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**TREE & HEDGE REPORT
FOR**

**LAND ADJACENT TO KIRKLAND ROAD
ENNERDALE BRIDGE**

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31st January 2018**

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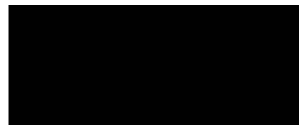
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Approved by T Elliott CEnv FRICS



V3 31st January 2018

1 INTRODUCTION

A tree and hedge survey has been undertaken on the instructions of Mr P Shannon of WYG plc on behalf of Genesis Homes Ltd as part of the preparation for an outline planning application for residential development on land adjoining Kirkland Road, Ennerdale Bridge, Cumbria CA23 3AP.

The survey was undertaken on the 31st August 2017. A total of 4 individual trees and 7 hedges or hedge sections were surveyed and assessed within and close to the site. The approach in BS 5837 (2012) Trees In Relation To Construction Sites: Recommendations, and the criteria in the Hedgerow Regulations 1997 have been followed.

The site adjoins Kirkland Road on the northern edge of the village of Ennerdale Bridge and extends to approximately 1ha, being part of an agricultural pasture field with general gradients to the south. It is understood that the proposed development is for 11 detached residential units with private gardens and a shared access on to Kirkland Road.

Appendix 1 provides photographs of the trees and hedges, Appendix 2 describes the tree classification system used, Appendix 3 provides details of the tree and hedge survey itself, Appendix 4 provides a tree and hedge constraints plan; Appendix 5 the proposed development plan; and Appendix 6 the proposed landscape plan.

It should be noted that assessments for tree condition have been made following a ground based inspection – test boring, ultrasound and climbing investigations do not form part of this report. Similarly, the presence of cavities was assessed from ground level by visual inspection. It is not possible to guarantee the safety of any tree, even trees with no apparent defects can collapse, or partially collapse, in extreme weather conditions. Trees are dynamic, biological systems which are subject to change with age, as a result of changes to the environment and the effects of pathogens. These factors reinforce the need to have trees inspected regularly, particularly those where defects have already been noted. This report is not a mandate to undertake any recommended works, and appropriate consent should be sought and obtained, where these are applicable.

2 TREE AND HEDGE SURVEY

2.1 General Description

The site covers an area of approximately 1ha and comprises part of a permanent pasture field with general gradients to the south, which is bounded by hedgerows on the east and south sides, which themselves connect to further hedges beyond. The northern boundary crosses the open fields. Immediately to the east of the site is Kirkland Road and there is a minor stream / ditch and culvert which winds in and out but generally flows southwards close to the eastern hedgerow boundary. Kirkland Road itself becomes a sunken road past the south eastern part of the site with a bank up to the hedge and field level in this area. There are domestic gardens to the south separated from the site by hedges.

The physical dimensions, stage of growth and condition of the trees and hedges are described in Appendix 3. The criteria in the Hedgerow Regulations 1997 have been used to assess the value of the hedges and these assessments are included in the tree and hedge schedules, also at Appendix 3. Appendix 4 provides a tree and hedge constraints plan with a position, reference number and other details plan; Appendix 5 the proposed development plan; and Appendix 6 the proposed landscape plan.

2.2 Trees and Hedges within the Site Boundary

The trees within the site include three within the eastern boundary hedge and at its north-east corner; Tree T1 is an alder (*Alnus sp.*) at the north eastern corner of the site; trees T2 and T3 are both ash (*Fraxinus excelsior*) of early mature growth stage as hedgerow trees; T4 is an oak (*Quercus sp.*) in an off-site garden and T5 is a young ash in the north-western corner.

The eastern boundary hedge was assessed in sections in accordance with the Hedgerow Regulations and according to its characteristics.

H3 comprised the northern part which is an old mixed hedge with 7 woody species including hazel (*Corylus avellana*), goat willow (*Salix caprea*), hawthorn (*Crataegus monogyna*), holly (*Ilex aquifolium*), gorse (*Ulex europaeus*), ash (*Fraxinus excelsior*), alder (*Alnus sp.*) and ivy (*Hedera helix*), with a ground layer including ground ivy, harebell, bramble, horsetail, mosses and grasses. It also lies on a low cam, has few gaps, has a ditch adjacent and there is a parallel hedge on the eastern side of the road as well as connectivity to further hedges to the north. This hedgerow has been classified as an Important Hedgerow under the Regulations.

H4 is the central section of the hedgerow and of a younger age - considered to be less than 30 years old, but follows an old field boundary alignment. It comprises young to early mature hedge plants of hazel, alder, goat willow, birch (*Betula sp.*), gorse and rose (*Rosa sp.*), with a bramble, rush, thistle and grasses ground layer. A 23m length has the youngest trees which are still in a gappy condition and up to 1.5m high. It is not considered to meet the criteria for being an Important Hedgerow.

H5 comprises the southern section of the eastern hedgerow and includes 7 woody species of hazel, ash, gorse, hawthorn, blackthorn (*Prunus spinosa*), holly and dog rose (*Rosa canina*), with a ground layer including harebell, bramble, cleavers, grasses and mosses. There are a further four features including an adjacent stream for part of its length, its position on a bank, two standard trees and a parallel hedgerow to the east of Kirkland Road. This has been classified as an Important Hedgerow under the Regulations.

Hedge H6 is a privet (*Ligustrum ovalifolium*) garden hedge of early mature age class in fair condition.

Hedge H7 has three qualifying woody species of hawthorn, blackthorn and elder (*Sambucus nigra*) as a field / garden hedge which has been planted on a low cam. This hedgerow is not classified as an Important Hedgerow.

