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NORTH COLWELL FARM



PLANNING SUBMISSION (ARBORICULTURE)

 EXPERT WITNESS
INSTITUTE

- TREE SURVEY TO BS5837:2012
- ARBORICULTURAL IMPACT ASSESSMENT
- PROPOSED TREE RETENTION & REMOVAL
- TREE PROTECTION PLAN &
ARBORICULTURAL METHOD STATEMENT

Prepared for: Miller Homes Ltd.

FLAC Instruction ref: CC43-1039

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NORTH COLWELL FARM

Planning Submission (Arboriculture) -

Introduction

This Arboricultural Impact Assessment has been prepared on behalf of Miller Homes Limited in support of an application for Outline planning permission.

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 application's layout proposals
- 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
- iv) Single-sheet drawing presenting our Tree Survey and Retention & Removal Plan with layout proposals overlay, project drawing ending .04 comprising 2no. detail sheets scaled at 1:500@ A0
- v) Single-sheet drawing presenting our Tree Protection Plan (Outline) with layout proposals overlay, project drawing ending .05 comprising 2no. detail sheets scaled at 1:500 @ A0

ARBORICULTURAL IMPACT ASSESSMENT -

KEY POINTS

1 Tree retention and removal - qualitative analysis

1.1 Trees subject of our survey and assessments 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), by layout proposals is summarised in Table 1 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	37	0	37	100	0
A	36	36	0	0	100
B	324	281	43	13	87
C	384	292	92	24	76

1.4 The tree removals to facilitate proposals are shown upon our *Tree Survey and Retention & Removal Plan* project drawing ending .04, which follows. The crown coding on the plan can be cross-referenced to our Tree Survey Data Table below, under the schedule's column headed *Proposal (REM)* in the data tables).

1.5 In addition to the trees as set out in Table 1 above, the east half of mixed species hedge H3001 in the vicinity of the site's access will be removed.

Tree protection during construction

2.1 Standardised tree protection details for the development phase are provided upon our *Tree Protection Plan (Outline)* (TPP, project drawing ending .05, following) which includes an Arboricultural Method Statement, Tree Protection Phasing Schedule and an Arboricultural Supervision Schedule.

Forbes-Laird Arboricultural Consultancy

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 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 stated, 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 x001 **for each type of vegetation**, where x identifies the surveyor (9000 series = JFL). Thus:

9000	Individual tree
TG9000	Tree group
WG9000	Woodland group
H9000	Domestic hedge
HR9000	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 [LIST ADAPTED TO REFLECT SURVEY FINDINGS]:

<i>Common name</i>	<i>Botanical name</i>	<i>Provenance</i>	<i>Notes</i>
Alder	<i>Alnus glutinosa</i>	Native	
Apple	<i>Malus domestica</i>	Native	
Ash	<i>Fraxinus excelsior</i>	Native	
Atlas cedar	<i>Cedrus atlantica</i>	Exotic	
Bay	<i>Laurus nobilis</i>	Exotic	
Beech	<i>Fagus sylvatica</i>	Native	
Blackthorn	<i>Prunus spinosa</i>	Native	
Cherry laurel	<i>Prunus laurocerasus</i>	Exotic	
Crack willow	<i>Salix fragilis</i>	Native	
European larch	<i>Larix decidua</i>	Native	
Field maple	<i>Acer campestre</i>	Native	
Gean	<i>Prunus avium</i>	Native	
Grey-budded snake bark maple	<i>Acer rufrinerve</i>	Exotic	
Hazel	<i>Corylus avellana</i>	Native	
Hawthorn	<i>Crataegus monogyna</i>	Native	
Himalayan birch	<i>Betula utilis</i> var. <i>jacquemontii</i>	Exotic	
Holly	<i>Ilex aquifolium</i>	Native	
Hornbeam	<i>Carpinus betulus</i>	Native	
Lawson cypress	<i>Chamaecyparis lawsoniana</i>	Exotic	
Leyland cypress	x <i>Cupressocyparis leylandii</i>	Exotic	
Norway maple	<i>Acer platanoides</i>	Exotic	
Norway spruce	<i>Picea abies</i>	Exotic	
Pedunculate oak	<i>Quercus robur</i>	Native	
Photinia	<i>Photinia x fraseri</i> 'Red Robin'	Exotic	
Plum	<i>Prunus domestica</i>	Native	
Portuguese laurel	<i>Prunus lusitanica</i>	Exotic	
Purple plum	<i>Prunus cerasifera</i> 'Pissardii'	Exotic	
Red snake bark maple	<i>Acer capillipes</i>	Exotic	
Scots pine	<i>Pinus sylvestris</i>	Native	
Silver birch	<i>Betula pendula</i>	Native	
Sweet chestnut	<i>Castanea sativa</i>	Naturalised	

Sycamore	Acer pseudoplatanus	Naturalised
Turkey oak	Quercus cerris	Exotic
Weeping willow	Salix x sepulcralis 'Chrysocoma'	Exotic
Western hemlock	Tsuga heterophylla	Exotic
Western red cedar	Thuja plicata	Exotic
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 m²

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 m², capped to a maximum of 707m² (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 m², capped to a maximum of 707m²

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
V	Veteran

Note

The V coding for veteran trees has been included due to the specific protection that such trees enjoy under the NPPF.

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') –

<i>Grade</i>	<i>Summary meaning</i>	<i>Ident. colour spot on TSP</i>
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	<i>For tree groups (TG), woodlands (WG) & hedgerows (HR)</i> – 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 <i>Tree Count</i> 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 m²

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 <i>NOTE Category U trees can have existing or potential conservation value which it might be desirable to preserve; see [BS5837:2012] 4.5.7.</i>			
	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

