 trees	Estimate

Area m^2

For trees assessed as woodland (ident. prefix WG), existing area in square metres within survey envelope, derived from CAD interrogation of the completed tree survey plan

Ht. (m)

Tree height in metres

Either:

Crown Spread

For individual trees, measured radial crown spread in metres, listed for each of the four cardinal points

Or:
MRCS

For trees assessed as groups or woodland, an estimated mean radial crown spread in metres for trees at the 80 percentile size

Note
For trees assessed as woodland, sample measurements for canopy overhang beyond woodland boundary (i.e. hedgerow, fence, ditch etc.) are given on the tree survey plan

Or:

Mean Width

Mean width in metres of hedge or hedgerow

Length

Approximate length in metres of hedge or hedgerow

Ht. 1st Br.

For individual trees and trees assessed as groups or woodland, height in metres above ground of attachment point of first significant branch (cardinal point may be given indicating growing direction)

Ht. Can.

For individual trees and trees assessed as groups or woodland, mean height in metres of lower extent of tree canopy above ground

Stem Count

For individual trees, number of stems present below 1.5m AGL. Stem count affects diameter entry as follows:

Where the stem count is 1 the diameter should be entered into the 1 column under Stem Dia.
Where the stem count is up to 5 each stem dia. should be listed
Where the stem count exceeds 5, the mean stem diameter should be entered in the 1 column

Either:

Stem Dia. (mm)

Stem diameter(s) at 1.5m above ground level (see measurement system in BS5837:2012 Annex C), given in millimetres

Where entered 1:
Single measured stem diameter

Where entered 2-5:
Multiple measured stem diameters, listed per stem

Where entered >5:
For trees with more than five stems, diameter is listed as an estimated mean

Where the diameter entry for trees with 1 or 2-5 stems appears in italics, this indicates that it was estimated by the surveyor (for example, due to the presence of ivy on the stem)

It is our practice to round up when estimating stem diameters

Or:

Specimen Stem Dia.

For trees assessed as groups or woodland, stem diameter in millimetres at 1.5m above ground level for 80 percentile member of TG or WG. Trees with larger diameters are identified on the TSP

Or:

Mean Stem Dia.

Mean stem diameter in millimetres above the basal flare of hedge or hedgerow component plants

Either:

RPA Rad.

Radius in metres of the notionally circular Root Protection Area, based on 12x stem diameter (example for single stemmed trees), capped to 15m radial to stem centre

Note
Where trees are identified as being *notable* (i.e. very large trees that have yet to attain veteran status), FLAC removes the cap such that the RPA is simply 12x stem diameter

Or:

Specimen RPA Rad.

For trees assessed as groups or woodland, radius in metres of the notionally circular Root Protection Area based on specimen diameter for TG or WG 80 percentile tree

Either:

Conversion of RPA radius to an area, given in m^2, capped to a maximum of $707m^2$ (in line with BS5837:2012), except for *notable* trees

Or:

Specimen RPA Area

For trees assessed as groups or woodland, conversion of specimen RPA radius to an area, given in m^2, capped to a maximum of $707m^2$

Note
RPA for hedges or hedgerows is to be taken as 3m from the centreline, half the height or 2m beyond existing width, whichever is the greater

Life Stage

Life stage assessment according into:

Y	Young
SM	Semi-mature
EM	Early mature
M	Mature
OM	Over-mature

Phys. Condition

An assessment of the **physiological** condition (i.e. health/vitality) status of the tree summarised according to:

GOOD	Generally in healthy condition
FAIR	Condition satisfactory though below mean species performance
POOR	Tree in decline/retrenching
DEAD	Self explanatory

Structural condition & Notes

Notes on the apparent structural integrity of the tree based on visual tree assessment, including notes on form, taper, forking habit, storm damage, decay fungi, pests, etc. plus other pertinent observations

Management recommendations

Preliminary recommendations for intervention (e.g. tree surgery, felling, etc) in relation to existing context

Trees assessed as being in apparently immediately hazardous condition will be notified to the client separately as soon as practical. Where the recommendation is for further investigation, including removal of ivy and reinspection, the given retention span and quality/value grade (see below) should be treated as provisional

Notes

This is **not** intended to comprise a specification for tree work: further advice should be sought prior to implementation

Change in land use (target value) requires further assessment

Ret. Span

Estimated remaining retention span based on species, condition & context divided into the following bands (relates to quality and value grade achievable as stated):

Years	*Best QV grade*
<10	U
10+	C
20+	B
>40	A

QV Grade

Quality & Value grade classification according to BS5837:2012 (see attached extract from BS5837:2012 'Table 1 - Cascade Chart for Tree Quality Assessment') –

Grade	*Summary meaning*	*Ident. colour spot on TSP*
U	Trees that are unretainable in viable condition	Dark red
A	High quality & value and consequent high retention priority	Light green
B	Moderate quality and value (moderate priority for retention)	Mid-blue
C	Low quality and value (generally considered to be sacrificial)	Grey

Note
Trees present which we consider to be **exceptional** specimens are identified by the suffix * after the A grade, e.g. A1*

Proposal

This column identifies:

1. Pre-planning (Arboricultural Stages 1, Tree Survey, & 2, Design):
   Our initial view of a defensible tree retention / removal balance
2. Planning submission (Arboricultural Stage 3):
   The actual tree retention / removal balance as proposed

The following codes are used:

RET 1. Trees preferably retained
2. Trees that would be retained

PRET *For tree groups (TG), woodlands (WG) & hedgerows (HR)* – signifies partial retention (see below)

REM 1. Trees defensibly removed to facilitate development
2. Trees that would be removed

U Trees identified to be unsuitable for retention

No. of trees retained

For tree groups only
Number of trees retained out of the total recorded for the group. Outcomes are as follows:

Survey grade U	Number of trees for retention defaults to 0 (can be amended by manual override)
Proposal code RET	Number of trees for retention defaults to total from *Tree Count* data field
Proposal code PRET	No. of trees for retention requires manual input following interrogation of relevant plans
Proposal code REM	Number of trees for retention defaults to 0

Trees retained %

For tree groups only
Percentage of pre-existing TG tree count that would be retained, based on an auto-sum derived from inputs into the preceding column

Area retained m^2

For woodlands only
Area, in square metres, of woodland (WG) proposed for retention. Outcomes are as follows:

Survey grade U	Area for retention defaults to 0 (can be amended by manual override)
Proposal code RET	Area for retention defaults to existing area
Proposal code PRET	Area for retention requires manual input following interrogation of relevant plans
Proposal code REM	Area for retention defaults to 0

Area retained %

For woodlands only
Percentage of pre-existing WG area that would be retained, based on an auto-sum derived from inputs into the preceding column

Length retained m

For hedgerows only
Length, in metres, of hedgerow (HR) proposed for retention. Outcomes are as follows:

Survey grade U	Length for retention defaults to 0 (can be amended by manual override)
Proposal code RET	Length for retention defaults to existing length
Proposal code PRET	Length for retention requires manual input following interrogation of relevant plans
Proposal code REM	Length for retention defaults to 0

Length retained %

For hedgerows only
Percentage of pre-existing HR length that would be retained, based on an auto-sum derived from inputs into the preceding column

BS5837:2012 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	• 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 *NOTE Category U trees can have existing or potential conservation value which it might be desirable to preserve; see [BS5837:2012]* ***4.5.7****.*			
	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, 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)	
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	Trees with material conservation or other cultural value	
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 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	

FLAC Note

The original contents of the column *Identification on plan* have been replaced by FLAC in the version above; spot colours to RGB codes given in BS5837:2012 Table 2

DOWNLANDS : TREE SURVEY DATA TABLE

Data for individual trees

FLAC Ref. No.	TPO Ref	Species	Ht. (m)	Crown Spread (m) N	S	W	E	Ht. 1st Br. (m)	Ht. Can. (m)	Stem Count	Stem Dia. (mm) 1 / mean	2	3	4	5	RPA Rad. (m)	RPA Area (m2)	Life Stage Y-SM-EM-M-OM	Phys. Condition G-F-P-D	Structural condition & Notes	Management recommendations	Ret. Span <10, 10+ 20+, >40	QV Grade U-A-B-C	Proposal
3001		Ash	16	4	2	3	6	3 E	4	4	190	190	190	190		4.56	65	M	F	VETERAN TREE. Woodbank coppice stool dimensions 115 x 100cm. Typically decayed stool but satisfactory. Appears to be separate from immediately adjacent companion ash coppice to south although difficult to be certain but contrasting physiological condition tends to support this.	No action required at time of survey	40+	A3	RET
3002		Ash	13	1	2	2	3	2 E	3	5	180	180	180	180	180	4.83	73	M	P	Former woodbank coppice stool dimensions 120 x 110cm. Very little live material present crown largely dead. Appears to be separate from immediately adjacent companion ash coppice to south although difficult to be certain but contrasting physiological condition tends to support this. Apparently some public access in open space to east.	Remove stems to keep old stool on woodbank.	<10	U	U
3003		Ash	16	3	5	5	5	1 E	3	9	250					9.00	254	M	F	VETERAN TREE. Woodbank coppice stool dimensions 190 x 180cm. High standing, typically decayed stool with large opening to basal cavity to north but satisfactory. Small central stem dead but otherwise in satisfactory condition.	No action required at time of survey	40+	A3	RET
3004		Ash	15	5	1	4	6	3 E	3	13	160					6.93	151	M	F	VETERAN TREE. Woodbank coppice stool dimensions 155 x 115cm. Typically decayed stool with low basal cavity but satisfactory. Some internal dead wood but otherwise in satisfactory condition.	No action required at time of survey	40+	A3	RET
3005		Ash	15	6	4	5	8	3 E	3	13	200					8.66	235	M	F	VETERAN TREE. Woodbank coppice stool dimensions 170 x 100cm. High standing, Some basal decay of stool but satisfactory. Some internal dead wood but otherwise in satisfactory condition. Provisional onset of ash dieback. Not reflected in ret span assessment.	No action required at time of survey	40+	A3	RET
3006		Ash	17	4	2	1	5	3 E	3	6	180					5.30	88	M	F	VETERAN TREE. Woodbank coppice stool dimensions 145 x 105cm. High standing, significant basal decay of stool but satisfactory. Some internal dead wood including death of shaded small internal stems but otherwise in satisfactory condition.	No action required at time of survey	40+	A3	RET
3007		Gean	21	5	5	5	6	7 E	7	1	560					6.72	142	M	F	VETERAN TREE. Very stout upright stem. Bark loss of lower stem south. Dry habitat spaces on stem. Past major storm damage. Major dead wood. Major hollowing at stem wound ca. 7 metres. Onset of crown senescence seen as distal decline.	No action required at time of survey	40+	A3	RET
3008		Ash	22	7	3	9	4	10 N	10	3	510	350	290			8.20	211	M	P	Iron ore pit slope coppice stool dimensions 210 x 95cm. High standing, significant basal decay of stool but satisfactory. Three live stems a fourth dead. Advancing ash dieback seen as crown wide distal dieback, poor prospects. Low occupancy area.	No action required at time of survey	<10	U	U
3009		Ash	18	3	3	5	1	10 W	10	3	330	260	240			5.81	106	M	P	Iron ore pit slope coppice stool dimensions 130 x 90cm. Some internal basal decay of stool but satisfactory. Three live stems. Advanced ash dieback seen as crown wide severe dieback, poor prospects. Low occupancy area.	No action required at time of survey	<10	U	U
3010		Ash	18	4	3	7	4	5 W	7	3	300	260	260			5.70	102	M	F	Iron ore pit slope coppice stool dimensions 125 x 85cm. Severe basal decay. Shares companion crown shelter with specimens exhibiting ash dieback, possible onset of early crown symptoms.	No action required at time of survey	10+	B3	RET
3011		Pedunculate oak	20	13	11	10	13	3 S	1	1	1740					15.00	707	M	G	Notable specimen. Very large for the species stem diameter. Three principal scaffold members from 2.5 metres. Structurally and physiologically in good condition. Dry habitat spaces in old branch cones and small areas of branch decay. Infrequent medium sized dead wood scattered through crown.	No action required at time of survey	40+	A1*	RET
3012		Norway spruce	15	5	7	6	6	2 S	2	1	*600*					7.20	163	M	G	Off site tree. Remote inspection only. Typical form and structure for the species. No apparent significant defects observed.	No action required at time of survey	40+	B1	RET
3013		Horse chestnut	9	5	5	5	5	2 N	3	1	750					9.00	254	M	F	Off site tree. Remote inspection only. Typical form and structure for the species. Crown reduced, possibly in response to concerns or issues relating to bleeding canker. Young regrowth present. No apparent significant defects observed.	No action required at time of survey	20+	B1	RET
3014		Yew	13	10	10	10	10	2 N	1	1	1100					13.20	547	M	G	Off site tree. Remote inspection only. Typical form and structure for the species. No apparent significant defects observed.	No action required at time of survey	40+	A1	RET
3015		Weeping willow	10	5	5	5	5	2 N	2	1	600					7.20	163	M	G	Off site tree. Remote inspection only. Typical form and structure for the species. Crown reduction management evident. No apparent significant defects observed.	No action required at time of survey	40+	B1	RET
3016		Pedunculate oak	19	10	10	10	10	4 W	3	1	950					11.40	408	M	G	Dense vegetation impedes inspection and stem measurement. Good overall condition. Symmetrical crown form. Attractive specimen with good future potential.	No action required at time of survey	40+	A1	RET
3017		Silver birch	17	2	3	1	5	5 E	4	1	400					4.80	72	M	F	Off site tree. Remote inspection only. Typical form and structure for the species. Crown asymmetry after former companion shelter. No apparent significant defects observed.	No action required at time of survey	20+	B1	RET
3018		Silver birch	10	2	3	3	1	2 W	2	2	300	250				4.69	69	M	D	Assumed off site tree. Remote inspection only. Standing dead, fragile.	Fell.	<10	U	U
3019		Pedunculate oak	15	7	7	7	7	3 N	3	1	450					5.40	92	M	G	Off site tree. Remote inspection only. Stem and principal branch structure and unions in satisfactory condition. No apparent significant defects observed.	No action required at time of survey	40+	B1	RET
3020		Ash	13	3	3	3	3	5 N	5	1	300					3.60	41	EM	P	Off site tree. Remote inspection only. Advanced ash dieback symptoms seen as dieback throughout crown. Poor prospects.	Fell.	<10	U	U
3021		Pedunculate oak	18	10	16	13	11	2.5 S	2	1	1520					15.00	707	M	G	Notable specimen. Very large for the species stem diameter. Multi-tiered *Ganoderma australe* fruiting bracket at lower stem north. Three principal scaffold members from 3.5 metres and large low limb becoming two to south. Structurally and physiologically in good condition. Dry habitat spaces in old branch cones and small areas of branch decay. Infrequent medium sized dead wood scattered through crown. Past storm damage seen in upper east crown.	Remove dead wood with potential to affect highway to east.	40+	A1*	RET
3022		Pedunculate oak	17	9	10	10	9	3 W	1.5	1	700					8.40	222	M	G	Situated to east of boundary fence. Stem and principal branch structure and unions in satisfactory condition. Small dead wood scattered through crown. Good overall condition.	Remove dead wood with potential to affect highway to east.	40+	A1	RET
3023		Sycamore	15	5	5	2	7	2 E	3	2	480	360				7.20	163	M	F	Uncompleted windthrow to east. Supported by roots under high tension. Intervention advisable. Retention and grade based upon intervention required.	Reduce whole crown by 1/3 height and 1/3 spread to reduce lever arm forces and stabilize structure.	10+	C1	RET
3024		Field maple	16	2	6	6	6	2.5 S	2	1	980					11.76	434	M	G	Diameter measurement at 1 metre due to form. Three principal scaffold members from 1.5 metres. General crown bias to south due to woodland edge position. Good overall condition	No action required at time of survey	40+	A1	RET
3025		Sycamore	15	5	4	2	5	2 E	3	2	480	230				6.39	128	M	F	Uncompleted windthrow to east. Supported by roots under high tension. Intervention advisable. Retention and grade based upon intervention required.	Reduce whole crown by 1/3 height and 1/3 spread to reduce lever arm forces and stabilize structure.	10+	C1	RET

FLAC Ref. No.	TPO Ref	Species	Ht. (m)	Crown Spread (m)				Ht. 1st Br. (m)	Ht. Can. (m)	Stem Count	Stem Dia. (mm)					RPA Rad. (m)	RPA Area (m2)	Life Stage Y-SM-EM-M-OM	Phys. Condition G-F-P-D	Structural condition & Notes	Management recommendations	Ret. Span <10, 10+ 20+, >40	QV Grade U-A-B-C	Proposal
				N	S	W	E				1 / mean	2	3	4	5									
3026		Pedunculate oak	20	9	12	13	13	4 SE	4	1	1400					15.00	707	M	G	VETERAN TREE. Very stout upright stem. Major hollowing of stem near ground level north in presence of extinct bracket fungi, unidentified, possibly *Ganoderma* resinaceum. Further extinct fruiting bodies found on ground nearby. Past major storm damage. Major dead wood. Dry habitat spaces in stem and structure. Onset of crown senescence seen as distal decline.	No action required at time of survey	40+	A3	RET
7001		Pedunculate oak	16.2	6.4	4.7	5.8	5.5	1.7 - N	1	1	680					8.16	209	M	G	Ivy covered lower stem and crown. No observed dieback or disease and no sign of obvious decay. Well proportioned tree	No action required at time of survey	>40	A1	RET
7002		Pedunculate oak	13.8	6.2	7	6	4.2	2.5 - S	3.2	1	620					7.44	174	M	F	Somewhat thin crown compared to adjacent trees. Minor dieback in outer/upper crown. Major deadwood in central crown. Ivy covered lower stem. No stem decay evident	Stabilise deadwood	20+	B1	RET
7003		Pedunculate oak	16.5	6.5	7	6.5	7	2.7 - N	0.9	1	710					8.52	228	M	G	Ivy covered lower stem. Upright stem with full healthy crown. No apparent significant defect	No action required at time of survey	>40	A1	RET
7004		Pedunculate oak	16	6	4.2	6.2	5.8	1.6 - N	0.7	1	720					8.64	234	M	G	Upright stem forms continuous crown with adjacent two trees. No apparent significant defect	No action required at time of survey	>40	A1	RET
7005		Pedunculate oak	16.4	4.5	4.5	6	6.2	2.2 - E	0.8	1	650					7.80	191	M	G	Upright stem forms continuous crown with adjacent two trees. No apparent significant defect	No action required at time of survey	>40	A1	RET
7006		Pedunculate oak	16.2	4.6	5.2	6.4	6.1	2.3 - S	1.7	1	680					8.16	209	M	G	Upright ivy covered stem forms continuous crown with adjacent two trees. No apparent significant defect	No action required at time of survey	>40	A1	RET
7007		Silver birch	13.8	4.6	4.5	4.8	4.5	2 - W	1.7	1	430					5.16	84	M	G	Upright stem with full healthy crown. No apparent significant defect	No action required at time of survey	20+	B1	RET
7008		Elm	15.2	3.2	3.4	3	3.4	1.9 - W	2.3	1	460					5.52	96	M	F	3rd party tree just beyond fence line. Minor dieback in lower drown. Congested central crown.	No action required at time of survey	10+	C1	RET
7009		Pedunculate oak	14.5	6.7	7	4.6	5	3.7 - N	1.8	1	630					7.56	179	M	F	Minor dieback in lower crown to N. Major deadwood in central crown. No significant decay evident	Stabilise deadwood	>40	B1	RET
7010		Pedunculate oak	16.4	6.8	6.3	6.5	5.2	2 - S	1.1	1	820					9.84	304	M	G	Upright stem with full healthy crown. Ivy covered lower stem and crown. Very small amount of apical dieback in N crown. No stem decay evident.	No action required at time of survey	>40	A1	RET
7011		Pedunculate oak	13.7	5.3	5.6	5.8	5.3	3.2 - S	1.8	1	620					7.44	174	M	G	Minor apical dieback in central upper branches of otherwise healthy and full crown. No sign of decay.	No action required at time of survey	>40	A1	RET
7012		Pedunculate oak	16.6	5.8	6.2	6.5	6	4.5 - W	0.4	1	660					7.92	197	M	G	Tree forms single crown with adjacent tree. Historic storm damage in W crown has left ragged stump. No observed dieback or disease and no sign of obvious decay	No action required at time of survey	>40	A1	RET
7013		Pedunculate oak	17	7.2	6.5	7	7.2	1.8 - E	1.2	1	*650*					7.80	191	M	G	Tree forms single crown with adjacent tree. Minor dieback in W crown with medium dead wood. No sign of significant decay	No action required at time of survey	>40	A1	RET
7014		Pedunculate oak	15.2	5.8	5.3	6	6.2	5.2 - E	2.6	1	*640*					7.68	185	M	F	Single stem becomes twin leader from 7m with tight forks where stems meet. Dieback in upper crown with Major deadwood. Thin crown elsewhere. No stem decay apparent	Stabilise deadwood	20+	B1	RET
7015		Pedunculate oak	16.4	7.2	6.4	7.5	6.2	4.6 - W	0.8	1	*720*					8.64	234	M	G	Upright stem with full healthy crown. No apparent significant defect.	No action required at time of survey	>40	A1	RET
7016		Pedunculate oak	17.3	6.5	5.4	6	5	2.3 - W	3.3	1	640					7.68	185	M	F	Major deadwood in central and lower crown. Major hanging broken branch to S. No observed dieback or disease and no sign of obvious decay	Stabilise deadwood	>40	B1	RET
7017		Pedunculate oak	16.2	6.5	5	6.5	6.8	1.8 - W	0.3	1	640					7.68	185	M	G	Upright stem with full healthy crown. Major deadwood in central crown. No observed dieback or disease and no sign of obvious decay	Stabilise deadwood	>40	A1	RET
7018		Pedunculate oak	17	4.9	5.2	6.8	6.5	2.6 - W	2	1	610					7.32	168	M	F	Thinner foliage than adjacent trees, but no significant dieback. Major deadwood in central crown.	No action required at time of survey	20+	B1	RET
7019		Pedunculate oak	13.2	5.2	6.2	6	7	2.3 - W	0.4	1	570					6.84	147	M	F	Upright stem with full healthy crown. Medium dead wood in central crown. No apparent significant defect	No action required at time of survey	>40	B1	RET
7020		Pedunculate oak	16.3	5.8	6	6	5.5	0.4 - E	0.5	1	760					9.12	261	M	F	Upright stem with full healthy crown. Attractive parkland form	No action required at time of survey	>40	A1	RET
7021		Pedunculate oak	18.2	7	6.2	5	6.3	1.8 - E	1.6	1	830					9.96	311	M	G	Upright stem with full healthy crown. Ivy covered lower stem and crown. No observed dieback or disease and no sign of obvious decay	No action required at time of survey	>40	A1	RET
7022		Pedunculate oak	17.5	5.4	6.8	3.8	7.8	2.4 - S	4.5	1	620					7.44	174	M	F	Somewhat suppressed/constrained crown. Minor dieback in upper crown.	No action required at time of survey	20+	B1	RET
7023		Pedunculate oak	18.4	6	7.5	8.2	3.6	2.4 - W	0.6	1	730					8.76	241	M	F	Ivy covered lower stem. Skewed crown due to adjacent trees. No observed dieback or disease and no sign of obvious decay	No action required at time of survey	>40	B1	RET
7024		Pedunculate oak	13.6	2.8	3.7	4.2	3.2	2.3 - S	0.5	1	560					6.72	142	M	F	Somewhat suppressed crown. Dieback in upper central area with Major deadwood	No action required at time of survey	20+	B1	RET
7025		Pedunculate oak	12.5	4.5	4.8	5	6.2	2.7 - S	1.3	1	680					8.16	209	M	G	Upright stem with full healthy crown. Attractive parkland form	No action required at time of survey	>40	A1	RET
7026		Silver birch	7.5	2.5	0.8	1.6	2.3	1.6 - N	1.6	1	170					2.04	13	EM	F	Significantly angled stem towards NE. Crown suppressed and thin	No action required at time of survey	10+	C1	RET
7027		Pedunculate oak	16.2	6.2	6.2	6	0.6	1.5 - E	1.2	1	780					9.36	275	M	G	Upright stem with full healthy crown. Attractive parkland form	No action required at time of survey	>40	A1	RET
7028		Pedunculate oak	6.2	4.2	0.5	0.5	3.8	1.6 - W	0.8	1	270					3.24	33	EM	F	Suppressed/constrained crown with angled stem. No observed dieback or disease	No action required at time of survey	10+	C1	RET
7029		Pedunculate oak	14.5	5	5.3	4.3	4.8	2.3 - S	0.5	1	710					8.52	228	M	F	Upright stem with full healthy crown. No apparent significant defect	No action required at time of survey	>40	B1	RET
7030		Goat willow	9.5	3.3	3	2.5	3.4	0.5 - S	0.2	6	110					3.24	33	SM	F	Multiple stems from ground level. Constrained crown due to adjacent larger tree. No observed dieback or disease	No action required at time of survey	20+	C1	RET
7031		Pedunculate oak	13.8	4.2	4.5	5.6	5	2.1 - N	0.3	1	650					7.80	191	M	F	Ivy covered lower stem and crown. Significant dieback in N crown with Major deadwood. No stem decay evident	No action required at time of survey	20+	B1	RET
7032		Pedunculate oak	16.5	6.5	7	7.4	7.2	2.7 - W	1.2	1	690					8.28	215	M	G	Upright stem with full healthy crown. Attractive parkland form	No action required at time of survey	>40	A1	RET
7033		Pedunculate oak	16.2	6.2	7.1	6.6	7	2.4 - E	1.1	1	760					9.12	261	M	G	Upright stem with full healthy crown. low branches form a small thicket to S of tree. No apparent significant defect	No action required at time of survey	>40	A1	RET
7034		Pedunculate oak	16.9	6.8	7.3	6.5	7.5	1.1 - S	2.1	1	820					9.84	304	M	G	Upright stem with full healthy crown. Minor dieback in N crown. Major deadwood in central area	Stabilise deadwood	>40	A1	RET
7035		Pedunculate oak	15.8	5.6	6.7	7	5.5	2.6 - S	1.8	1	710					8.52	228	M	F	Crown thick and healthy but constrained to E by adjacent larger tree. No observed dieback or disease and no sign of obvious decay	No action required at time of survey	>40	B1	RET
7036		Pedunculate oak	13.4	6.2	6	6.5	5.1	2.1 - W	1.3	1	660					7.92	197	M	F	Major deadwood in central area of otherwise healthy and thick rounded crown. No apparent significant defect	No action required at time of survey	>40	A1	RET
7037		Pedunculate oak	16.2	6.8	5.6	6.3	6	2.0 - N	1.4	1	650					7.80	191	M	F	Relatively thin crown compared to adjacent trees. Major deadwood in central crown. No observed dieback or disease and no sign of obvious decay	No action required at time of survey	20+	B1	RET
7038		Pedunculate oak	13.2	4.2	5.2	5.6	4.6	2.1 - E	1.6	1	540					6.48	132	M	F	Angled stem towards SW. Crown constrained by adjacent tree. No observed dieback or disease and no sign of obvious decay	No action required at time of survey	20+	B1	RET
7039		Pedunculate oak	14.2	6.5	6.7	3.9	6.6	1.8 - W	1.1	1	570					6.84	147	M	F	Crown forms single canopy with adjacent tree to W. Major deadwood in central crown. No observed dieback or disease and no sign of obvious decay	No action required at time of survey	>40	B1	RET
7040		Pedunculate oak	14.6	6	6.4	6.7	4	1.7 - S	0.6	1	630					7.56	179	M	F	Crown forms single canopy with adjacent tree to E. Major deadwood in central crown. No observed dieback or disease and no sign of obvious decay	No action required at time of survey	>40	B1	RET
7041		Beech	10.2	5.6	6	6.5	7	2.4 - W	2.1	1	850					10.20	327	OM	F	VETERAN TREE - Main stem has extensive decay from base to top where historic storm damage has removed main leader above c.8.5m. Spreading crown below this us healthy throughout.	No action required at time of survey	20+	A3	RET