2.3 Trees and Hedges outside the Site Boundary

Two further trees were just off-site in the garden to the south-west and at the north-east / north-west corner of the site, which were included because they are within potential influencing distance of the site.

Hedge H1 lies adjacent to Kirkland Road and to the north-east of the site, but connected to it, and is classified as an Important Hedgerow with 6 woody species and two other qualifying features. It is continuous to the north-east with a parallel hedgerow to the east of Kirkland Road which also leads to a woodland.

Hedge H2 leads northwards from the site and is a discontinuous blackthorn, holly, hazel hedge with a large gap and other smaller gaps within the first 100m northwards from the site. This is not classified as an Important Hedgerow.

3 IMPACTS OF THE PROPOSED DEVELOPMENT

The outline development plan ME-GH Ennerdale Bridge 1722-PL201 at Appendix 5 has been assessed in relation to the proposal, in conjunction with the Landscape and Planting Plan at Appendix 6 (Drawing No.03 Rev. 00, Eden Environment Ltd), illustrating the proposed translocation of the impacted hedges and new tree and hedge planting.

Sections of the hedges located along the eastern site boundary (part hedge 3, the whole of hedge 4 and part hedge 5) will be impacted through the development of the access road and its visibility splay and the access to the waste treatment plant from Ennerdale Road.

In relation to hedges 3 and 4, the Landscape proposals specify that 35m of Hedge 3 and 5m of Hedge 4 will be translocated (the majority of the affected hedge lengths) and are then included as part of the landscaping for the visibility splay needed for the main access road. Undisturbed hedgerow trees are to be protected and grown on as hedgerow trees.

Approximately 10m of hedge 5, on the south eastern boundary of the site will also be translocated to create an access for the proposed water treatment plant located in the south eastern corner of the development.

Tree 3 will be removed from the south eastern corner as it is located at the entrance to the proposed access road for the water treatment plant.

The landscape proposals specify a number of new trees and hedges to be planted as part of the landscaping for the development, to improve existing and new boundaries, and also to include new planting and woodland within the development, as part of mitigation and enhancement proposals.

4 ARBORICULTURAL METHOD STATEMENT

The retained trees will need protection for roots, trunks and branches during ground works and construction. The trees will be protected by erecting barrier fencing as defined below. Note that this is likely to coincide with the alignment of site construction safety fencing.

Above-ground Protection

Above ground protection should take the form of barrier fencing.

Protective fencing should enclose tree canopies in all areas where ground-works are not required (other than where canopies extend over parking and access routes).

The fencing will remain in place until completion of the development and then only removed with the consent of the Local Planning Authority to permit completion of the scheme. Other than works detailed within this Method Statement or approved in writing by the Local Planning Authority, no works including storage or dumping of materials shall take place within the Construction Exclusion Zones (CEZs) as defined by the protective fencing.

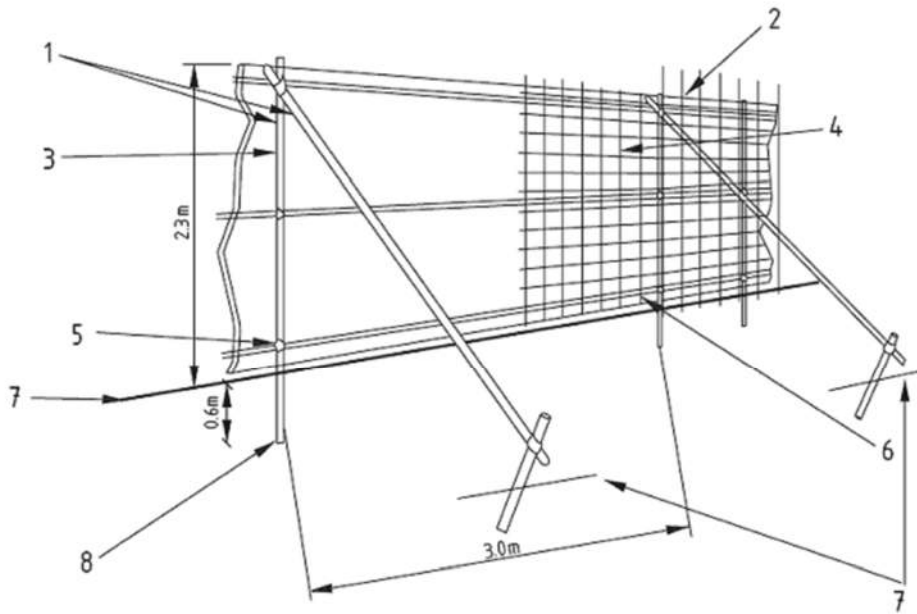
Construction of Protective Fencing

Barriers should consist of a scaffold framework in accordance with BS 5837:2012 Trees in relation to construction - Recommendations; section 9, comprising a vertical and horizontal framework, well braced to resist impacts, with vertical tubes spaced at a maximum interval of 3m. Onto this, weld-mesh panels should be securely fixed with wire or scaffold clamps. Weld-mesh panels on rubber or concrete feet are not resistant to impact and should not be used unless they are effectively pinned down and braced. The use of any alternative method of fencing should only be allowed following prior approval from the site arboriculturalist or the Local Planning Authority.

Protective fencing should enclose tree canopies in all areas where ground-works are not required (other than where canopies extend over parking and access routes).