NORTH COLWELL FARM : TREE SURVEY DATA TABLE

Data for individual trees

FLAC Ref. No.	TPO Ref	Species	Ht. (m)	Crown Spread (m)				Ht. 1 st Rr. (m)	Ht. Can. (m)	Stem Count	Stem Dia. (mm)					RPA Rad. (m)	RPA Area (m2)	Life Stage Y-SM-EM-M-OM-V	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									
3001		Sots pine	14	5	5	5	5	5 S	2	1	550					6.60	137	M	F	Garden tree. Upright stem. Dead wood and dead partially attached limb may affect footway.	Prune out dead wood and broken limb with potential to affect footway.	20+	B1	RET
3002		Western red cedar	17	4	4	4	4	3 N	2.5	1	500					6.00	113	M	F	Garden tree. Upright stem. Typical form and structure for the species. No apparent significant defects observed.	No action required at time of survey	40+	B1	RET
3003		Purple plum	6	4	4	4	4	2 W	2	5	230	200	180	170	150	5.05	80	M	F	Garden tree. Multi-stemmed. Fence impedes visual assessment.	No action required at time of survey	20+	C1	RET
3004		Western red cedar	17	4	4	4	4	3 N	2.5	1	580					6.96	152	M	F	Garden tree. Upright stem. Typical form and structure for the species. No apparent significant defects observed.	No action required at time of survey	40+	B1	RET
3005		Holly	10	3	5	3	5	2 S	2	4	300	250	210	160		5.66	101	M	F	Garden tree. Multi-stemmed. Fence impedes assessment. Some dead wood at north of crown over footway.	Remove dead wood.	20+	C1	RET
3006		Holly	7	3	1	3	4	2 E	2	4	230	90	90	70		3.27	34	EM	F	Scrubby, multi-stemmed specimen at edge of drainage ditch. Lower stem bark wound at south. Principal stem swept to north. Tinning branch tips and overall lower than normal density of foliage. Low arboricultural merit.	No action required at time of survey	20+	C1	RET
3007		Atlas cedar	10	4	4	4	4	2 N	2	2	450	180				5.82	106	EM	F	Garden tree. Behind 1.7 metre tall brick wall, likely to affect root distribution to some degree. Slender secondary stem at north. Typical form and structure for the species.	No action required at time of survey	40+	B1	RET
3008		Scots pine	14	6	6	4	3	7 S	5	1	500					6.00	113	M	F	Garden tree. Low dead limb at east and further small dead wood.	No action required at time of survey	40+	B1	RET
3009		Lawson cypress	10	2.5	2.5	2.5	2.5	3.5 S	2.5	1	300					3.60	41	M	F	Dense ivy on stem. Previously topped at 4 metres, crown adapting. Tree of relatively low arboricultural merit.	No action required at time of survey	40+	C1	RET
3010		Lawson cypress	12	2.5	2.5	2.5	2.5	4 S	2	1	450					5.40	92	M	F	Garden tree, limited visual assessment. No apparent significant defects observed.	No action required at time of survey	40+	B1	RET
3011		Beech	18	5	5	5	5	3 S	2	1	550					6.60	137	M	F	Garden tree, limited visual assessment. No apparent significant defects observed.	No action required at time of survey	40+	B1	RET
3012		Grey-budded snake-bark maple	5	2.5	2.5	2.5	2.5	1.5 S	1.5	1	130					1.56	8	SM	F	Garden tree. Lower stem leans slightly towards highway. Compact crown.	No action required at time of survey	40+	C1	RET
3013		Plum	6	3	3	3	3	2 N	1.5	3	220	210	180			4.25	57	M	F	Garden tree. Multi-stemmed, fence and hedge impedes visual assessment. No apparent significant defects observed.	No action required at time of survey	20+	B1	RET
3014		Red snake bark maple	6	2	2	2	2	3 N	3	3	140	130	120			2.71	23	EM	P	Garden tree. Advancing distal decline evident. Hedge impedes assessment. Limited prospects.	No action required at time of survey	10+	C1	RET
3015		Plum	6	3	3	3	3	2 N	2	3	160	150	130			3.06	29	EM	P	Garden tree. Distal decline. Hedge impedes assessment. Limited prospects.	No action required at time of survey	10+	C1	RET
3016		Purple plum	5	2	2	2	2	2 N	2	1	160					1.92	12	SM	G	Hedge impedes assessment. No apparent significant defects observed.	No action required at time of survey	40+	B1	RET
3017		Norway maple	12	4	4	2	4	2 S	3	1	260					3.12	31	EM	G	Garden tree. Hedge impedes assessment. Some crown asymmetry after companion shelter to west. No apparent significant defects observed	No action required at time of survey	40+	B1	RET
3018		Lawson cypress	12	3	3	3	3	2 N	2	1	550					6.60	137	M	F	Garden tree. Fence and hedge impedes assessment. No apparent significant defects observed.	No action required at time of survey	40+	B1	RET
7001		Pedunculate oak	18.2	7.5	6.5	10	6	4.1 NW	2.1	1	1120					13.44	567	M	F	Future veteran potential - Cannot fully assess base of tree as tree is on 3rd party land. Major deadwood in central crown with historic storm damage apparent. Minor dieback/stag heading apparent. Cannot see N face of lower stem, but no sign of significant stem or basal decay to S/W.	No action required at time of survey	>40	B3	RET
7002		Pedunculate oak	16.8	6	9.5	6.5	10	3.6 NE	1.6	1	1070					12.84	518	M	F	Single slightly inclined stem towards E, become multiple leader from 4.5m with tight forks where stems meet. Skewed crown towards E due to adjacent 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
7003		Pedunculate oak	18.8	8	3.5	9	7.8	2.3 W	0.9	1	970					11.64	425	M	F	Forms single crown with 7004. Major deadwood. Upright stem is covered with epicormic growth to 10m. Remnants of fungal fruiting bodies at base, likely armillaria spp. No observed dieback or disease and no major basal or stem decay apparent	No action required at time of survey	20+	B3	RET
7004		Pedunculate oak	17.6	4	8.5	8	10	2.4 SW	1.6	1	1060					12.72	508	M	P	Forms single crown with 7003. Dieback apparent through upper crown. Historic storm damage apparent to main stem at c.13m. Major deadwood throughout. Remnants of fungal fruiting bodies at base, likely armillaria spp.	No action required at time of survey	20+	B3	RET
7005		Ash	18	3	10.5	11	4.5	2.1 NW	1.4	2	470	410				7.49	176	M	F	Twin stems from 0.6m. Ash dieback apparent in upper/outer crown, but not advanced at present. Heavily skewed crown due to adjacent trees.	No action required at time of survey	10+	C1	RET
7006		Crack willow	10.5	4	10	9.5	3	1.5 W	0	6	360					10.59	352	M	P	Multiple stems from ground level with included unions where stems meet. Majority of stems have partially to fully collapsed towards SW.	Fell to as low as reasonably practicable	<10	U	U
7007		Ash	16.5	6.5	4	5.5	7	2.2 S	3.2	2	460	330				6.80	145	M	F	Twin stems from ground level with tight forks where stems meet. Ash dieback apparent in crown, but not advanced yet.	No action required at time of survey	10+	C1	RET
7008		Hornbeam	15.8	6	7	5.5	6	1.2 N	1.5	7	280					8.89	248	M	F	Historically coppiced stool at boundary ditch/bank. Multiple stems from 1m with included unions where stems meet. Elongated vertical growth. No observed dieback or disease and no sign of obvious decay	No action required at time of survey	20+	B3	RET
7009		Sweet chestnut	20.2	9.5	8.5	9	6.5	3.9 N	2	9	500					15.00	707	M	F	Multiple stems from ground level with included unions where stems meet. Dead stem towards centre of stool. 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
7010		Sweet chestnut	16.3	7	3.5	6	4	1.5 E	2.2	3	470	460	280			8.58	231	M	P	Multiple stems from ground level with tight forks where stems meet. Advanced widespread through crown, very little healthy foliage present.	Fell to as low as reasonably practicable	<10	U	U
7011		Crack willow	8	6	6	9.5	2.5	1.1 W	0	5	550	330	200	170	150	8.51	227	M	P	Stem has partially failed towards W and is laying on ground. Multiple stems from low level.	Fell to as low as reasonably practicable	<10	U	U
7012		Pedunculate oak	20.2	5.5	7	6	5	2.2 N	1.8	2	490	170				6.23	122	M	F	Upright stem with much smaller secondary stem from base. No apparent significant defect	No action required at time of survey	>40	B1	RET
7013		Pedunculate oak	20.4	3	7.5	4.5	8	7.5 S	11	1	540					6.48	132	M	F	Upright stem leads to 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
7014		Western hemlock	22	4.5	5	5	4	1.9 S	1.2	1	530					6.36	127	M	F	Upright stem with full healthy crown. Slightly inclined stem, possibly due to root plate movement in early maturity. No observed dieback or disease and no sign of obvious decay	No action required at time of survey	20+	B1	RET
7015		Western hemlock	19.5	5	4	3.5	5	1.3 N	1	1	520					6.24	122	M	F	Stem has slight kink in at 1.8-3m. No observed dieback or disease and no sign of obvious decay	No action required at time of survey	20+	B1	RET
7016		Pedunculate oak	17.2	5.5	4	3	8.5	4 E	1.4	2	510	240				6.77	144	M	F	Twin stems from ground level with tight forks where stems meet. Crown heavily skewed to E into field. Subsiding limbs over field. No observed dieback or disease and no sign of obvious decay	No action required at time of survey	>40	B1	RET