FLAC Ref. No.	TPO Ref	Species	Ht.	Crown Spread (m)				Ht. 1st Br.	Ht. Can.	Stem Count	Stem Dia. (mm)					RPA Rad.	RPA Area	Life Stage	Phys. Condition	Structural condition & Notes	Management recommendations	Ret. Span	QV Grade	Proposal
			(m)	N	S	W	E	(m)	(m)		1 / mean	2	3	4	5	(m)	(m2)	Y-SM-EM-M-OM	G-F-P-D			<10, 10+ 20+, >40	U-A-B-C	
7042		Silver birch	12.1	3	3.9	3.2	2.6	1.1 - W	0.6	2	320	280				5.11	82	M	F	Twin stems from 1.6m with included unions where stems meet. No observed dieback or disease and no sign of obvious decay	No action required at time of survey	20+	B1	RET
7043		Sycamore	9.3	3	2.9	3	2.6	0.8 - N	1	2	200	180				3.23	33	SM	F	Twin stems from ground level with included unions where stems meet. Overgrown self set tree. No observed dieback or disease	No action required at time of survey	20+	C1	RET
7044		Sycamore	10.4	6.2	4.3	4.5	3.6	0.6 - W	1	12	170					7.07	157	SM	F	Multiple stems from ground level. Overgrown former hedgerow tree. No observed dieback or disease	No action required at time of survey	20+	C1	RET
7045		Sweet chestnut	10.2	1.5	6.8	6	2.8	3.1 - S	0.6	1	470					5.64	100	M	F	Constrained/suppressed crown with angled stem towards S. No observed dieback or disease	No action required at time of survey	20+	C1	RET
7046		Pedunculate oak	15.8	5.6	5	5	4.5	3.6 - E	4	1	480					5.76	104	M	F	High crown on woodland edge tree. No observed dieback or disease and no sign of obvious decay	No action required at time of survey	20+	B1	RET
7047		Corsican pine	21	5.5	4.5	5.5	5	4.5 - S	6	1	600					7.20	163	M	F	3rd party tree just beyond boundary fence. Crown has been raised in recent past. No observed dieback or disease and no sign of obvious decay	No action required at time of survey	20+	B1	RET
7048		Corsican pine	21	3.5	6	5.5	5.5	4 - S	5.5	1	560					6.72	142	M	F	3rd party tree just beyond boundary fence. Crown has been raised in recent past. No observed dieback or disease and no sign of obvious decay	No action required at time of survey	20+	B1	RET
7049		Field maple	14.2	5	2.2	4.3	5	2.4 - E	1.8	3	420	360	140			6.85	147	M	F	Multiple stems from ground level with tight forks where stems meet. Tree appears to be overgrown boundary tree growing from edge of ditch. Skewed crown due to proximity of woodland. No observed dieback or disease and no sign of obvious decay	No action required at time of survey	20+	B1	RET
7050		Goat willow	13	5.2	6	6.5	5	1.3 - S	2.1	5	530	480	320	260	180	10.14	323	M	F	Multiple ivy covered stems from 0.3m with included unions where stems meet. Decaying branch wounds on lower 2m of stems. No dieback in crown	No action required at time of survey	10+	C1	RET
7051		Pedunculate oak	14.6	4.2	6.5	4.5	4	2.3 - E	2.4	1	880					10.56	350	OM	P	Approximately 50-60% of crown is dead and skeletonised. Crown to S and E has thick healthy foliage. Extensive bark loss and associated stem decay on lower 3-4m of N of main trunk. Woodpecker/animal habitats within upper stem and dead major limbs.	Stabilise deadwood	20+	B3	RET
7052		Pedunculate oak	16.3	5.5	5.4	6.7	6.6	2.3 - W	3.3	1	600					7.20	163	M	F	3rd party tree at corner of property. Congested lower crown where pruning has initiated epicormic growth, but no dieback, disease or decay evident	No action required at time of survey	>40	B1	RET
7053		Pedunculate oak	16.3	8.2	9	7.6	7.5	2.2 - E	1.3	1	1210					14.52	662	M	G	Stout lower stem with significant burr growth. Major deadwood in central crown. No observed dieback or disease and no sign of obvious decay. Possible future veteran	No action required at time of survey	>40	A1	RET
7054		Coast redwood	27	6	6	5.5	6	4.5 - E	0.5	1	1750					15.00	707	M	G	Very large tree growing on slope of woodland hollow. Single stout low trunk becomes twin leaders from 3.2m with tight forks where stems meet. Historic storm damage on W most stem has left major tear wound. No dieback in foliage and no significant stem decay evident. Potential future veteran tree	No action required at time of survey	40	A1	RET
7055		Ash	18.5	5.5	6	5.5	5	7.5 - S	9.5	1	710					8.52	228	M	G	Very straight and tall stem makes tree distinctive from adjacent woodland. Very minor dieback evident in upper crown	No action required at time of survey	>40	A1	RET
7056		Copper beech	17.8	9.5	9	8	7.5	4 - S	0.5	1	910					10.92	374	M	G	Upright stem with full healthy crown. No apparent significant defect	No action required at time of survey	>40	A1	RET
7057		Goat willow	8.5	5.2	3.9	4	5.5	1.5 - E	0.6	1	620					7.44	174	M	F	Stout lower stem becomes multiple leader from 1.6m with included unions where stems meet. Large amount of broken/damaged limbs in upper crown. No observed dieback or disease	No action required at time of survey	20+	B1	RET
7058		Sweet chestnut	17.5	6	7.8	6.5	7	2.6 - N	0.5	1	1180					14.16	630	M	F	Upright stem leads to crown with beginning of stag-heading/retrenchment present. Major deadwood in lower reaches. No stem decay evident. Possible future veteran	No action required at time of survey	>40	A1	RET
7059		Sweet chestnut	18	7.5	7	7	8	1.5 - E	0.4	2	1030	610				14.37	648	M	G	Twin stems from ground level with tight forks where stems meet. Stems growing at angle towards SW. Full healthy crown with no dieback or decay evident	No action required at time of survey	>40	A1	RET
7060		Pedunculate oak	19.5	6.2	9	8.5	8	2.7 - S	1.1	1	840					10.08	319	M	G	Upright stem with full healthy crown. Major deadwood in central crown. No observed dieback or disease and no sign of obvious decay	No action required at time of survey	>40	A1	RET
7061		Ash	18.2	6.2	4	5.7	6.2	4.8 - N	1.3	1	780					9.36	275	M	G	Upright stem with full healthy crown. Major deadwood in central crown. No observed dieback or disease and no sign of obvious decay	No action required at time of survey	>40	A1	RET
7062		Ash	16.7	6.8	5.5	6.5	7.8	2.3 - W	1.7	1	600					7.20	163	OM	P	Significant decline in crown. Inonotus hispidus fungal fruiting bodies on main stem at 8-10m.	Fell to as low as reasonably practicable	<10	U	U
7063		Pedunculate oak	15.5	6	6.5	6.2	6.8	5.5 - W	3.2	1	680					8.16	209	M	G	Upright stem with full healthy crown. No apparent significant defect	No action required at time of survey	>40	A1	RET
7064		Ash	19.2	8.5	9.5	7	8.5	4.3 - S	4	1	840					10.08	319	M	G	Upright stem with spreading healthy crown. Bark loss at base to E with superficial decay.	No action required at time of survey	>40	A1	RET
7065		Turkey oak	22	9	7.5	7	9	4.2 - E	0.5	2	820	720				13.10	539	M	G	Twin stems from ground level with tight forks where stems meet. Ivy covered lower stem and crown. Full healthy crown throughout. No observed dieback or disease and no sign of obvious decay	No action required at time of survey	>40	A1	RET
7066		Goat willow	11	6.2	6.5	6	5	0.8 - N	2	7	260					8.26	214	M	F	Multiple stems from ground level with included unions where stems meet. Multiple broken branches in central crown. No observed dieback or disease	No action required at time of survey	20+	C1	RET
7067		Pedunculate oak	24	8	4.5	6	12	1.8 - E	0.6	1	970					11.64	425	M	F	Trunk and leaders angled towards E. No root plate movement evident. No observed dieback or disease and no sign of obvious decay	No action required at time of survey	>40	A1	RET
7068		Copper beech	23.5	9	8.5	9	11	2.9 - E	1.2	1	860					10.32	334	M	G	Upright stem with full healthy crown. No apparent significant defect	No action required at time of survey	>40	A1	RET
7069		Scots pine	23	6.5	9.5	8	6	8.5 - N	12	1	780					9.36	275	M	G	Upright stem becomes multiple leader from 8-10m. Major deadwood in central reaches. No observed dieback or disease and no sign of obvious decay	No action required at time of survey	>40	A1	RET
7070		Pedunculate oak	21	8.5	6.5	13	10	5.8 - S	4.8	1	860					10.32	334	M	G	Upright stem with full healthy crown. Major deadwood in central crown. No observed dieback or disease and no sign of obvious decay	No action required at time of survey	>40	A1	REM
7071		Pedunculate oak	21.5	8	7.5	7	10	3.1 - N	1	1	890					10.68	358	M	G	Upright stem with full healthy crown. No apparent significant defect. Excellent specimen	No action required at time of survey	>40	A1	RET
7072		Pedunculate oak	19.5	13	12	13	11	3.6 - W	9.5	1	920					11.04	383	M	G	Ivy covered lower stem. Upright stem with widely spreading crown. Major deadwood in lower reaches. No observed dieback or disease and no sign of obvious decay	Stabilise deadwood	>40	A1	RET
7073		Pedunculate oak	23	9	10	12	11	2.5 - S	3.5	1	940					11.28	400	M	G	Upright stem with full healthy crown. No apparent significant defect. Excellent specimen	No action required at time of survey	>40	A1	RET
7074		Downy birch	23	7	6	8	8	2.4 - N	2.8	1	1010					12.12	461	M	G	Very large excellent specimen. No apparent significant defect	No action required at time of survey	>40	A1	RET
7075		Pedunculate oak	22	11	12	11	11	3.4 - W	3.5	1	1250					15.00	707	M	G	Upright stem with full healthy crown. Single stem becomes twin leader at 3-4m. No apparent significant defect. Excellent specimen	No action required at time of survey	>40	A1	RET
7076		Pedunculate oak	21	10	9	8.5	11	2.3 - E	4.5	1	960					11.52	417	M	G	Upright stem leads to spreading crown. Major deadwood in lower crown. No stem decay or dieback in crown. Open cavity in major limb towards E. Possible future veteran	Stabilise deadwood	>40	A3	RET
7077		Pedunculate oak	19.5	7	6..5	8	5.5	4.8 - N	7.2	1	980					11.76	434	OM	F	Potential future veteran. Strip of bark loss from ground to top of crown with minor decay associated throughout length. Likely historic lightning strike damage. Major deadwood in lower reaches. No extensive basal decay and no fungal fruiting bodies found.	Stabilise deadwood	>40	A3	RET
8001		Beech	14.2	5.6	5.3	4.3	3.5	1.4 - S	1.6	2	520	320				7.33	169	M	F	Twin stems from ground level. Larger stem bifurcates at 6m with included unions where stems meet. No observed dieback or disease and no sign of obvious decay	No action required at time of survey	20+	B1	REM
8002		Silver birch	14.8	2.3	3	3	3.2	2.2 - SE	2.6	1	310					3.72	43	M	F	Ivy covered lower stem . Constrained crown due adjacent trees. No observed dieback or disease and no sign of obvious decay	No action required at time of survey	20+	B1	REM

FLAC Ref. No.	TPO Ref	Species	Ht. (m)	Crown Spread (m)				Ht. 1st Br. (m)	Ht. Can. (m)	Stem Count	Stem Dia. (mm)					RPA Rad. (m)	RPA Area (m2)	Life Stage Y-SM-EM-M-OM	Phys. Condition G-F-P-D	Structural condition & Notes	Management recommendations	Ret. Span <10, 10+ 20+, >40	QV Grade U-A-B-C	Proposal
				N	S	W	E				1 / mean	2	3	4	5									
8003		Beech	16.5	6.5	6.8	7.2	7	2 - NW	2.2	1	630					7.56	179	M	F	Major limb at 2.2m forms poor union with main stem. No observed dieback or disease and no sign of obvious decay	No action required at time of survey	20+	B1	REM
8004		Sycamore	17.2	4.2	6.4	4.3	5	4.2 - S	5	1	520					6.24	122	M	P	Ivy covered lower stem and crown. Dieback through central upper crown. Major deadwood in upper crown. No sign of basal decay	Fell to as low as reasonably practicable	10+	C1	REM
8005		Holly	12.3	3.4	3.2	2	3.4	1.3 - SW	1	2	300	260				4.77	71	M	F	Twin stems from ground level with included unions where stems meet. Constrained crown. No observed dieback or disease and no sign of obvious decay	No action required at time of survey	20+	C1	REM
8006		Yew	10.5	3.8	6.2	4.4	4	2.3 - SW	0.4	3	360	350	350			7.35	170	M	F	Multiple stems from 0.5m with included unions where stems meet. Skewed crown towards S. No observed dieback or disease and no sign of obvious decay	No action required at time of survey	>40	B1	REM
8007		Yew	8.5	1.5	2	1.8	2.2	0.5 - N	0.3	1	190					2.28	16	EM	F	Ivy covered lower stem . Skewed and leaning crown towards S. No observed dieback or disease	No action required at time of survey	20+	C1	REM
8008		Elm	16	7.4	6	6.5	6	1.8 - S	2.1	3	370	340	320			7.15	161	M	F	Multiple stems from ground level with tight forks where stems meet. Ivy covered lower stem and crown. No sign of dieback or disease at present.	No action required at time of survey	20+	B1	REM
8009		Yew	7.8	2.2	3.3	3.4	3.4	1 - W	1.3	1	260					3.12	31	M	F	Single stem becomes multiple leader from 1.5m. Ivy covered lower stem and crown. No observed dieback or disease	No action required at time of survey	20+	B1	REM
8010		Sycamore	17	2	6.4	3.5	2.2	4.6 - E	4	2	720	680				11.89	444	M	F	Twin stems from ground level with included unions where stems meet. One stem has been reduced heavily down to 12m leaving only minor regrowth on stem. Remaining crown on larger stem is heavily skewed towards SW. No observed dieback or disease and no basal decay present.	No action required at time of survey	20+	C1	REM
8011		Yew	10.4	3	4	3.6	3	1.8 - S	1.3	2	250	220				4.00	50	M	F	Twin stems from ground level with included unions where stems meet. Stems angled towards SW, but no sign of root plate movement. No observed dieback or disease and no sign of obvious decay	No action required at time of survey	20+	C1	REM
8012		Yew	9.5	0.5	3	2.4	1.4	0.8 - S	1.2	1	210					2.52	20	M	F	Heavily constrained crown on angled stem towards SW. No observed dieback or disease	No action required at time of survey	20+	C1	RET
8013		Sycamore	14.3	4.2	1.5	2.8	3.4	4.8 - N	5.5	1	330					3.96	49	M	F	Heavily constrained and skewed crown. Ivy covered lower stem and crown. No basal or stem decay evident.	No action required at time of survey	20+	C1	RET
8014		Sycamore	22	7.4	5.2	7	6.5	2 - S	5.4	1	780					9.36	275	M	F	Single stem bifurcates at 6.5m with tight forks where stems meet. No stem or basal decay evident. No sign of dieback or disease in central crown.	No action required at time of survey	20+	B1	RET
8015		Laburnum	4.8	3	2.5	3.1	2.6	1.8 - NW	1.9	8	150					5.10	82	M	F	Multiple stems from ground level with tight forks where stems meet. No apparent significant defect	No action required at time of survey	20+	C1	REM
8016		Laburnum	4.2	2.4	2.1	0.5	3	1.6 - S	1.5	2	130	110				2.05	13	M	F	Twin stems from ground level with tight forks where stems meet. Skewed and constrained crown. No observed dieback or disease	No action required at time of survey	20+	C1	REM
8017		Japanese cherry	9.5	2.8	2	2.2	2.5	1.7 - SE	2.3	1	240					2.88	26	M	F	Grafted stem from 1.3m. No observed dieback or disease and no sign of obvious decay	No action required at time of survey	20+	C1	REM
8018		Apple	5.2	3.5	2.2	3.6	3.5	1.2 - W	1.5	1	260					3.12	31	M	F	Skewed crown towards N. No observed dieback or disease and no sign of obvious decay	No action required at time of survey	20+	C1	RET
8019		Pedunculate oak	21	6.5	10	7.4	7	5.2 - S	5	1	770					9.24	268	M	G	Upright stem with full healthy crown. Moderate deadwood in upper crown. No apparent significant defect	Stabilise dead wood according to occupancy levels beneath the crown	>40	A1	RET
8020		Sycamore	16.5	5.2	2.5	5.3	6	4.3 - N	2.9	1	540					6.48	132	M	F	Single stem bifurcates at 1.8m with tight forks where stems meet. Skewed crown due to adjacent larger trees. No observed dieback or disease and no sign of obvious decay	No action required at time of survey	20+	B1	RET
8021		Silver birch	10	3.5	1.5	1.2	3.2	1.9 - N	2.3	1	300					3.60	41	M	P	Ivy covered lower stem and crown. Heavily constrained and skewed crown. Little of foliage visible. No basal or stem decay evident	No action required at time of survey	10+	C1	RET
8022		Sycamore	18.5	7	6.5	6	5.5	2.4 - S	4.8	2	610	470				9.25	269	M	F	Twin stems from 1.3m with tight forks where stems meet. No observed dieback or disease and no sign of obvious decay	No action required at time of survey	20+	B1	RET
8023		Sycamore	13.8	2.5	4.5	4	3.5	2.3 - E	3.2	1	270					3.24	33	M	F	Skewed and constrained crown. No observed dieback or disease and no sign of obvious decay	No action required at time of survey	20+	C1	RET
8024		Silver birch	11	2.8	3	2.6	3.3	2.6 - N	0.2	1	230					2.76	24	M	F	Somewhat constrained crown, but no sign of dieback or disease	No action required at time of survey	20+	B1	RET
8025		Yew	7.2	4.2	3.5	3.1	3.6	1 - N	1	1	260					3.12	31	EM	F	Upright stem with full healthy crown. No apparent significant defect	No action required at time of survey	>40	B1	RET
8026		Cider gum	18.5	6.5	5	4.8	5.6	3.8 - E	12.5	1	580					6.96	152	M	F	Upright stem with full healthy crown. No apparent significant defect	No action required at time of survey	20+	B1	RET
8027		Pedunculate oak	18	2.5	3	6	3.8	7.8 - E	9	1	300					3.60	41	M	F	Ivy covered lower stem and crown. High, but full crown. No apparent significant defect	No action required at time of survey	20+	B1	RET
8028		Ash	17.2	4.2	6	5.4	6.4	2.5 - S	3.2	6	460					13.53	575	M	F	Multiple stems from ground level with included unions where stems meet. Dieback in upper central crown showing signs of as dieback disease. No basal or stem decay evident	No action required at time of survey	10+	C1	RET
8029		False acacia	15	2.5	6.4	6	4.2	2.3 - NW	3.4	2	320	190				4.47	63	EM	F	Twin stems from 0.4m with included unions where stems meet. Further poor unions from 2.2m and partially failed/split limbs here also. Hanging broken branches in upper crown. No observed dieback or disease	Remove hanging broken branches and partially failed stems.	20+	C1	RET
8030		Beech	14.2	5.5	7	5.5	6.5	2.6 - S	2	1	380					4.56	65	M	F	Single stem bifurcates at 5.5m with included unions where stems meet. No observed dieback or disease and no sign of obvious decay	No action required at time of survey	20+	B1	RET
8031		Scots pine	19	5.5	6.5	5.2	6	10.2 - W	13	1	810					9.72	297	M	F	Heavily kinked/contorted central stem. Major deadwood in upper crown. No observed dieback or disease and no sign of obvious decay	No action required at time of survey	20+	B1	RET
8032		Scots pine	18.6	3.2	6.4	2	6	3.2 - W	8.5	1	630					7.56	179	M	F	Heavily constrained crown. No observed dieback or disease and no sign of obvious decay	No action required at time of survey	20+	B1	RET
8033		Pedunculate oak	17	6.2	6.5	7	4.8	3.9 - N	4.2	1	560					6.72	142	M	F	Upright stem with full healthy crown. Moderate deadwood in lower crown. No observed dieback or disease and no sign of obvious decay	No action required at time of survey	>40	B1	RET
8034		Pedunculate oak	9.8	2.4	4.2	3.2	4.6	2.3 - S	2	2	360	220				5.07	81	M	F	Twin stems from ground level. Third stem has been historically lost with decaying stump remaining between stems. No observed dieback or disease	No action required at time of survey	20+	B1	RET
8035		Ash	12.8	2.9	3.4	3.4	3.6	4.6 - SE	4	1	330					3.96	49	EM	F	Ash dieback through lower crown. No basal or stem decay apparent	No action required at time of survey	10+	C1	RET
8036		Pedunculate oak	20	9.6	10	5.5	11.3	2.6 - SE	2.1	1	1420					15.00	707	M	G	VETERAN. Major limb failure in lower crown has left very large decaying branch stub with woodpecker holes. Further bark loss of limbs in upper crown. Major deadwood in upper crown. No sign of basal or lower stem decay	Stabilise dead wood according to occupancy levels beneath the crown	>40	A1	RET
8037		Sycamore	18.2	8.8	7.2	7.5	4.2	2.6 - S	3.3	2	780	290				9.99	313	M	F	Main stem with overgrown basal shoot. Constrained crown due to adjacent trees. No observed dieback or disease and no sign of obvious decay	No action required at time of survey	20+	B1	RET
8038		Monterey pine	25.4	10.4	13	9.4	9.5	9.8 - S	12.5	1	1540					15.00	707	M	G	Notable tree - Very large stem leading to spreading crown. Relatively recent major limb failures have left major branch stubs/wounds in upper crown. No observed dieback or disease and no sign of obvious decay	No action required at time of survey	>40	A1	RET
8039		Beech	14.8	6.5	3.5	5.8	4	2.3 - NW	1.8	3	1130	190	120			13.83	601	OM	P	VETERAN relic tree. Major and widespread stem decay from 0-5m where stem has failed historically. Ganoderma sp. Fruiting body at base to S and E. Single major limb present. Overgrown basal shoots form secondary stems.	No action required at time of survey	20+	B3	RET
8040		Pedunculate oak	22	5.6	7	5.5	7.4	6.2 - N	7	1	520					6.24	122	M	F	Upright stem leads to high crown. Major deadwood in central crown. No basal or stem decay	Stabilise dead wood according to occupancy levels beneath the crown	>40	B1	RET