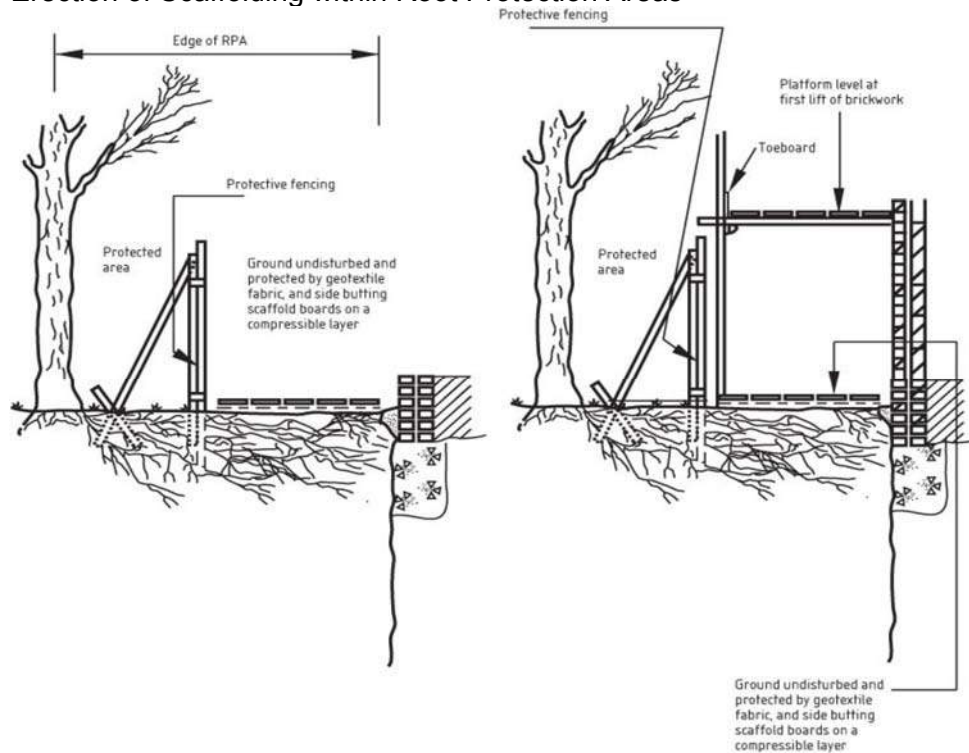
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Protective Fencing Details

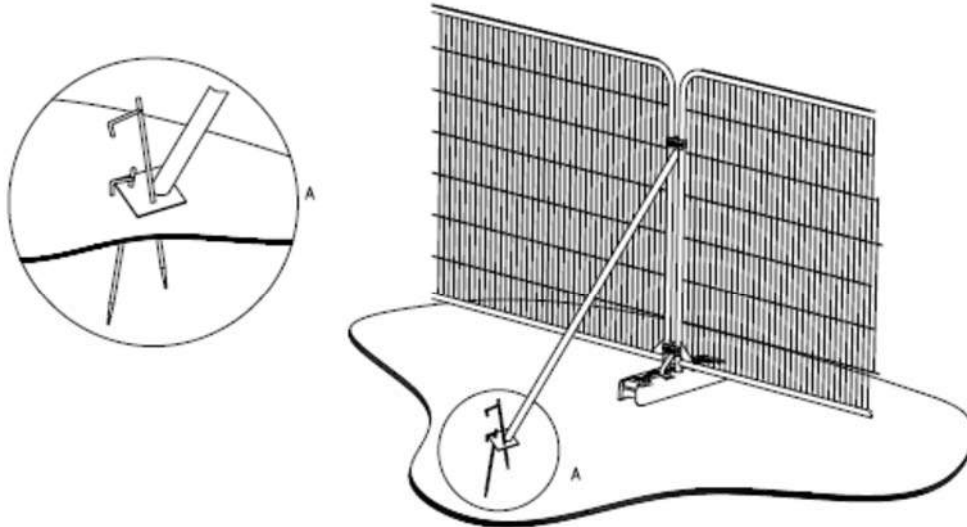


- | | |
|--|--|
| 1 Standard scaffold poles | 5 Standard clamps |
| 2 Uprights to be driven into the ground | 6 Wire twisted and secured on inside face of fencing to avoid easy dismantling |
| 3 Panels secured to uprights with wire ties and where necessary standard scaffold clamps | 7 Ground level |
| 4 Weldmesh wired to the uprights and horizontals | 8 Approx. 0.6 m driven into the ground |

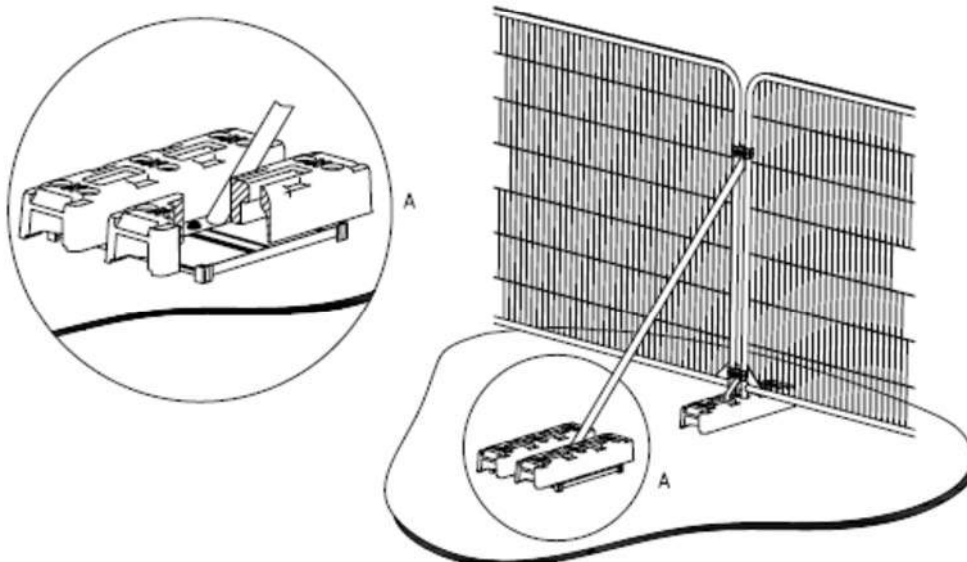
Erection of Scaffolding within Root Protection Areas