FLAC Ref. No.	TPO Ref	Species	Ht. (m)	Crown Spread (m)				Ht. 1 st Br. (m)	Ht. Can. (m)	Stem Count	Stem Dia. (mm)					RPA Rad. (m)	RPA Area (m2)	Life Stage Y-SM-EM-M-OM-V	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									
7017		Pedunculate oak	20.1	6.5	5.5	7	12	2.9 NE	1.7	3	560	470	230			9.20	266	M	F	Multiple stems from ground level with tight forks where stems meet. Smaller two stems are growing at significant angle to NE. No observed dieback or disease and no sign of obvious decay	No action required at time of survey	>40	B1	RET
7018		Pedunculate oak	4.8	2.3	2.5	3	3.2	1 E	1.7	1	140					1.68	9	SM	F	Lower crown is heavily dominated with brambles. No observed dieback or disease and no sign of obvious decay	No action required at time of survey	20+	C1	RET
7019		Crack willow	15.5	4	7	8.5	8	1.8 E	0.2	8	360					12.22	469	M	P	Multiple stems from 0.2-1.5m with included unions where stems meet. Stems to E are starting to subside/collapse. Several pockets of decay present on lower stems.	Fell to as low as reasonably practicable	<10	U	U
7020		Crack willow	16	3	2.5	7.3	8.4	1.1 E	0	5	390	350	250	240	200	7.92	197	M	P	Multiple stems from 0.5-1.2m with included unions where stems meet. Stem has partially collapsed towards E. Significant basal decay	Fell to as low as reasonably practicable	<10	U	U
7021		Ash	14.8	6	4	4	4.5	2.8 N	3.9	1	370					4.44	62	EM	P	Advancing ash dieback through crown	Fell to as low as reasonably practicable	<10	U	U
7022		Pedunculate oak	13.2	3	5.5	5	2	1.8 SW	2.9	1	320					3.84	46	EM	F	Skewed crown due to adjacent trees. No observed dieback or disease	No action required at time of survey	20+	C1	RET
7023		Pedunculate oak	7.2	3	3	3.5	3.5	1.6 W	1.5	1	220					2.64	22	SM	G	No apparent significant defect	No action required at time of survey	20+	B1	RET
7024		Ash	16.8	7.2	7	4.5	6	3.6 E	4.2	3	380	280	260			6.47	131	M	F	Multiple stems from 1m with included unions where stems meet. Ash dieback apparent in upper crown, but not advanced at present	No action required at time of survey	10+	C1	RET
7025		Ash	17.3	6	6	6.5	4.5	6.2 N	2.5	1	420					5.04	80	M	F	Upright stem leads to crown with apparent ash dieback, but not widespread at present	No action required at time of survey	10+	C1	RET
7026		Pedunculate oak	18.5	7	6.5	10	7	1.9 S	1.6	1	1100					13.20	547	M	F	Future veteran potential - Cannot fully assess base of tree as tree is on 3rd party land. Historic storm damage apparent in central upper crown. fungal fruiting bodies at base to S and E, likely armillaria spp. Major deadwood in central crown	No action required at time of survey	>40	A3	RET
7027		Pedunculate oak	9.8	4.2	3.8	5	2.4	1.3 NW	1.5	1	360					4.32	59	EM	F	Skewed crown due to adjacent taller trees. No observed dieback or disease and no sign of obvious decay	No action required at time of survey	20+	C1	RET
7028		Pedunculate oak	6.8	4	4	3.7	4	1.7 NW	1.6	1	320					3.84	46	EM	F	Minor bark wounds on lower limbs from browsing animals. No observed dieback or disease and no sign of obvious decay	No action required at time of survey	20+	B1	REM
7029		Pedunculate oak	14.5	7.2	6	6	5.2	1.8 NW	2	1	570					6.84	147	M	F	Kinked/contorted lower stem with bulge at 1.3m. No observed dieback or disease and no sign of obvious decay	No action required at time of survey	20+	B1	RET
7030		Pedunculate oak	19	11	9	12	12	2.8 N	2.7	1	1250					15.00	707	M	G	Future veteran potential - Cannot fully assess base of tree as tree is on 3rd party land. Historic storm damage apparent in central crown. Major deadwood present here also. Tear wounds with woodpecker/animal holes present in lower crown. Cannot assess base of tree to determine if stem decay or fungal fruiting bodies present.	No action required at time of survey	>40	A1	RET
7031		Pedunculate oak	18.5	10.5	10	11	8	2.6 S	2.8	1	1150					13.80	598	M	G	Cannot fully assess base of tree due to dense vegetation. Ivy covered lower stem. Widely flared root buttresses to 1m. Single stem becomes twin leader at 2.5m with tight forks where stems meet. 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
7032		Pedunculate oak	8.1	3.5	3.5	3.5	3.5	1.7 S	1.5	1	280					3.36	35	EM	G	No apparent significant defect	No action required at time of survey	20+	B1	RET
7033		Blackthorn	5.8	2	5	0.5	4	1.6 E	1.6	2	160	160				2.72	23	M	P	Twin stems from ground level. One stem has failed to S, remaining stem is angled significantly to E. No observed dieback or disease	Fell to as low as reasonably practicable	<10	U	U
7034		Gean	16.5	6.3	4.5	6	4	3.9 W	2.8	1	510					6.12	118	M	F	Relatively high crown due to competition within group. No observed dieback or disease and no sign of obvious decay	No action required at time of survey	20+	B1	RET
7035		Sycamore	4	2	0.8	1.4	1.4	1.3 SW	1.5	2	90	75				1.41	6	SM	P	Advanced dieback related to animal browsing.	Fell to as low as reasonably practicable	<10	U	U
7036		Ash	19	8.5	10	9.5	8	3.4 E	1.5	3	670	550	400			11.46	412	M	P	Multiple stems from ground level with included unions where stems meet. Advancing ash dieback apparent through crown.	Fell to as low as reasonably practicable	<10	U	U
7037		European larch	17.5	4.5	5	4.5	3	1.9 S	1.6	1	450					5.40	92	M	F	No apparent significant defect	No action required at time of survey	20+	B1	RET
7038		Pedunculate oak	14	6.2	3.9	4.4	5	0.6 E	1	1	450					5.40	92	M	F	Heavily skewed lower stem, likely caused by historic root instability. No observed dieback or disease and no sign of obvious decay	No action required at time of survey	20+	B1	RET
7039		Pedunculate oak	18.3	7.5	4	4.5	6	3.6 E	1.6	2	490	450				7.99	200	M	F	Twin stems from ground level. N most stem is inclined to N with subsiding lower limbs. No observed dieback or disease and no sign of obvious decay	No action required at time of survey	20+	B1	RET
7040		Ash	18	13.5	3.5	6	6	1.7 W	0	3	470	410	390			8.83	245	M	P	Multiple stems from ground level. Tree has partially collapsed and is resting on the ground. Ash dieback apparent in crown	Fell to as low as reasonably practicable	<10	U	U
7041		Ash	18.5	6.5	7	8.5	4.5	3.6 S	2.8	1	540					6.48	132	M	F	Upright stem with full healthy crown. No sign of ash dieback at present.	No action required at time of survey	20+	B1	RET
7042		Ash	19.2	9.5	11	8	7.5	3.3 SW	3.5	8	460					15.00	707	M	P	Multiple stems from ground level with included unions where stems meet. Advancing ash dieback throughout crown	Fell to as low as reasonably practicable	<10	U	U
7043		Pedunculate oak	17.8	7.2	7	6.5	4.5	1.6 S	1	4	480	430	410	190		9.45	280	M	F	Multiple stems from 1m with tight forks where stems meet. Moderate 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
7044		Pedunculate oak	4.4	2	2	2.8	2.4	1.4 NE	1.6	2	100	85				1.58	8	SM	F	Twin stems from ground level. Lower crown dominated by brambles. No observed dieback or disease	No action required at time of survey	20+	C1	RET
7045		Pedunculate oak	18.4	7	9.5	8.5	10	4.4 NE	3.8	1	1210					14.52	662	M	G	Upright stem with full healthy crown. Historic storm damage apparent in lower crown. Ivy covered lower stem and crown. Major deadwood in central crown. No basal or stem decay apparent.	No action required at time of survey	>40	A1	RET
7046		Pedunculate oak	13	4.5	5	4.5	4.5	2.3 E	1.9	1	430					5.16	84	M	F	Ivy covered lower stem and crown. No observed dieback or disease and no sign of obvious decay	No action required at time of survey	20+	B1	RET
7047		Pedunculate oak	19	10	11.5	9.5	9	4.6 E	5	1	1200					14.40	651	M	G	Cannot fully assess base of tree as tree is on 3rd party land. Ivy covered lower stem and crown. Historic storm damage and subsequent pruning have thinned crown, but no significant dieback apparent. No basal or stem decay observed.	No action required at time of survey	>40	A1	RET
7048		Hazel	6.2	3	3	3.2	3.5	1.5 SW	1.5	15	75					3.49	38	M	F	Multiple stems from ground level. No apparent significant defect	No action required at time of survey	20+	C1	RET
7049		Apple	4.8	0	3.8	2	2.7	2.1 E	1.4	1	210					2.52	20	M	F	Heavily skewed crown to SE. No observed dieback or disease and no sign of obvious decay	No action required at time of survey	10+	C1	RET
7050		Ash	16.2	7.2	7	7	4	3.4 S	4	1	410					4.92	76	M	P	Advancing ash dieback disease throughout crown	Fell to as low as reasonably practicable	<10	U	U
7051		Pedunculate oak	18.4	5.5	7.3	5.3	2.5	2.3 S	1.6	1	620					7.44	174	M	F	Stem bifurcates at 1.6m with large included union here starting to form crack. Skewed crown due to adjacent competition. No observed dieback or disease and no sign of obvious decay.	No action required at time of survey	20+	C1	RET
7052		Pedunculate oak	12.2	3.4	4.5	0.5	3.6	2.7 SE	1.8	1	210					2.52	20	EM	F	Skewed and constrained crown due to adjacent competition. No observed dieback or disease and no sign of obvious decay	No action required at time of survey	20+	C1	RET
7053		Pedunculate oak	16.5	8	10.8	4.5	6.5	1.4 SW	1.9	4	520	450	440	340		10.62	354	M	F	Multiple stems from 1.4m with tight forks where stems meet. Moderate deadwood in central crown. No observed dieback or disease and no sign of obvious decay	No action required at time of survey	>40	B1	REM
7054		Pedunculate oak	12.3	6.5	6	5.4	6	1.8 S	2.3	1	460					5.52	96	M	F	Slightly curved lower stem. No apparent significant defect	No action required at time of survey	>40	B1	RET