FLAC Ref. No.	TPO Ref	Species	Ht.	Crown Spread (m)				Ht. 1st Br.	Ht. Can.	Stem Count	Stem Dia. (mm)					RPA Rad.	RPA Area	Life Stage	Phys. Condition	Structural condition & Notes	Management recommendations	Ret. Span	QV Grade	Proposal
			(m)	N	S	W	E	(m)	(m)		1 / mean	2	3	4	5	(m)	(m2)	Y-SM-EM-M-OM	G-F-P-D			<10, 10+ 20+, >40	U-A-B-C	
8041		Sycamore	18.5	3.2	6.4	4.5	6	3.5 - SW	2.5	2	530	270				7.14	160	M	P	Twin stems from ground level with decaying remnants of at least one further stem between them. Main stem has extensive internal hollowing with open cavities on N and S face.	Fell to as low as reasonably practicable	>10	U	U
8042		Pedunculate oak	12.5	3	4.1	4.5	3.6	1.8 - SW	2.2	1	690					8.28	215	M	F	Historic stem failure at c.11m has left decaying stub. Remaining foliage appears healthy throughout. Major deadwood in upper crown. No basal or stem decay evident.	Stabilise dead wood according to occupancy levels beneath the crown	20+	B3	RET
8043		Silver birch	14.2	5.6	6	6.8	6.7	3.4 - NE	1.9	1	570					6.84	147	M	F	Upright stem with full healthy crown. No apparent significant defect	No action required at time of survey	20+	B1	RET
8044		Yew	12.2	3.4	3.8	3.8	4.2	1.8 - W	1.6	1	460					5.52	96	M	F	Single stem bifurcates at 6m with included unions where stems meet. No observed dieback or disease and no sign of obvious decay	No action required at time of survey	>40	B1	REM
8045		Pedunculate oak	18.5	7.2	8	7.8	6.5	1.9 - W	2.6	1	1200					14.40	651	M	G	Notable tree - Stout lower stem leads to spreading crown from 2.5m. Major limbs in lower crown have decaying columns on upper surfaces with saprophytic fruiting body present hear also. Major deadwood in central crown. No sign of stem or basal decay	Stabilise dead wood according to occupancy levels beneath the crown	>40	A3	RET
8046		Pedunculate oak	19	8	7.5	9.2	7.6	1.8 - SW	2.4	1	990					11.88	443	M	G	Stout lower stem leads to spreading crown. Major deadwood in upper crown. No observed dieback or disease and no sign of obvious decay	Stabilise dead wood according to occupancy levels beneath the crown	>40	A1	RET
8047		Beech	17.8	6.5	6	5.8	6.5	5.4 -NE	6	1	680					8.16	209	M	F	Decaying branch wounds on lower stem. Branch failure in central crown has left decaying stub. Major deadwood in upper crown. No basal or stem decay evident	Stabilise dead wood according to occupancy levels beneath the crown	20+	B1	RET
8048		Pedunculate oak	19.2	8.2	7	8.3	6.9	4.4 - SW	3.2	1	910					10.92	374	M	G	Upright stem with full healthy crown. Major deadwood in upper crown. No observed dieback or disease and no sign of obvious decay	Stabilise dead wood according to occupancy levels beneath the crown	>40	A1	RET
8049		Pedunculate oak	19	6.5	9	6.8	8	2.1 - E	1.6	1	800					9.60	289	M	G	Upright stem with full healthy crown. Major deadwood in upper crown. No observed dieback or disease and no sign of obvious decay	Stabilise dead wood according to occupancy levels beneath the crown	>40	A1	RET
8050		Pedunculate oak	17.8	8.8	6.5	7.2	5.8	2.3 - N	1.5	1	620					7.44	174	M	F	Ivy covered lower stem and crown. Skewed crown due to position on edge of woodland. No observed dieback or disease and no sign of obvious decay	No action required at time of survey	>40	B1	RET
8051		Ash	18.5	7	8.4	6.2	5	4.7 - NE	3	1	640					7.68	185	M	F	Very start of ash dieback through upper central crown. Major deadwood in lower crown. No basal or stem decay evident.	No action required at time of survey	20+	B1	RET
8052		Pedunculate oak	17.4	6.8	7.4	6.8	7	1.9 - SW	4.2	2	480	400				7.50	177	M	F	Twin stems from 1m with included unions where stems meet. No observed dieback or disease and no sign of obvious decay.	No action required at time of survey	>40	B1	RET
8053		Ash	16.4	4.8	5.4	6.3	3.2	2.8 - NE	1.9	3	380	190	130			5.34	90	M	F	Multiple stems from ground level with tight forks where stems meet. Dieback evident in lower crown. No basal or stem decay	No action required at time of survey	10+	C1	RET
8054		Scots pine	17.5	1.9	2.5	2.8	2.1	14.2 - W	14	1	340					4.08	52	M	F	High crown on tall, slender tree. No observed dieback or disease and no sign of obvious decay	No action required at time of survey	20+	C1	RET
8055		Elm	9.5	2.3	2.8	2.8	2.5	1.9 - W	2.2	1	220					2.64	22	EM	F	Somewhat constrained crown, but No apparent significant defect	No action required at time of survey	20+	C1	RET
8056		Scots pine	16.2	1.8	19	1	2.2	6.8 - E	7	1	230					2.76	24	M	F	Heavily constrained crown with evidence of historic limb failures in upper crown	No action required at time of survey	10+	C1	RET
8057		Scots pine	17.4	2.8	3.4	2.8	3.5	9.8 - S	9.5	1	300					3.60	41	M	F	Column of decay from 0-2.5m on main stem. No dieback in crown.	No action required at time of survey	10+	C1	RET
8058		Scots pine	18.5	4.2	4	3.8	4.5	12.2 - S	13.5	1	460					5.52	96	M	F	Slightly inclined stem towards NE, but no sign of root plate movement. Moderate deadwood in upper crown. No observed dieback or disease	No action required at time of survey	20+	B1	RET
8059		Elm	18.5	3.3	3.8	3.5	4	4.5 - SE	3.2	2	380	340				6.12	118	M	F	Twin stems from ground level with included unions where stems meet. Stems inclined and contorted around each other towards NE. No observed dieback or disease and no sign of obvious decay	No action required at time of survey	20+	C1	RET
8060		Scots pine	14	0.5	1	0.8	1	12 - N	12	1	260					3.12	31	M	D	Standing dead tree	Fell to as low as reasonably practicable	<10	U	U
8061		Silver birch	15	3	3.4	2.9	3	4.8 - N	6.7	1	270					3.24	33	M	F	Single stem becomes twin leader from 6-7m. No apparent significant defect	No action required at time of survey	20+	B1	RET
8062		Sweet chestnut	15.6	31	4	3.2	3.4	2.6 - S	1.5	1	330					3.96	49	M	F	Skewed and contorted crown due to adjacent trees. No apparent significant defect	No action required at time of survey	20+	C1	RET
8063		Ash	17.5	2.8	3.8	4	3.5	7.5 - N	13.5	2	330	280				5.20	85	M	P	Twin stems from ground level with decaying stool present between. Advanced dieback through crown.	Fell to as low as reasonably practicable	<10	U	U
8064		Ash	18.8	5.4	4.5	3.8	4	12.5 - E	14	1	400					4.80	72	M	P	Significant dieback/decline through upper crown. No basal or stem decay evident	No action required at time of survey	10+	C1	RET
8065		Elm	19	4	3.8	4	4.2	4.8 - N	3.8	1	360					4.32	59	M	F	Upright stem with full healthy crown No apparent significant defect. No sign of DED.	No action required at time of survey	20+	B1	RET
8066		Elm	8	3.2	3.8	3.5	4	5 - SE	4.4	1	340					4.08	52	M	F	Upright stem with full healthy crown No apparent significant defect. No sign of DED.	No action required at time of survey	20+	B1	RET
8067		Ash	18.5	5	4.8	4.2	6.2	6.2 - E	5.8	3	480	400	250			8.08	205	M	F	Overgrown coppice stool, with tight forks where stems meet. Dieback/decline beginning to take hold in upper central crown. No basal or stem decay.	No action required at time of survey	10+	C1	RET
8068		Elm	19.4	3.5	6.2	6.5	6.8	2.7 - E	2.4	3	440	410	330			8.24	213	M	F	Multiple stems from ground level from overgrown stool. Decaying stump present beside other stems. Contorted/twisted stems leading to full healthy crown.	No action required at time of survey	20+	B1	RET
8069		Silver birch	17.1	3.2	4.3	2.4	4	1.9 - S	3.2	3	430	160	75			5.58	98	M	F	Secondary stems are overgrown basal shoots. Skewed crown due to adjacent trees, but no sign of dieback or decline	No action required at time of survey	20+	B1	RET
8070		Elm	15.9	6.2	3.5	4	3.8	1 - W	2.3	3	310	220	110			4.75	71	M	F	Multiple stems from 0.8m with included unions where stems meet. Skewed, but healthy crown. No sign of DED.	No action required at time of survey	20+	C1	RET
8071		Silver birch	18.2	3	3	2.5	3.2	9.9 - N	10	1	260					3.12	31	M	F	Upright stem leads to high, slender crown. No observed dieback or disease and no sign of obvious decay	No action required at time of survey	20+	B1	RET
8072		Ash	18.5	4.2	4	3.5	4.8	1.8 - S	6.5	4	360	340	330	140		7.34	169	M	P	Multiple stems from ground level with tight forks where stems meet. Widespread decline due to ash dieback through crown. No basal or stem decay evident.	Fell to as low as reasonably practicable	<10	U	U
8073		Ash	18.3	5.1	3.8	4.2	4	6.4 - NE	7.2	1	370					4.44	62	M	P	Widespread dieback throughout crown. No basal or stem decay evident.	Fell to as low as reasonably practicable	<10	U	U
8074		Silver birch	17	3	3.2	2.8	4	11.2 - S	13	1	260					3.12	31	M	F	Upright stem leads to full, but high crown. No apparent significant defect	No action required at time of survey	20+	B1	RET
8075		Ash	15.8	4.3	4.5	4.3	5.3	5 - NE	7.2	1	360					4.32	59	M	F	Upright stem with full high crown. Ash dieback starting to affect upper crown, but not significantly at present. No basal or stem decay evident	No action required at time of survey	10+	C1	RET
8076		Pedunculate oak	15.4	3.9	5.3	4.2	5.2	2.5 - N	2.6	1	430					5.16	84	M	G	Upright stem with full healthy crown. No apparent significant defect	No action required at time of survey	>40	B1	RET
8077		Scots pine	18.5	5	3.9	4.4	5.8	9.5 - E	13	1	500					6.00	113	M	F	Upright stem with full healthy crown. No apparent significant defect	No action required at time of survey	20+	B1	RET
8078		Scots pine	16.2	4	3.9	2.6	3.4	11 - S	10.6	1	410					4.92	76	M	F	Somewhat constrained crown, but no sign of dieback or decline	No action required at time of survey	20+	B1	RET
8079		Pedunculate oak	14.8	3.8	4.9	3.2	4.6	4.8 - E	4.6	1	340					4.08	52	M	F	Constrained crown, but healthy throughout. No apparent significant defect	No action required at time of survey	>40	B1	RET
8080		Pedunculate oak	13.2	4.3	5.2	2.1	3.2	3.6 - E	4.2	1	340					4.08	52	M	F	Constrained crown, but healthy throughout. No apparent significant defect	No action required at time of survey	>40	B1	RET
8081		Yew	14	3.9	4.6	5.3	5	2.3 - SW	1.6	2	400	390				6.71	141	M	G	Twin stems from 1.2m with tight forks where stems meet. Full healthy, well rounded crown. No apparent significant defect	No action required at time of survey	>40	A1	RET
8082		Sycamore	17.2	4.6	5.8	5.4	5.5	2.2 - N	2.8	2	540	520				9.00	254	M	F	Twin stems from ground level with included unions where stems meet. Historic branch failure has left decaying wound with woodpecker holes at c. 12m in central crown. No basal or lower stem decay apparent	No action required at time of survey	20+	B1	RET

FLAC Ref. No.	TPO Ref	Species	Ht. (m)	Crown Spread (m) N	S	W	E	Ht. 1st Br. (m)	Ht. Can. (m)	Stem Count	Stem Dia. (mm) 1 / mean	2	3	4	5	RPA Rad. (m)	RPA Area (m2)	Life Stage Y-SM-EM-M-OM	Phys. Condition G-F-P-D	Structural condition & Notes	Management recommendations	Ret. Span <10, 10+ 20+, >40	QV Grade U-A-B-C	Proposal
8083		Pedunculate oak	12.8	3.8	0.9	2	1.2	9.2 - NW	10	1	1100					13.20	547	OM	D	Standing dead tree	Reduce to 8m high pole	<10	U	U
8084		Silver birch	16.3	4.2	4	4.2	4.5	4.3 - SW	4.2	1	370					4.44	62	M	F	Upright stem with full healthy crown. No apparent significant defect	No action required at time of survey	20+	B1	RET
8085		Silver birch	11.5	3.8	3	2.8	2.2	2 - E	1.8	2	200	85				2.61	21	EM	F	Twin stems from ground level with tight forks where stems meet. No apparent significant defect	No action required at time of survey	20+	C1	RET
8086		Holly	9	3.6	4.9	3.8	4.3	1.7 - SE	1.4	8	170					5.77	105	M	F	Multiple stems from ground level with tight forks where stems meet. No observed dieback or disease and no sign of obvious decay	No action required at time of survey	20+	B1	RET
8087		Holly	6.2	2.9	3.6	3	3.6	2.3 - W	1.1	2	270	120				3.55	40	M	F	Twin stems from ground level with included unions where stems meet. Pocket of decay relating to historic branch failure on lower stem. No observed dieback or disease	No action required at time of survey	20+	B1	RET
8088		Holly	8.8	2.6	3	3.2	2.4	1.9 - NW	1.8	1	260					3.12	31	M	F	Upright stem with full healthy crown. No apparent significant defect	No action required at time of survey	20+	B1	RET
8089		Sycamore	11	1.5	3.4	3.2	3	2.1 - NE	4.5	3	220	220	190			4.38	60	M	P	Multiple stems from ground level originating from edge of heavily decayed stump. Smallest stem is dead, and another shows significant dieback.	Fell to as low as reasonably practicable	<10	U	U
8090		Silver birch	13.2	3.2	3.4	4	3.6	2.4 - E	4.1	2	230	110				3.06	29	EM	F	Twin stems from ground level with tight forks where stems meet. No observed dieback or disease and no sign of obvious decay	No action required at time of survey	20+	C1	RET
8091		Holly	5.8	3.5	3.2	3	3.2	1.4 - S	1	2	310	200				4.43	62	M	F	Twin stems from ground level with included unions where stems meet. Large decaying branch wound at 1.8m to N. No observed dieback or disease	No action required at time of survey	20+	C1	RET
8092		Sycamore	7.5	3.4	3.2	2.5	3	1.9 - NW	1.8	11	100					3.98	50	M	P	Multiple stems growing from heavily decayed stump. Minor dieback in N most stems.	No action required at time of survey	<10	U	U
8093		Sycamore	5.5	2	1.8	2.4	1.2	1.9 - NE	1.7	1	140					1.68	9	SM	F	Skewed crown, but no dieback or decline	No action required at time of survey	20+	C1	RET
8094		Holly	7.2	2	2.3	2.1	2.3	0.5 - SW	0.8	1	220					2.64	22	M	F	Upright stem with full healthy crown. No apparent significant defect	No action required at time of survey	20+	B1	RET
8095		Pedunculate oak	2.8	2	1.8	1.8	2	1.4 - E	1.5	1	110					1.32	5	SM	G	Ornamental, planted tree. No apparent significant defect	No action required at time of survey	>40	C1	RET
8096		Sycamore	9	2.5	2	2	2.5	1.4 - S	1.5	3	130	120	90			2.39	18	SM	F	Multiple stems from ground level with tight forks where stems meet. No observed dieback or disease	No action required at time of survey	20+	C1	RET
8097		Sycamore	7.5	1	2	2.5	2	0.5 - S	0.4	3	170	75	75			2.41	18	SM	F	Decline in crown of largest stem. Pocket of decay at base.	No action required at time of survey	10+	C1	RET
8098		Silver birch	15	3	3.5	4	4.5	1.5 - S	1	1	290					3.48	38	EM	F	Upright stem with full healthy crown. No apparent significant defect	No action required at time of survey	20+	B1	RET
8099		Elm	14	1	4.5	3.5	1.5	2.5 - S	4	1	250					3.00	28	EM	F	Skewed crown, but no sign of decline, disease of decay	No action required at time of survey	20+	B1	RET
8100		Elm	16	2	3.5	4	3.5	3.5 - N	4.5	1	240					2.88	26	M	F	Skewed crown, but no sign of decline, disease of decay	No action required at time of survey	20+	B1	RET
8101		Scots pine	18	3.5	3.5	3	3.5	11.5 - E	12	1	380					4.56	65	M	F	Upright stem with full healthy crown. No apparent significant defect	No action required at time of survey	20+	B1	RET
8102		Scots pine	18	4.5	3	3	3	9.5 -S	13	1	410					4.92	76	M	F	Slightly inclined stem towards N, but no sign of recent root plate movement. Major deadwood in lower crown. No observed dieback or disease and no sign of obvious decay	No action required at time of survey	20+	B1	RET
8103		Scots pine	17	3.5	3.5	3.5	2.5	11 - SW	11	1	390					4.68	69	M	F	Upright stem with full healthy crown. Major deadwood in lower crown. No observed dieback or disease and no sign of obvious decay	No action required at time of survey	20+	B1	RET
8104		Sycamore	12.5	4	5	4	3	3 - W	7.5	9	190					6.84	147	EM	F	Multiple stems from ground level with tight forks where stems meet. Squirrel damage in upper stems has left dead/dying material.	No action required at time of survey	20+	C1	RET
8105		Scots pine	14	0.5	4.5	3	4	8 - SE	10.5	1	310					3.72	43	M	F	Heavily skewed crown on kinked upper stem, possibly due to historic leader failure. No basal or stem decay.	No action required at time of survey	20+	C1	RET
8106		Scots pine	15.5	2	4.5	4.5	2.5	10 - NW	12	1	380					4.56	65	M	F	Historic stem failure at 9m has left decaying stub and meant side branches have becoming codominant leaders. No observed dieback or disease and no basal decay apparent.	No action required at time of survey	20+	C1	RET
8107		Scots pine	11	1.5	4	2.5	3	6.5 - SW	7.5	1	230					2.76	24	EM	F	Contorted/spiralling upper half of stem, related to historic stem failure at 6m. Minor decay present at failure point.	No action required at time of survey	20+	C1	RET
8108		Scots pine	18.5	4	3.5	3.5	3.5	10.5 - N	12	1	430					5.16	84	M	F	Upright stem with full healthy crown. No apparent significant defect	No action required at time of survey	20+	B1	RET
8109		Scots pine	14	1	2.5	3	1	8 - W	10	1	240					2.88	26	EM	F	Heavily skewed/constrained crown due to adjacent trees. No observed dieback or disease and no sign of obvious decay	No action required at time of survey	20+	C1	RET
8110		Yew	6	3	2.5	3	2.5	1 - S	0.4	1	180					2.16	15	EM	G	Upright stem with full healthy crown. No apparent significant defect	No action required at time of survey	>40	B1	RET
8111		Ash	14	2.5	3	3	2	2.2 - N	10.5	1	200					2.40	18	EM	P	Ash dieback apparent in crown, but fully crown wide yet.	No action required at time of survey	<10	U	U
8112		Elm	10	1	3	2.5	2	2.8 - SE	3.5	1	180					2.16	15	EM	F	Constrained by healthy crown. No observed dieback or disease	No action required at time of survey	20+	C1	RET
8113		Ash	15	3.5	3	5.5	5.5	8.5 - N	12.5	1	300					3.60	41	EM	P	Advanced widespread dieback through crown, likely ash dieback disease.	Fell to as low as reasonably practicable	<10	U	U
8114		Elm	13	4	1.5	3.5	3	4 - N	4.5	1	220					2.64	22	EM	F	Constrained by healthy crown. No observed dieback or disease	No action required at time of survey	20+	C1	RET
8115		Ash	15.5	4.5	5.5	3.5	3.5	3 - SE	4	1	350					4.20	55	M	P	Major decline through crown due to ash dieback disease. No basal or stem decay apparent.	Fell to as low as reasonably practicable	<10	U	U
8116		Pedunculate oak	13	4.5	3.5	6	2	1.6 - W	0.6	1	290					3.48	38	EM	F	Slightly constrained crown, but no dieback or decline present.	No action required at time of survey	20+	B1	RET
8117		Ash	10	1	1	1	1	3.9 - E	4.5	1	150					1.80	10	SM	P	Advanced decline through crown.	Fell to as low as reasonably practicable	<10	U	U
8118		Scots pine	17	3	2.5	3.5	2.5	9 - W	10	1	380					4.56	65	M	F	Very slight incline towards N, but no sign of dieback or disease.	No action required at time of survey	20+	B1	RET
8119		Goat willow	16.5	3.5	2.5	3	2	5.5 - N	7	6	160					4.71	70	EM	F	Multiple stems from ground level with included unions where stems meet. Partial stem failure between two stems near base. No observed dieback or disease	No action required at time of survey	20+	C1	RET
8120		Scots pine	18	5	4	5.5	4.5	11 - SW	12	1	470					5.64	100	M	F	Very slight incline towards N, but no sign of dieback or disease.	No action required at time of survey	20+	B1	RET
8121		Ash	16.5	3	3	4	3	5.5 - SW	6.5	1	240					2.88	26	EM	P	Significant and widespread decline present throughout crown due to ash dieback disease.	Fell to as low as reasonably practicable	<10	U	U
8122		Elm	14	2	3	3	4	6 - W	7	1	300					3.60	41	EM	P	Dieback in E upper crown. Remaining foliage is healthy. No basal or stem decay apparent.	Stabilise dead wood according to occupancy levels beneath the crown	10+	C1	RET
8123		Ash	17	6	4.5	4	4	7 - N	9	1	370					4.44	62	M	P	Contorted stem leads to crown with extensive decline due to ash dieback disease. Small open pocket of decay at base to N.	Fell to as low as reasonably practicable	<10	U	U
8124		Ash	18.5	5	5.5	3	6	2.8 - SW	13	1	460					5.52	96	M	P	Advanced decline throughout crown. Small area of basal decay to NW.	Fell to as low as reasonably practicable	<10	U	U
8125		Elm	14	3.5	3	4.5	3	2.9 - E	3.5	3	220	150	75			3.32	35	EM	F	Multiple stems from ground level with tight forks where stems meet. No observed dieback or disease	No action required at time of survey	10+	C1	RET
8126		Sycamore	15	3	4	2	0	5 NW	6	1	190					2.28	16	EM	F	Scrubby specimen. Asymmetrical form. Low arboricultural merit.	No action required at time of survey	20+	C1	RET
8127		Sycamore	13	2	5	5	1	4 W	4	5	150	130	130	100	90	3.28	34	EM	F	Multi-stemmed from ground level. Asymmetrical form. Low arboricultural merit.	No action required at time of survey	20+	C1	RET
8128		Scots pine	17	2	4	2	1	10 SW	9	1	380					4.56	65	M	F	Upright stem. Scattered lower crown dead wood. Bare lower stem. Some crown asymmetry after companion shelter.	No action required at time of survey	40+	B1	RET

FLAC Ref. No.	TPO Ref	Species	Ht. (m)	Crown Spread (m) N	S	W	E	Ht. 1st Br. (m)	Ht. Can. (m)	Stem Count	Stem Dia. (mm) 1 / mean	2	3	4	5	RPA Rad. (m)	RPA Area (m2)	Life Stage Y-SM-EM-M-OM	Phys. Condition G-F-P-D	Structural condition & Notes	Management recommendations	Ret. Span <10, 10+ 20+, >40	QV Grade U-A-B-C	Proposal
8129		Scots pine	15	1	3	3	3	8 SW	8	1	380					4.56	65	M	F	Upright stem. Scattered lower crown dead wood. Bare lower stem. Some crown asymmetry after companion shelter.	No action required at time of survey	40+	B1	RET
8130		Sweet chestnut	8	2	4	2	2	1 N	2	1	130					1.56	8	SM	F	Slender tree developing stem lean and crown asymmetry. Low arboricultural merit.	No action required at time of survey	40+	C1	RET
8131		Sycamore	10	0	4	2	5	2.5 E	3	1	160					1.92	12	EM	F	Scrubby specimen. Asymmetrical form. Low arboricultural merit.	No action required at time of survey	20+	C1	RET
8132		Scots pine	17	2	2	4	2	8 W	8	1	410					4.92	76	M	F	Upright stem. Scattered lower crown dead wood. Bare lower stem. Some crown asymmetry after companion shelter.	No action required at time of survey	40+	B1	RET
8133		Scots pine	17	2	4	4	2	9 N	9	1	430					5.16	84	M	F	Upright stem. Scattered lower crown dead wood. Bare lower stem. Some crown asymmetry after companion shelter.	No action required at time of survey	40+	B1	RET
8134		Scots pine	15	0	2	0	2	8 S	8	1	280					3.36	35	M	F	Upright stem. Scattered lower crown dead wood. Bare lower stem. Heavy crown asymmetry after companion shelter.	No action required at time of survey	40+	C1	RET
8135		Sycamore	12	2	4	5	3	2.5 W	3	2	210	140				3.03	29	EM	F	Basal decay below twin stems. Asymmetrical crown form. Low arboricultural merit.	No action required at time of survey	10+	C1	REM
8136		Scots pine	15	1	2	3	1	9 S	8	1	260					3.12	31	EM	F	Upright stem. Scattered lower crown dead wood. Bare lower stem. Heavy crown asymmetry after companion shelter.	No action required at time of survey	40+	C1	REM
8137		Sycamore	13	5	4	5	6	3 E	3	2	230	210				3.74	44	EM	F	Twin-stemmed with decay at canker wound of lower west stem. Squirrel damage through crown. Low arboricultural merit.	No action required at time of survey	10+	C1	REM
8138		Ash	17	7	3	5	6	6 NE	7	1	440					5.28	88	M	P	Crown displays thinning of distal branch structure and dieback. Probable honey fungus infection and potentially also ash dieback infection.	No action required at time of survey	10+	C1	REM
8139		Scots pine	15	1	1	2	1	12 W	12	1	260					3.12	31	EM	F	Very slender stem. Small asymmetrical crown. Low arboricultural.	No action required at time of survey	40+	C1	RET
8140		Scots pine	15	1	1	4	0	11 W	11	1	260					3.12	31	EM	F	Very slender stem. Small asymmetrical crown. Low arboricultural.	No action required at time of survey	40+	C1	RET
8141		Scots pine	17	1	3	1	2	10 S	10	1	340					4.08	52	M	F	Upright stem. Scattered lower crown dead wood. Bare lower stem. Some crown asymmetry after companion shelter.	No action required at time of survey	40+	B1	RET
8142		Wych elm	15	5	5	6	4	4 W	4	3	210	100	100			3.04	29	EM	F	Multi-stemmed with additional basal shoots. Crown asymmetry after companion shelter. Generally suppressed.	No action required at time of survey	40+	C1	RET
8143		Scots pine	17	2	1	4	1	13 W	12	1	420					5.04	80	M	F	Upright stem. Scattered lower crown dead wood. Bare lower stem. Some crown asymmetry after companion shelter.	No action required at time of survey	40+	B1	RET
8144		Scots pine	17	3	2	2	0	12 NW	12	1	390					4.68	69	M	F	Upright stem. Scattered lower crown dead wood. Bare lower stem. Some crown asymmetry after companion shelter.	No action required at time of survey	40+	B1	RET
8145		Sycamore	10	3	2	4	0	4 W	4	1	120					1.44	7	SM	F	Very slender stem. Small asymmetrical crown. Low arboricultural.	No action required at time of survey	20+	C1	RET
8146		Ash	17	4	0	2	1	12 N	12	1	260					3.12	31	EM	P	Slender stem and heavily asymmetrical crown. Crown appears thin, possibly due to onset of ash dieback.	No action required at time of survey	10+	C1	RET
8147		Wych elm	16	5	5	5	7	5 E	4	2	230	160				3.37	36	EM	F	Twin-stemmed from ground level. Slender branch structure. Satisfactory overall condition.	No action required at time of survey	40+	B1	RET
8148		Sycamore	15	2	3	3	4	4 W	5	1	210					2.52	20	EM	F	Omitted from topo. Scrubby specimen with squirrel damage.	No action required at time of survey	10+	C1	RET
8149		Sycamore	17	3	0	6	0	7 NW	7	2	250	210				3.92	48	EM	F	Twin-stemmed from ground. Heavily asymmetrical crown form. Low arboricultural merit.	No action required at time of survey	40+	C1	RET
8150		Ash	14	1	1	1	1	4 E	5	1	210					2.52	20	EM	D	Dead.	No action required at time of survey	<10	U	U
8151		Sycamore	16	2	3	3	3	4 E	4	1	260					3.12	31	EM	F	Slender upright stem. Branch failures following squirrel damage. Low arboricultural merit.	No action required at time of survey	10+	C1	RET
8152		Sycamore	16	3	2	3	4	7 W	7	3	250	180	170			4.23	56	EM	F	Multi-stemmed. Branch failures following squirrel damage. Low arboricultural merit.	No action required at time of survey	10+	C1	RET
8153		Scots pine	17	2	2	2	1	9 W	8	1	360					4.32	59	M	F	Upright stem. Scattered lower crown dead wood. Bare lower stem. Some crown asymmetry after companion shelter.	No action required at time of survey	40+	B1	RET
8154		Wych elm	13	6	4	4	4	4 S	2	1	200					2.40	18	EM	F	Suppressed with associated asymmetrical crown form. Satisfactory overall condition but a tree if low significance.	No action required at time of survey	40+	C1	RET
8155		Goat willow	12	6	6	7	0	1 S	1	3	180	120	90			2.82	25	EM	F	Multi-stemmed with south stem collapsed after lower stem decay remaining stems likely to follow suit.	No action required at time of survey	10+	C1	RET
8156		Goat willow	12	2	3	0	9	2 E	2	1	300					3.60	41	M	F	Recent windthrow arrested by adjacent tree to east due to basal decay.	No action required at time of survey	<10	U	U
8157		Ash	17	3	1	4	3	6 W	7	1	350					4.20	55	M	P	Crown displays advancing decline symptoms typical of ash dieback.	No action required at time of survey	<10	U	U
8158		Ash	17	1	3	3	4	8 W	8	1	400					4.80	72	M	P	Crown displays advancing decline symptoms typical of ash dieback.	No action required at time of survey	<10	U	U
8159		Hornbeam	15	4	7	5	6	2 S	1.5	2	310	100				3.91	48	M	F	Swept stem, some crown asymmetry after companion shelter. Satisfactory overall condition.	No action required at time of survey	40+	B1	RET
8160		Goat willow	10	3	1	2	1	4 N	4	2	170	110				2.43	19	SM	D	Basal decay. Appears dead.	No action required at time of survey	<10	U	U
8161		Ash	17	2	2	2	1	8 S	8	1	270					3.24	33	EM	P	Crown displays advancing decline symptoms typical of ash dieback.	No action required at time of survey	<10	U	U
8162		Wych elm	12	2	3	3	1	3 N	4	1	190					2.28	16	SM	F	Slender stem. Some crown asymmetry after companion shelter. Low arboricultural merit.	No action required at time of survey	40+	C1	RET
8163		Wych elm	11	0	4	0	5	2.5 E	3	2	130	130				2.21	15	SM	F	Twin-stemmed from ground level. Heavily asymmetrical crown form. Low arboricultural merit.	No action required at time of survey	40+	C1	RET
8164		Wych elm	12	2	4	1	4	4 E	4	2	130	130				2.21	15	SM	F	Twin-stemmed from 1.3 metres. Heavily asymmetrical crown form. Low arboricultural merit.	No action required at time of survey	40+	C1	RET
8165		Wych elm	11	0	4	0	6	5 E	5	1	130					1.56	8	SM	F	Slender stem. Heavy crown asymmetry after companion shelter. Low arboricultural merit.	No action required at time of survey	40+	C1	RET
8166		Goat willow	15	2	4	2	4	2 S	4	1	340					4.08	52	M	F	Lower stem becomes four slender scaffold limbs from 2.5 metres, the northernmost has fractured. Scrubby overall condition, further failures likely.	No action required at time of survey	20+	C1	RET
8167		Goat willow	13	3	6	3	5	3 S	4	1	270					3.24	33	M	F	Basal decay. Swept stem with asymmetrical crown form. Low arboricultural merit.	No action required at time of survey	10+	C1	RET
8168		Pedunculate oak	19	4	4	4	3	8 S	8	1	400					4.80	72	M	G	Upright stem with good taper. Good overall condition.	No action required at time of survey	40+	B1	RET
8169		Yew	7	3	3	3	3	1 W	0.5	1	145					1.74	10	SM	F	Small tree with thin foliage density. Tree of relatively low significance.	No action required at time of survey	40+	C1	RET
8170		Goat willow	15	4	3	4	3	5 E	5	1	270					3.24	33	M	F	Upright stem. Debilitating squirrel damage in upper crown, failures likely.	No action required at time of survey	20+	C1	RET
8171		Hazel	7	3	1	3	2	2 W	2	7	80					2.54	20	SM	F	Scrubby, multi-stemmed , typical form. Low arboricultural merit.	No action required at time of survey	40+	C1	RET
8172		Ash	17	2	4	4	2	5 W	5	1	300					3.60	41	M	P	Crown displays advancing decline symptoms typical of ash dieback.	No action required at time of survey	<10	U	U
8173		Ash	18	1	4	2	3	11 E	11	1	310					3.72	43	M	F	Slender, upright stem. Satisfactory overall condition.	No action required at time of survey	40+	B1	RET
8174		Ash	19	4	2	4	2	11 NW	11	1	340					4.08	52	M	P	Slender, upright stem. Distal branch thinning, suspect onset of ash dieback infection.	No action required at time of survey	10+	C1	RET
8175		Ash	16	2	3	5	2	6 W	8	1	270					3.24	33	EM	P	Slender, upright stem. Distal branch thinning, suspect onset of ash dieback infection.	No action required at time of survey	10+	C1	RET
8176		Ash	18	2	4	5	7	6 N	6	3	410	130				5.17	84	M	P	Principal stem plus a secondary stem at west, a second small stem to west has died, the sunken bark indicates ash dieback infection, Wider crown thinning evident. Not expected to survive for the long-term.	No action required at time of survey	10+	C1	REM
8177		Wych elm	11	5	3	5	4	4 N	5	1	170					2.04	13	SM	F	Slender, upright stem. Satisfactory overall condition. Tree of relatively low significance.	No action required at time of survey	40+	B1	RET
8178		Yew	9	4	4	4	4	1 S	1	1	230					2.76	24	EM	F	Stem and crown structure in satisfactory condition.	No action required at time of survey	40+	B1	RET
8179		Hornbeam	14	6	6	6	6	2.5 SW	2	1	250					3.00	28	EM	G	Stem and principal branch structure and unions in satisfactory condition.	No action required at time of survey	40+	B1	RET
8180		Scots pine	28	1	2	2	2	14 S	14	1	380					4.56	65	M	F	Upright stem. Scattered lower crown dead wood. Bare lower stem. Some crown asymmetry after companion shelter.	No action required at time of survey	40+	B1	RET
8181		Scots pine	18	2	3	2	2	13 S	13	1	420					5.04	80	M	F	Upright stem. Scattered lower crown dead wood. Bare lower stem. Some crown asymmetry after companion shelter.	No action required at time of survey	40+	B1	RET
8182		Scots pine	18	5	2	5	2	7 W	7	1	460					5.52	96	M	F	Upright stem. Scattered lower crown dead wood. Bare lower stem. Some crown asymmetry after companion shelter. Crown is a component of woodland edge canopy.	No action required at time of survey	40+	B1	RET