Examples of above-ground stabilizing systems



a) Stabilizer strut with base plate secured with ground pins



b) Stabilizer strut mounted on block tray

Where the site circumstances and associated risk of damaging incursion into the RPA do not necessitate the default level of protection, an alternative specification should be prepared by the project arboriculturist and, where relevant, agreed with the local planning authority. For example, 2 m tall welded mesh panels on rubber or concrete feet might provide an adequate level of protection from cars, vans, pedestrians and manually operated plant. In such cases, the fence panels should be joined together using a minimum of two anti-tamper couplers, installed so that they can only be removed from inside the fence. The distance between the fence couplers should be at least 1 m and should be uniform throughout the fence. The panels should be supported on the inner side by stabilizer struts, which should normally be attached to a base plate secured with ground pins (Figure 3a). Where the fencing is to be erected on retained hard surfacing or it is otherwise unfeasible to use ground pins, e.g. due to the presence of underground services, the stabilizer struts should be mounted on a block tray.

Protective Fencing Minimum Distances

The list below gives minimum distances from the trunk to protective fencing for retained trees within the site. Wherever possible fencing beyond these distances is desirable and fencing should enclose tree canopies unless access beneath the canopy is absolutely necessary.

- Tree 1: 3m
- Tree 2: 4.5m

Construction Exclusion Zones

No works access should be allowed into the Construction Exclusion Zones (CEZs) during the development phase. No storage of any building materials or any other materials should be allowed within the CEZs.

Once the exclusion zones have been protected by barriers and/or ground protection, construction work can commence. All weather notices should be erected on the barrier with words such as: "Construction Exclusion Zone — Keep Out".

In addition the following should be addressed or avoided.

- Care should be taken when planning site operations to ensure that wide or tall loads or plant with booms, jibs and counterweights can operate without coming into contact with retained trees. Such contact can result in serious damage to them and might make their safe retention impossible. Consequently, any transit or traverse of plant in close proximity to trees should be conducted under the supervision of a banksman to ensure that adequate clearance from trees is maintained at all times.
- Material which will contaminate the soil, e.g. concrete mixings, diesel oil and vehicle washings, should not be discharged within 10m of the tree stems.
- Fires should not be lit in a position where their flames can extend to within 5m of foliage or branches of trunk. This will depend on the size of the fire and the wind direction.
- Notice boards, telephone cables or other services should not be attached to any part of the trees.
- It is essential that allowance should be made for the slope of the ground so that damaging materials such as concrete washings, mortar or diesel oil cannot run towards trees.

Excavations within Root Protection Areas

All excavations for landscaping or re-surfacing works within RPAs must be carried out following the guidelines set out in NJUG Volume4 (National Joint Utilities Guidance Volume 4 *Guidelines for the Planning, Installation And Maintenance Of Utility Apparatus in Proximity To Trees issue 2*).

Root Protection

Fine roots are vulnerable to desiccation once they are exposed to the air. Larger roots have a bark layer which provides some protection against desiccation and temperature change. The greatest risk to these roots occurs when there are rapid fluctuations in air temperature around them e.g. frost and extremes of heat. It is therefore important to protect exposed roots where they are to be left open overnight where there is a risk of frost. In winter, before leaving the site at the end of the day, the exposed roots should be wrapped with dry sacking. This sacking must be removed before the trench is backfilled.

All roots greater than 25mm diameter should be preserved and worked around. These roots must not be severed unless absolutely necessary following approval from the sites arboriculturist. If after consultation severance is unavoidable, roots must be cut back using a sharp tool to leave the smallest wound possible. No roots above 50mm in diameter will be severed without prior approval from the local authority's arboricultural officer. It is not anticipated that severance of any large roots will be required.

Hand Digging / Airspade

The objective of hand digging is to retain as many undamaged roots as possible. Hand digging within RPA must be undertaken with great care preferably using an airspade, preferably under supervision from the sites arboricultural consultant. After careful removal of any hard surface materials digging must proceed with hand tools. Clumps of roots less than 25mm in diameter (including fibrous roots) should be retained in situ without damage. Throughout the excavation works great care should be taken to protect the bark around the roots.

Backfilling

Backfilling should where required be carefully carried out to avoid direct damage to roots and excessive compaction of the soil around them. The backfill should, where possible, include the placement of an inert granular material mixed with top soil or sharp sand (not builder's sand) around the roots. This should allow the soil to be gently compacted prior to construction without damage to the roots, securing a local aerated zone enabling the root to survive in the longer term. If required backfilling outside the direct influence of tree roots should be carried out using the excavated soil. This should not be compacted but lightly "tamped" and usually left slightly proud of the surrounding surface to allow natural settlement. Other materials should not be incorporated into the backfill.