FLAC Ref. No.	TPO Ref	Species	Ht. (m)	Crown Spread (m)				Ht. 1 st Br. (m)	Ht. Can. (m)	Stem Count	Stem Dia. (mm)					RPA Rad. (m)	RPA Area (m2)	Life Stage Y-SM-EM-M-OM-V	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									
7055		Pedunculate oak	16.2	6.5	8.5	5.5	6.5	1.7 S	2	1	540	500				8.84	245	M	F	Twin stems from ground level with included unions where stems meet. Multiple leaders from 1.6m. No observed dieback or disease and no sign of obvious decay	No action required at time of survey	20+	B1	RET
7056		Silver birch	24.5	4.8	3	3	4.4	1.7 SW	1.8	1	270					3.24	33	M	F	Cannot fully assess base of tree as tree is on 3rd party land. No apparent significant defect	No action required at time of survey	20+	B1	RET
7057		Pedunculate oak	8.8	2	1.5	2.1	1	0.1 W	1.4	1	230					2.76	24	EM	P	Advanced dieback through crown. Tree almost dead	Fell to as low as reasonably practicable	<10	U	U
7058		Gean	14	3.5	4	4.5	3.5	1.7 NW	1.8	1	320					3.84	46	M	F	Mechanical damage apparent to surface roots. Upright stem with full healthy crown. No observed dieback or disease and no sign of obvious decay	No action required at time of survey	20+	B1	REM
7059		Sweet chestnut	13.8	4.8	3.2	4	5.5	1 N	1.6	4	220	200	160	100		4.23	56	EM	F	Multiple stems from low level with included unions where stems meet. Bark damage and associated basal decay to S.	No action required at time of survey	10+	C1	REM
7060		Pedunculate oak	15	5.2	4.5	5.3	4	1.1 SW	1.6	1	410					4.92	76	EM	F	Upright stem with full healthy crown. No apparent significant defect	No action required at time of survey	20+	B1	REM
7061		Silver birch	16.5	4	4	3.5	4	1.6 NW	1.4	1	380					4.56	65	M	F	Slightly contorted lower stem. No apparent significant defect	No action required at time of survey	20+	B1	REM
7062		Ash	16	3.8	4.3	3.9	4.3	1.8 W	1.5	1	340					4.08	52	EM	F	Ash dieback advancing through crown.	Fell to as low as reasonably practicable	<10	U	U
7063		Pedunculate oak	16.3	4	5.7	5.6	6	1.8 SW	1.5	1	400					4.80	72	EM	F	Upright stem with full healthy crown. No apparent significant defect	No action required at time of survey	>40	B1	REM
7064		Pedunculate oak	19.2	8	8.5	9	9	1.3 S	1.7	2	870	850				14.60	669	M	F	Twin stems from low level with large included union between. E most stem has open cavity at 1m but decay appears localised. Major deadwood in central crown. Fused limbs at 2.5m to E. No observed dieback or disease and no significant associated basal or stem decay	No action required at time of survey	>40	B1	REM
7065		Hornbeam	6.5	6.5	3	4.9	1.5	1.6 W	1.8	2	240	230				3.99	50	EM	F	Twin stems from low level with contorted included union between. Crown heavily skewed by adjacent much larger crown. No observed dieback or disease	No action required at time of survey	20+	C1	REM
7066		Norway maple	16.5	4.5	6.5	6	6.5	2.8 S	2	6	270					7.94	198	EM	F	Multiple stems from ground level with tight forks where stems meet. Moderate deadwood in central crown. No observed dieback or disease and no sign of obvious decay	No action required at time of survey	10+	C1	REM
7067		Scots pine	14	5	6.5	4	3.5	8.5 SE	8	1	500					6.00	113	M	F	Skewed crown due to adjacent trees. Major deadwood in central crown. No observed dieback or disease	No action required at time of survey	20+	B1	REM
7068		Pedunculate oak	16.8	5	7.2	4	3.5	1.7 NE	2.4	2	580	180				7.29	167	M	F	Twin stems from 1.3m. Contorted lower stem leads to constrained, but healthy crown. No observed dieback or disease and no sign of obvious decay	No action required at time of survey	>40	B1	REM
7069		Ash	17.2	5	4.5	5.5	6	3.3 SW	5.2	3	440	210	180			6.24	122	M	P	Multiple stems from ground level with included unions where stems meet. Ash dieback advancing through crown.	Fell to as low as reasonably practicable	<10	U	U
7070		Ash	17	4.5	4	5	5.5	6.5 SW	3.9	1	400					4.80	72	M	P	Ash dieback advancing through crown.	No action required at time of survey	<10	U	U
7071		Norway maple	9.5	2.4	2.5	2.5	2.3	1 S	1.4	1	230					2.76	24	EM	F	No apparent significant defect	No action required at time of survey	20+	C1	RET
7072		Pedunculate oak	18.4	6.5	9.8	10	3	1.8 SW	1.8	1	1080					12.96	527	M	F	Very stout lower stem leads to skewed crown due to presence of adjacent tree. Historic storm damage apparent in upper crown. No observed dieback or disease and no sign of obvious decay	No action required at time of survey	>40	A1	RET
7073		Pedunculate oak	19.6	9	8.2	6.7	7	2.6 S	2	1	960					11.52	417	M	G	Upright stem leads to crown showing some signs of historic storm damage. Major deadwood present in several locations. No basal or stem decay apparent. No observed dieback or disease	No action required at time of survey	>40	A1	RET
7074		Turkey oak	6.5	3.9	3.6	3.5	4.5	0.8 SW	1	2	250	160				3.57	40	EM	F	Twin stems from ground level with included unions where stems meet. Bark loss and minor decay apparent at union. No observed dieback or disease	No action required at time of survey	20+	C1	RET
7075		Silver birch	16.5	3.8	3.8	4.3	3.5	1 N	1.4	1	400					4.80	72	M	F	No apparent significant defect	No action required at time of survey	20+	B1	RET
7076		Ash	1	5	2.5	2.5	5.5	8.5 N	6	1	300					3.60	41	EM	P	Ash dieback advancing through crown.	No action required at time of survey	<10	U	U
7077		Ash	1	5	2.5	2.5	5.5	8.5 N	6	1	300					3.60	41	EM	P	Ash dieback advancing through crown.	No action required at time of survey	<10	U	U

Data for trees assessed as groups (TG)

FLAC Ref. No.	TPO Ref	Species	Tree Count	Ht. (m)	MRCs (m)	Ht. 1 st 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		Holly, plum, Norway maple	17	10	4	2 N	2	350	4.20	55	EM	F	Linear group outside of garden fence comprising scrubby and unremarkable specimens.	No action required at time of survey	20+	C2	RET	17	100.0
TG3002		Leyland cypress	7	11	3	2 N	2	250	3.00	28	EM	F	In garden. Fence impedes assessment. Slender, drawn-up and unremarkable.	No action required at time of survey	40+	C2	RET	7	100.0
TG3003		Holly	9	10	2	2 N	2	360	4.32	59	M	D	Dispersed dead and very close to dead stems, outside of garden fence, previously topped, most at risk of collapse into highway.	Fell.	<10	U	U	0	0.0
TG3004		Photinia Red Robin	13	3.5	1	1.5	1.5	90	1.08	4	Y	F	Shrubs planted outside and against boundary brick wall.	No action required at time of survey	20+	C2	RET	13	100.0
TG3005		Beech, sycamore, hawthorn, field maple	10	10	5	3 N	2.5	300	3.60	41	EM	F	Close-set specimens flanking driveway entrance and front boundary of garden. Lower branches clipped forming hedge-like screen, upper portions a contiguous canopy tree group.	No action required at time of survey	40+	B2	RET	10	100.0
TG3006		Beech, sycamore, hawthorn, field maple	10	10	5	3 N	2.5	300	3.60	41	EM	F	Close-set specimens flanking driveway entrance and front boundary of garden. Lower branches clipped forming hedge-like screen, upper portions a contiguous canopy tree group. Some dense ivy on stems and into crowns of hawthorns.	No action required at time of survey	40+	B2	RET	10	100.0
TG3007		Leyland cypress x2, Lawson cypress cv x1	3	20	4	1 SW	2	700	8.40	222	M	F	Trio of large conifers in garden sharing close companion shelter and common crown profile.	No action required at time of survey	20+	B2	RET	3	100.0
TG3008		Ash	2	20	6	5 SW	5	660	7.92	197	M	F	Pair of garden trees. Limited visual assessment by hedge. Scattered dead wood may affect footway.	Remove dead wood with potential to affect footway.	20+	B2	RET	2	100.0
TG3009		Holly, hazel, bay , sycamore	8	12	3	2 S	2	350	4.20	55	EM	G	Linear tree group in garden of close-set specimens forming tall dense screening. No apparent significant defects observed.	No action required at time of survey	40+	B2	RET	8	100.0
TG3010		Hornbeam	4	6	2.5	2 S	3	170	2.04	13	SM	F	Hedge impedes assessment. Linear dispersed tree group. No apparent significant defects observed.	No action required at time of survey	40+	B2	RET	4	100.0
TG3011		Weeping willow x2, Norway maple x1	3	16	6	2 N	4	550	6.60	137	M	P	Pair of willows in garden, both have thinning foliage density, east tree most affected. Dense conifer hedge impedes visual assessment of much of their structure. Some physiological impairment obvious but cause not discernible from public realm.	No action required at time of survey	10+	C2	RET	3	100.0
TG7001		Holly, hornbeam, hazel, silver birch	18	10	3.5	1.6 E	1	240	2.88	26	M	F	Overgrown/under-managed historic feature along site boundary/ditch. All trees have multiple stems where historic coppicing/copparding has been performed. Several stems have pockets of decay at historic pruning points. No observed dieback or disease	No action required at time of survey	20+	B3	RET	18	100.0
TG7002		Hornbeam, sweet chestnut	28	14.5	4.5	1.3 W	1	360	4.32	59	M	F	Row of overstood, predominantly, hornbeam coppice. All stools have multiple stems with elongated vertical growth. Several instances of minor decay towards centre of stools, but general structural condition of feature is very good with no stem failures apparent at present.	No action required at time of survey	40+	A3	RET	28	100.0
TG7003		Silver birch, ash	15	19	4	2.1 N	1.8	340	4.08	52	M	F	Row of multiple stem trees along edge of woodland to S. All appear to be natural or managed coppice stools, but significantly less mature than nearby hornbeam feature. Ash trees within group are showing significant dieback and are likely to continue to worsen in structure	Fell ash within group	20+	B2	RET	15	100.0
TG7004		Pedunculate oak, ash, hazel	35	14	3.5	1.5 E	3.5	280	3.36	35	EM	F	Roughly 50/50 split of ash/oak forming spine of very over grown hedge-like feature or visual barrier. Very densely planted with hazel filling gaps between taller trees. Almost all ash have significant decline related to ash dieback disease. Oak show no significant health or structural issues	Fell and remove declining ash within group.	20+	B2	PRET	27	77.1
TG7005		Blackthorn	30	4	2.5	0.1 N	0	75	0.90	3	M	F	Thicket like feature forming part of thick shelter belt, but unattractive in itself. Feature has occasional thinner section. No systemic issues within group	No action required at time of survey	20+	C2	PRET	20	66.7
TG7006		Blackthorn	30	3.8	2.5	0.2 W	0	75	0.90	3	M	F	Thicket like feature forming part of thick shelter belt, but unattractive in itself. Feature has occasional thinner section. No systemic issues within group	No action required at time of survey	20+	C2	PRET	12	40.0
TG7007		Pedunculate oak, ash,	35	16.5	5	1.7 W	1.5	360	4.32	59	EM	F	Roughly 30/70 split of ash/oak forming spine of very over grown hedge-like feature or visual barrier. Almost all ash have significant decline related to ash dieback disease. Oak show no significant health or structural issues	Fell and remove declining ash within group.	20+	B2	PRET	34	97.1
TG7008		Pedunculate oak,	18	5	2.5	1.5 E	1.5	160	1.92	12	SM	F	Group of self set trees with skewed crowns towards E. Most are dominated by brambles into lower canopy. No observed dieback or disease and no sign of obvious decay	No action required at time of survey	20+	C2	PRET	14	77.8
TG7009		Pedunculate oak, crack willow, ash	20	8.5	3	0.5 S	0	180	2.16	15	EM	F	Scrubby trees within field margin. Bracken and young blackthorn form dense understorey. Ash show signs of ash dieback disease. Willow show some signs of stem collapse. No other systemic issues	No action required at time of survey	20+	C2	PRET	14	70.0
TG7010		Ash	3	15.5	5	2.2 SE	1.8	340	4.08	52	EM	F	Multiple stems from ground level with included unions where stems meet. All show ash dieback within crowns, with significant decline apparent	Fell to as low as reasonably practicable	<10	U	U	0	0.0
TG7011		Hazel, blackthorn, yew	12	6	2.5	0.3 E	1	140	1.68	9	M	F	Scrubby remnant of hedge feature. No observed dieback or disease and no sign of obvious decay	No action required at time of survey	20+	C2	RET	12	100.0
TG7012		Blackthorn	25	3.5	2.2	0.2 S	0	75	0.90	3	M	F	Thicket like feature forming part of thick shelter belt, but unattractive in itself. Feature has occasional thinner section. No systemic issues within group	No action required at time of survey	20+	C2	PRET	21	84.0
TG7013		Pedunculate oak,	4	4	2.8	1.6 N	1.5	140	1.68	9	SM	F	Cluster of relatively young oaks. No apparent significant defect	No action required at time of survey	20+	C2	RET	4	100.0
TG7014		Crack willow, pedunculate oak	7	15	3.5	1.6 N	2.5	260	3.12	31	EM	F	Dense cluster of trees surrounded by brambles. No apparent significant defect	No action required at time of survey	20+	B2	RET	7	100.0
TG7015		Ash	5	15	4.5	2 N	1.8	360	4.32	59	M	F	Ash dieback based decline present in all trees, but not advanced at present	No action required at time of survey	10+	C2	PRET	4	80.0
TG7016		Pedunculate oak	25	6.5	3	1.4 S	1.9	150	1.80	10	SM	F	Strip of relatively young trees at field margin with dense brambles at S/W edge of group. No apparent significant defect	No action required at time of survey	20+	C2	PRET	19	76.0
TG7017		Hazel, pedunculate oak, blackthorn	35	6.5	2.5	0.8 S	0.5	140	1.68	9	M	F	Overgrown and under manged hedge-like boundary group. Bracken and brambles dominate lower area of trees. No observed dieback or disease and no sign of obvious decay	No action required at time of survey	20+	C2	PRET	18	51.4
TG7018		Pedunculate oak, ash, field maple, gean, hazel, blackthorn	80	13	3.5	1 E	0.2	240	2.88	26	M	F	Wide barrier planting/field divide with ditch and bank at centre. W half of feature is composed almost entirely if thicket like blackthorn. Dense hazel fill gaps between larger/taller trees along bank edge. Ash show signs of decline related to ash dieback with occasional tree in obvious terminal decline. No other systemic issues observed.	No action required at time of survey	20+	B3	PRET	55	68.8
TG7019		Ash	3	16.5	5	2.3 SE	3.2	270	3.24	33	M	P	Significant ash dieback apparent through crowns.	Fell to as low as reasonably practicable	<10	U	U	0	0.0
TG7020		Field maple	7	14.5	5	2.1 E	1	340	4.08	52	M	F	Row of trees that were historically coppiced but have regrown to full height. All have multiple fused stems from 0.5-2m. No observed dieback or disease and no sign of obvious decay	No action required at time of survey	20+	B2	RET	7	100.0
TG7021		Field maple	3	16	4.5	2.1 N	1.7	340	4.08	52	M	F	Row of trees that were historically coppiced but have regrown to full height. All have fused stems from low level and all trees almost join into one large stool. No observed dieback or disease. Small pockets of decay evident near base, but none appear advanced or overly extensive.	No action required at time of survey	20+	B3	RET	3	100.0