FLAC Ref. No.	TPO Ref	Species	Ht. (m)	Crown Spread (m) N	S	W	E	Ht. 1st Br. (m)	Ht. Can. (m)	Stem Count	Stem Dia. (mm) 1 / mean	2	3	4	5	RPA Rad. (m)	RPA Area (m2)	Life Stage Y-SM-EM-M-OM	Phys. Condition G-F-P-D	Structural condition & Notes	Management recommendations	Ret. Span <10, 10+ 20+, >40	QV Grade U-A-B-C	Proposal
8183		Ash	17	4	3	3	2	7 NE	8	1	270					3.24	33	EM	P	Crown displays advancing decline symptoms typical of ash dieback.	No action required at time of survey	<10	U	U
8184		Scots pine	18	4	1	4	1	8 W	8	1	450					5.40	92	M	F	Upright stem. Scattered lower crown dead wood. Bare lower stem. Some crown asymmetry after companion shelter. Crown is a component of woodland edge canopy.	No action required at time of survey	40+	B1	RET
8185		Scots pine	18	3	2	4	3	6 W	5	1	470					5.64	100	M	F	Upright stem with medium density ivy to 6 metres. Scattered lower crown dead wood. Bare lower stem. Some crown asymmetry after companion shelter. Crown is a component of woodland edge canopy.	No action required at time of survey	40+	B1	RET
8186		Pedunculate oak	10	4	7	6	0	1.2 W	1	2	340	280				5.29	88	EM	F	Twin-stemmed from ground level with a poor quality bark-included union. Heavily asymmetrical crown due to woodland edge position. Structurally compromised, exacerbated by form.	No action required at time of survey	20+	B1	RET
8187		Ash	15	6	6	4	3	2 NW	2	1	340					4.08	52	M	P	Crown displays advancing decline symptoms typical of ash dieback.	No action required at time of survey	<10	U	U
8188		Ash	17	4	3	3	1	10 N	10	1	270					3.24	33	M	P	Crown displays advancing decline symptoms typical of ash dieback.	No action required at time of survey	<10	U	U
8189		Ash	15	7	0	6	1	7 N	5	1	360					4.32	59	M	F	Stem lean and crown bias to north due to woodland edge position. Ivy into crown. Satisfactory overall condition.	No action required at time of survey	40+	B1	RET
8190		Ash	14	3	2	4	4	5 S	5	1	220					2.64	22	EM	F	Slender stem. Asymmetrical crown form after companion. Low arboricultural merit.	No action required at time of survey	40+	C1	RET
8191		Holly	6	2	2	2	2	2 S	1.5	1	115					1.38	6	SM	F	Slender, upright stem. Satisfactory overall condition. Tree of relatively low significance.	No action required at time of survey	40+	C1	RET
8192		Ash	17	2	3	3	1	12 W	12	1	300					3.60	41	EM	P	Crown displays advancing decline symptoms typical of ash dieback.	No action required at time of survey	<10	U	U
8193		Pedunculate oak	7	2	2	1	4	2 E	2	1	130					1.56	8	SM	F	Slender stem with asymmetrical crown after light competition. Low arboricultural merit.	No action required at time of survey	40+	C1	REM
8194		Wych elm	11	4	3	4	4	2.5 W	3	4	170	80	70	70		2.55	20	EM	F	Multi-stemmed. Slender stems and crown structure. Satisfactory overall condition. Tree of relatively low significance.	No action required at time of survey	40+	B1	REM
8195		Ash	16	3	3	3	3	11 N	11	1	260					3.12	31	EM	P	Slender, upright stem. Distal branch thinning, suspect onset of ash dieback infection.	No action required at time of survey	10+	C1	REM
8196		Wych elm	14	2	5	5	1	5 S	6	1	210					2.52	20	EM	F	Slender stem with asymmetrical crown after light competition. Tree of relatively low significance.	No action required at time of survey	40+	B1	REM
8197		Downy birch	16	3	3	4	2	9 E	8	1	390					4.68	69	M	F	Upright stem. Squirrel damage at base of central leader pre-disposes its failure. Remainder of structure appears satisfactory.	No action required at time of survey	20+	B1	REM
8198		Yew	7	3	2	3	3	1 E	1	1	110					1.32	5	SM	F	Slender, upright stem. Satisfactory overall condition. Tree of relatively low significance.	No action required at time of survey	40+	C1	REM
8199		Wych elm	12	2	5	1	2	4 S	5	1	160					1.92	12	SM	F	Slender stem. Some crown asymmetry after companion shelter. Satisfactory overall condition. Tree of relatively low significance.	No action required at time of survey	40+	C1	REM
8200		Wych elm	10	2	5	2	3	3.5 S	2	2	150	100				2.17	15	SM	F	Slender stems. Some crown asymmetry after companion shelter. Satisfactory overall condition. Tree of relatively low significance.	No action required at time of survey	40+	C1	REM
8201		Pedunculate oak	11	3	3	4	2	6 NW	6	1	190					2.28	16	SM	F	Slender stem. Some crown asymmetry after companion shelter. Satisfactory overall condition. Tree of relatively low significance.	No action required at time of survey	40+	B1	REM
8202		Goat willow	15	1	7	5	6	6 W	6	1	310					3.72	43	M	F	Stem incline and crown bias to south. Sub-optimal condition of northern of two scaffold limbs at 7 metres. Failures are likely. Low arboricultural merit.	No action required at time of survey	20+	C1	REM
8203		Ash	11	1	1	0	2	4 SE	4	2	130					1.56	8	SM	P	Crown displays advanced decline symptoms typical of ash dieback.	No action required at time of survey	<10	U	U
8204		Ash	14	3	4	1	5	3.5 N	4	1	250					3.00	28	EM	P	Crown displays advancing decline symptoms typical of ash dieback.	No action required at time of survey	<10	U	U
8205		Wych elm	10	5	6	1	6	1 E	3	2	180	170				2.98	28	SM	F	Slender stems. Heavy crown asymmetry after companion shelter. Satisfactory overall condition. Tree of relatively low significance.	No action required at time of survey	40+	C1	RET
8206		Wych elm	13	4	3	2	5	3.5 E	4	1	180					2.16	15	SM	F	Slender stem. Some crown asymmetry after companion shelter. Satisfactory overall condition. Tree of relatively low significance.	No action required at time of survey	40+	C1	RET
8207		Ash	17	1	3	4	3	7 S	8	2	350	140				4.53	64	M	P	Crown displays advancing decline symptoms typical of ash dieback.	No action required at time of survey	<10	U	U
8208		Wych elm	10	2	4	2	3	2.5 E	5	1	190					2.28	16	SM	F	Slender stem. Some crown asymmetry after companion shelter. Satisfactory overall condition. Tree of relatively low significance.	No action required at time of survey	40+	C1	RET
8209		Ash	15	1	3	1	3	6 S	8	1	260					3.12	31	EM	P	Crown displays advancing decline symptoms typical of ash dieback.	No action required at time of survey	<10	U	U
8210		Ash	17	3	2	3	3	12 S	12	1	290					3.48	38	EM	P	Crown displays advancing decline symptoms typical of ash dieback.	No action required at time of survey	<10	U	U
8211		Downy birch	13	3	3	3	5	5 S	4	1	270					3.24	33	M	F	Upright stem. Some crown asymmetry after companion shelter. Satisfactory overall condition.	No action required at time of survey	20+	B1	RET
8212		Ash	15	0	3	4	1	8 W	8	1	280					3.36	35	EM	F	Slender, upright stem. Distal branch thinning, suspect onset of ash dieback infection.	No action required at time of survey	10+	C1	RET
8213		Ash	17	4	3	3	3	11 W	11	1	360					4.32	59	EM	F	Upright stem. Principal branch structure and unions in satisfactory condition.	No action required at time of survey	40+	B1	RET
8214		Pedunculate oak	11	0	2	3	1	6 S	6	2	150	80				2.04	13	SM	F	Slender stems. Some crown asymmetry after companion shelter. Satisfactory overall condition. Tree of relatively low significance.	No action required at time of survey	40+	C1	RET
8215		Ash	16	3	3	3	1	11 W	11	2	290	70				3.58	40	EM	F	Slender, upright stem. Distal branch thinning, suspect onset of ash dieback infection.	No action required at time of survey	10+	C1	RET
8216		Wych elm	15	5	5	7	3	7 W	5	1	290					3.48	38	M	F	Slight stem incline to west. Crown asymmetry after companion shelter. Satisfactory overall condition.	No action required at time of survey	40+	B1	RET
8217		Ash	16	2	1	1	1	7 N	7	1	270					3.24	33	EM	P	Crown displays advanced decline symptoms typical of ash dieback.	No action required at time of survey	<10	U	U
8218		Gean	10	3	3	1	5	2.5 E	2	1	140					1.68	9	SM	F	Upright stem. Some crown asymmetry after companion shelter. Satisfactory overall condition.	No action required at time of survey	40+	C1	RET
8219		Ash	18	3	3	2	2	11 S	11	1	310					3.72	43	EM	P	Crown displays advancing decline symptoms typical of ash dieback.	No action required at time of survey	<10	U	U
8220		Wych elm	13	3	5	5	4	2 E	2	3	240	200	120			4.02	51	EM	F	Slender stems. Some crown asymmetry after companion shelter. Satisfactory overall condition. Tree of relatively low significance.	No action required at time of survey	40+	B1	RET
8221		Wych elm	11	9	0	5	3	3.5 N	4	1	220					2.64	22	EM	F	Slender stem with increasing sweep to north. Some crown asymmetry after companion shelter. Squirrel damage within branch structure. Tree of relatively low significance.	No action required at time of survey	40+	C1	RET
8222		Ash	17	4	4	3	4	8 E	8	1	370					4.44	62	M	P	Crown displays advancing decline symptoms typical of ash dieback.	No action required at time of survey	<10	U	U
8223		Downy birch	16	4	4	4	4	4 E	4	1	320					3.84	46	M	F	Stem and principal branch structure and unions in satisfactory condition.	No action required at time of survey	20+	B1	RET
8224		Goat willow	14	4	4	4	4	5 NW	5	1	350					4.20	55	M	G	Slight lower stem incline to north-west. Principal branch structure and unions in satisfactory condition.	No action required at time of survey	20+	B1	RET
8225		Wych elm	11	4	0	3	1	4 W	4	1	130					1.56	8	SM	F	Slender stem. Some crown asymmetry after companion shelter. Satisfactory overall condition. Tree of relatively low significance.	No action required at time of survey	40+	C1	RET
8226		Wych elm	14	2	4	4	4	3 S	4	1	210					2.52	20	EM	F	Slender stem. Some crown asymmetry after companion shelter. Satisfactory overall condition. Tree of relatively low significance.	No action required at time of survey	40+	C1	RET
8227		Pedunculate oak	6	3	3	3	3	1 SE	1.5	1	130					1.56	8	SM	F	Slender stem. Some crown asymmetry after companion shelter. Satisfactory overall condition. Tree of relatively low significance.	No action required at time of survey	40+	C1	RET
8228		Ash	18	5	5	5	5	6 S	6	1	450					5.40	92	M	F	Stem and principal branch structure and unions in satisfactory condition.	No action required at time of survey	40+	B1	RET
8229		Ash	16	4	4	5	5	5 E	5	1	380					4.56	65	M	F	Stem and principal branch structure and unions in satisfactory condition.	No action required at time of survey	40+	B1	RET
8230		Scots pine	17	4	1	2	3	10 N	9	1	370					4.44	62	M	F	Upright stem. Scattered lower crown dead wood. Bare lower stem. Some crown asymmetry after companion shelter.	No action required at time of survey	40+	B1	RET
8231		Scots pine	17	2	4	3	4	8 S	7	1	470					5.64	100	M	F	Upright stem. Scattered lower crown dead wood. Bare lower stem. Some crown asymmetry after companion shelter.	No action required at time of survey	40+	B1	RET
8232		Pedunculate oak	11	3	5	4	5	3 NE	3	1	290					3.48	38	EM	F	Stem and principal branch structure and unions in satisfactory condition.	No action required at time of survey	40+	B1	RET

FLAC Ref. No.	TPO Ref	Species	Ht. (m)	Crown Spread (m) N	S	W	E	Ht. 1st Br. (m)	Ht. Can. (m)	Stem Count	Stem Dia. (mm) 1 / mean	2	3	4	5	RPA Rad. (m)	RPA Area (m2)	Life Stage Y-SM-EM-M-OM	Phys. Condition G-F-P-D	Structural condition & Notes	Management recommendations	Ret. Span <10, 10+ 20+, >40	QV Grade U-A-B-C	Proposal
8233		Pedunculate oak	16	3	6	5	5	3 S	4	1	380					4.56	65	EM	G	Stem and principal branch structure and unions in satisfactory condition.	No action required at time of survey	40+	B1	RET
8234		Pedunculate oak	7	3	4	3	4	1 S	1	1	170					2.04	13	SM	G	Stem and principal branch structure and unions in satisfactory condition. Tree of relatively low significance.	No action required at time of survey	40+	B1	RET
8235		Beech	15	3	4	3	5	1.7 E	1	1	260					3.12	31	EM	F	Slender, drawn-up stem. Principal branch structure and unions in satisfactory condition.	No action required at time of survey	40+	B1	REM
8236		Sycamore	15	1	2	1	5	3 E	3	1	190					2.28	16	EM	F	Slender, drawn-up stem. Basal decay. Secondary stem has rotted away leaving only a small low branch. Heavily asymmetrical crown form. Low arboricultural merit.	No action required at time of survey	20+	C1	RET
8237		Solver birch	17	2	2	2	3	6 N	6	1	320					3.84	46	M	F	Drawn-up form after companion shelter. Principal branch structure and unions in satisfactory condition.	No action required at time of survey	20+	B1	RET
8238		Sycamore	15	3	5	5	3	4 S	3	2	220	210				3.65	42	EM	F	Twin-stemmed from ground level. Asymmetrical crown form after companion shelter. Low arboricultural merit.	No action required at time of survey	20+	C1	RET
8239		Sycamore	7	1	3	0	4	1 E	1	3	80	70	60			1.47	7	SM	F	Scrubby, suppressed, multi-stemmed and asymmetrical.	No action required at time of survey	20+	C1	RET
8240		Silver birch	7	1	3	0	5	2 S	3	1	130					1.56	8	SM	F	Suppressed specimen. Stem lean and crown bias to east. Low arboricultural merit.	No action required at time of survey	20+	C1	REM
8241		Silver birch	9	1	3	1	4	2.5 E	2	2	160					1.92	12	SM	F	Suppressed with asymmetrical crown form. Sapling adjacent included. Low arboricultural merit.	No action required at time of survey	20+	C1	REM
8242		Silver birch	8	3	4	0	4	2 N	2	3	170	100	100			2.66	22	SM	F	Suppressed with asymmetrical crown form. Small, twin-stemmed specimen adjacent included. Low arboricultural merit.	No action required at time of survey	20+	C1	REM
8243		Silver birch	10	0	1	2	2	6 S	5	3	130	60				1.72	9	SM	F	Suppressed specimen. Stem lean and crown bias to south-east. Low arboricultural merit.	No action required at time of survey	20+	C1	REM
8244		Sycamore	8	3	3	1	2	3 E	3	4	90	80	70	40		1.74	10	SM	F	Multi-stemmed. Basal decay. Dead wood including smaller stems. Suppressed. Low arboricultural merit.	No action required at time of survey	10+	C1	REM
8245		Sycamore	9	3	2	2	3	1.2 E	1	2	145	125				2.30	17	SM	F	Twin-stemmed from ground level, rooting over rick face. Slender stems. Some crown asymmetry after companion shelter. Tree of relatively low significance.	No action required at time of survey	20+	C1	REM
8246		Sycamore	7	5	3	2	3	1 E	1	7	100					3.18	32	SM	F	Multi-stemmed. Squirrel damage. Asymmetrical. Low arboricultural merit.	No action required at time of survey	20+	C1	RET
8247		Silver birch	10	2	3	1	3.5	1.5 E	0.5	1	210					2.52	20	EM	G	Slight stem incline to east. Crown bias to east. Some surface rooting over rocks. Principal branch structure and unions in satisfactory condition.	No action required at time of survey	40+	B1	RET
8248		Holly	8	3	3	3	3	2 W	1	2	220	150				3.20	32	EM	F	Twin-stemmed. Stems and principal branch structure and unions in satisfactory condition.	No action required at time of survey	40+	B1	RET
8249		Holly	6	2	3	2	3	2 E	1	2	*190*	190				3.23	33	EM	F	Twin-stemmed. Stems and principal branch structure and unions in satisfactory condition. General crown bias to east.	No action required at time of survey	40+	B1	RET
8250		Holly	5	2	2	1	3	1 S	1	2	*145*	85				2.02	13	SM	F	Compact, twin-stemmed specimen on edge of rock face. Tree of relatively low significance.	No action required at time of survey	40+	C1	RET
8251		Holly	7	4	3	2	3	2 S	1.5	5	*190*	120	120	100	80	3.43	37	SM	P	Decline of former central stem. Crown dieback. Suspected *Armillaria* damage.	No action required at time of survey	<10	U	U
8252		Silver birch	10	1	3	3	1	2.5 W	2.5	1	220					2.64	22	EM	F	Slight damage to bark of root buttresses at east, no significant decay found. Stem lean and crown bias to south-west. Tree of relatively low significance.	No action required at time of survey	20+	C1	RET
8253		Pedunculate oak	8	2	3	1	3	2 S	2	2	140	120				2.22	15	SM	F	Twin-stemmed with relatively poor bark-included union. Asymmetrical crown form. Low arboricultural merit.	No action required at time of survey	20+	C1	RET
8254		Pedunculate oak	9	1	5	3	5	2 E	2	1	260					3.12	31	EM	G	Stem and principal branch structure and unions in satisfactory condition. Asymmetrical crown form. Satisfactory overall condition.	No action required at time of survey	40+	B1	RET
8255		Pedunculate oak	8	2	2	1	3	2.5 NE	2	1	180					2.16	15	SM	G	Slender stem with small, asymmetrical crown.	No action required at time of survey	40+	C1	RET
8256		Smooth Japanese maple	4	3	2	3	2	1 N	1	1	130					1.56	8	EM	F	Slender stem becomes co-dominant from 1.4 metres, diameter measurement just below. Suppressed crown. Low arboricultural merit	No action required at time of survey	20+	C1	RET
8257		Holly	8	3	4	3	4	2 E	1	1	250					3.00	28	EM	G	Stem and principal branch structure and unions in satisfactory condition. Some crown asymmetry after companion shelter.	No action required at time of survey	40+	B1	RET
8258		Sycamore	17	7	5	5	5	2.5 NW	4	1	770					9.24	268	M	F	Significant basal and lower stem decay, likely *Armillaria* in butt-rot mode. Lower stem residual wall fracture evident under loading. Collapse likely. Whilst slightly weighted away from highway, cannot rule out collapse into highway in high winds.	Fell.	<10	U	U

Data for trees assessed as groups (TG)