Tree Works

Some tree works do not relate directly to the proposed development and although this / these operations are recommended they need not necessarily be carried out in order to allow development to proceed. The operations are therefore listed as optional in the schedule below although it is still advised that recommendations are followed.

Schedule of Arboricultural Works

1. Provide site managers with a copy of Arboricultural report.
2. Install protective fencing including information signs.

3. Install ground protection.
4. Tree Protection Plan to be mounted in works cabin.
5. Brief all site staff regarding protective measures (ongoing).
6. Construction phase.
7. Install new surfacing and services (if any) using special construction techniques within Root Protection Areas.
8. Construction Phase – including all further construction and landscaping works including new tree planting.
9. Remove tree protection – only once all development activity is completed.
10. Completion.

All staff on site should be briefed regarding the protective measures to be enforced.

Construction should not proceed prior to the installation of the protective measures and these should remain in place for the entire duration of the construction phase. Only once the construction phase is completed in its entirety should the protective fencing be removed.

Arboricultural Supervision

Arboricultural supervision should be available during the installation of ground protection and during installation of surfacing and foundations using special construction techniques.

Any deviation from the prescribed method statement or the occurrence of any unforeseen damage to the sites trees must be immediately reported to an arboricultural advisor. All works on site must be halted immediately. The advisor will make a site visit to assess the extent of the damage or deviation from the prescribed method statement and any resulting works required. The local authority planning department will also be immediately informed and the advisor will provide them with a written assessment of any such damage or deviation from the prescribed method statement.

Other Site Factors

Protected Wildlife

It is an offence under the Wildlife and Countryside Act 1981 (and amendments) and the EU Habitats Directive to disturb and or destroy the nests of bats, birds and other protected wildlife. It is therefore advised that tree contractors check for the presence of bats and birds nests prior to carrying out tree removals.

APPENDIX 1 – PHOTOGRAPHS



Photo 1. Hedge H1 to north east of site. Important Hedgerow under Hedgerow Regulations 1997.



Photo 2. Hedge 2 to north of site.



Photo 3. T1 in north east corner of site.



Photo 4. H3 general view south. An Important Hedgerow under Hedgerow Regulations 1997.



Photo 5. H3 general view south..



Photo 6. Hedge H3 looking north. An Important Hedgerow under Hedgerow Regulations 1997.



Photo 7. Hedge H3 with stream in foreground.



Photo 8. Old ash stump in H3.



Photo 9. H4 looking south.



Photo 10. Northern end of H4.



Photo 11. H4 gappy young hedge section.



Photo 12. H5 hedge looking north. An Important Hedgerow under Hedgerow Regulations 1997



Photo 13. Old stump in H5.



Photo 14. Tree T2 within hedge H5.



Photo 15. Tree T3 within hedge H5.



Photo 16. Garden hedge H6.



Photo 17. Southern hedge H7.



Photo 18. Tree T4 to the south of H7.



Photo 19. Tree T5 in north west corner of the site.

APPENDIX 2 – CLASSIFICATION CRITERIA

Classification Criteria

Information on the trees is provided in the Tree Tabular Data Section as follows:

The presentation has been slightly changed from the tree survey pro-forma detailed in BS 5837:2005, to allow for greater comment, but follows a similar approach.

Species - The most commonly used name is given only.

Age Class

RP	Recently planted trees	Up to approx 5 years old.
Y	Young	Established tree up to one third the expected ultimate height.
EM	Early Mature	Between one third and two thirds the expected ultimate height. Growth rate still increasing.
YM	Young Mature	Growth rate stabilises, although tree has not obtained full potential stature.
M	Mature	Full stature achieved, more or less full height, but still increasing in girth.

NOTE: The Young Mature and Mature period may account for approximately half the trees' life-span.

LM	Late Mature	Crown may begin to decline. Annual increment declines or slows down.
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Intermediate classifications have been used where trees do not fall clearly within an age class.

Diameter at Breast Height – (dbh. measured in centimetres at approx 1.5m)

Height – (Approximate height. Measured in metres)

Height of Main Fork – The height of top of main stem.

Height of Crown – The height of the crown (to general lowest point above ground level) where appropriate.

Crown Spread – (Approximate crown spread, measured in metres, to each cardinal point)

Condition - A general classification of condition: For example, Good; Fair; Poor; Dead; Dangerous and intermediate classifications, followed by more detailed information regarding condition or any other comments regarded as relevant.

Recommendations - Action recommended in the interests of safety and in accordance with good arboricultural practice.

Physiological Condition – Overall appraisal of the trees health / biological condition together with any relevant comments e.g. pests and diseases.

- Good
- Fair
- Poor
- Dead

Structural Condition – Overall appraisal of the trees structural condition together with any relevant comments e.g. dead, damaged branches.

- Good
- Fair
- Poor
- Dead

Action and Comments (in the context of proposed development)

Recommendations – action required to facilitate the development

Category Grading –

- U – Unsuitable, dead, dangerous, dying; less than 10 year useful contribution
- A – High Quality and Value; minimum of 40 year useful contribution
- B – Moderate Quality and Value; minimum of 20 year useful contribution
- C – Low quality and value categories

Sub categories for A, B, C above –

- 1 – Mainly arboricultural values
- 2 – Mainly landscape values
- 3 – Mainly cultural / conservation values

