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FACEBY LODGE FARM  
CARLTON -IN -CLEVELAND  
TS9 7DP

## Pre-Application Arboricultural Survey

Prepared at the request of  
MD<sub>2</sub> Consulting Limited

8<sup>th</sup> March 2019

For client  
Mr Adam Heald

Prepared by  
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NYMNPA

13/03/2019

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# SUMMARY

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Langton Airey Associates have been instructed by Mr Glenn McGill of MD2 Consulting Limited on behalf of his client Mr Adam Heald, to inspect trees within the curtilage of Faceby Lodge Farm buildings and yard as part of a pre-application consultation for development.

A site visit was carried out on 4<sup>th</sup> March 2019 and a number of trees growing within the proposed development area were inspected, together with an appraisal of those trees growing outside of this area but potentially vulnerable to the development process.

There are four significant trees within the curtilage of the proposed development area. Three mature trees are located away from the focus of redevelopment, however one tree (T4 Goat Willow) is directly affected by the proposals. T4 is a poor quality multi-stemmed self-sown Goat Willow, and has a partially collapsed canopy due to a significant tear in the main stem union at the base of the tree.

The proposals also have a minimal impact on three groups of trees located on land outside the development footprint, and this is discussed in Section 6.1 of the report.

In addition it is worth noting that trees in Group 3 are causing significant structural damage to the fabric of the buildings at Faceby Lodge Farm, and that this is a separate issue requiring immediate attention, irrespective of any planning consent or ongoing planning applications

Trees T1-T3 were given a retention category of B2, and T4 categorised as U according to BS5837, 2012. The specifications of the trees, together with comments and recommendations for work, are recorded in Appendix 5 along with the retention category, Root Protection Area (RPA) and estimated tree canopy spread.

Also included in Appendix 5 are two Tree Constraints Plans showing existing layout and canopy spread, existing layout and Root Protection Areas, and a

Tree Protection Plan showing the position of necessary temporary protective fencing for the development.

Trees T1-T3 provide some landscape amenity for longer views to the property from the A172, and from Faceby Lodge Cottages to the east, however they are indistinguishable from trees within Group 2 from the highway and none are of sufficient merit to be considered a constraint to redevelopment of the site. As previously stated, T4 is partially collapsed and structurally compromised, prompting a need to fell.

Any perceived loss of tree cover on site can be compensated for by a robust planting scheme with species and size of planting stock chosen to enhance the existing landscape character and new residential setting with immediate effect.

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## 1.0 INTRODUCTION

### 1. Instruction

Langton Airey Associates has been instructed by Mr Glenn McGill of MD2 Consulting Limited on behalf of his client Mr Adam Heald, to inspect trees within the proposed development area at Faceby Lodge Farm (furthermore referred to as 'the site') as part of an application for redevelopment of the farm buildings, most of which are falling into dereliction. The curtilage of the site is shown bordered in red on the Location Plan in Appendix 5.

The trees have been inspected and this report prepared in accordance with the guidance contained in the British Standard: *Trees in relation to design, demolition and construction – Recommendations* (BS 5837, 2012).

### 1.2 Qualifications & experience

This report is based on the site observations and professional experience of Elisabeth Airey, whose experience and qualifications in Arboriculture can be found in Appendix 6.

### 1.3 Documents and information provided

MD2 Consulting Ltd have provided plans showing existing site layout and the proposed site layout, together with elevation views and a location plan.

### 1.4 Scope of the report

This report provides arboricultural information and advice in relation to the proposed development and categorises the trees in accordance with BS 5837, 2012

This report does not seek to give detailed assessments of the trees or offer any long-term management prescription. Any arboricultural work recommended in this report is solely to minimise any potential damage to the trees should planning permission be granted. If appropriate, a post-development condition survey of the retained trees is recommended to advise

on longer-term management.

This report takes no account of whether the trees could affect the soil in the area in such a way as to cause the proposed development, or other structures, to suffer tree related subsidence or heave damage.

This report does not take into account extreme weather events not normally expected in this locality. Such events could include, but are not restricted to, severe windstorms, floods or drought. This report also does not take into account potential outbreaks of tree pests or diseases. Operations carried out in the vicinity of trees, either in the past or future, could affect their health and stability; such operations could include, but are not restricted to trenches excavated for the installation or repair of underground utilities.

This report makes no assumption that the development will proceed.

## **2.0 SITE VISIT AND OBSERVATIONS**

### **2.1 Site visit**

I visited the site and inspected significant trees within the curtilage of the site on 4<sup>th</sup> March 2019. I also had limited access to land adjoining the site and my observations identified three areas of tree cover outside of the proposed development area that could be vulnerable to processes undertaken during redevelopment. These are described in Section 6 of this report. The aerial view of the site shows the curtilage of Faceby Lodge Farm bordered in red, identifying the three groups of trees outside of the site boundary.

All my observations were from ground level without detailed investigations. Measurements for Diameter at Breast Height (DBH) readings were taken with a standard metric DBH tape and heights were calculated using a Suunto Clinometer. The weather at the time of the inspection was settled with good visibility and daytime temperatures around 12 degrees C.