FLAC Ref. No.	TPO Ref	Species	Tree Count	Ht. (m)	MRCS (m)	Ht. 1st Br. (m)	Ht. Can. (m)	Specimen Stem Dia. (mm)	Specimen RPA Rad. (m)	Specimen RPA Area (m2)	Life Stage Y-SM-EM-M-OM	Phys. Condition G-F-P-D	Structural condition & Notes	Management recommendations	Ret. Span <10, 10+ 20+, >40	QV Grade U-A-B-C	Proposal	No. of trees retained	Trees retained %
TG3001		Scots pine x4, pedunculate oak x4, Lawson cypress x12, beech x2, goat willow x1	23	18	8	2 S	2	700	8.40	222	M	G	Off site tree group. Remote inspection only. Dense vegetation impedes inspection. Good overall condition. No apparent significant defects observed. Domestic hedgerow of mixed species beneath trees along stem line.	No action required at time of survey	40+	A2	RET	23	100.0
TG3002		Pedunculate oak x4, silver birch x3,	7	18	8	2 E	2	500	6.00	113	M	G	Off site tree group. Remote inspection only. West side of ditch and stock fence. Dispersed holly and hazel understorey. Satisfactory overall condition.	No action required at time of survey	40+	B2	RET	7	100.0
TG3003		Holly x7, yew x2, rowan x1,	10	9	3	2 S	2	380	4.56	65	EM	G	Assumed to be off site. Dispersed linear tree group along north of driveway. Satisfactory overall condition. Rowan at east end appears to be the poorest.	No action required at time of survey	40+	B2	RET	10	100.0
TG3004		Pedunculate oak	4	12	7.5	1 S	1	450	5.40	92	EM	G	Close-set cluster share companion shelter and common crown profile. Central tree suppressed. General crown bias to south. Structurally and physiologically satisfactory.	No action required at time of survey	40+	B2	RET	4	100.0
TG3005		Pedunculate oak	5	12	8	1 E	1	540	6.48	132	EM	G	Close-set cluster share companion shelter and common crown profile. Scattered internal dead wood. Structurally and physiologically satisfactory.	No action required at time of survey	40+	B2	RET	5	100.0
TG3006		Ash	2	20	10	4 S	3	800	9.60	289	M	F	Off site tree group. Remote inspection only. Multi-stemmed pair. Possibly early stage onset ash dieback, not certain. Currently satisfactory both structurally and physiologically.	No action required at time of survey	20+	B2	RET	2	100.0
TG3007		Pedunculate oak x1, hawthorn x1, holly x1	3	10	5	3 S	3	300	3.60	41	EM	F	Off site tree group. Remote inspection only. Dispersed specimens at gate to west and to east beyond east ash. Scrubby but satisfactory.	No action required at time of survey	40+	B2	RET	3	100.0
TG3008		Pedunculate oak	3	14	8	1.5 S	3	700	8.40	222	EM	G	Ownership uncertain, assumed off site. Specimens share companion shelter and common crown profile. Stems and principal branch structure and unions in satisfactory condition. Dense understorey of hazel with hawthorn and holly beneath crown profile.	No action required at time of survey	40+	B2	RET	3	100.0
TG3009		Pedunculate oak	2	19	10	4 N	2	1000	12.00	452	M	G	Close-set pair share companion shelter and common crown profile. Shallow ditch to south. Principal branch structure and unions in satisfactory condition. Dominant above woodland group.	No action required at time of survey	40+	A2	RET	2	100.0
TG3010		Pedunculate oak x23, beech x2, ash x1	26	18	9	3 W	2	650	7.80	191	M	G	Linear tree group of mostly close-set specimens sharing companion shelter and common crown profile. Hazel and holly understorey. Scattered small dead wood. Good overall condition.	No action required at time of survey	40+	B2	RET	26	100.0
TG3011		Ash	2	20	8	4 N	1	857	10.29	332	M	F	Off site tree group. Remote inspection only. Pair of multi-stemmed specimens. East tree largest and dominant over west tree. No apparent significant defects observed.	No action required at time of survey	40+	B2	RET	2	100.0
TG3012		Sycamore	4	14	3	3 W	3	350	4.20	55	EM	F	Located outside boundary fence, assumed off site. Former companion near centre collapsed into field. Some past topping evident, probably associated with power line clearance works.. Tree group of relatively low arboricultural merit.	No action required at time of survey	10+	C2	RET	4	100.0
TG3013		Ash	30	15	5	3 E	3	580	6.96	152	EM	F	Veteran ash coppice stools dispersed along top of woodbank feature. Generally homogenous form and condition with basal decay of stools and slender stems but with some individuals exhibiting physiological impairment. Mean age of individually assessed coppiced stools applied.	No action required at time of survey	>40	A3	RET	30	100.0
TG7001		Goat willow x5, sycamore x7	12	14	4	0.5 - N	0.5	370	4.44	62	M	F	Cluster of multiple stem trees with several poor unions near base of trunks. Ivy covers majority of stems. No observed dieback or disease	No action required at time of survey	20+	B2	RET	12	100.0
TG7002		Pedunculate oak	3	6.5	3.2	1.3 - E	0.6	250	3.00	28	EM	F	Row of relatively young trees on well maintained/mowed area just within site boundary. No apparent significant defect	No action required at time of survey	20+	B2	RET	3	100.0
TG7003		Copper beech, sycamore	3	4.5	2.2	1.7 - W	1.7	140	1.68	9	SM	F	Row of well maintained ornamental trees. No apparent significant defect	No action required at time of survey	20+	C2	RET	3	100.0
TG7004		Goat willow, silver birch	8	3.5	2.5	0.2 - N	0	80	0.96	3	SM	F	Cluster of scrubby trees growing at edge of canopy line of larger tree. No apparent significant defect	No action required at time of survey	20+	C2	RET	8	100.0
TG7005		Goat willow, silver birch	50	8	2.5	0.5 - W	0	220	2.64	120	SM	F	Dense cluster of trees separate from adjacent woodland. Thicket-like feature. No observed dieback or disease	No action required at time of survey	20+	C2	RET	50	100.0
TG7006		Goat willow, silver birch, pedunculate oak	25	9	4	1.1 - S	1	220	2.64	22	EM	F	Strip of younger trees in row between more nature specimens. Small amount of dieback in occasional silver birch. No other dieback or decay evident	No action required at time of survey	20+	B2	RET	25	100.0
TG7007		Pedunculate oak x3, sycamore x1	4	8.5	3.5	0.6 - W	0.8	190	2.28	16	EM	F	Row of scrubby boundary trees. No apparent significant defect	No action required at time of survey	20+	C2	RET	4	100.0
TG7008		Silver birch	5	12	3	1.2 - W	0.6	180	2.16	15	EM	F	Dense cluster of trees at boundary. No observed dieback or disease	No action required at time of survey	20+	C2	RET	5	100.0
TG7009		Ash	2	13	4.5	2.2 - E	3.2	220	2.64	22	EM	F	Pair of multiple stem trees along boundary beside footpath entrance. Ivy covered lower stems. No observed dieback or disease	No action required at time of survey	20+	C2	RET	2	100.0
TG7010		Hornbeam, sweet chestnut, silver birch, pedunculate oak, aspen, goat willow	35	11	3.5	0.5 - E	0.1	260	3.12	31	EM	F	Row of trees along footpath edge, with extended self set regeneration advancing into space towards S. No observed dieback or disease	No action required at time of survey	20+	B2	RET	35	100.0
TG7011		Pedunculate oak	3	19	6.5	1.5 - S	1.5	650	7.80	191	M	G	Small amount of large mature trees separated from adjacent woodland by footpath. Major deadwood in all trees, but no sign of dieback, disease or decay	No action required at time of survey	>40	A2	RET	3	100.0
TG7012		Goat willow	10	7.5	3	0.4 - E	0.5	100	1.20	5	SM	F	Small thicket of multiple stem trees. No observed dieback or disease	No action required at time of survey	20+	C2	RET	10	100.0
TG7013		Sycamore, goat willow, Leyland cypress, yew	50	12	3.5	0.5 - N	0	320	3.84	46	M	F	Visual barrier on 3rd party land. Many multiple stem trees in feature and good mix of species along length. No systemic issues observed	No action required at time of survey	20+	B3	RET	50	100.0
TG7014		Pedunculate oak x5, ash x1	6	17	6	2 - N	1.2	550	6.60	137	M	F	Short row of trees on 3rd party land just beyond boundary. No apparent significant defect	No action required at time of survey	>40	B2	RET	6	100.0
TG7015		Elder, sycamore, goat willow	25	4.5	2.5	0.5 - E	0	160	1.92	12	EM	F	Cluster of scrubby trees in loose group. No apparent significant defect	No action required at time of survey	20+	C2	REM	0	0.0
TG7016		Sycamore, goat willow, ash, hazel	40	10	3.5	1 - S	0.5	330	3.96	49	EM	F	Cluster of trees, mainly scrubby in nature, with dense nettle/bramble growth underneath. Majority of trees have multiple stems with poor unions. Trees appear to be natural regeneration over rough ground composed of rubble and building waste. Several willows appear to be failing/have subsiding stems. No observed dieback or disease	No action required at time of survey	20+	C2	PRET	30	75.0
TG7017		Pedunculate oak	5	4.5	2.5	0.5 - E	0.2	130	1.56	8	SM	F	Loose cluster of scrubby trees within grass area. No apparent significant defects	No action required at time of survey	20+	C2	RET	5	100.0
TG7018		Ash, sycamore, common lime	20	10.5	3.5	1.2 - W	1.5	250	3.00	28	EM	F	Row of multiple stem trees along edge of driveway. Several show signs of subsiding limbs/stems and majority are ivy dominated. No observed dieback or disease	No action required at time of survey	20+	C2	RET	20	100.0
TG7019		Elder, hawthorn, gean, cherry laurel, pedunculate oak	15	4.5	2.2	0.1 - S	0	140	1.68	9	M	F	Scrubby, overgrown former hedgerow trees. Dense ruderal growth around base of trees. No observed dieback or disease	No action required at time of survey	20+	C2	RET	15	100.0
TG7020		Hawthorn, elm, gean, ash, blackthorn, pedunculate oak	50	6.5	3	0.1 - E	0	180	2.16	15	M	F	Heavily overgrown hedgerow has become tree group in its own right. Occasional poor condition ash in group due to ash dieback, but rest of group is healthy and thick with foliage	No action required at time of survey	20+	B2	PRET	30	60.0
TG7021		Goat willow, pedunculate oak, sycamore, blackthorn,	50	7	3	0.2 - W	0	200	2.40	18	EM	F	Dense thicket-like feature. Multiple stem trees throughout. No observed dieback or disease	No action required at time of survey	20+	C2	RET	50	100.0

FLAC Ref. No.	TPO Ref	Species	Tree Count	Ht. (m)	MRCS (m)	Ht. 1st Br. (m)	Ht. Can. (m)	Specimen Stem Dia. (mm)	Specimen RPA Rad. (m)	Specimen RPA Area (m2)	Life Stage Y-SM-EM-M-OM	Phys. Condition G-F-P-D	Structural condition & Notes	Management recommendations	Ret. Span <10, 10+ 20+, >40	QV Grade U-A-B-C	Proposal	No. of trees retained	Trees retained %
TG7022		Blackthorn, gean, apple, plum, ash, sycamore, goat willow	60	7.5	3	0.5 - E	0.5	200	2.40	18	M	F	Thicket-like group appears to be former orchard, but no recent management evident, although trees appear in fair condition throughout.	No action required at time of survey	20+	B3	RET	60	100.0
TG7023		Goat willow, silver birch	15	10	4.5	0.8 - E	1.5	230	2.76	24	M	F	Row of multiple stem trees along old path/track. All have subsiding/failing stems and/or limbs. No dieback evident in group	No action required at time of survey	20+	C2	RET	15	100.0
TG7024		Pedunculate oak, alder, goat willow	35	9	3.5	0.5 - N	0.4	350	4.20	55	EM	G	Area of relatively young planted trees beside much more mature woodland group. No apparent significant defect	No action required at time of survey	>40	B2	REM	0	0.0
TG7025		Common lime	8	25	6	2.5 - S	3	950	11.40	408	M	G	Short row of very large trees which align with track/ride, giving impression of part of old avenue. Extensive basal/epicormic shoot growth inhibits inspection of main trunk and central crown. No observed dieback or disease and no sign of obvious decay	No action required at time of survey	>40	A2	RET	8	100.0
TG8001		Sycamore	4	18.5	6	6.8 - E	8	580	6.96	152	M	F	Row of trees parallel to road edge. Ivy on all stems. Occasional moderate deadwood. No observed dieback or disease and no sign of obvious decay	Stabilise dead wood according to occupancy levels beneath the crown	20+	B1	RET	4	100.0
TG8002		Lawson cypress	2	9	2.5	0.3 - E	0.1	250	3.00	28	EM	F	Pair of trees with heavily constrained crowns, with only significant foliage towards N and NW. No observed dieback or disease	No action required at time of survey	20+	C2	RET	2	100.0
TG8003		Sycamore	7	17.5	4	2.8 - S	3	440	5.28	88	M	F	Cluster of multiple stem trees on top of ridge. Tight forks and included unions in all trees. No observed dieback or disease and no sign of obvious decay	No action required at time of survey	20+	C2	RET	7	100.0
TG8004		Silver birch, pedunculate oak, goat willow, sycamore	10	16	4	2.2 - N	2.5	320	3.84	46	EM	F	Relatively sparse cluster of trees with garden area distinct from adjacent woodland. No observed dieback or disease and no sign of obvious decay in any trees.	No action required at time of survey	20+	B2	RET	10	100.0
TG8005		Holly, sycamore	15	12	3	1.8 - E	0.4	240	2.88	26	EM	F	Dense cluster of trees on sloped ground. Majority have multiple stems from near ground level. No observed dieback or disease and no sign of obvious decay	No action required at time of survey	20+	B2	RET	15	100.0
TG8006		Sycamore, ash, silver birch	25	14.5	3.5	1.4 - S	2.5	350	4.20	55	M	F	Dense area of trees forming boundary feature at top of and on slope. Majority have multiple stems from ground level. Ash trees are starting to show decline due to ash dieback. No other systemic issues observed.	No action required at time of survey	20+	B2	RET	25	100.0
TG8007		Portuguese laurel, yew, sycamore	60	8	3	0.1 - S	0	180	2.16	15	M	F	Dense thicket of laurel with sporadic yew and young sycamore. No systemic issues observed	No action required at time of survey	20+	C2	PRET	52	86.7
TG8008		Scots pine	10	17	3	9 - W	10.5	350	4.20	55	M	F	Cluster on relatively densely planted trees. High crowns on all. No apparent significant defect	No action required at time of survey	20+	C2	PRET	3	30.0
TG8009		Scots pine	6	17	2.5	12 - E	14	260	3.12	31	M	F	Rough row of trees, all with slender crowns and relatively thin stems. No apparent significant defect	No action required at time of survey	20+	C2	RET	6	100.0
TG8010		Ash	3	16	3	2.6 - S	4.2	190	2.28	16	EM	F	Dieback through crowns, but not to advanced. Slender and high crowns. No basal or stem decay	No action required at time of survey	10+	C2	PRET	1	33.3
TG8011		Ash	5	18	4	5.5 - NW	6	320	3.84	46	M	F	Dieback through upper crowns, with associated deadwood. No basal or stem decay evident.	No action required at time of survey	10+	C2	RET	5	100.0
TG8012		Elm	2	17.5	4	2.7 - NW	1.8	420	5.04	80	M	F	Pair of trees growing at slight angle towards NE. No apparent significant defect.	No action required at time of survey	20+	B2	RET	2	100.0
TG8013		Ash	4	18	3.5	4.8 - W	13.5	280	3.36	35	EM	P	Significant and widespread decline due to ash dieback through all trees in group. No basal or stem decay.	No action required at time of survey	<10	U	U	0	0.0
TG8014		Scots pine	2	18	3.5	13 - E	14	400	4.80	72	M	F	Skewed but healthy crowns through both trees. No observed dieback or disease and no sign of obvious decay	No action required at time of survey	20+	B2	RET	2	100.0
TG8015		Elm	4	17.5	3.8	3.4 - W	3.2	360	4.32	59	M	F	Cluster of trees with healthy, full crowns and no sign of DED.	No action required at time of survey	20+	B2	RET	4	100.0
TG8016		Hazel, elm	10	7	3	1.4 - E	1.6	120	1.44	7	EM	F	Cluster of relatively small and younger trees. Most have multiple stems from ground level.	No action required at time of survey	20+	C2	RET	10	100.0
TG8017		Ash, elm, silver birch	12	13	2	3.4 - W	3	150	1.80	10	EM	F	Cluster of relatively young trees with slender stems and crowns. Ash dieback starting to affect trees within group, but not significantly yet.	No action required at time of survey	20+	C2	RET	12	100.0
TG8018		Pedunculate oak, ash, field maple, sweet chestnut	16	13.5	2.5	1.6 - S	1.8	150	1.80	10	EM	F	Cluster of relatively young trees towards edge of sparser area of woodland group. Ash dieback starting to affect trees within group, but not significantly yet.	No action required at time of survey	20+	C2	RET	16	100.0
TG8019		Ash, elm, silver birch, sweet chestnut, goat willow, hawthorn	30	13	2.5	1.2 - N	1.5	170	2.04	13	EM	F	Well mixed group of relatively young/less mature trees within wider woodland group. No systemic issues observed	No action required at time of survey	20+	C2	RET	30	100.0
TG8020		Pedunculate oak, gean, field maple, ash, silver birch, holly	18	14	3	1 - N	1	160	1.92	12	EM	F	Group of trees on sloped ground. Ash are beginning to suffer from ash dieback. All of trees are somewhat scrubby in appearance and form.	No action required at time of survey	20+	C2	RET	18	100.0
TG8021		Holly	11	6	3	1.6 - N	1.4	170	2.04	13	M	F	Dense cluster of multiple stem trees forming thicket-like feature. Larger trees within group have decaying stools evident or pockets of decay where branch failures have occurred. No dieback or decline in any crown.	No action required at time of survey	20+	C2	RET	11	100.0
TG8022		Rhododendron	6	4.5	3	0.4 - E	0	80	0.96	3	M	F	Dense multiple stem trees forming thicket. No observed dieback or disease	No action required at time of survey	20+	C2	RET	6	100.0
TG8023		Silver birch	4	12.5	2.5	2.2 - S	4	150	1.80	10	EM	F	Cluster of relatively young/small trees. No apparent significant defect	No action required at time of survey	20+	C2	RET	4	100.0
TG8024		Rhododendron	5	4.5	3	0.4 - E	0	80	0.96	3	M	F	Dense multiple stem trees forming thicket. No observed dieback or disease	No action required at time of survey	20+	C2	RET	5	100.0
TG8025		Silver birch	7	14	3	3.4 - S	3.5	150	1.80	10	EM	F	Cluster of relatively young/small trees. No apparent significant defect	No action required at time of survey	20+	C2	RET	7	100.0
TG8026		Sycamore	12	14	3.5	1.5 - SW	3.5	230	2.76	24	EM	F	Cluster of trees, most of which have twin or multiple stems, all showing significant decline and crown dysfunction relating to squirrel damage. No basal or stem decay evident.	Stabilise dead wood according to occupancy levels beneath the crown	10+	C2	RET	12	100.0
TG8027		Ash	9	15	3.5	4 - N	6.5	240	2.88	26	EM	P	Cluster of trees all with significant decline in crown due to ash dieback disease. Scrubby hazel, wild cherry and elm in understorey here.	Fell to as low as reasonably practicable	<10	U	U	0	0.0
TG8028		Ash	5	12	3	2.5 - E	3.5	130	1.56	8	SM	F	Cluster of relatively young trees all with some degree of ash dieback disease evident.	No action required at time of survey	10+	C2	RET	5	100.0
TG8029		Scots pine	9	17	3.5	8 - S	10	300	3.60	41	M	F	Cluster of similar sized/aged trees. All have moderate/major deadwood in lower crowns. No observed dieback or disease and no sign of obvious decay	No action required at time of survey	20+	B2	RET	9	100.0
TG8030		Ash	4	17	3	10 E	10	270	3.24	33	EM	P	Crowns display advancing decline symptoms typical of ash dieback.	No action required at time of survey	<10	U	U	0	0.0
TG8031		Scots pine x12, ash x14, goat willow x2, pedunculate oak x4, yew x1	33	17	3	5 N	4	400	4.80	72	M	F	Tree group comprises high canopy pines in a lozenge contiguous with west boundary of woodland, thereafter slender others internally to woodland and dispersed amongst pines.	No action required at time of survey	40+	B2	RET	33	100.0
TG8032		Goat willow	4	13	5	5 S	5	150	1.80	10	EM	F	Close-set cluster of slender asymmetrical specimens. East tree slightly larger stem diameter. Unremarkable both individually and collectively.	No action required at time of survey	20+	C2	RET	4	100.0
TG8033		Ash	4	17	4	9 E	8	290	3.48	38	EM	P	Crowns display advancing decline symptoms typical of ash dieback.	No action required at time of survey	<10	U	U	0	0.0
TG8034		Pedunculate oak, ash, gean, hazel holly, yew holm oak, goat willow, field maple	40	14	3	3 N	3	230	2.76	24	SM	F	Tree group comprising understorey specimens. Mostly slender, upright with compact, often asymmetrical crowns. Unremarkable individually but collectively providing tree cover where few mature high canopy trees are present.	No action required at time of survey	40+	B2	RET	40	100.0
TG8035		Sycamore x10, silver birch x1, yew x1, holly x10, Portuguese laurel, cherry laurel	50	14	4	1 N	1	320	3.84	46	EM	F	Dense cluster of frequent *Prunus* species understorey with scattered trees. All rather unremarkable but collectively providing screening to/from the highway for the residential dwelling. The broadleaf species are generally drawn-up, slender trees that are getting away above the evergreen understorey.	No action required at time of survey	40+	C2	PRET	42	84.0

Data for trees assessed as woodland (WG)

FLAC Ref. No.	TPO Ref	Species	Area (m^2)	Ht. (m)	MRCS (m)	Ht. 1st Br. (m)	Ht. Can. (m)	Specimen Stem Dia. (mm)	Specimen RPA Rad. (m)	Specimen RPA Area (m2)	Life Stage Y-SM-EM-M-OM	Phys. Condition G-F-P-D	Structural condition & Notes	Management recommendations	Ret. Span <10, 10+ 20+, >40	QV Grade U-A-B-C	Proposal	Area retained (m^2)	Area retained %
WG3001		Goat willow, hazel, pedunculate oak, silver birch, holly	4982	15	5	1 S	1	480	5.76	104	F	EM	Dense canopy comprising chiefly goat willow with hazel and scattered oaks with infrequent birch. Older goat willow collapsing in typical fashion, hazel stools from past coppice management. Ditches to north and south edges, north edge bears holly with hazel from presumed past hedgerow management. Limited structural diversity and almost no herb and shrub layer species. Could benefit from management to increase biodiversity attributes.	No action required at time of survey	40+	B2	RET	4982	100.0
WG3002		Cherry laurel, sycamore, hazel, ash, holly, field maple, pedunculate oak	4629	15	6	1 S	1	500	6.00	113	G	EM	Dense canopy comprising chiefly sycamore with hazel and scattered ash and birch with infrequent gean and field maple, the latter in southern edge. Cherry laurel near east boundary. Ash dieback present. Some older sycamore dispersed through area, stools from past coppice management. Ditches to south edge bears holly with hazel and field maple from presumed past hedgerow management. Limited structural diversity and little herb and shrub layer species, bluebell seen. Could benefit from management to increase biodiversity attributes. Woodyard and associated activities at west end.	Undertake risk-facing tree assessments of trees with potential to affect third party and highway land.	40+	B2	RET	4629	100.0
WG3003		Cherry laurel, sycamore, elm, ash, holly, pedunculate oak, gean, hazel, elder	3369	25	7	2 S	2	700	8.40	222	P	M	High canopy sycamore and ash with infrequent oak and gean. Thicketting cherry laurels with other understorey. Access cut through from highway serves powerline clearance etc. Ash dieback seen near highway. Trees thin to thorn scrub with hazels and elder to west end.	Undertake risk-facing tree assessments of trees with potential to affect third party and highway land. Fell ash with dieback within fall radius of highway or third party land.	40+	B2	RET	3369	100.0
WG7001		Ash, sycamore, elm, silver birch, goat willow, pedunculate oak	2081	16	5.5	1.5 - S	1	450	5.40	92	M	F	Woodland strip just beyond site boundary. Majority of canopy is formed of multiple stem ash and sycamore. Ivy is rife. Evidence of ash dieback in feature.	No action required at time of survey	20+	B3	RET	2081	100.0
WG7002		Ash, gean, pedunculate oak, aspen, sweet chestnut, field maple, hazel, holly, silver birch, European larch, Scots pine	47349	15	3.5	3.5	2	300	3.60	41	M	F	Dense wooded area centred around damp hollows. Extensive historic coppicing activity evident with no recent maintenance meaning that all stools are over stood. Significant planting has been undertaken in the southern 1/3 of the feature within the last 10-15 years, tree shelters are still present. Along the E boundary of the site is a ditch with what looks like a very overgrown hedge-like feature present along its edge, this is where field maple is present within the group. Sporadic scattering of larger, more mature ash throughout group, but these makeup less than 5% of canopy cover. Small area of conifer plantation towards E edge of group approximately half way up feature. Multiple informal paths through group, particularly around or near to edges.	Create management plan to ensure long term health is maintained	>40	A3	RET	47349	100.0
WG7003		Pedunculate oak, gean, ash, western hemlock, elder	6646	16	4	1.8 - N	1.5	450	5.40	92	M	F	Woodland area spreading into 3rd party land with little in the way of boundary signifiers. Larger, more mature trees towards edges, with younger planted conifers and natural regeneration concentrated within the central areas. Moderate amount of standing dead trees, mainly conifers. No systemic issues	No action required at time of survey	>40	B3	RET	6646	100.0
WG7004		Pedunculate oak, gean, silver birch, Norway spruce, ash, sycamore, holly, hazel, goat willow	18459	15	4.5	1.2 - E	1	500	6.00	113	M	G	Woodland is centred around the valley of small gill. Dense understorey of unmanaged coppice species as well as natural regeneration. Occasional cluster of non-native planted trees present. Ground flora is diverse and healthy. Good mix of species and maturities throughout group. No systemic issues present	No action required at time of survey	>40	A3	RET	18459	100.0
WG7005		Goat willow, pedunculate oak, field maple, hawthorn, holly	2717	15	5	1.2 - E	0.5	500	6.00	113	M	F	Small woodland group centred around pond. Larger more mature trees found at boundary of group with more scrubby willows towards the centre/edge of pond. Ground flora is limited to edges of group, and is somewhat dominated by bracken and brambles. No systemic issues observed	No action required at time of survey	>40	B3	RET	2717	100.0
WG7006		Ash, pedunculate oak, sweet chestnut, elder, aspen, Scots pine, horse chestnut	28645	17	5.5	1.5 - E	1	600	7.20	163	M	G	3rd party woodland just beyond boundary of site. Larger proportion of ash than anywhere else on site. Ivy dominated ground of edges of group. No systemic issues observed	No action required at time of survey	>40	A3	RET	28645	100.0
WG7007		Ash, pedunculate oak, gean, holly, sycamore, field maple, hazel	54136	16	6	1.2 - E	0.5	500	6.00	113	M	G	3rd party woodland group bounded by shallow ditch to N. Evidence of historic coppicing activity within group, but no apparent recent management. Good mix of species and maturities with established understorey. Several informal footpaths at edges, particularly N boundary. No systemic issues observed	No action required at time of survey	>40	A3	RET	54136	100.0

FLAC Ref. No.	TPO Ref	Species	Area (m^2)	Ht. (m)	MRCS (m)	Ht. 1st Br. (m)	Ht. Can. (m)	Specimen Stem Dia. (mm)	Specimen RPA Rad. (m)	Specimen RPA Area (m2)	Life Stage Y-SM-EM-M-OM	Phys. Condition G-F-P-D	Structural condition & Notes	Management recommendations	Ret. Span <10, 10+ 20+, >40	QV Grade U-A-B-C	Proposal	Area retained (m^2)	Area retained %
WG7008		ash, hornbeam, sweet chestnut, hazel, field maple, hawthorn	6092	7	2.5	0.5 - S	0.5	140	1.68	9	SM	F	Dense area of relatively young woodland. Young coppice stools and relatively new planting throughout group. Density shows lack of management. Dense ruderal growth throughout. No systemic issues evident	No action required at time of survey	20+	B3	PRET	5334	87.6
WG7009		Ash, pedunculate oak, sweet chestnut, field maple, elm, hazel, hawthorn	5663	14.5	5	1 - E	0.5	420	5.04	80	M	F	Taller/more mature woodland area than areas to N and S. Significant area of windthrow and decline in sweet chestnut in SW corner beside roadside. Rest of area appears healthy with little in the way of decline or disease. Understorey is established with hazel, hawthorn and young field maple	Fell to ground level area of dead/dying sweet chestnut.	20+	B3	PRET	1808	31.9
WG7010		Goat willow, hawthorn, pedunculate oak, hazel, elm, ash	5350	9	2.2	0.5 - E	0.8	160	1.92	12	EM	F	Relatively young woodland with well spaced, planted semi-mature tree stock. Little in the way of management evident. No systemic issues observed	No action required at time of survey	20+	B3	RET	5350	100.0
WG7011		Ash, pedunculate oak, hazel, hawthorn, horse chestnut	9665	18	6	2.5 - E	2	600	7.20	163	M	G	Tall stand of predominantly ash and occasional oak, with understorey of coppice-like hazel and other smaller species. Occasional mature tree showing signs of decline/dieback, possibly result of ash dieback. No systemic issues, but lack of management evident. Group bounded to N and S by shallow ditch.	No action required at time of survey	>40	A3	RET	9665	100.0
WG7012		Hazel, hawthorn, goat willow, ash, pedunculate oak	5748	7	2.5	0.5 - S	0.5	140	1.68	9	EM	G	Densely planted, relatively young coppice-like woodland. Occasional larger willow scattered through group. No recent management evident, but no systemic issues. Group bounded to N by drainage ditch	No action required at time of survey	20+	B3	RET	5748	100.0
WG7013		Pedunculate oak, ash, copper beech, hazel, silver birch, hawthorn, beech, goat willow, Scots pine	12204	14	5	1 - E	1	550	6.60	137	M	G	Dense wooded area where distinct understorey of hazel/hawthorn has developed below tall ash and oak standards. Probably originally managed as coppice coup, but no recent management evident. No systemic issues observed	No action required at time of survey	>40	A3	RET	12204	100.0
WG7014		Pedunculate oak, silver birch, hazel, holly, aspen, ash, goat willow, hornbeam	23109	15	4.5	0.5 - S	1	480	5.76	104	M	F	Dense understorey of hazel, willow and hawthorn throughout group. Canopy of birch, oak, ash and goat willow. No recent management evident. Rhododendron is starting to overtake understorey in central and E parts of group.	No action required at time of survey	>40	B3	RET	23109	100.0
WG7015		Silver birch, pedunculate oak, sweet chestnut, Scots pine, hazel, beech, sycamore, alder	117776	17	5.5	1.8	2	450	5.40	92	M	G	Dense woodland towards W, S and N gives way to more open area towards E. Woodland around series of small dips, wet areas and raised rock outcrops. Dense woodland has distinct coppice-like understorey. Rhododendron beginning to spread through E and S areas. Bluebells prominent in large areas. Occasional large mature trees found scattered around group. Area of dead/dying sweet chestnut present. Large area of over stood sweet chestnut coppice present within central area with significant historic windthrow	Create management plan to ensure long term health is maintained	>40	A3	RET	117776	100.0
WG7016		Pedunculate oak, aspen, silver birch, common lime, beech, hazel, holly, sycamore	33773	20	7	0.5 - S	1	750	9.00	254	M	G	Very thick woodland. Extensive understorey of hazel, holly and sycamore. Very large trees scattered throughout group, but are more frequent at edges of group, in particular the NW boundary. No systemic issues	No action required at time of survey	>40	A3	RET	33773	100.0
WG7017		Silver birch, pedunculate oak, hornbeam, goat willow, hawthorn, sweet chestnut	60593	16	6.5	1.5 - E	0.5	520	6.24	9	M	F	Dense woodland with thick understorey. W edge of group has thick band of young regeneration growing here, as woodland area expands. Good mixture of species through rest of feature. No systemic issues observed	No action required at time of survey	>40	A3	RET	60593	100.0
WG7018		Pedunculate oak, silver birch, sweet chestnut, holly, hawthorn, ash, sycamore	87953	17	5.5	1.5 - S	1	550	6.60	9	M	G	3rd party woodland beyond boundary fence/markers. Well established, mixed and diverse group with established understorey as well as diverse ground flora. No systemic issues present.	No action required at time of survey	>40	A3	RET	87953	100.0

FLAC Ref. No.	TPO Ref	Species	Area (m^2)	Ht. (m)	MRCS (m)	Ht. 1st Br. (m)	Ht. Can. (m)	Specimen Stem Dia. (mm)	Specimen RPA Rad. (m)	Specimen RPA Area (m2)	Life Stage Y-SM-EM-M-OM	Phys. Condition G-F-P-D	Structural condition & Notes	Management recommendations	Ret. Span <10, 10+ 20+, >40	QV Grade U-A-B-C	Proposal	Area retained (m^2)	Area retained %
WG8001		Elm, ash, Scots pine, sweet chestnut, silver birch, pedunculate oak, holly, yew, hazel, hawthorn, gean	26561	18	4	1.8 - E	2	400	4.80	72	M	F	Relatively well spaced woodland group with several glade-like areas, particularly towards the central portion. Understorey is sporadic with mixture of elm, hazel and holly forming densest areas, particularly around edges. Ash are showing significant decline throughout group, due to ash dieback disease. Densest area of ash towards N and W edges of group. Little in the way of decline seen within elm. Group lacks significantly older/more mature trees indicating relatively recent/constant management. No sign of recent coppice management.	No action required at time of survey	>40	A3	RET	26561	100.0

Data for hedges (H)

FLAC Ref. No.	Species	Ht. (m)	Mean Width (m)	Length (m)	Mean Stem Dia. (mm)	Life Stage Y-SM-EM-M-OM	Phys. Condition G-F-P-D	Structural condition & Notes	Management recommendations	Ret. Span <10, 10+ 20+, >40	QV Grade U-A-B-C
H3001	Hazel	2	2	102	150	EM	G	Regularly clipped boundary hedge. Assumed under private ownership.	No action required at time of survey	40+	B2
H3002	Hazel, hawthorn, elder, yew, holly	2	1.5	183	150	EM	G	Regularly clipped boundary hedge. Assumed under private ownership.	No action required at time of survey	40+	B2

Data for hedgerows (HR)

FLAC Ref. No.	Species	Ht. (m)	Mean Width (m)	Length (m)	Mean Stem Dia. (mm)	Life Stage Y-SM-EM-M-OM	Phys. Condition G-F-P-D	Structural condition & Notes	Management recommendations	Ret. Span <10, 10+ 20+, >40	QV Grade U-A-B-C	Proposal	Length retained (m)	Percentage retained %
HR3001	Hazel, hawthorn	7	12	99	550	M	G	Close-set specimens from past coppice management. No recent management so becoming broad but in good overall condition.	No action required at time of survey	40+	B2	RET	99	100.0
HR3002	Hawthorn, elder,	7	6	65	300	M	G	Southern section to just north of 3021 cut to 1.8 metres and clipped, remainder not subject to management. Good overall condition in both sections.	No action required at time of survey	40+	B2	RET	65	100.0



APPENDIX FLAC 2

RAVEN METHODOLOGY
RAVEN RECORDER

Recognition of Ancient, Veteran & Notable Trees –
R A V E N

Step One—Size Assessment

Tree has very large girth for species
Note—pollarding & senescence reduce stem increment: girth may be deceptive – assess stem girth relationship with life-stage accordingly

Refer to *Ancient and other veteran trees: further guidance on management* (Lonsdale, ATF 2013) at Fig. 1.3: *Chart of girth in relation to age and developmental classification of trees*

IF GIRTH NOT VERY LARGE FOR SPECIES, STOP HERE!