Tree Quality Assessment Cascade Chart

Trees for removal			
Category and definition	Criteria		
<p>Category U Those in such a condition that any existing value would be lost within 10 years, and which should in the current context, be removed for sound arboricultural reasons.</p>	<ul style="list-style-type: none"> Trees that have a serious, irremediable, structural defect, such that their early loss is expected due to collapse. Includes those that will be exposed following removal of other category U trees, because their sudden exposure increases risk of failure. Trees that are dead or are showing signs of irreversible, immediate decline. Trees infected with pathogens that threaten the health or safety of other trees nearby. Very low value trees restricting the growth of specimens of better quality. <p>NOTE: Habitat re-instatement or protection may be appropriate for species such as bats. E.g. installation of bat boxes, or leaving as a safe structure of no arboricultural value, but very good for invertebrates, owls, woodpeckers etc.</p>		
Trees to be considered for retention			
Category and definition	1. Mainly Arboricultural Values	2. Mainly landscape values	3. Mainly cultural values inc conservation
<p>Category A Those of high quality and value: in such a condition as to be able to make a substantial contribution for a min. of 40 years</p>	Good examples for the species (maybe rare or unusual), or essential components of groups, or of formal or semi-formal arboricultural features.	Trees, groups or woodlands which provide a definite screening or softening effect to the locality (views into or out of the site), or those of particular visual importance.	Trees, groups or woodlands of significant conservation, historical etc value.
<p>Category B Those of moderate quality and value: those in such a condition as to make a significant contribution for a minimum of 20 years.</p>	Trees downgraded from A because of impaired, but remediable, condition.	Trees present in numbers that form part of distinct landscape features, that are collectively of more value than they would be as individuals, but are not essential parts of more formal arboricultural features (eg avenues). Or trees internal to a site, with little visual impact on the wider locality.	Trees with clearly identifiable conservation or other cultural benefits
<p>Category C Those of low quality and value: Currently in adequate condition to remain until new planting could be established for a minimum of 10 years. Also young trees with a stem diameter below 150mm.</p>	Trees not qualifying as category A or B.	Trees that are only of value because of their contribution to a group, or trees offering only low or temporary screening benefit.	Trees with very limited or low conservation or cultural benefits.
<p>NOTE: Whilst Category C trees will usually not be retained where they would impose a significant constraint on development, trees less than 150mm could be relocated on site.</p>			

APPENDIX 3 – TREE AND HEDGE SURVEY ASSESSMENTS

Tree and Hedge Schedule

Ref Number	Species	Height	Diam. (DBH)	Branch Spread	Ht of fork; crown	Age Class	Structural Condition	Physiological Condition	Comments	Length hedge surveyed / tree RPA	Value Category
H1	6 Blackthorn, (sycamore), holly, hazel, ash, (bramble), oak, rose, travellers joy	3m	Up to 20cm	N: 1m S: 1m		M	Roadside verge to the south. Pasture field to north & protective post and rail fence. Stream cuts through at corner.	Cut every 3 – 5 years? Continuous 200m+ & post & rail gapped. Hedges both sides of road. Woodland 200m northeast. Ferns Bramble, ground ivy, grasses, umbellifer, groundlayer.	E-W Hedgerow off site to the North east.	30m length surveyed	6 Woody Species
											2 Features: • No gaps • Parallel hedge.
											Important Hedgerow
H2	Blackthorn, holly, hazel	3m max 2m av	Up to 15cm	E: 1-2m W: 1m		EM	2 x 5m gaps from corner. Large gap 35m from corner 50m in length. Stream to east side	Gorse, ferns, harebell, grasses groundlayer.	N-S Hedgerow off site to the North.	100m surveyed	3 Woody Species
											1 Feature: • Ditch.
											Not an Important Hedgerow
T1	Alder	5m	Multi 20cm x 8	N:3 m E: 3m S: 3m W: 3m	0.0m 1.0m	EM	Fair	Fair	At hedge junction of H1, H2 and H3, in NE corner of site.	3m	C2
H3	Hazel, goat willow, hawthorn, holly, gorse, ash, alder, ivy,	Up to 3.5m	Up to 30cm & old large ash stump 50cm	N: m E: 1m S: m W: 1-4m		M	Fair. Very large old stumps & coppiced. On 0.5 – 1m cam of soil.	Northern 10m has stream adjacent. Middle has o/flow to west down field for 20m. Ground ivy, harebell, bramble, horsetail, mosses, grasses groundlayer. .	N-S Northern section of eastern hedgerow. <i>Note that for H3 – H5 parallel hedge across road is continuous and leads to woodland to the NE.</i>	30m surveyed	7 Woody Species
											4 Features: • No gaps • Cam • Parallel hedge • Ditch adjacent
											Important Hedgerow

Tree and Hedge Schedule

Ref Number	Species	Height	Diam. (DBH)	Branch Spread	Ht of fork; crown	Age Class	Structural Condition	Physiological Condition	Comments	Length hedge surveyed / tree RPA	Value Category
H4	6 Hazel, alder, goat willow, birch, gorse, rose	1.5m	Up to 25cm	N: m E: 0.5m S: m W: 0.5m		EM to Y	Younger than H3 gapped up? Still gappy at south end.	Bramble, rush, thistle grasses groundlayer	N-S central section of eastern hedgerow. At south end becomes as a "Gapped-up section" with p & w fence.	30m length	<30 years old but old alignment 6 Woody Species
											1 Feature: • Parallel hedge
											Not an Important Hedgerow
H5	7 Hazel, ash, gorse, hawthorn, blackthorn, holly, dog rose.	Up to 3.5m	Up to 25cm old v large stump 40cm	N: m E: 1m S: m W: 2m		M	Fair. Post & wire under. Less continuous at south end.	Stream 1m to west over 30m northern. Harebell, bramble cleavers, grasses, mosses, groundlayer.	N-S southern section of eastern hedgerow.	30m length surveyed	7 Woody Species
											4 Features: • Stream • Parallel hedge • Bank • 2 standard trees
											Important Hedgerow
T2	Ash	8m	37cm	N: 4m E: 3m S: 4m W: 5m	2.0m 1.5m	YM	Fair. Ivy covered.	Fair	In hedge line 30m from south boundary.	4.5m	B2
T3	Ash	8m	40cm	N: 4m E: 4m S: 4m W: 4m	4.0m 2.0m	YM	Fair. Ivy covered. Basal young stems.	Fair	In hedge line on edge of sunken road which is 1.5m below.	4.8	B2