FLAC Ref. No.	TPO Ref	Species	Tree Count	Ht. (m)	M RCS (m)	Ht. 1 st 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		Western hemlock x1, European larch x4	5	17.5	4.5	1.8 E	0.5	500	6.00	113	M	F	Small cluster of conifers forming dense area in otherwise less dense woodland. No apparent significant defect	No action required at time of survey	20+	B2	RET	5	100.0
TG7023		Ash, pedunculate oak, hazel,	25	16.5	6	1.6 N	0.2	370	4.44	62	M	F	Row of trees forming boundary along low bank/shallow ditch. Rough mix of 70/30 ash to oak with hazel filling gaps between trees. Ash dieback apparent through group, but not advanced at present.	No action required at time of survey	20+	B2	RET	25	100.0
TG7024		Blackthorn	25	5	2.5	0.4 S	0	75	0.90	3	M	F	Thicket like growth of trees at field margin. No systemic issues evident	No action required at time of survey	20+	C2	RET	25	100.0
TG7025		Blackthorn, pedunculate oak	45	4.5	2.5	0.5 E	0	120	1.44	7	M	F	Thicket like area with lower reaches dominated by brambles and bracken. No systemic issues observed.	No action required at time of survey	20+	C3	RET	45	100.0
TG7026		Hornbeam, holly	7	10	3.5	1.4 E	1.5	230	2.76	24	M	F	Row of historically coppiced trees that have regrown into fused stems. Occasional pockets of decay at branch failure points near base. No observed dieback or disease	No action required at time of survey	20+	B3	RET	7	100.0
TG7027		Ash	4	16.5	5.5	1.5 SW	2.5	340	4.08	52	M	F	All trees have significant decline related to ash dieback apparent in crowns.	No action required at time of survey	<10	U	U	0	0.0
TG7028		Blackthorn, pedunculate oak	35	4	3	0.3 S	0	110	1.32	5	M	F	Thicket like area with lower reaches dominated by brambles and bracken. No systemic issues observed.	No action required at time of survey	20+	C3	PRET	18	51.4
TG7029		Himalayan birch	5	13	3	1.4 E	2.2	200	2.40	18	EM	F	Cannot fully assess base of trees as trees are on 3rd party land. No apparent significant defect	No action required at time of survey	20+	B2	RET	5	100.0
TG7030		Norway maple	2	16.5	5.5	1.4 W	2.4	280	3.36	35	EM	F	Pair of multiple stem trees from ground level with tight forks where stems meet. Minor deadwood in lower crowns. No observed dieback or disease	No action required at time of survey	20+	C2	REM	0	0.0
TG7031		Apple	4	2.5	2	1 S	0.8	130	1.56	8	EM	F	Recently pruned/reduced ornamental garden trees. No observed dieback or disease	No action required at time of survey	20+	C2	REM	0	0.0
TG7032		Pedunculate oak	2	10	3	1.8 S	2	180	2.16	15	EM	F	Pair of self set trees growing from roadside hedge. No apparent significant defect	No action required at time of survey	20+	C2	RET	2	100.0
TG7033		Sycamore	3	17	5	2.3 W	1.9	360	4.32	59	M	F	Tight cluster of multiple stem trees with included unions where stems meet. Moderate deadwood in all crowns. No observed dieback or disease	No action required at time of survey	20+	C2	RET	3	100.0

Data for trees assessed as woodland (WG)

FLACRef. No.	TPO Ref	Species	Area (m ²)	Ht. (m)	M RCS (m)	Ht. 1 st 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 %
WG7001		Ash, sweet chestnut, hornbeam, hazel, silver birch, pedunculat e oak	13446	16	3.5	1.4 E	1.5	460	5.52	96	F	M	N and W boundary is demarked by row of overstood coppice hombeam/hazel along ditch/bank boundary. Most larger trees present around edge of group. Dense, relatively smaller/less mature birch and chestnut present within main body of group. Ground flora is dominated by bracken. Ash with edge of group are showing signs of ash dieback disease, but no significantly advanced at present. No other systemic issues apparent. Recorded by MAGIC as including replanted ancient woodland.	No action required at time of survey	40+	A3	RET	13446	100.0
WG7002		Silver birch, crack willow, ash, hazel, Norway spruce, Western hemlock, European larch.	8453	18	3.5	1.2 S	1.5	320	3.84	46	F	EM	Birch and other broadleaf trees from barrier around N edge of woodland with conifers forming main body of feature spreading off-site to S. No systemic issues observed. Recorded by MAGIC as including replanted ancient woodland.	No action required at time of survey	20+	B3	RET	8453	100.0
WG7003		Ash, pedunculat e oak, silver birch, crack willow, hazel	5970	16.5	3.5	0.8 S	1.4	360	4.32	59	F	EM	Mainly off-site woodland, dominated by densely spaced relatively less mature trees. There are larger, more mature trees around site boundary with the woodland. Occasional failed stem along boundary into fields. Ash trees within group show significant ash dieback in general. No other systemic issues observed. Recorded by MAGIC as including replanted ancient woodland.	No action required at time of survey	40+	A3	RET	5970	100.0
WG7004		Silver birch, alder, pedunculat e oak, ash, holly, hazel, European larch, Western hemlock	4444	17	4.5	1.8 N	2.2	420	5.04	80	F	M	Less dense woodland than elsewhere on site. Sparse understorey, likely due to deer browsing. No systemic issues observed. Recorded by MAGIC as including replanted ancient woodland.	No action required at time of survey	40+	A3	RET	4444	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	Proposal
H3001	Chery laurel, bay, holly	2	2	45	150	EM	F	Mixed species of mostly evergreen species. Some variation of density and height. Rather scrubby overall condition.	No action required at time of survey	20+	C2	PRET
H7001	Hazel, pedunculate oak	3	3.6	41	85	M	F	Well maintained garden boundary feature. No observed dieback or disease	No action required at time of survey	20+	B2	RET
H7002	Hawthorn, blackthorn	1.9	2	20	85	M	F	Well maintained garden boundary feature. No observed dieback or disease	No action required at time of survey	20+	B2	RET
H7003	Pedunculate oak, holly, field maple	2.5	1.2	53	65	M	F	Well maintained garden boundary feature. No observed dieback or disease	No action required at time of survey	20+	B2	RET
H7004	Hazel, hawthorn	5.2	2.4	51	65	M	F	Undermanaged and unkempt feature with significant gaps along length. No observed dieback or disease	No action required at time of survey	20+	C2	RET
H7005	Hazel, hawthorn	3	1.2	72	65	M	F	Well maintained garden boundary feature. No observed dieback or disease	No action required at time of survey	20+	B2	RET
H7006	Portuguese laurel, cherry laurel	1.5	1.2	22	45	M	F	Well maintained garden boundary feature. No observed dieback or disease	No action required at time of survey	20+	C2	RET