Step Two—Additional Primary Features

At least one of the following should be present, or refer to Step Three

- ☐ Extensive decay, especially brown rot or exposed stem heartwood in relevant species
- ☐ Extensive hollowing
- ☐ Crown senescence
- ☐ Retrenchment

Step Three—Secondary Features

If no additional Primary Feature is present, tree should have at least four Secondary Features

- ☐ Large quantity of dead wood in crown, especially where large-sized
- ☐ Major storm damage/ breakout wounds
- ☐ Habitat spaces: decay holes and/ or crevices/ branch splits sheltered from direct rainfall
- ☐ Aerial rooting
- ☐ Sap run/ slime flux
- ☐ Water pool
- ☐ Bark loss inc. due to lightning strike
- ☐ Fungi
- ☐ Other epiphytic plants, including significant presence of lichens

Step Four – Identification Guide

☐ **ANCIENT**
Veteran tree with extremely large girth: age likely > 50% of estimated species maximum
E.g. pedunculate oak, 2m stem dia, average site: ca. 460 years old, ca. 50% of species max

☐ **VETERAN**
Very large girth for species and qualifies under either Step Two or Step Three

☐ **NOTABLE**
Very large girth for species but does not qualify under either Step Two or Step Three

IF A TARGET IS PRESENT, ASSESS RISK USING *THREATS*

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FLAC

RAVEN - *Recognition of Ancient, Veteran & Notable trees*

Guide to column headings

Tree No. Refer to accompanying plan
Species Listed by common name
Form Key factors that influence significance of stem size and age estimation
Pollard Whether the tree bears a pollard form, even if now long grown out
Relic Tree assessed as bearing <75% of former maximum crown volume

Required primary feature Tree must be large relative to others of its kind to qualify for assessment (or evidence retarded increment); refer to Lonsdale 2013
Additional primary features Features of principal importance for identifying A/V trees. In each case, feature should be present significantly
Secondary features Less important though still valuable features that aid identification, especially where present in numbers
Extensive decay Exposed decay areas should exceed 400cm2
Exposed HW HW refers to heartwood; applicable to relevant species only

DW>150mm dia Dead wood present in the crown with diameter over 150mm
Maj. Storm damage Breakout wounds or broken spars exceeding 30cm dia
Dry habitat space Potential for faunal use where not subject to rain entry
Water pool Offers niche habitat for specialist inverts, even where transient
Signif. Bark loss/ LS Bark loss exceeding 400cm2. LS refers to lightning strike
Notable fungi Refers to species with known associations to old-growth trees
Other epiphytic plants Should be either rare or present in significant quantity

Age estimate Computed using FC White Method, form & senescence weighting added
Ancient Trees beyond 50% of species maximum life expectancy
Veteran Trees with Required/ Primary or Secondary features as listed, and age >25% of species maximum life expectancy
Notable Trees that are large and/ or old for species, but which lack qualifying features
Non-special All other trees

Note: This assessment reports findings on identified candidate A-V-N trees within flac's study area: refer to accompanying indicative plan of tree locations

Tree no.	Species	Form		REQUIRED PRIMARY FEATURE	*Either:* ADDITIONAL PRIMARY FEATURES - at least one of						*Or:* SECONDARY FEATURES - at least four of												AGE ESTIMATE		RAVEN ASSESSMENT				NOTES
		Pollard	Relic	Large stem dia.	Extensive decay			Hollowing	Senescence	Retrenchment	DW>150mm dia	Maj. Storm Damage	Dry habitat space	Aerial roots	Sap run/ slime flux	Water pool	Signif. bark loss/ LS	Fungi		Other epiphytic plants				Years	Origin	Ancient	Veteran	Notable	Non-special	
				(mm)	Brown rot	Exposed HW	Other											Notable	Other	Lichens	Ferns	Other							
3001	Ash	Coppice		190, 190, 190, 190			X																269	1752		X			Typical decay of coppice stool
3003	Ash	Coppice		250 x 9			X																463	1558		X			Typical decay of coppice stool
3004	Ash	Coppice		160 x 13			X																339	1682		X			Typical decay of coppice stool
3005	Ash	Coppice		200 x 13			X																343	1678		X			Typical decay of coppice stool
3006	Ash	Coppice		180 x 6			X																315	1706		X			Typical decay of coppice stool
3007	Gean			560				X	X		X	X	X										94	1928		X			
3026	Pedunculate oak			1400				X	X		X	X	X					X					251	1771		X			Extinct fungi provisionally identified as Ganoderma resinaceum
7041	Beech			850			X			X													116	1906		X			
8036	Pedunculate oak			1420			X				X	X	X										257	1765		X			
8039	Beech		X	1130, 190, 120				X		X									X				198	1824		X			Provisional fungi identification as genus Ganoderma
TG3013	Ash	Coppice		n/a			X				X												346	1676		X			Veteran ash coppice stools dispersed along top of woodbank feature. Mean age of individually assessed coppiced stools applied

APPENDIX FLAC 2

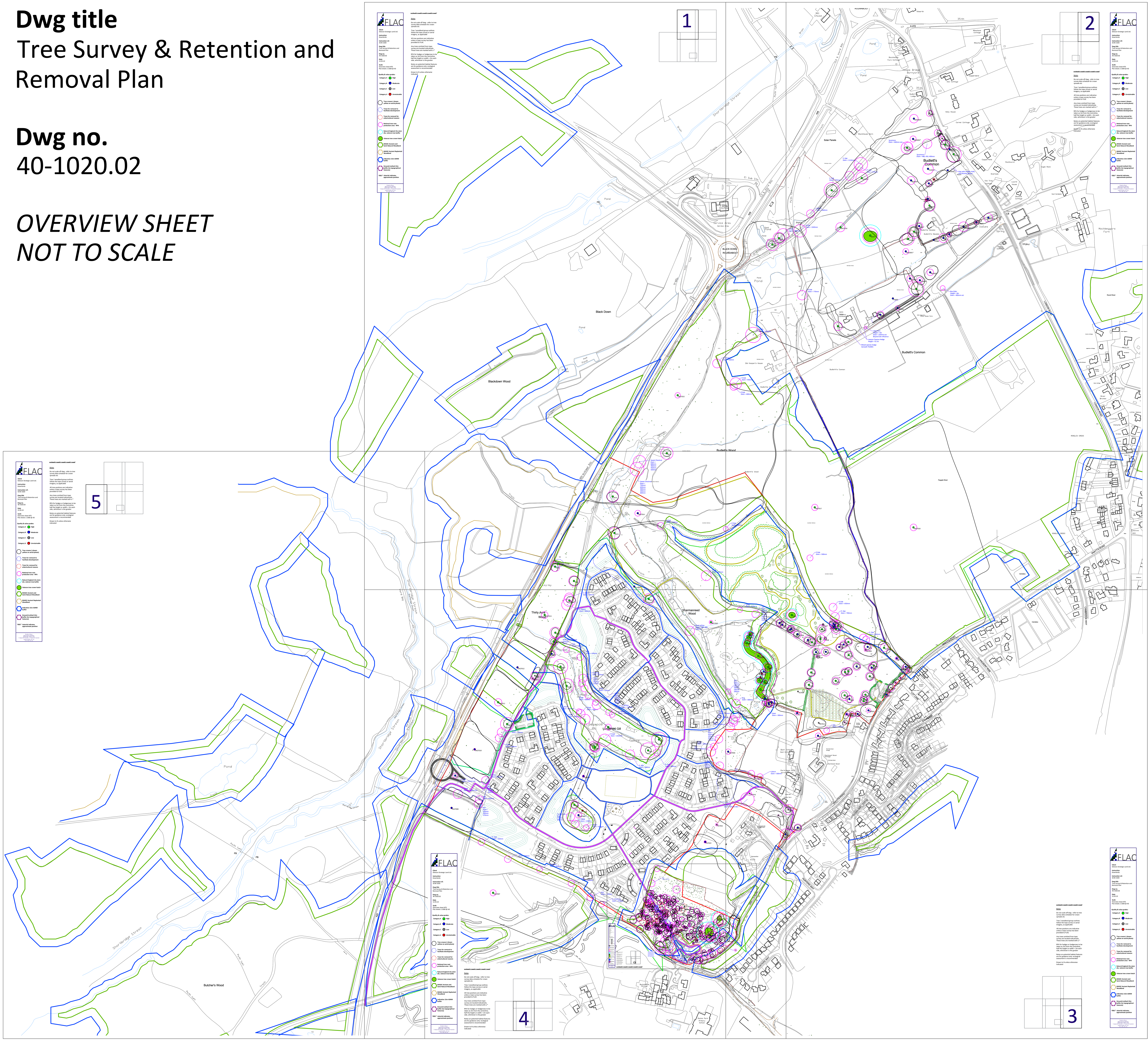
TREE SURVEY RETENTION & REMOVAL PLAN

TREE PROTECTION PLAN & ARBORICULTURAL METHOD STATEMENT

Dwg title
Tree Survey & Retention and Removal Plan

Dwg no.
40-1020.02

OVERVIEW SHEET
NOT TO SCALE



FLAC

Client
Gleeson Strategic Land Ltd.

Instruction
Downlands

Instruction ref.
SC40-1020

Dwg title
Tree Survey & Retention and Removal Plan

Dwg no.
40-1020.02

Date
12.05.22

Scale
Overview sheet NTS
Plot sheets 1:1000 @ A0

Quality & value grades:

- Category A — High
- Category B — Moderate
- Category C — Low
- Category U — Unretainable

- Tree crowns (shown yellow on aerial photo)
- Trees for removal to facilitate development
- Trees for removal for arboricultural reasons
- Notional tree root protection area - RPA
- Natural England 15x stem dia. veteran tree buffer
- Veteran tree crown hatch
- MAGIC Ancient and Semi-Natural Woodland
- MAGIC Ancient Replanted Woodland
- Indicative 15m ASNW buffer
- Ground-truthed 15m buffer (to topographical features)
- 7001* Asterisk indicates approximate position

Dendron House
Barford Road, Blunham
BEDFORD, MK44 3ND
T 44(0)1767 641648 / / F 44(0)1767 660330
enquiries@flac.uk.com
www.flac.uk.com

0m 10m 20m 30m 40m 50m

Notes

Do not scale off dwg - refer to tree survey data schedule for crown spreads etc

Tree / woodland group outlines follow the topo survey or aerial imagery, as applicable

All tree positions are indicative unless a topo survey has been provided to FLAC

Any trees omitted from topo survey are located indicatively. These trees are marked with a *

RPA for hedges or hedgerows to be taken as 3m from the centreline, half the height or width + 2m each side, whichever is the greater

Notes on potential habitat features are for guidance only: ecological assessment is recommended

Drawn to N unless otherwise indicated

1

Black Down

Blackdown Wood

Budlett's Wood

Old Keeper's House

Budletts Cottage

BLACK DOWN ROUNDABOUT

Service Area

Filling Station

Short-bridge Stream

Drain

Track

Pond

FB

El Sub Sta

A26

A32

Lay-by

Ed & Ward Bay CR

Path (um)

7076

7077

7074

7073

7072

7070

7069

7068

WG7015

WG7014

TG7024

P.Oak
Diam = 1250mm

W.Hemlock
Diam = 720mm

P.Oak
Diam = 950mm

P.Oak
Diam = 600mm

Sweet Chestnut
Diam =
680mm
460mm
450mm
420mm

Sweet Chestnut
Diam =
750mm
620mm
360mm
340mm
260mm

P.Oak
Diam = 560mm

P.Oak
Diam = 400mm

P.Oak
Diam = 810mm

2

FLAC

Client
Gleeson Strategic Land Ltd.

Instruction
Downlands

Instruction ref.
SC40-1020

Dwg title
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Dwg no.
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Date
12.05.22

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0m 10m 20m 30m 40m 50m

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Category A **High**

Category B **Moderate**

Category C **Low**

Category U **Unretainable**

Tree crowns (shown yellow on aerial photo)

Trees for removal to facilitate development

Trees for removal for arboricultural reasons

Notional tree root protection area - RPA

Natural England 15x stem dia. veteran tree buffer

Veteran tree crown hatch

MAGIC Ancient and Semi-Natural Woodland

MAGIC Ancient Replanted Woodland


Indicative 15m ASNW buffer

Ground-truthed 15m buffer (to topographical features)

7001* **Asterisk indicates approximate position**

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ROUNABOUT
Mill Chase
Drain
Kilworth
35.4m
A 272
Milestone Cottage
Milestones
Pond
Stone Cottage
Blackhouse Farm
Blackhouse Farm Cottage
ED & Ward Bdy
Hoops Bridge Barnyard
Pond
Copperdene
Ilex Cottage
35.1m
Budlett's Lodge
Holly House
Carmel Cottage
FB
Path (um)
ge Stream
A26
Track
Blackhouse Barn
Solar Panels
3025*
WG3003*
3023*
TG3012*
3022*
HR3002
3021*
WG3002*
3024*
Sycamore Diam = 660mm est
Sycamore Diam = 480, 450, 400mm
Budlett's Common
P. Oak Diam = 1110mm
P. Oak Diam = 570mm
TG7025*
P. Oak Diam = 750mm
TG3011*
HR3001*
Gap with smaller Holly and Norway Spruce
N12GR
TG3010*
3020*
3019*
7075*
3018*
3017*
3016*
S.Birch Diam = 660mm
Drain
Pond
P.Oak Diam = 1020mm
P.Oak Diam = 880mm
WG7016
3026*
3015*
3014*
Budletts Meadow
Budlett's Meadow
TG3009
H3002
3013
TG3008*
TG3006*
TG3007*
TG3007*
Issues
Spring
Spring Cottage
7076
7077
WG3001*
TG3005
TG3002*
TG3004*
3011
H3001
TG3003
3012*
TG3001*
Budlette Farmhouse
Budlett's Farmhouse
White House Farm
White House Farm
Box Elder Height = 8m Diam = 400mm est
Laburnum Height = 4m Diam = 220mm est Beyond site influence
Lawson Cypress Hedge Height = to 2m
Mixed species hedge beneath TG3001
P.Oak Diam = 770mm
P.Oak Diam = 1250mm
P.Oak Diam = 950mm
P.Oak Diam = 600mm
Old Keeper's House
Budletts Cottage
Budlett's Common
Budlett's Common
Caravan Site
Rockhurst
Eagle Rock
Overlook
Yew Tree Cottage
Laurel House
Willow Tree Cottage
Diamond Cottage
Warrendale
Garage
LB
Mockbeggars Farm
Round Wood
LONDON ROAD
Fairhazel
Orchard Cottage
Greenside
Copperfield
Warren Cottage
Little Peppers
Appletree Cottage
Squirrels Wood
Broadstone
The Old Orchard
Greenmeyes
Crofters
Brambles Cottage
Gorse Cottage
Kimberley
Silver Birches
Trees
Little Spinne
Lavender
Clematis
The Roches
Woodview
Ringles Cross Cottage
Ringles Place
RINGLES CROSS
Cranberry Lodge
Garage
The Lodge
Dakies
Springfield
Telephone Call Box
Shelter
Woodside
Murrayt
SNATT'S ROAD
Cemetery
The Old Dairy
Whitehaven
Mile Post
Budlett's Wood
Paygate Wood
WG7017
WG7018
P.Oak Diam = 500mm
P.Oak Diam = 400mm



Notes

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Drawn to N unless otherwise indicated

3

FLAC

Client
Gleeson Strategic Land Ltd.

Instruction
Downlands

Instruction ref.
SC40-1020

Dwg title
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Dwg no.
40-1020.02

Date
12.05.22

Scale
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Plot sheets 1:1000 @ A0

Quality & value grades:

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- **Category B** — **Moderate**
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Sweet Chestnut
Diam =
680mm
460mm
450mm
420mm

Sweet Chestnut
Diam =
750mm
620mm
360mm
340mm
260mm

P.Oak
Diam = 560mm

P.Oak
Diam = 400mm

P.Oak
Diam = 810mm

C. Beech
Diam = 730mm

C. Beech
Diam = 900mm

Goat willow
Diam = 690, 400, 280mm

Gean
Diam = 420mm

Ash
Diam =
500mm
500mm
270mm
250mm
230mm
150mm

Multi Stemmed Ash
Dieback
Cat U

Ash
Diam = 490mm

Ash
Diam = 550mm

G.Willow
Diam = 670mm

P.Oak
Diam =
450mm
370mm

P.Oak
Diam = 520mm

Gean
Diam =
450mm
390mm
320mm
300mm

P.Oak
Diam = 500mm

G. Willow
Diam = 520mm

G. Willow
Diam = 440mm

S. Birch
Diam = 430mm

P.Oak
Diam = 700mm

P.Oak
Diam = 830mm

P.Oak
Diam = 730mm

P.Oak
Diam = 640mm

P.Oak
Diam = 1010mm

P. Oak
Diam = 780mm

P. Oak
Diam = 580mm

P.Oak
Diam = 560mm

Ash
Diam = 270mm

Ash
Diam =
450mm
330mm
250mm
170mm est

P.Oak
Diam = 780mm

P.Oak
Diam = 790mm

P.Oak
Diam = 640mm

Ash
Diam =
320mm
180mm
180mm
140mm
100mm

Ash
Diam = 600mm

Gean
Diam = 390mm

Ash
Diam = 550mm

S.Birch
Diam = 500mm

G.Willow
Diam = 450mm MS

P.Oak
Diam = 750mm est

P.Oak
Diam = 780mm est

Ash
Diam =
410mm
400mm

Ash
Diam = 650mm

Ash
Diam =
430mm
390mm
370mm

P. Oak
Diam = 550mm

Ash
Diam = 660mm

S. Maple
Diam = 480mm

Ash
Diam = 520mm

Turkey Oak
Diam =
570mm
380mm

P-Oak
Diam = 630mm

Beech
Diam = 450mm

Ash
Diam = 540mm

H. Chestnut
Diam = 470mm

Thirty Acre Wood

Shermanreed Wood

Longwood Gill

Pond

Track

Lay-by

Issues

Shortbridge Stream

Ward Bay

Dudlett's Wood

Buckswood Grange

Rocks Park Primary School

SNATTS ROAD

ROCKS ROAD

HUNTERS WAY

A22

WG7014
WG7013
WG7012
WG7011
WG7010
WG7009
WG7008
WG7007
WG7005
WG7003
WG7002
TG7024
TG7023
TG7022
TG7021
TG7020
TG7019
TG7018
TG7017
TG7016
TG7015
TG3018
TG3013

7074 7073 7072 7071 7070 7069 7068 7067 7066 7065 7064 7063 7062 7061 7060 7059 7058 7057 7056 7055 7054 7053 7052 7051 7050 7049 7048 7047 7046 7045 7044 7043 7042 7041 7040 7039 7038 3001 3002 3003 3004 3005 3006 3007 3008 3009 3010

FLAC

Client
Gleeson Strategic Land Ltd.

Instruction
Downlands

Instruction ref.
SC40-1020

Dwg title
Tree Survey & Retention and Removal Plan

Dwg no.
40-1020.02

Date
12.05.22

Scale
Overview sheet NTS
Plot sheets 1:1000 @ A0

Quality & value grades:

- **Category A** High
- **Category B** Moderate
- **Category C** Low
- **Category U** Unretainable

- **Tree crowns (shown yellow on aerial photo)**
- **Trees for removal to facilitate development**
- **Trees for removal for arboricultural reasons**
- **Notional tree root protection area - RPA**
- **Natural England 15x stem dia. veteran tree buffer**
- **Veteran tree crown hatch**
- **MAGIC Ancient and Semi-Natural Woodland**
- **MAGIC Ancient Replanted Woodland**
- **Indicative 15m ASNW buffer**
- **Ground-truthed 15m buffer (to topographical features)**
- **7001* Asterisk indicates approximate position**

Dendron House
Barford Road, Blunham
BEDFORD, MK44 3ND
T 44(0)1767 641648 / F 44(0)1767 660330
enquiries@flac.uk.com
www.flac.uk.com

Notes

Do not scale off dwg - refer to tree survey data schedule for crown spreads etc

Tree / woodland group outlines follow the topo survey or aerial imagery, as applicable

All tree positions are indicative unless a topo survey has been provided to FLAC

Any trees omitted from topo survey are located indicatively. These trees are marked with a *

RPA for hedges or hedgerows to be taken as 3m from the centreline, half the height or width + 2m each side, whichever is the greater

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Drawn to N unless otherwise indicated

4

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T 44(0)1767 641688 / F 44(0)1767 660330
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0m 10m 20m 30m 40m 50m

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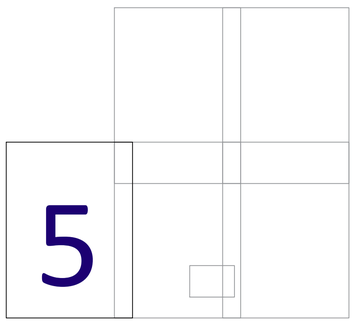
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Diam = 500mm

Ash
Diam = 550mm

H. Chestnut
Diam = 470mm

Dead collapsing

Dead Scots pine to 30m ht

Birch

Holly/sycamore scrub understorey

Mixed species shrubs

Mixed species shrubs

Red line shows extents of earthworks

Pedunculate oak 8045 is not expected to have significant rooting presence in area of cut/fill earthworks due to the sandstone between the two and consequent level difference - the incursion upon the 'notional' circular RPA is considered acceptable

ROCKS ROAD

SNATT'S ROA

46.5m

FLAC

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Gleeson Strategic Land Ltd.