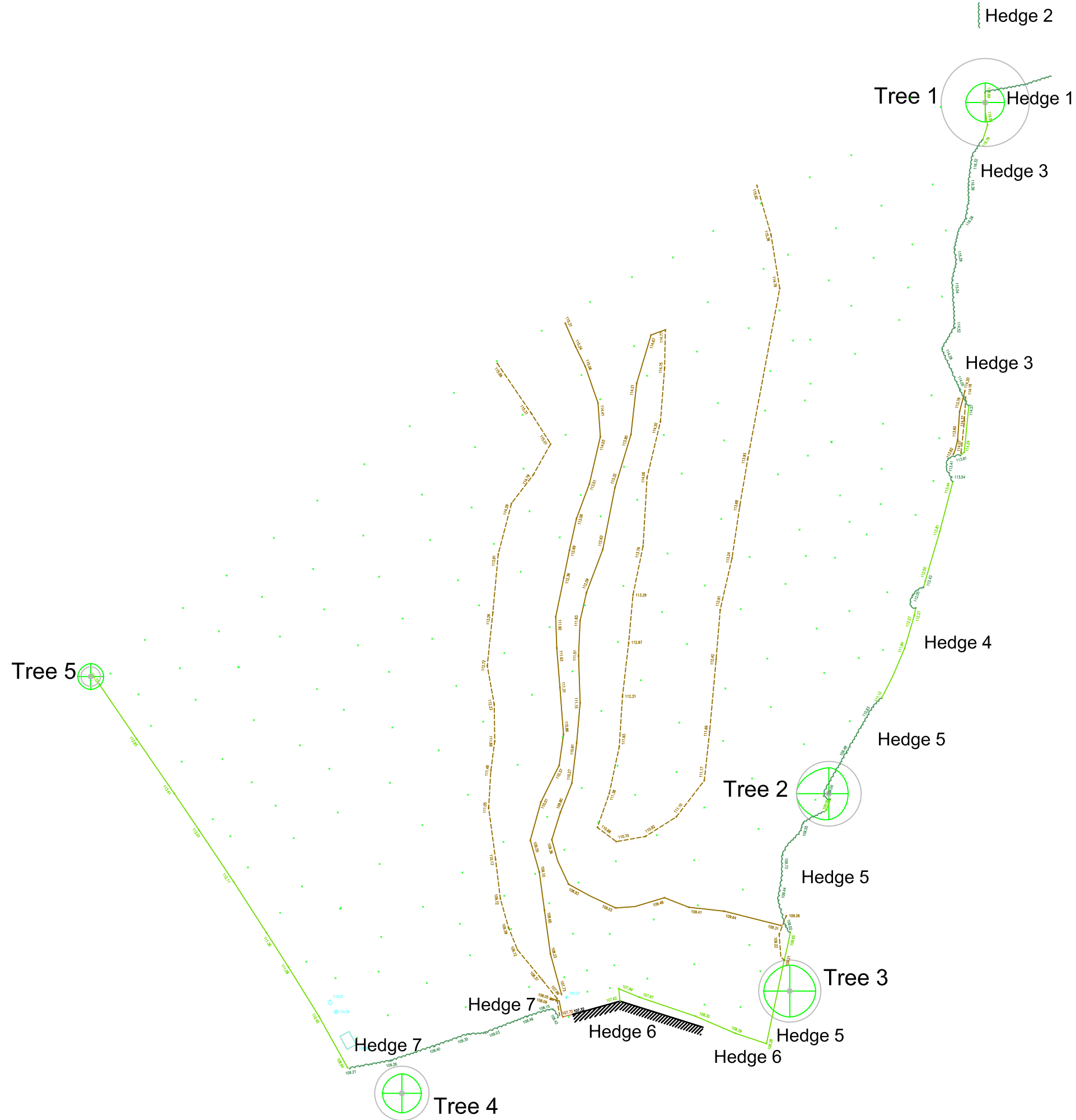
Tree and Hedge Schedule

Ref Number	Species	Height	Diam. (DBH)	Branch Spread	Ht of fork; crown	Age Class	Structural Condition	Physiological Condition	Comments	Length hedge surveyed / tree RPA	Value Category
H6	Privet	Trimmed to 1.5m	7.5cm	N: m E: m S: 0.5m W: m		EM	Fair	Fair	Garden hedge.		
H7	Hawthorn, blackthorn, elder, snowberry	2m	Up to 10cm	N: 1m E: m S: 0.5m W: m		YM	Fair. Leggy to 1.5m	Fair. Mosses, ground ivy, ferns, nettles.	E-W southern hedgerow. Planted hedge on 0.5m cam? Trimmed top every 2 years? Not laid.		3 Woody species
											1 Feature: • Bank
											Not an Important Hedgerow
T4	Oak	5m	35cm estd	N: m E: m S: m W: m	2.5m 3.0m	EM	Fair	Fair	Off site 3m to south. Also apple 10m further east.	1.2m onsite	B2
T5	Ash	5m	13cm	N: 2m E: 2m S: 2m W: 2m	3.5m 2.0m	Y	Fair	Fair	Near gate, just off site NW corner.	1.5m	B2