SHEET 1 OF 2

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 survey data where materially larger

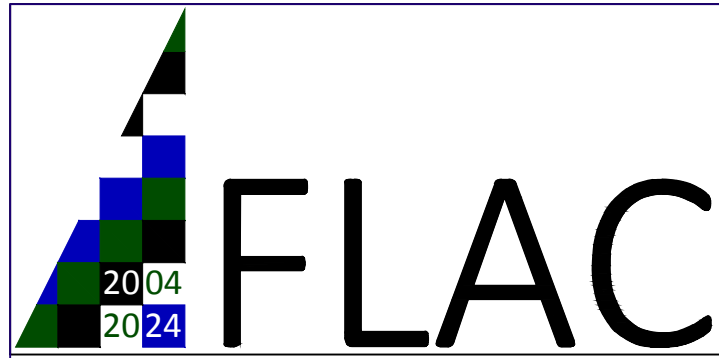
All tree positions are indicative (marked *) unless a topo survey has been provided to FLAC

Any trees omitted from topo
survey are located indicatively

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



Client
Miller Homes Ltd

Instruction
North Colwell Farm

Instruction ref.
CC43-1039

Dwg title
Tree Survey & Removal &
Retention Plan

Dwg no.
FLAC TSRRP 43-1039.04

Date
12.12.24

Scale
1:500 @ A0

Key

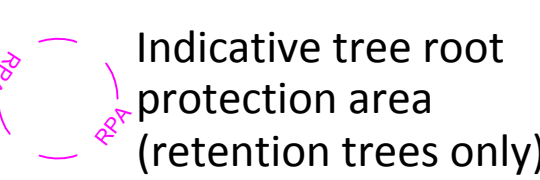
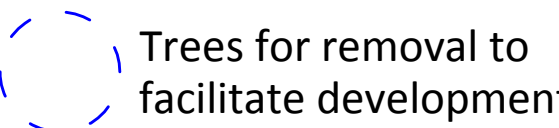
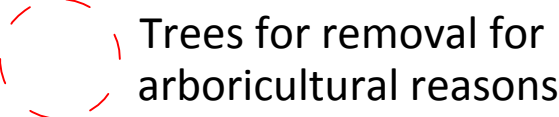
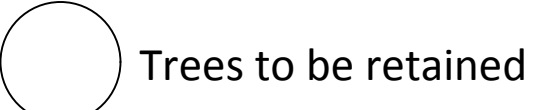
Quality & value grades:

Category A High

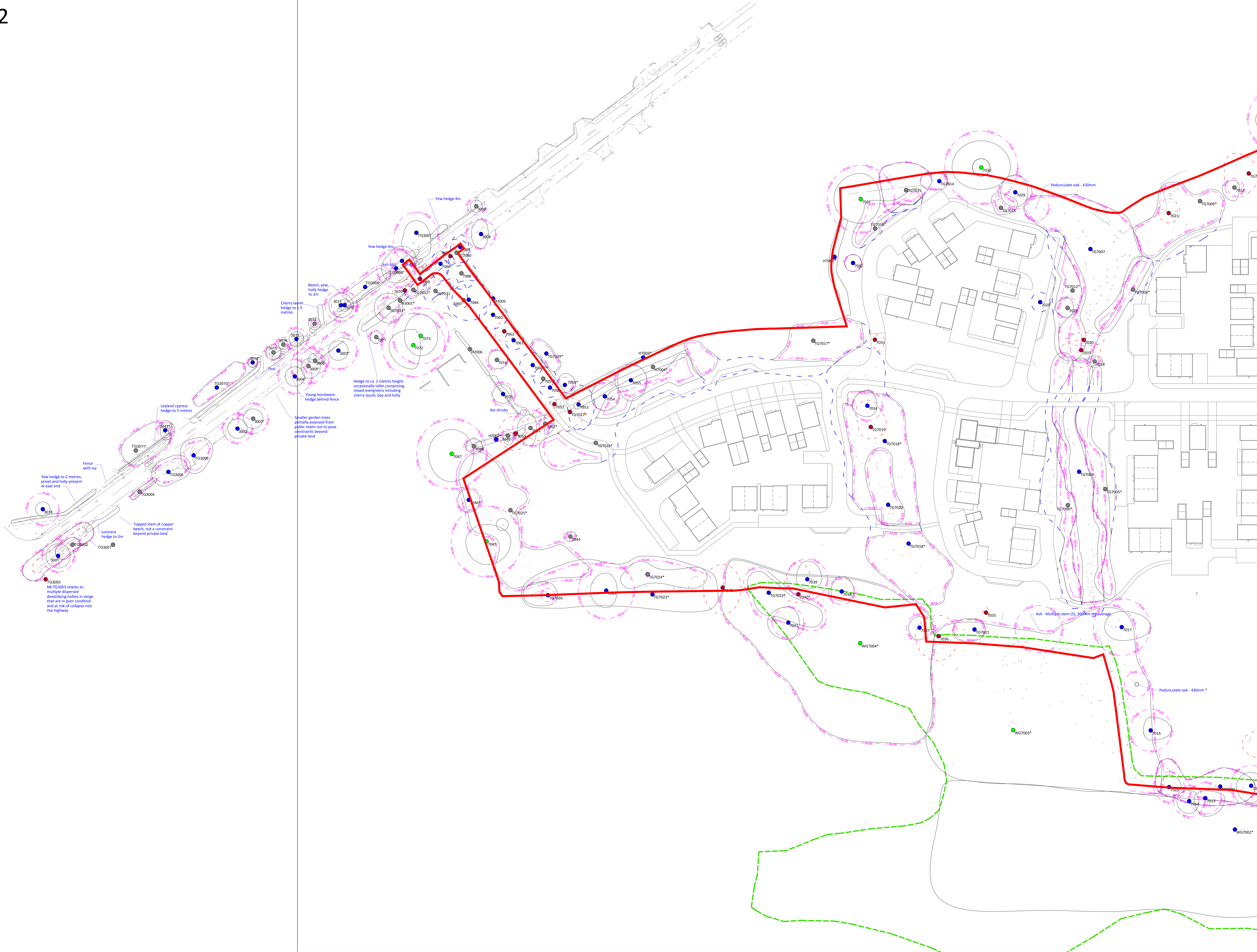
Category B  Moderate

Category C  Low

Category U Unretainable



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SHEET 2 OF 2

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 survey data where materially larger

All tree positions are indicative (marked *) unless a topo survey has been provided to FLAC

Any trees omitted from topo survey are located indicatively

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



Client
Miller Homes Ltd

Instruction
North Colwell Farm

Instruction ref.
CC43-1039

Dwg title
Tree Survey & Removal & Retention Plan

Dwg no.
FLAC TSRRP 43-1039.04

Date
12.12.24

Scale
1:500 @ A0

Key

Quality & value grades:

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

 Trees to be retained

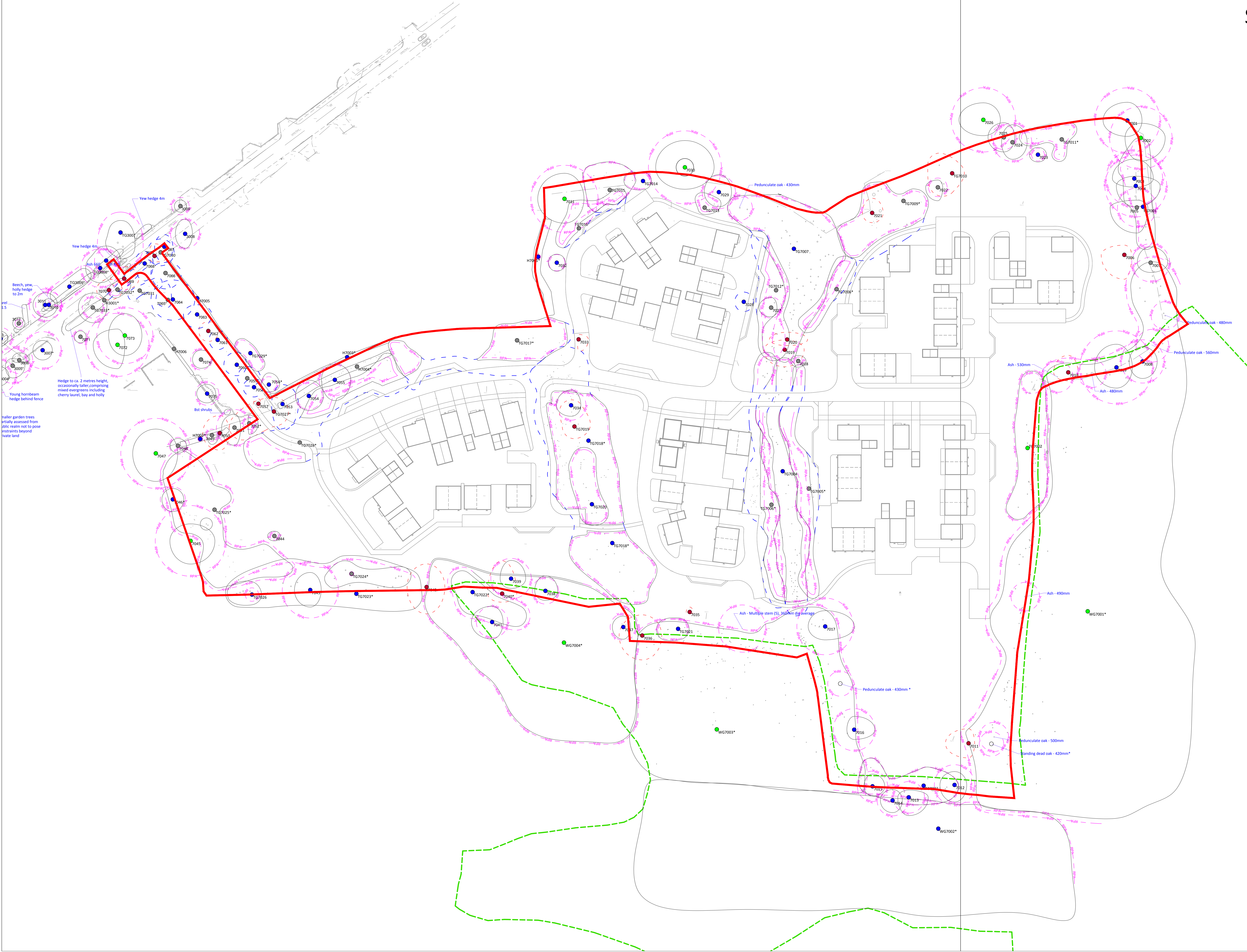
 Trees for removal for arboricultural reasons

 Trees for removal to facilitate development

 Indicative tree root protection area (retention trees only)

 MAGIC Ancient Woodland boundary

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SHEET 1 OF 2

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 survey data where materially larger

All tree positions are indicative (marked *) unless a topo survey has been provided to FLAC

Any trees omitted from topo survey are located indicatively

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



Client
Miller Homes Ltd

Instruction
North Colwell Farm

Instruction ref.
CC43-1039

Dwg title
Tree Protection Plan (Outline)

Dwg no.
FLAC TPP 43-1039.05

Date
07.01.25

Scale
1:500 @ A0

Key

Quality & value grades:

Category A ● High

Category B ● Moderate

Category C ● Low

Category U ● Unretainable

 Retained trees

 Indicative tree root protection area (retention trees only)

 MAGIC Ancient Woodland boundary

 FLAC Type 1 tree protection fencing (TPF), see Inset sketch 1

 FLAC Type 2 tree protection fencing (TPF), see Inset sketch 2

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ARBORICULTURAL METHOD STATEMENT

A) PRELIMINARY MATTERS

1. Prior to any ground modelling, demolition or construction work on site, the approved tree works (see FLAC dwg. no. 43-1039.04 or as superseded by full planning consent **NB** not Outline consent) 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, each phase shall have its **full system of physical tree protection measures** (barriers and ground protection) installed (i.e. not in piecemeal) 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 for a) works behind the primary alignment but within the RPAs and b) where proximity to site boundary does not allow on-site space for Type 1 scaffold framework supports

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. Site secure fencing may take the place of tree protection fencing if it a) suitably robust and b) provides no less protection for above and below ground tree constraints

C) PROHIBITIONS & PRECAUTIONS

8. 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
- Existing ditches within either RPAs or VTBs that are to be used for proposal drainage must not be cleaned, improved, re-graded or re-profiled
- 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

9. 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.

10. 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

11. 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

12. 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)

13. 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

E) ARBORICULTURAL SUPERVISION & REPORTING

14. 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

LANDSCAPING WITHIN RPAS

After primary construction has been completed the Tree Protection Fencing shall be removed to allow landscaping to take place.

Prior to landscaping commencing the project arboriculturist shall meet the landscape contractors to discuss what is proposed and precautions required.

The following principles shall be followed within the RPA of retained trees:

- No machinery shall pass over the ground unless protected by existing hard surface or temporary ground protection
- If excavation is required, this shall be localised and undertaken carefully by hand tools only ensuring that roots are preserved
- There shall be no changes in levels, unless agreed by the project arboriculturist

TREE PROTECTION PHASING SCHEDULE

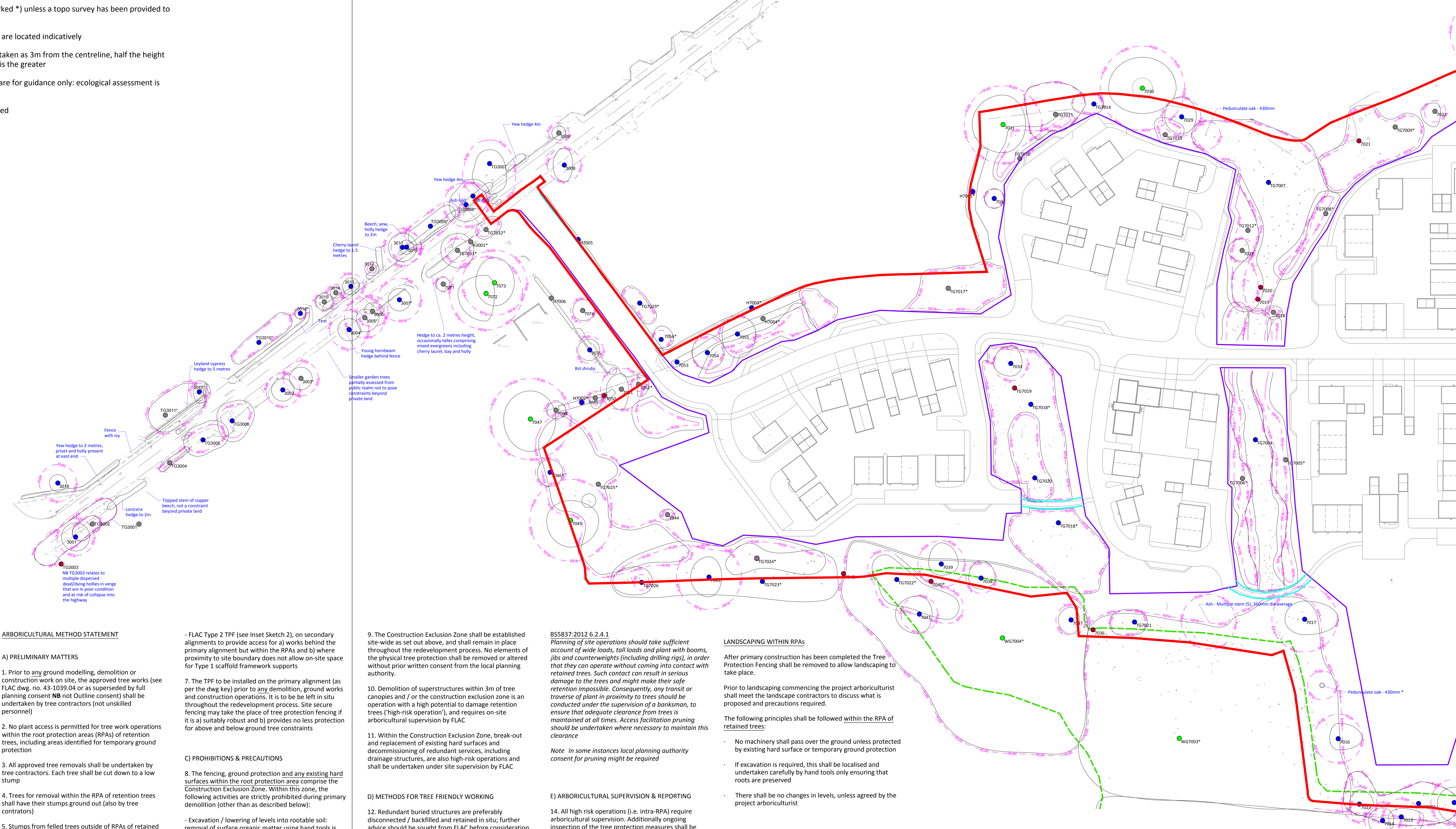
The following phasing schedule shall be strictly adhered to:

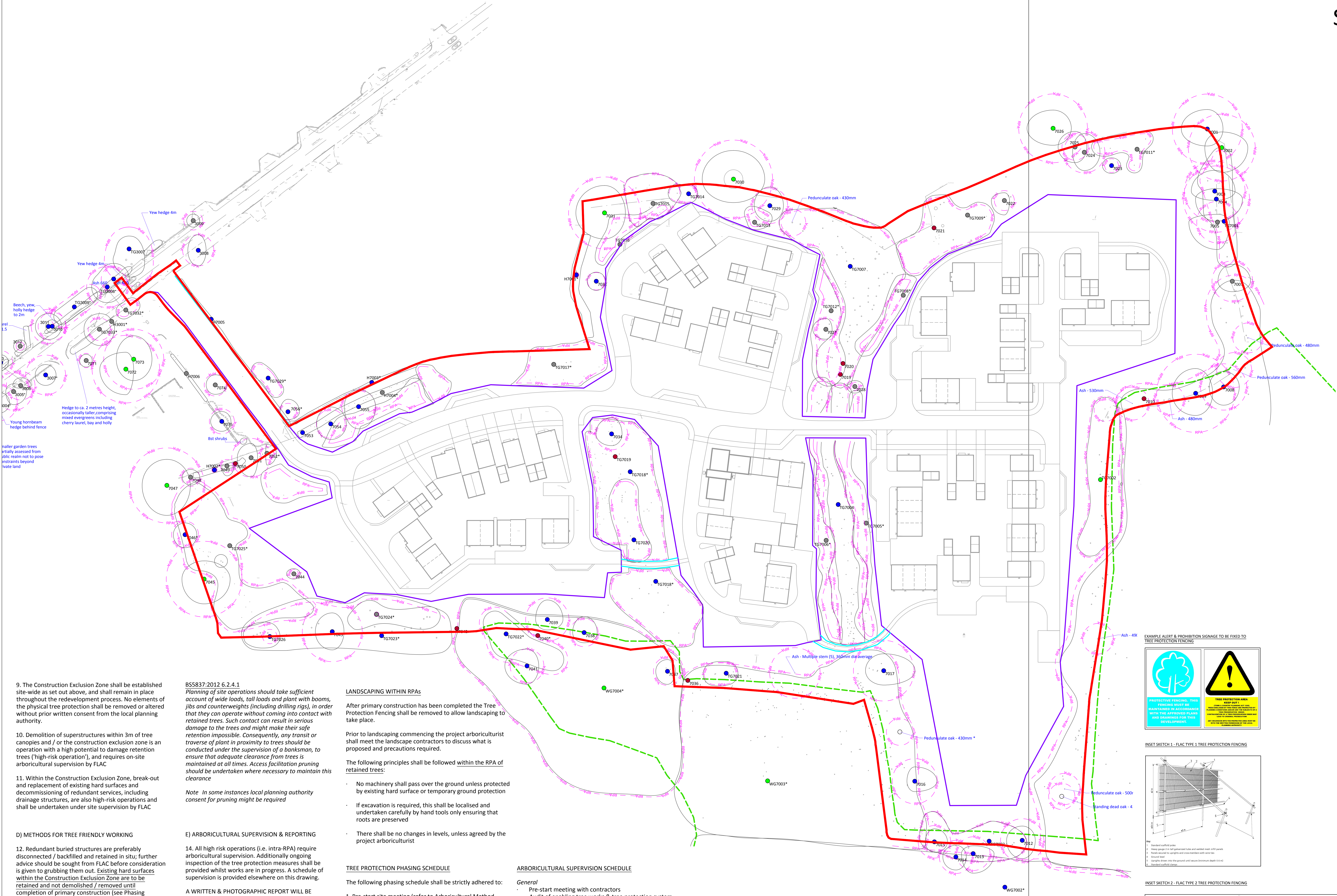
1. Pre-start site meeting (refer to Arboricultural Method Statement)
2. Implementation of physical tree protection (= establishment of Construction Exclusion Zone)
3. Audit of adjustments to/installation of secondary tree protection measures by FLAC
4. Primary construction
7. Secondary construction including hard landscaping
8. ARB OVERWATCH BY FLAC FOR ANY OPERATIONS WITHIN CONSTRUCTION EXCLUSION ZONE (see Arboricultural Supervision Schedule)
9. Removal of physical tree protection measures
10. Soft landscaping
11. Post-completion tree condition check by FLAC

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)





9. 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.

10. 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

11. 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

12. 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)

13. 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

E) ARBORICULTURAL SUPERVISION & REPORTING

14. 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

LANDSCAPING WITHIN RPAS

After primary construction has been completed the Tree Protection Fencing shall be removed to allow landscaping to take place.

Prior to landscaping commencing the project arboriculturist shall meet the landscape contractors to discuss what is proposed and precautions required.

The following principles shall be followed within the RPA of retained trees:

- No machinery shall pass over the ground unless protected by existing hard surface or temporary ground protection
- If excavation is required, this shall be localised and undertaken carefully by hand tools only ensuring that roots are preserved
- There shall be no changes in levels, unless agreed by the project arboriculturist

TREE PROTECTION PHASING SCHEDULE

The following phasing schedule shall be strictly adhered to:

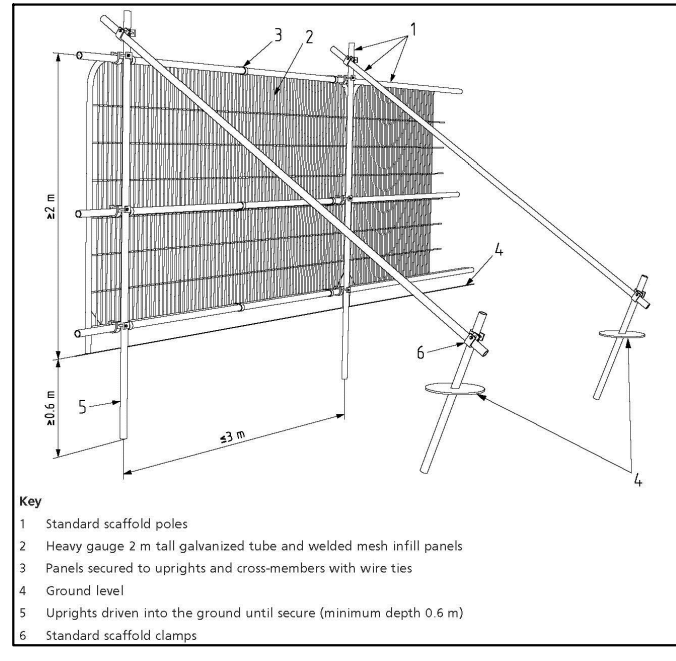
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2. Implementation of physical tree protection (= establishment of Construction Exclusion Zone)
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4. Primary construction
7. Secondary construction including hard landscaping.
8. ARB OVERWATCH BY FLAC FOR ANY OPERATIONS WITHIN CONSTRUCTION EXCLUSION ZONE (see Arboricultural Supervision Schedule)
9. Removal of physical tree protection measures
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ARBORICULTURAL SUPERVISION SCHEDULE

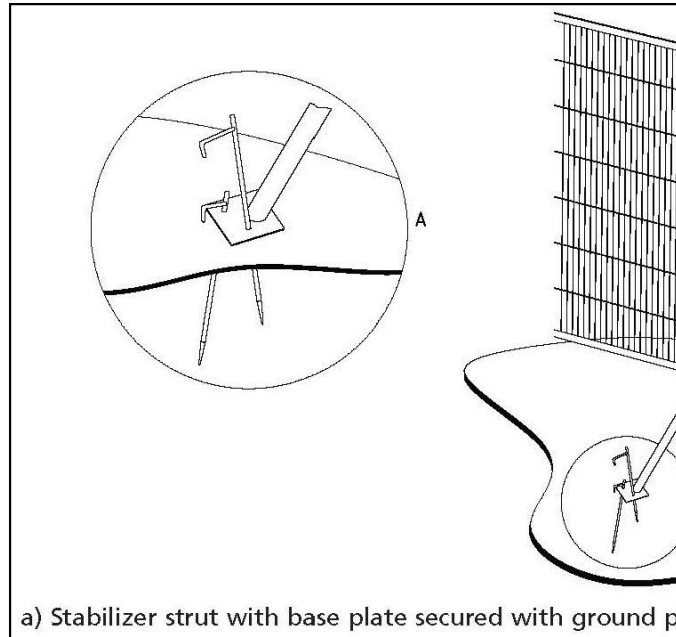
- General
- Pre-start meeting with contractors
 - Audit of enabling tree works & tree protection system, fencing and ground protection
 - 2x weekly visits
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 - All/any works within the root protection areas (RPAs)



INSET SKETCH 1 - FLAC TYPE 1 TREE PROTECTION FENCING



INSET SKETCH 2 - FLAC TYPE 2 TREE PROTECTION FENCING



Client
Miller Homes Ltd

Instruction
North Colwell Farm

Instruction ref.
CC43-1039

Dwg title
Tree Protection Plan (Outline)

Dwg no.
FLAC TPP 43-1039.05

Date
07.01.25

Scale
1:500 @ A0

Key

Quality & value grades:

Category A High

Category B Moderate

Category C Low

Category U Unretainable

Retained trees

Indicative tree root protection area (retention trees only)

MAGIC Ancient Woodland boundary

FLAC Type 1 tree protection fencing (TPF), see Inset sketch 1

FLAC Type 2 tree protection fencing (TPF), see Inset sketch 2

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