Instruction
Downlands

Instruction ref.
SC4D-1020

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Tree Survey & Retention and Removal Plan

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40-1020.02

Date
12.05.22

Scale
Overview sheet NTS
Plot sheets 1:1000 @ A0
THIS INSET SHEET 1:250 @A0

Quality & value grades:

Category A	**High**
Category B	**Moderate**
Category C	**Low**
Category U	**Unretainable**

Tree crowns (shown yellow on aerial photo)

Trees for removal to facilitate development

Trees for removal for arboricultural reasons

Notional tree root protection area - RPA

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Indicative 15m ASNW buffer

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Dendrus House
The Paddocks
Ruthin LL15 1LL
T +44(0)1745 535160 / +44(0)1745 535161
T +44(0)1745 540510 / F +44(0)1745 540530
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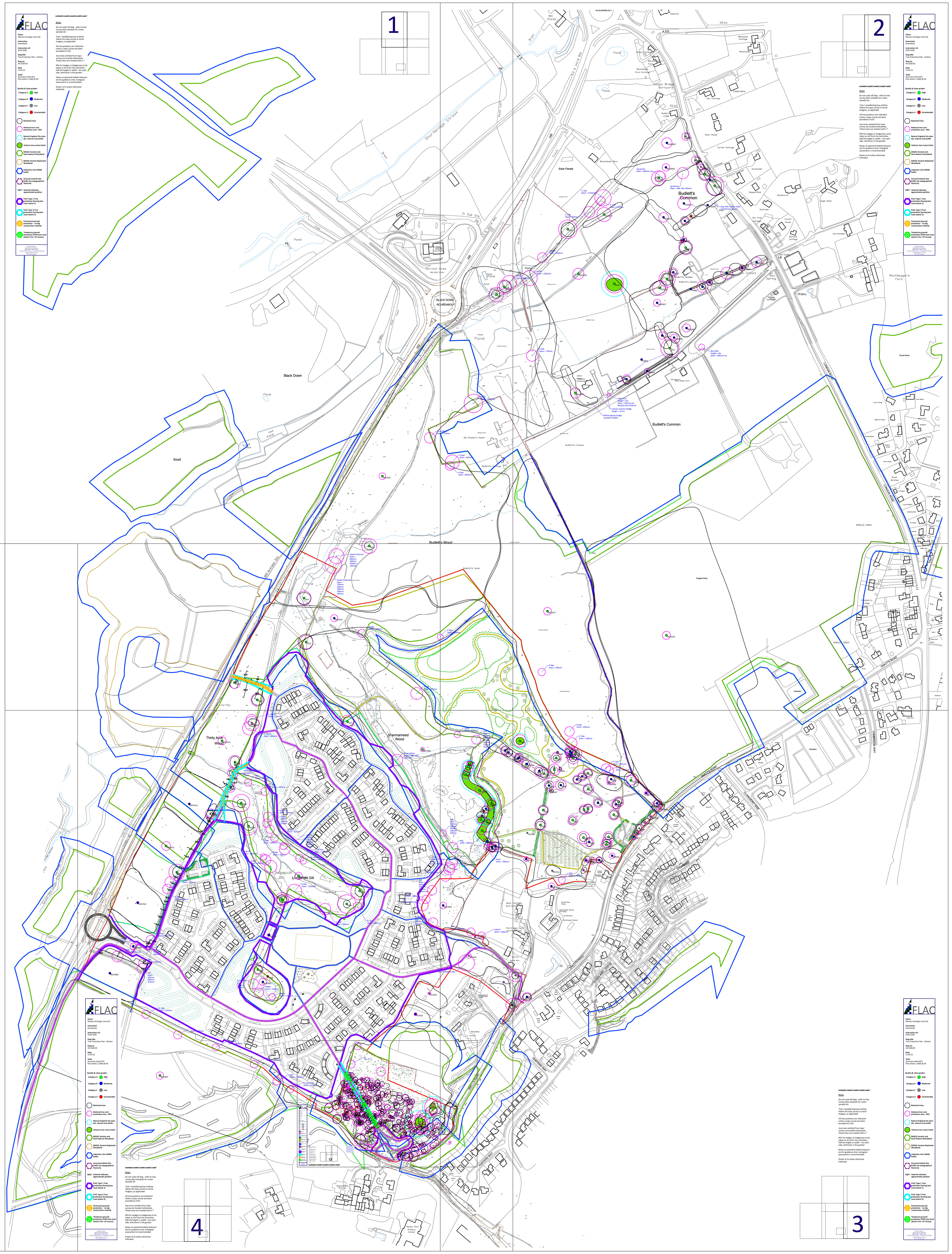
Drawn to N unless otherwise indicated

5m 10m 20m 30m 40m 50m

Dwg title
Tree Protection Plan

Dwg no.
40-1020.03

OVERVIEW SHEET
NOT TO SCALE



ARBORICULTURAL METHOD STATEMENT

Note: This drawing relates to a hybrid application with detail shown as is commensurate for both detailed and outline proposals available at time of writing.

A) PRELIMINARY MATTERS

1. Prior to any ground modelling, demolition or construction work on site, the approved tree works (see FLAC dwg. no. 40-1020.02) shall be undertaken by tree contractors (not unskilled personnel)

2. No plant access is permitted for tree work operations within the root protection areas (RPAs) of retention trees, including areas identified for temporary ground protection

3. All approved tree removals shall be undertaken by tree contractors. Each tree shall be cut down to a low stump

4. Trees for removal within the RPA of retention trees shall have their stumps ground out (also by tree contractors)

5. Stumps from felled trees outside of RPAs of retained trees can be grubbed out

B) INSTALLATION OF PHYSICAL TREE PROTECTION MEASURES

6. Following completion of enabling tree works, physical tree protection measures (barriers and ground protection) shall be installed in line with the provisions of BS5837:2012. These measures comprise:

- Tree Protection Fencing (TPF) to BS5837:2012 Figure 2 (see FLAC Type 1 at Inset Sketch 1) fitted with all-weather warning signs (see elsewhere on plan)

- FLAC Type 2 TPF (see Inset Sketch 2), on secondary alignments to provide access behind primary alignment of fencing

- Temporary Ground Protection (TGP) designed by engineers to accommodate all anticipated loadings if >2T OR if <2T see Inset Sketch 3 and per BS5837:2012 recommendations

7. The TPF to be installed on the primary alignment (as per the dwg key) prior to any demolition, ground works and construction operations. It is to be left in situ throughout the redevelopment process except for temporary repositioning to secondary alignment (see key) under arboricultural supervision by FLAC.

8. The TGP will be installed at the locations shown by the relevant hatching (see key) prior to any demolition and construction operations, unless behind primary TPF, in which case secondary TPF set-up is required. TGP is to be left in situ throughout the redevelopment process or in the alternative removed and primary TPF alignment reinstated to exclude construction access over RPAs

9. Installation of Permanent Ground Protection (i.e. the No-Dig design emergency vehicle access,) is to be carried out under arboricultural supervision by FLAC following adjustment of proximal fencing to the secondary alignment as depicted (see detailed task specific methodology on this dwg for further guidance)

C) PROHIBITIONS & PRECAUTIONS

10. The fencing, ground protection and any existing hard surfaces within the root protection area comprise the Construction Exclusion Zone. Within this zone, the following activities are strictly prohibited during primary demolition (other than as described below):

- Excavation / lowering of levels into rootable soil: removal of surface organic matter using hand tools is acceptable; scraping or reduction in depth of topsoil is not
- Removal of existing hard surfaces (= 'secondary demolition': see below)
- Grubbing out of redundant buried structures (see below)
- Operation, transit or storage of plant, and storage of materials, including demolition arisings, other than on ground protection
- Storage or handling of any chemical substance injurious to trees, including fuels, oils, lubricants and cement washings.
- No services/drainage to be aligned through RPAs except by trenchless methods
- No level changes within RPAs
- Boundary features to avoid continuous excavations or trenching within RPAs. For fence post installation see specific text on this dwg

11. The Construction Exclusion Zone shall be established site-wide as set out above, and shall remain in place throughout the redevelopment process. No elements of the physical tree protection shall be removed or altered without prior written consent from the local planning authority.

12. Demolition of superstructures within 3m of tree canopies and / or the construction exclusion zone is an operation with a high potential to damage retention trees ('high-risk operation'), and requires on-site arboricultural supervision by FLAC

13. Within the Construction Exclusion Zone, break-out and replacement of existing hard surfaces and decommissioning of redundant services, including drainage structures, are also high-risk operations and shall be undertaken under site supervision by FLAC

D) METHODS FOR TREE FRIENDLY WORKING

14. Redundant buried structures are preferably disconnected / backfilled and retained in situ; further advice should be sought from FLAC before consideration is given to grubbing them out. Existing hard surfaces within the Construction Exclusion Zone are to be retained and not demolished / removed until completion of primary construction (see Phasing Schedule)

15. The recommendations of BS5837:2012 6.2.4.1 shall be strictly observed throughout the demolition and construction process:

BS5837:2012 6.2.4.1
Planning of site operations should take sufficient account of wide loads, tall loads and plant with booms, jibs and counterweights (including drilling rigs), in order that they can operate without coming into contact with retained trees. Such contact can result in serious damage to the trees and might make their safe retention impossible. Consequently, any transit or traverse of plant in proximity to trees should be conducted under the supervision of a banksman, to ensure that adequate clearance from trees is maintained at all times. Access facilitation pruning should be undertaken where necessary to maintain this clearance

Note In some instances local planning authority consent for pruning might be required

16. No-dig new surfaces shall be constructed in accordance with the principles set out in the Arboricultural Practice Note 12 *Through the trees to development* (APN12) using a 3-dimensional cellular confinement system of appropriate specification to the anticipated loading. The design of the cellular confinement system is to be produced by engineers.

BS5837:2012 7.2 Avoiding physical damage to roots during demolition or construction

7.2.1 To avoid damage to tree roots, existing ground levels should be retained within the RPA. Intrusion into soil (other than for piling) within the RPA is generally not acceptable, and topsoil within it should be retained in situ. However, limited manual excavation within the RPA might be acceptable, subject to justification. Such excavation should be undertaken carefully, using hand-held tools and preferably by compressed air soil displacement.

NOTE Due to the demands that manual excavation places on a development project, and limitations arising from health and safety considerations, it is not realistic to plan for excavation using hand-held tools where there is a need for trench shoring or grading the sides of the excavation to a stable angle of repose.

17. Boundary treatments within RPAs shall comprise fences fixed to posts (see risk/control methodology for fence post installation elsewhere on this drawing). Any walls within RPAs will require tree-friendly, non-invasive design avoiding trench footings by, for example, brickwork founded upon pile supported lintels born above the existing ground level, pile hole locations avoiding major tree roots and ground-truthed under arboricultural supervision.

E) EXCAVATIONS WITHIN THE RPA

18. Excavations within the RPA may proceed only under arboricultural supervision. Personnel to be briefed on the precautions to be taken by the arboriculturist at the start of an operation; arboricultural supervision to be carried out to ensure that the method statement is understood and complied with.

19. No mechanical excavation shall occur within the RPA; this is because where roots are encountered by excavators the roots can sustain longitudinal shattering which causes extensive damage to the tree.

20. Excavations of the top 600mm associated with any construction activities within the RPA shall be carried out carefully and by hand tools only e.g. spades, shovels, trowels etc, this may include a hand held pneumatic breaker where sub-surface structures are encountered and their removal is essential. Air excavation tools may be employed where operatives have an understanding of the use of these tools in proximity to roots and soil conditions allow. Care must be taken to avoid damage to the bark of parts of roots that will be retained.

21. In any case where poured concrete is to be used within the RPA a heavy-duty, non-permeable membrane e.g. 1000 micron polythene is to be used to fully shutter the poured concrete to prevent toxification of rootable soil

E) ROOT TREATMENT

22. Root pruning operations may proceed only under arboricultural supervision.

23. In normal circumstances where roots are encountered they are first assessed primarily for size; roots over 25mm in diameter would normally be retained and those below 25mm in diameter should be pruned at 90 degrees to the direction of the root.

24. Proprietary cutting tools only shall be used to prune roots i.e. secateurs and sharp pruning saws.

25. Should any roots over 25mm be discovered they should only be severed following consultation with the arboricultural consultant with regard to the tree's health and stability.

26. Where roots are to be left exposed for any period of time they shall be protected from the drying effect of sunlight and will be wrapped in clean dry Hessian to prevent desiccation.

27. Prior to backfilling retained roots should be unwrapped and surrounded by sharp sand (not builder's sand because of the high salt content which is toxic to tree roots) or another loose granular material before soil is replaced.

28. Any imported topsoil for backfilling must be of good quality and free of contaminants and foreign bodies, it must be well graded and friable to promote good growing conditions and perform as a suitable rooting medium. The topsoil to be used must satisfy the requirements of a multipurpose topsoil as is described within BS3882:2007.

29. All materials, including any new top soil to replace the hard surface must be close to hand prior to commencement of the works. These works will be carried out to the recommendations of BS5837: 2012 7.2 (see below). Once the works are complete tree protection fence is to be erected around the new open ground.

F) ARBORICULTURAL SUPERVISION & REPORTING

30. All high risk operations (i.e. intra-RPA) require arboricultural supervision. Additionally ongoing inspection of the tree protection measures shall be provided whilst works are in progress. A schedule of supervision is provided elsewhere on this drawing.

A WRITTEN & PHOTOGRAPHIC REPORT WILL BE PROVIDED WITHIN 5 WORKING DAYS OF EACH MONITORING VISIT

FENCE POST INSTALLATION WITHIN RPAS

Risks
- Damage/severance of roots by excavations for posts
- Contamination of rootable soil by uncured concrete leachate

Controls
- Vertical holes shall be hand dug carefully under arboricultural supervision. Holes shall be kept to the minimum dimensions possible. Use of either a hand-held auger or a twin-handled post-hole spade is recommended as this enables the dimensions of the holes to be kept to a minimum
- If present, existing hard surfacing and sub-base or other obstruction may be broken out with a hand held pneumatic breaker
- If roots over 25mm are encountered then the post hole shall be moved to the side of the root to avoid the need for root severance
- Roots below 25mm may be cut cleanly against the side of the post hole using sharp secateurs or pruning saw. Roots above 25mm may only be severed following assessment of impact by the arboriculturist.
- Where concrete is to be used to fix the posts in place then the upper metre of holes must first be lined with a heavy-duty, non-permeable membrane, such as a 1000 micron polythene, to protect tree roots from the toxic effects of uncured concrete leachate
- There must be no storage or mixing of concrete within the RPAs of retained trees.

ARBORICULTURAL SUPERVISION SCHEDULE

General
- Pre-start meeting with contractors
- Audit of enabling tree works & tree protection system, fencing and ground protection
- 2x weekly visits
- 2x fortnightly visits
- 3x monthly visits
- Quarterly visits until completion, inc. of soft landscaping
- Adjustments of TPF from primary to secondary alignments
- All/any works within the root protection areas (RPAs) (see specific tasks below)

Specific
- Adjustments of primary alignment of tree protection fencing (TPF) to secondary alignment before the works/tasks commence
- Works within RPAs to include operative briefing at commencement of:
- surface preparation in advance of construction of no-dig emergency vehicle access
- surface preparation in advance of construction of screw piling for boardwalk
- ground-truthing for screw pile locations

TREE PROTECTION PHASING SCHEDULE

The following phasing schedule shall be strictly adhered to:

1. Pre-start site meeting (refer to Arboricultural Method Statement)
2. Implementation of physical tree protection (= establishment of Construction Exclusion Zone) into and along woodland track network
3. Audit of tree protection measures by arboricultural clerk of works
4. Construction of no-dig track using 3D cellular confinement system
5. Construction of drainage/services infrastructure
6. Set-up of construction operational areas including fencing and temporary ground protection for machinery/plant access
7. Audit of construction operational area tree protection measures by arboricultural clerk of works
8. Construction of first cabin with arboricultural overwatch for excavations into upper 600mm for screw pile locations
9. Break-down and movement of of physical tree protection measures from one construction operational area to another
10. Soft landscaping
11. Post-completion tree condition check by arboricultural clerk of works

TREE PROTECTION MEASURES FOR NEW PERMANENT HARD SURFACING OVER RPA

1. GENERAL
The emergency access aligned between WG7013 and WG7014 and cycleway at west end of Longwood Gill are within RPAs of retained trees and shall require a no-dig, tree-friendly design and method to be adhered to.

2. TPF SET-UP AND PHASED FENCING ALIGNMENT
The work area is to be secured by the secondary tree protection fence alignment as shown (see key). No work is to begin until this has been set up and confirmed by FLAC. Operatives are to be briefed on the precautions necessary for each task by FLAC.

3. GROUND SURFACE PREPARATION
Preparation of the ground to receive no-dig permanent surfaces within RPAs will be subject to the following precautions:

i) No vehicle or plant movements across RPAs without temporary ground protection
ii) Careful removal of unwanted surface vegetation by hand tools only and not to exceed a depth of greater than 50mm
iii) A blinding of no greater than 100mm of a clean sandy loam topsoil is to be applied to provide flowing contours and neutralize any localized dips and hollows, smoothing out the ground ready for construction
iv) This operation places trees at the greatest risk during no-dig surface construction and accordingly it is advised that FLAC oversees surface preparation as a minimum

4. DESIGN AND CONSTRUCTION PRINCIPLES
New hard surfacing is to be constructed to an engineer's specification with regard to the anticipated loading. The design must be in accordance with the principles set out in *Arboricultural Practice Note 12 - Through the Trees to Development* (APN12).

New hard surfacing is to be constructed above the prepared ground, **no** excavations, soil stripping or soil lowering (other than that described at 3 above) within RPAs of retained trees.

Use of a 3 dimensional cellular confinement system is recommended within the RPAs to provide a sub-base capable of bearing anticipated loading without the need for consolidation by compaction (see example at Inset sketch 4). Engineer to determine cell depth and construction specification. Installation is to be in accordance with the manufacturer's instructions.

If the new surface design is to incorporate an edge retention system this also must not require excavations but instead must use pegs, pins or posts to provide lateral restraint in combination with a timber board or metal edging.

5. NEW SURFACE USE DURING CONSTRUCTION
Once completed , construction access to the new permanent hard surfacing can be either excluded by returning the fencing to the primary alignment or used for temporary access with the secondary alignment of fencing in place, a temporary wearing course may be beneficial.

No vehicle or plant movements are to take place upon the new permanent hard surfacing unless it has been designed and constructed to bear the loading adequately.

TREE PROTECTION MEASURES (OUTLINE) FOR BOARDWALK

1. GENERAL
The boardwalk aligned through WG8001 lies within RPAs of retained trees requiring a tree-friendly design and method to be adhered to.

2. TREE WORKS
Trees for removal shall be sprayed-marked by FLAC and tree contractors briefed on the precautions for working within the ancient woodland. Stumps shall be ground.

3. TREE PROTECTION SYSTEM SET-UP
The work area is to be secured by the secondary tree protection fence alignment as shown (see key). No work is to begin until this has been set up and confirmed by FLAC. Operatives are to be briefed on the precautions necessary for each task by FLAC.

Temporary ground protection is to be set out over the RPAs of retained trees per the plan, this is to bedesigned by engineers to accommodate all anticipated loadings if >2T OR if <2T see Inset Sketch 3 and per BS5837:2012 recommendations

4. GROUND SURFACE PREPARATION
Preparation (as may be required) of the ground along the alignment of the boardwalk within RPAs will be subject to the following precautions:

i) No vehicle or plant movements across RPAs without temporary ground protection
ii) Careful removal of unwanted surface vegetation by hand tools only and not to exceed a depth of greater than 50mm
iii) This operation places trees at the greatest risk during no-dig surface construction and accordingly it is advised that FLAC oversees surface preparation as a minimum

5. STORAGE AND WASTE
Designated storage areas for materials and waste outside of the ancient woodland. Designated construction access routes defined by tree protection system, fencing and ground protection

6. DESIGN AND CONSTRUCTION PRINCIPLES
The 3 metre wide boardwalk shall comprise a raised structure with minimum 150mm gap above the existing woodland surface. Screw piles shall be installed to bear the timber structure. Lighting shall be installed within the structure avoiding subterranean trenching for cables within the RPAs of retained trees.

7. SCREW PILE INSTALLATIONS
The boardwalk will employ either ground screw micro piles and/or screw piles respectively, the former installed by hand, the latter using a 1.8t rubber tracked excavator

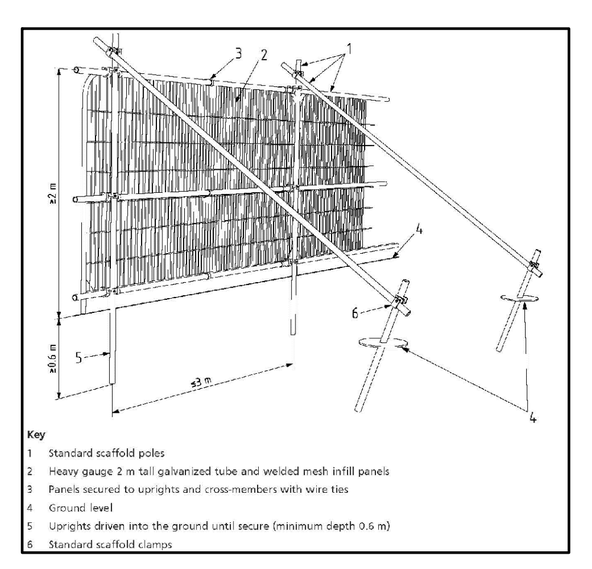
Screw pile locations within RPAs are to be ground-truthed by hand excavation or air lance to 600mm below ground level to ensure roots >25mm in diameter are retained unless assessed by the supervising arboriculturists to be dead, dysfunctional or that severance would have sub-material and/or recoverable impact

Exposed roots are covered over with topsoil after piles have been set out. FLAC AMS sections E and F provide further guidance on hand excavations and root treatment

The process of ground-truthing and installing piles within RPAs is to be supervised by the project arboriculturists at commencement to agree working method. Arboricultural advise is to be sought before severing roots >25mm in diameter

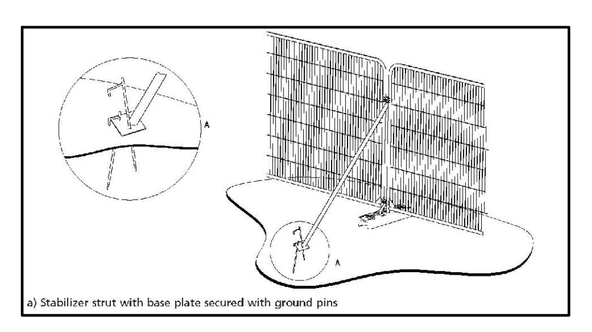
8. BOARDWALK CONSTRUCTION
The boardwalk shall be constructed sequentially working away from the access point into the woodland so that it becomes the working platform thereby minimizing the construction activity access/traffic after screw pile installation

INSET SKETCH 1 - FLAC TYPE 1 TREE PROTECTION FENCING



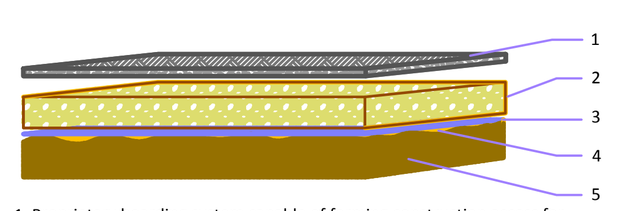
Key
1 Standard scaffold poles
2 Heavy gauge 2 m tall galvanized tube and welded mesh infill panels
3 Panels secured to uprights and cross-members with wire ties
4 Ground level
5 Uprights driven into the ground until secure (minimum depth 0.6 m)
6 Standard scaffold clamps

INSET SKETCH 2 - FLAC TYPE 2 TREE PROTECTION FENCING



a) Stabilizer strut with base plate secured with ground pins

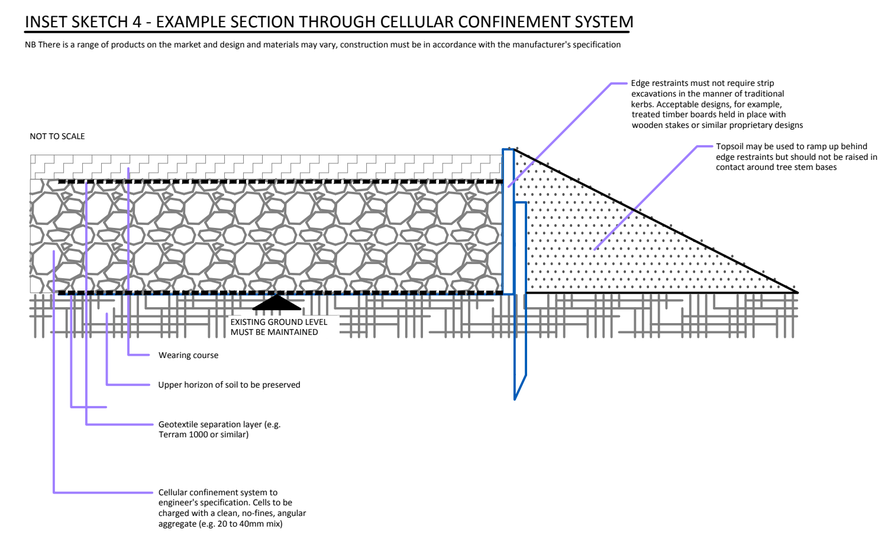
INSET SKETCH 3 - EXAMPLE GROUND PROTECTION FOR <2T ACCESS



1. Proprietary boarding system capable of forming construction access for vehicles (e.g. Greentek *Ground Guards*)
2. If surface roots are visible on woodland surface a 150mm depth compression-resistant fill (e.g. woodchip) - must be replenished if compression occurs. Where no surface roots are seen boards may be laid directly on leaf litter within woodland
3. Geotextile (e.g. *Terram 1000*)
4. Sharp sand loose tipped & lightly tamped to level significantly uneven ground
5. Undisturbed soil containing tree roots

INSET SKETCH 4 - EXAMPLE SECTION THROUGH CELLULAR CONFINEMENT SYSTEM

NB There is a range of products on the market and design and materials may vary, construction must be in accordance with the manufacturer's specification



EXAMPLE ALERT & PROHIBITION SIGNAGE TO BE FIXED TO TREE PROTECTION FENCING



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Retained trees
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Ground-truthed 15m buffer (to topographical features)
7001* Asterisk indicates approximate position
FLAC Type 1 Tree protection fencing (see Inset sketch 1)
FLAC Type 2 Tree protection fencing (see Inset sketch 2)
Permanent ground protection - no-dig construction method
Temporary ground protection (TGP) (see Inset sketch 3 for <2T access)

Notes

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Notes

Do not scale off dwg - refer to tree survey data schedule for crown spreads etc

Tree / woodland group outlines follow the topo survey or aerial imagery, as applicable

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Notes on potential habitat features are for guidance only: ecological assessment is recommended

Drawn to N unless otherwise indicated

1

FB
Path (um)
Shortbridge Stream
Drain
Track
El Sub Sta
ED & Ward Boy
OR
Pond
FB
Track
Filling Station
A26
Service Area
Service Area
Pond
Pond
Pond
7076
7077
BLACK DOWN
ROUNDABOUT
Drain
Track
Track
A22
Pond
Pond
Black Down
Pond
Pond
Pond
Pond
Wood
Track
Track
W.Hemlock
Diam = 720mm
P.Oak
Diam = 1260mm
Old Keeper's House
P.Oak
Diam = 950mm
Budletts Cottage
P.Oak
Diam = 600mm
WG7015
7074
Sweet Chestnut
Diam =
680mm
460mm
450mm
420mm
Budlett's Wood
Budlett's Wood
Track
Sweet Chestnut
Diam =
750mm
620mm
360mm
340mm
260mm
Pond
7073
WG7014
Track
P.Oak
Diam = 560mm
P.Oak
Diam = 400mm
7072
Track
P.Oak
Diam = 810mm
Track
Pond
12.3
9.2
25.2
16.5
7069
7068
Lay-by

2

Client
Gleeson Strategic Land Ltd.