APPENDIX 4 – TREE CONSTRAINTS PLAN

TREE AND HEDGE CONSTRAINTS PLAN

Kirkland Road, Ennerdale Bridge



- Tree Canopy Current ———
- Cat U (unsuitable) Tree Base ●
- Cat A (high quality) Tree Base ●
- Cat B (moderate quality) Tree Base ●
- Cat C (low quality) Tree Base ●
- Root Protection Area (Indicative)

Version number: 1 Version state: FINAL

Design by: CC	Date: 01.09.2017
Drawn by: CC	Date: 01.09.2017
Reviewed by: T Elliott	Date: 01.09.2017
Approved by: T Elliott	Date: 01.09.2017

Drawing ref: Kirkland Road Tree and Hedge Constraints Plan
File ref: EES17-099



Scale @ A3 1:750



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APPENDIX 5 – PROPOSED DEVELOPMENT PLAN

REVISIONS:		
Revision	--	00.00.00
DESCRIPTION		

Target Unit Schedule		SQ.M	SQ.Ft	Units	Total SQ.M	Total SQ.Ft
Hon	The Honister Detached House 4 Bed	188.9	2034	3	567	6101
Lan	The Langdale Detached House 5 Bed	201.0	2163	3	603	6489
Lan V2	The Langdale Detached House 5 Bed	201.0	2163	1	201	2163
Rye	The Ryedale Detached House 4.5 Bed	172.4	1855	1	172	1855
Enn	The Ennerdale Bungalow 3 bed	148.8	1601	1	149	1601
Dee	The Dee Bungalow 2 Bed	64.5	694	2	129	1388
Totals				11	1821	19597

Parking: 2.5 Spaces min (inc garages over 20 sq ft)



Site Area 9872 sq m or 0.987 hectares (to be confirmed).



New hedgerow boundary treatment to all units

Private Shared drive

Visibility splay 2.4 x 41 m

Signature units
 Cumberland style (render / slate / stone)
 Indigenous to the village

Dwarf stone wall

Visibility splay 2.4 x 35 m

Footpath link
 Dwarf stone wall

Treatment plant access
 Timber farm gate and posts
 Splayed stone wall either side

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 PARTNERSHIP

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project title:
 Proposed Housing Development
 Kirkland Road
 Ennerdale Bridge

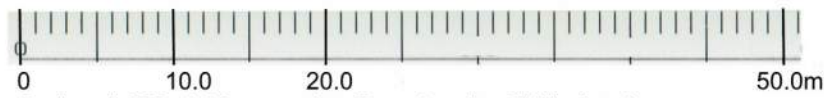
drawing title:
 Site Plan as Proposed

issue stage:
 FOR COMMENT

date: NOV 17 drawn: MH/NB scale @ A1/A3: 1:250 / 500

drawing number: 1722-PL201 revision: -

APPENDIX 6 – LANDSCAPE AND PLANTING PLAN



Woodland on northern up-slope of development frames it and "backdrops" new rooftops. Where necessary, trees are planted offsite, to avoid being too close to windows of new homes

Semi-native hedges and trees at bend in road creates a green view into the road and improves amenity for new residents

New native field hedgerow defines and encloses the proposed development, provides a backdrop to new dwellings, and supports local landscape character by strengthening the field pattern in a currently large, sprawling field.

Trees within site soften appearance of development and break up appearance of roofs when seen from higher viewpoints in Lake District fells

Use of mainly native local species with occasional more ornamental, statuesque specimens (as are found elsewhere in the village) supports landscape character.

Tree and hedge planting along south western edge of site softens views into site for existing residents living at Back Lane. Single storey dwellings here reduces visual impact.

Simple entrance with existing hedgerows realigned to provide both a baffle to views in and privacy for new residents

Wildflowers to give soft rural appearance

Trees positioned to screen views of proposed houses

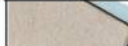










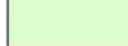

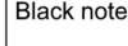
Treatment plant

Wildflower edges to treatment plant area to give a soft, rural "field-like appearance."

Location of treatment plan creates distance between existing and proposed dwellings

Self-fertile plum provides roadside fruit for people walking by, adding richness to village experience.

Key

-  Existing buildings (ridge lines not shown)
-  Proposed dwellings and garages (ridge lines shown)
-  Existing trees
-  Existing hedgerows
-  Existing hedgerow to be translocated
-  Proposed trees
-  Proposed woodland block
-  Proposed native field hedgerow
-  Proposed semi-ornamental hedge (a mix of native and ornamental)
-  Proposed ornamental hedge
-  Proposed mown grass
-  Proposed wildflower grass
-  Black notes
-  Blue notes

Note: all existing tree positions are approximate.

R 00	12.01.2018	original drawing
revision	date	notes

drawing number 03

drawing name Landscape and planting plan

project Residential Development Land at Kirkland Road Ennerdale Bridge

client Genesis Homes

This plan is based on the following drawing prepared by Manning Elliott.

project title	Proposed Housing Development Kirkland Road Ennerdale Bridge
drawing title	Site Plan as Proposed
issue title	PLANNING ISSUE
date	NOV 17 2018
author	MHNB
scale @ A3	1:250 / 500
drawing number	1722-PL201
revision	
description	