Instruction
Downlands

Instruction ref.
SC40-1020

Dwg title
Tree Protection Plan - Outline

Dwg no.
40-1020.03

Date
12.05.22

Scale
Overview sheet NTS
Plot sheets 1:1000 @ A0

0m 10m 20m 30m 40m 50m

Notes

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Quality & value grades:

Category A High
Category B Moderate
Category C Low
Category U Unretainable

Retained trees
Notional tree root protection area - RPA
Natural England 15x stem dia. veteran tree buffer
Veteran tree crown hatch
MAGIC Ancient and Semi-Natural Woodland
MAGIC Ancient Replanted Woodland
Indicative 15m ASNW buffer
Ground-truthed 15m buffer (to topographical features)
7001* Asterisk indicates approximate position
FLAC Type 1 Tree protection fencing (see Inset sketch 1)
FLAC Type 2 Tree protection fencing (see Inset sketch 2)
Permanent ground protection - no-dig construction method
Temporary ground protection (TGP) (see Inset sketch 3 for <2T access)

Dondron House
Barford Road, Blunham
BEDFORD, MK44 3ND
T 44(0)1767 641648 / / F 44(0)1767 660130
enquiries@flac.uk.com
www.flac.uk.com

ROUNABOUT
Mill Chase
Drain
FB
Path (um)
ge Stream
A 272
Kilworth
35.4m
Milestone Cottage
Milestones
Pond
Stone Cottage
Blackhouse Farm
Blackhouse Farm Cottage
ED & Ward Bdy
Hoops Bridge Barnyard
Pond
35.1m
Budlett's Lodge
Copperdene
Ilex Cottage
Holly House
Carmel Cottage
A26
Track
Blackhouse Barn
Solar Panels
WG3003*
3025*
3023*
LONDON ROAD
Fairhazel
Greenside
Orchard Cottage
Copperfield
WG3002*
3024*
3022*
HR3002
3021*
Sycamore Diam = 660mm est
Sycamore Diam = 480, 450, 400mm
Budlett's Common
P. Oak Diam = 1110mm
P. Oak Diam = 570mm
TG7025*
P. Oak Diam = 750mm
TG3011*
HR3001*
Gap with smaller Holly and Norway Spruce
N12GR
Rockhurst
Eagle Rock
Overlook
Yew Tree Cottage
Laurel House
Willow Tree Cottage
Diamond Cottage
Warrendale
TG3010*
3020*
3019*
7075*
3018*
3017*
3016*
S.Birch Diam = 660mm
Drain
Pond
P.Oak Diam = 1020mm
P.Oak Diam = 880mm
WG7016
3026*
3015*
Budletts Meadow
3014*
Budlett's Meadow
TG3009
H3002
3013
TG3007*
TG3006*
TG3008*
Garage
LB
Issues
Spring
Spring Cottage
Mockbeggars Farm
7076
7077
WG3001*
TG3005
TG3002*
TG3004*
3011
Box Elder Height = 8m Diam = 400mm est
H3001
TG3003
3012
Budlett's Farmhouse
White House Farm
TG3001*
Laburnum Height = 4m Diam = 220mm est Beyond site influence
Lawson Cypress Hedge Height = to 2m
Mixed species hedge beneath TG3001
P.Oak Diam = 770mm
P.Oak Diam = 1250mm
Old Keeper's House
Budlett's Common
Budletts Cottage
P.Oak Diam = 950mm
P.Oak Diam = 600mm
Budlett's Wood
WG7017
WG7018
P.Oak Diam = 500mm
P.Oak Diam = 300mm
Paygate Wood
Cemetery
Caravan Site
Round Wood
Warren Cottage
Little Peppers
Appletree Cottage
Squirrels Wood
Brousetone
The Old Orchard
Greenmeyes
Crofters
Brambles Cottage
Gorse Cottage
Kimberley
Silver Birches
Trees
Little Spinne
Lavender
Clematis
The Roches
Rosetta
Woodview
Ringles Cross Cottage
Ringles Place
RINGLES CROSS
Cranberry Lodge
Garage
The Lodge
Dakies
Springfield
Telephone Call Box
Shelter
Woodside
Murrayt
SNATT'S ROAD
The Old Dairy
Whitehaven



Notes

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3

FLAC

Client
Gleeson Strategic Land Ltd.

Instruction
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Date
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Scale
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Plot sheets 1:1000 @ A0

Quality & value grades:

- **Category A** — **High**
- **Category B** — **Moderate**
- **Category C** — **Low**
- **Category U** — **Unretainable**

- **Retained trees**
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- **Natural England 15x stem dia. veteran tree buffer**
- **Veteran tree crown hatch**
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- **MAGIC Ancient Replanted Woodland**
- **Indicative 15m ASNW buffer**
- **Ground-truthed 15m buffer (to topographical features)**
- **7001*** **Asterisk indicates approximate position**
- **FLAC Type 1 Tree protection fencing (see Inset sketch 1)**
- **FLAC Type 2 Tree protection fencing (see Inset sketch 2)**
- **Permanent ground protection - no-dig construction method**
- **Temporary ground protection (TGP) (see Inset sketch 3 for <2T access)**

Dendron House
Barford Road, Blunham
BEDFORD, MK44 3ND
T 44(0)1767 641648 // F 44(0)1767 660330
enquiries@flac.uk.com
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4

ARBORICULTURAL METHOD STATEMENT

Note: This drawing relates to a hybrid application with detail shown as is commensurate for both detailed and outline proposals available at time of writing.

A) PRELIMINARY MATTERS

1. Prior to any ground modelling, demolition or construction work on site, the approved tree works (see FLAC dwg. no. 40-1020.02) shall be undertaken by tree contractors (not unskilled personnel)

2. No plant access is permitted for tree work operations within the root protection areas (RPAs) of retention trees, including areas identified for temporary ground protection

3. All approved tree removals shall be undertaken by tree contractors. Each tree shall be cut down to a low stump

4. Trees for removal within the RPA of retention trees shall have their stumps ground out (also by tree contractors)

5. Stumps from felled trees outside of RPAs of retained trees can be grubbed out

B) INSTALLATION OF PHYSICAL TREE PROTECTION MEASURES

6. Following completion of enabling tree works, physical tree protection measures (barriers and ground protection) shall be installed in line with the provisions of BS5837:2012. These measures comprise:

- Tree Protection Fencing (TPF) to BS5837:2012 Figure 2 (see FLAC Type 1 at Inset Sketch 1) fitted with all-weather warning signs (see elsewhere on plan)

- FLAC Type 2 TPF (see Inset Sketch 2), on secondary alignments to provide access behind primary alignment of fencing

- Temporary Ground Protection (TGP) designed by engineers to accommodate all anticipated loadings if >2T *OR* if <2T see Inset Sketch 3 and per BS5837:2012 recommendations

7. The TPF to be installed on the primary alignment (as per the dwg key) prior to any demolition, ground works and construction operations. It is to be be left in situ throughout the redevelopment process except for temporary repositioning to secondary alignment (see key) under arboricultural supervision by FLAC.

8. The TGP will be installed at the locations shown by the relevant hatching (see key) prior to any demolition and construction operations, unless behind primary TPF, in which case secondary TPF set-up is required. TGP is to be be left in situ throughout the redevelopment process or in the alternative removed and primary TPF alignment reinstated to exclude construction access over RPAs

9. Installation of Permanent Ground Protection (i.e. the No-Dig design emergency vehicle access,) is to be carried out under arboricultural supervision by FLAC following adjustment of proximal fencing to the secondary alignment as depicted (see detailed task specific methodology on this dwg for further guidance)

C) PROHIBITIONS & PRECAUTIONS

10. The fencing, ground protection and any existing hard surfaces within the root protection area comprise the Construction Exclusion Zone. Within this zone, the following activities are strictly prohibited during primary demolition (other than as described below):

- Excavation / lowering of levels into rootable soil: removal of surface organic matter using hand tools is acceptable; scraping or reduction in depth of topsoil is not
- Removal of existing hard surfaces (= 'secondary demolition': see below)
- Grubbing out of redundant buried structures (see below)
- Operation, transit or storage of plant, and storage of materials, including demolition arisings, other than on ground protection
- Storage or handling of any chemical substance injurious to trees, including fuels, oils, lubricants and cement washings
-No services/drainage to be aligned through RPAs except by trenchless methods
- No level changes within RPAs
- Boundary features to avoid continuous excavations or trenching within RPAs. For fence post installation see specific text on this dwg

11. The Construction Exclusion Zone shall be established site-wide as set out above, and shall remain in place throughout the redevelopment process. No elements of the physical tree protection shall be removed or altered without prior written consent from the local planning authority.

12. Demolition of superstructures within 3m of tree canopies and / or the construction exclusion zone is an operation with a high potential to damage retention trees ('high-risk operation'), and requires on-site arboricultural supervision by FLAC

13. Within the Construction Exclusion Zone, break-out and replacement of existing hard surfaces and decommissioning of redundant services, including drainage structures, are also high-risk operations and shall be undertaken under site supervision by FLAC

D) METHODS FOR TREE FRIENDLY WORKING

14. Redundant buried structures are preferably disconnected / backfilled and retained in situ; further advice should be sought from FLAC before consideration is given to grubbing them out. Existing hard surfaces within the Construction Exclusion Zone are to be retained and not demolished / removed until completion of primary construction (see Phasing Schedule)

15. The recommendations of BS5837:2012 6.2.4.1 shall be strictly observed throughout the demolition and construction process:

BS5837:2012 6.2.4.1
Planning of site operations should take sufficient account of wide loads, tall loads and plant with booms, jibs and counterweights (including drilling rigs), in order that they can operate without coming into contact with retained trees. Such contact can result in serious damage to the trees and might make their safe retention impossible. Consequently, any transit or traverse of plant in proximity to trees should be conducted under the supervision of a banksman, to ensure that adequate clearance from trees is maintained at all times. Access facilitation pruning should be undertaken where necessary to maintain this clearance

Note In some instances local planning authority consent for pruning might be required

16. No-dig new surfaces shall be constructed in accordance with the principles set out in the Arboricultural Practice Note 12 *Through the trees to development* (APN12) using a 3 dimensional cellular confinement system of appropriate specification to the anticipated loading. The design of the cellular confinement system is to be produced by engineers.

BS5837:2012 7.2 Avoiding physical damage to roots during demolition or construction

7.2.1 To avoid damage to tree roots, existing ground levels should be retained within the RPA. Intrusion into soil (other than for piling) within the RPA is generally not acceptable, and topsoil within it should be retained in situ.However, limited manual excavation within the RPA might be acceptable, subject to justification. Such excavation should be undertaken carefully, using hand-held tools and preferably by compressed air soil displacement.

NOTE Due to the demands that manual excavation places on a development project, and limitations arising from health and safety considerations, it is not realistic to plan for excavation using hand-held tools where there is a need for trench shoring or grading the sides of the excavation to a stable angle of repose.

17. Boundary treatments within RPAs shall comprise fences fixed to posts (see risk/control methodology for fence post installation elsewhere on this drawing). Any walls within RPAs will require tree-friendly, non-invasive design avoiding trench footings by, for example, brickwork founded upon pile supported lintels born above the existing ground level, pile hole locations avoiding major tree roots and ground-truthed under arboricultural supervision.

E) EXCAVATIONS WITHIN THE RPAs

18. Excavations within the RPA may proceed only under arboricultural supervision. Personnel to be briefed on the precautions to be taken by the arboriculturist at the start of an operation; arboricultural supervision to be carried out to ensure that the method statement is understood and complied with.

19. No mechanical excavation shall occur within the RPA; this is because where roots are encountered by excavators the roots can sustain longitudinal shattering which causes extensive damage to the tree.

20. Excavations of the top 600mm associated with any construction activities within the RPA shall be carried out carefully and by hand tools only e.g. spades, shovels, trowels etc, this may include a hand held pneumatic breaker where sub-surface structures are encountered and their removal is essential. Air excavation tools may be employed where operatives have an understanding of the use of these tools in proximity to roots and soil conditions allow. Care must be taken to avoid damage to the bark of parts of roots that will be retained.
21. In any case where poured concrete is to be used within the RPA a heavy-duty, non-permeable membrane e.g. 1000 micron polythene is to be used to fully shutter the poured concrete to prevent toxification of rootable soil

E) ROOT TREATMENT

22. Root pruning operations may proceed only under arboricultural supervision.

23. In normal circumstances where roots are encountered they are first assessed primarily for size; roots over 25mm in diameter would normally be retained and those below 25mm in diameter should be pruned at 90 degrees to the direction of the root.

24. Proprietary cutting tools only shall be used to prune roots i.e. secateurs and sharp pruning saws.

25. Should any roots over 25mm be discovered they should only be severed following consultation with the arboricultural consultant with regard to the tree's health and stability.

26. Where roots are to be left exposed for any period of time they shall be protected from the drying effect of sunlight and will be wrapped in clean dry Hessian to prevent desiccation.

27. Prior to backfilling retained roots should be unwrapped and surrounded by sharp sand (not builder's sand because of the high salt content which is toxic to tree roots) or another loose granular material before soil is replaced.

28. Any imported topsoil for backfilling must be of good quality and free of contaminants and foreign bodies, it must be well graded and friable to promote good growing conditions and perform as a suitable rooting medium. The topsoil to be used must satisfy the requirements of a multipurpose topsoil as is described within BS3882:2007.

29. All materials, including any new top soil to replace the hard surface must be close to hand prior to commencement of the works. These works will be carried out to the recommendations of BS5837: 2012 7.2 (see below). Once the works are complete tree protection fence is to be erected around the new open ground.

F) ARBORICULTURAL SUPERVISION & REPORTING

30. All high risk operations (i.e. intra-RPA) require arboricultural supervision. Additionally ongoing inspection of the tree protection measures shall be provided whilst works are in progress. A schedule of supervision is provided elsewhere on this drawing.

A WRITTEN & PHOTOGRAPHIC REPORT WILL BE PROVIDED WITHIN 5 WORKING DAYS OF EACH MONITORING VISIT

FENCE POST INSTALLATION WITHIN RPAS

Risks

- Damage/severance of roots by excavations for posts
- Contamination of rootable soil by uncured concrete leachate

Controls

- Vertical holes shall be hand dug carefully under arboricultural supervision. Holes shall be kept to the minimum dimensions possible. Use of either a hand-held auger or a twin-handled post-hole spade is recommended as this enables the dimensions of the holes to be kept to a minimum
- If present, existing hard surfacing and sub-base or other obstruction may be broken out with a hand held pneumatic breaker
- If roots over 25mm are encountered then the post hole shall be moved to the side of the root to avoid the need for root severance
- Roots below 25mm may be cut cleanly against the side of the post hole using sharp secateurs or pruning saw. Roots above 25mm may only be severed following assessment of impact by the arboriculturist.
- Where concrete is to be used to fix the posts in place then the upper metre of holes must first be lined with a heavy-duty, non-permeable membrane, such as a 1000 micron polythene, to protect tree roots from the toxic effects of uncured concrete leachate
- There must be no storage or mixing of concrete within the RPAs of retained trees.

ARBORICULTURAL SUPERVISION SCHEDULE

General

- Pre-start meeting with contractors
- Audit of enabling tree works & tree protection system, fencing and ground protection
- 2x weekly visits
- 2x fortnightly visits
- 3x monthly visits
- Quarterly visits until completion, inc. of soft landscaping
- Adjustments of TPF from primary to secondary alignments
- All/any works within the root protection areas (RPAs) (see specific tasks below)

Specific

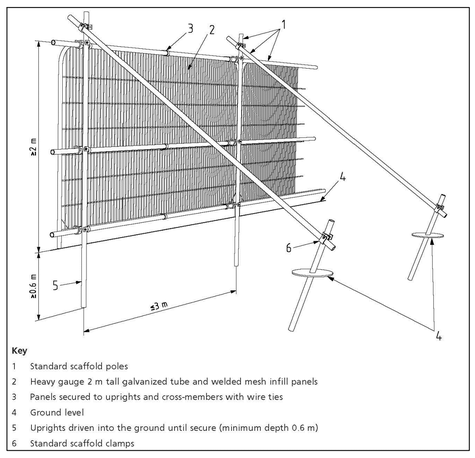
- Adjustments of primary alignment of tree protection fencing (TPF) to secondary alignment before the works/tasks commence
- Works within RPAs to include operative briefing at commencement of:
- surface preparation in advance of construction of no-dig emergency vehicle access
- surface preparation in advance of construction of screw piling for boardwalk
- ground-truthing for screw pile locations

TREE PROTECTION PHASING SCHEDULE

The following phasing schedule shall be strictly adhered to:

1. Pre-start site meeting (refer to Arboricultural Method Statement)
2. Implementation of physical tree protection (= establishment of Construction Exclusion Zone) into and along woodland track network
3. Audit of tree protection measures by arboricultural clerk of works
4. Construction of no-dig track using 3D cellular confinement system
5. Construction of drainage/services infrastructure
6. Set-up of construction operational areas including fencing and temporary ground protection for machinery/plant access
7. Audit of construction operational area tree protection measures by arboricultural clerk of works
8. Construction of first cabin with arboricultural overwatch for excavations into upper 600mm for screw pile locations
9. Break-down and movement of of physical tree protection measures from one construction operational area to another
10. Soft landscaping
11. Post-completion tree condition check by arboricultural clerk of works

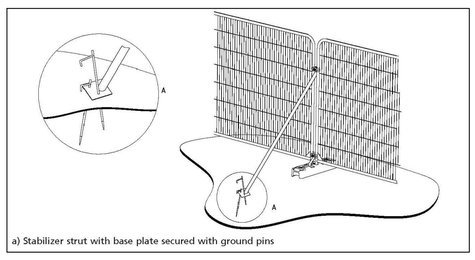
INSET SKETCH 1 - FLAC TYPE 1 TREE PROTECTION FENCING



Key

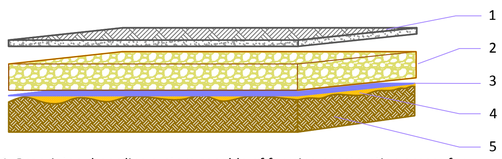
1 Standard scaffold poles
2 Heavy gauge 2 m tall galvanized tube and welded mesh infill panels
3 Panels secured to uprights and cross-members with wire ties
4 Ground level
5 Uprights driven into the ground until secure (minimum depth 0.6 m)
6 Standard scaffold clamps

INSET SKETCH 2 - FLAC TYPE 2 TREE PROTECTION FENCING



a) Stabilizer strut with base plate secured with ground pins

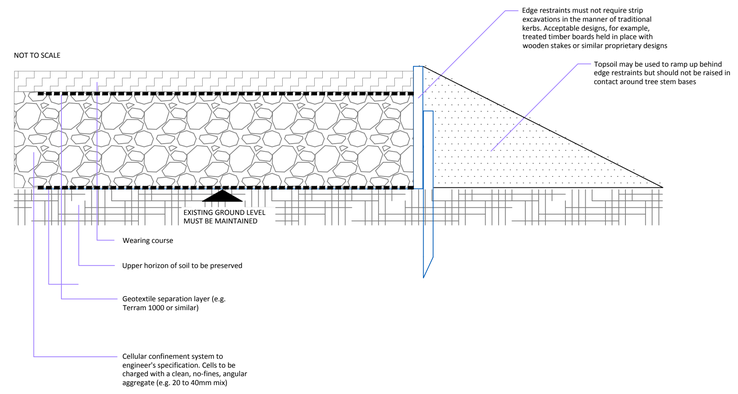
INSET SKETCH 3 - EXAMPLE GROUND PROTECTION FOR <2T ACCESS



1. Proprietary boarding system capable of forming construction access for vehicles (e.g. Greentek *Ground Guards*)
2. If surface roots are visible on woodland surface a 150mm depth compression-resistant fill (e.g. woodchip) - must be replenished if compression occurs. Where no surface roots are seen boards may be laid directly on leaf litter within woodland
3. Geotextile (e.g. *Terram 1000*)
4. Sharp sand loose tipped & lightly tamped to level significantly uneven ground
5. Undisturbed soil containing tree roots

INSET SKETCH 4 - EXAMPLE SECTION THROUGH CELLULAR CONFINEMENT SYSTEM

NB There is a range of products on the market and design and materials may vary, construction must be in accordance with the manufacturer's specification



EXAMPLE ALERT & PROHIBITION SIGNAGE TO BE FIXED TO TREE PROTECTION FENCING



TREE PROTECTION MEASURES FOR NEW PERMANENT HARD SURFACING OVER RPA

1. GENERAL
The emergency access aligned between WG7013 and WG7014 and cycleway at west end of Longwood Gill are within RPAs of retained trees and shall require a no-dig, tree-friendly design and method to be adhered to.

2. TPF SET-UP AND PHASED FENCING ALIGNMENT
The work area is to be secured by the secondary tree protection fence alignment as shown (see key). No work is to begin until this has been set up and confirmed by FLAC. Operatives are to be briefed on the precautions necessary for each task by FLAC.

3. GROUND SURFACE PREPARATION
Preparation of the ground to receive no-dig permanent surfaces within RPAs will be subject to the following precautions:

i) No vehicle or plant movements across RPAs without temporary ground protection
ii) Careful removal of unwanted surface vegetation by hand tools only and not to exceed a depth of greater than 50mm
iii) A blinding of no greater than 100mm of a clean sandy loam topsoil is to be applied to provide flowing contours and neutralize any localized dips and hollows, smoothing out the ground ready for construction
iv) This operation places trees at the greatest risk during no-dig surface construction and accordingly it is advised that FLAC oversees surface preparation as a minimum

4. DESIGN AND CONSTRUCTION PRINCIPLES
New hard surfacing is to be constructed to an engineer's specification with regard to the anticipated loading. The design must be in accordance with the principles set out in *Arboricultural Practice Note 12 - Through the Trees to Development* (APN12).

New hard surfacing is to be constructed above the prepared ground, **no** excavations, soil stripping or soil lowering (other than that described at 3 above) within RPAs of retained trees.

Use of a 3 dimensional cellular confinement system is recommended within the RPAs to provide a sub-base capable of bearing anticipated loading without the need for consolidation by compaction (see example at Inset sketch 4). Engineer to determine cell depth and construction specification. Installation is to be in accordance with the manufacturer's instructions.

If the new surface design is to incorporate an edge retention system this also must not require excavations but instead must use pegs, pins or posts to provide lateral restraint in combination with a timber board or metal edging.

5. NEW SURFACE USE DURING CONSTRUCTION
Once completed , construction access to the new permanent hard surfacing can be either excluded by returning the fencing to the primary alignment or used for temporary access with the secondary alignment of fencing in place, a temporary wearing course may be beneficial.

No vehicle or plant movements are to take place upon the new permanent hard surfacing unless it has been designed and constructed to bear the loading adequately.

TREE PROTECTION MEASURES (OUTLINE) FOR BOARDWALK

1. GENERAL
The boarwalk aligned through WG8001 lies within RPAs of retained trees requiring a tree-friendly design and method to be adhered to.

2. TREE WORKS
Trees for removal shall be sprayed-marked by FLAC and tree contractors briefed on the precautions for working within the ancient woodland. Stumps shall be ground.

3. TREE PROTECTION SYSTEM SET-UP
The work area is to be secured by the secondary tree protection fence alignment as shown (see key). No work is to begin until this has been set up and confirmed by FLAC. Operatives are to be briefed on the precautions necessary for each task by FLAC.

Temporary ground protection is to be set out over the RPAs of retained trees per the plan, this is to bedesigned by engineers to accommodate all anticipated loadings if >2T*OR* if <2T see Inset Sketch 3 and per BS5837:2012 recommendations

4. GROUND SURFACE PREPARATION
Preparation (as may be required) of the ground along the alignment of the boardwalk within RPAs will be subject to the following precautions:

i) No vehicle or plant movements across RPAs without temporary ground protection
ii) Careful removal of unwanted surface vegetation by hand tools only and not to exceed a depth of greater than 50mm
iii) This operation places trees at the greatest risk during no-dig surface construction and accordingly it is advised that FLAC oversees surface preparation as a minimum

5. STORAGE AND WASTE
Designated storage areas for materials and waste outside of the ancient woodland. Designated construction access routes defined by tree protection system, fencing and ground protection

6. DESIGN AND CONSTRUCTION PRINCIPLES
The 3 metre wide boardwalk shall comprise a raised structure with minimum 150mm gap above the existing woodland surface. Screw piles shall be installed to bear the timber structure. Lighting shall be installed within the structure avoiding subterranean trenching for cables within the RPAs of retained trees.

7. SCREW PILE INSTALLATIONS
The boardwalk will employ either ground screw micro piles and/or screw piles respectively, the former installed by hand, the latter using a 1.8t rubber tracked excavator
Screw pile locations within RPAs are to be ground-truthed by hand excavation or air lance to 600mm below ground level to ensure roots >25mm in diameter are retained unless assessed by the supervising arboriculturists to be dead, dysfunctional or that severance would have have sub-material and/or recoverable impact

Exposed roots are covered over with topsoil after piles have been set out. FLAC AMS sections E and F provide further guidance on hand excavations and root treatment

The process of ground-truthing and installing piles within RPAs is to be supervised by the project arboriculturists at commencement to agree working method. Arboricultural advise is to be sought before severing roots >25mm in diameter

8. BOARDWALK CONSTRUCTION
The boardwalk shall be constructed sequentially working away from the access point into the woodland so that it becomes the working platform thereby minimizing the construction activity access/traffic after screw pile installation

FLAC

Client
Gleeson Strategic Land Ltd.

Instruction
Downlands

Instruction ref.
SC40-1020

Dwg title
Tree Protection Plan - Outline

Dwg no.
40-1020.03

Date
12.05.22

Scale
Overview sheet NTS
Plot sheets 1:1000 @ A0

Quality & value grades:

Category A **High**
Category B **Moderate**
Category C **Low**
Category U **Unretainable**

Retained trees
Notional tree root protection area - RPA
Natural England 15x stem dia. veteran tree buffer
Veteran tree crown hatch
MAGIC Ancient and Semi-Natural Woodland
MAGIC Ancient Replanted Woodland
Indicative 15m ASNW buffer
Ground-truthed 15m buffer (to topographical features)
7001* Asterisk indicates approximate position
FLAC Type 1 Tree protection fencing (see Inset sketch 1)
FLAC Type 2 Tree protection fencing (see Inset sketch 2)
Permanent ground protection - no-dig construction method
Temporary ground protection (TGP) (see Inset sketch 3 for <2T access)

Dendron House
Barford Road, Blunham
BEDFORD, MK44 3ND
T 44(0)1767 641648 // F 44(0)1767 660330
enquiries@flac.uk.com
www.flac.uk.com

0m 10m 20m 30m 40m 50m

Notes

Do not scale off dwg - refer to tree survey data schedule for crown spreads etc

Tree / woodland group outlines follow the topo survey or aerial imagery, as applicable

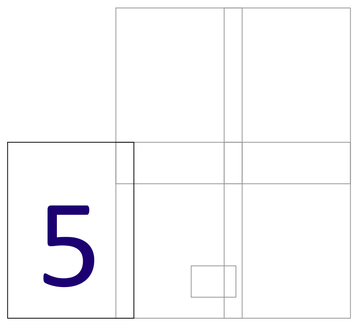
All tree positions are indicative unless a topo survey has been provided to FLAC

Any trees omitted from topo survey are located indicatively. These trees are marked with a *

RPA for hedges or hedgerows to be taken as 3m from the centreline, half the height or width + 2m each side, whichever is the greater

Notes on potential habitat features are for guidance only: ecological assessment is recommended

Drawn to N unless otherwise indicated





Diam = 500mm

Ash
Diam = 550mm

540mm

H. Chestnut
Diam = 470mm

Dead collapsing

Dead Scots pine to 30m ht

Birch

Holly/ wicathorn scrub under canopy

Multi-stemmed hazel 1.500m dia.

Suckering stump

Mixed species shrubs

Red line shows extents of earthworks

Pedunculate oak 8045 is not expected to have significant rooting presence in area of cut/fill earthworks due to the sandstone between the two and consequent level difference - the incursion upon the 'notional' circular RPA is considered acceptable

ROCKS ROAD

SNATT'S ROAD

46.5m

FLAC

Client
Gleeson Strategic Land Ltd.

Instruction
Downlands

Instruction ref.
SC40-1020

Dwg title
Tree Protection Plan - Outline

Dwg no.
40-1020.03

Date
12.05.22

Scale
Overview sheet NTS
Plot sheets 1:1000 @ A0
THIS INSET SHEET 1:250 @A0

Quality & value grades:

Category A	High
Category B	Moderate
Category C	Low
Category U	Unretainable

- Retained trees
- Notional tree root protection area - RPA
- Natural England 15x stem dia. veteran tree buffer
- Veteran tree crown hatch
- MAGIC Ancient and Semi-Natural Woodland
- MAGIC Ancient Replanted Woodland
- Indicative 15m ASNW buffer
- Ground-truthed 15m buffer (to topographical features)
- 7001* Asterisk indicates approximate position
- FLAC Type 1 Tree protection fencing (see Inset sketch 1)
- FLAC Type 2 Tree protection fencing (see Inset sketch 2)
- Permanent ground protection - no-dig construction method
- Temporary ground protection (TGP) (see Inset sketch 3 for <2T access)

Deadlow House
Byfield Road, Blakesley
Towcester, NN12 8RQ
T 44(0)1327 441648 / F 44(0)1327 441130
enquiries@flac.uk.com
www.flac.uk.com

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Drawn to N unless otherwise indicated

5m 10m 20m 30m 40m 50m