### **2.2 Site description**

The site is located at Ordnance Survey grid reference NZ 496040 south of the



A172 north west of the village of Carlton in Cleveland near Stokesley, North Yorkshire.

The site is level and is accessed via the existing stoned farm driveway from the A172 road. Faceby Lodge Farm consists of a number of sandstone and brick farm buildings arranged as detached single storey buildings, together with a traditional range of double and single storey buildings around an enclosed stack yard ( which has previously been roofed over).

Adjacent to the west of the site is a derelict garden where many self-sown trees are growing adjacent to the rear walls of the subject barns. These trees are causing direct physical damage to the fabric of the farm buildings, and immediate action to resolve this is recommended.

Within the curtilage of the site are three mature trees close to a partially demolished "Atcost" style steel framed farm building, built on a concrete pad, and a collapsed Goat willow at the SE corner of the piggery building (Building no.3 / Building Identification Plan).

Faceby Lodge Farm is in a private, rural location.

### **2.3 Identification and location of the trees**

The location of the trees, and their approximate natural canopy spread and shape is shown in black on Tree Constraints Plan 1.

Tree Constraints Plan 2 shows the location and BS 5837(2012) retention category of the trees and the Root Protection Areas, expressed as a coloured circle around each tree in relation to the proposed development. It is noted in Section 6 of this report that common sense must be applied when installing protective fencing around these three trees as access to the adjoining field must be maintained. It is accepted that the full RPA cannot be protected due to this.

The plans included in this report are for illustrative purposes only and should not be used for directly scaling measurements: all measurements should be checked on site.

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## **2.4 Tree Observations**

There are four significant trees within the site and information regarding species, dimensions and condition, including initial management recommendations, are recorded in Appendix 5.

There are three areas of mature tree cover outside of the site curtilage that are assumed (for the purpose of this report) to be within third party ownership.

## **3. REFERENCES, PLANNING POLICY AND GUIDANCE**

### **3.1. National policy**

Section 197 in the Town and Country Planning Act 1990 makes it the duty of local planning authorities, '*in the interests of amenity,*' to protect trees, when granting planning permission, either by the imposition of conditions or serving Tree Preservation Orders (TPOs).

The National Planning Policy Framework (NPPF) should also be taken into account.

### **3.2. British Standard: Trees in relation to design, demolition and construction – Recommendations (BS 5837, 2012)**

The British Standard: *Trees in relation to design, demolition and construction – Recommendations* (BS 5837, 2012) contains guidance on how to assess trees in or close to proposed development sites and the information to include in a pre-development arboricultural report to be submitted with a planning application. Appendix 4 contains a cascade chart for Tree Quality Assessment from BS 5837 (2012).

### 3.3. North Yorkshire Moors Authority Local Development Framework Design Guide Part 3: Tree and Landscape

This supplementary planning document can be found at:

[www.northyorkmoors.org.uk/planning/framework/spds/dgpt3/pdf](http://www.northyorkmoors.org.uk/planning/framework/spds/dgpt3/pdf)

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## 4. LEGAL CONSIDERATIONS

### 4.1. Protected trees

The trees at Faceby Lodge Farm are not protected by a Tree Preservation Order, and are not within a Conservation Area.

### 4.2. Wildlife conservation legislation

The nests of most birds are legally protected while they are in use. Bats are also legally protected and their roosts are protected whether or not they are in use. Tree work contractors should be aware of their duties under legislation enacted to protect wildlife and carry out their site assessment and work accordingly. If bats are suspected Natural England should be consulted. The Forestry Commission and others produced a leaflet called: *Woodland Management for Bats* (2005) that contains some useful advice and is freely available to download from:

<https://www.forestry.gov.uk/pdf/woodland-management-for-bats.pdf>

On page 14 this publications states:

*'The Wildlife and Countryside Act 1981 makes it an offence to disturb, damage or destroy bats or their roosts (even if bats are not present in the roost at the time of any incident). The Act applies in both England and Wales, and requires consultations with the appropriate Statutory Nature Conservation Organisation [Natural England or The Countryside Council for Wales] before carrying out activities which might harm or disturb bats or their roosts (even if unoccupied).'*

*'The Act is amended by the Countryside and Rights of Way Act 2000 in England and Wales. This adds 'reckless' to the offence of damaging or destroying a place a bat uses for shelter or rest, or disturbing a bat while using a roost. Under EU Regulations damaging or destroying a breeding site or resting place is an absolute offence, regardless of whether the act of doing so may be considered reckless or deliberate.'*

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## 5. TREE CONSTRAINTS

### 5.1. Tree Retention Category – BS 5837 (2012)

The retention category of each significant tree was assessed using the guidance contained in Table 1 of BS 5837, 2012. The guidance is included in this report as Appendix 4. The retention category is recorded in the schedule included as Appendix 5 and shown on Plan 2 using the following colour scheme to represent the tree retention categories:

Dark Red:	Retention Category U	Those trees in such a condition that they cannot realistically be retained as living trees in the context of the current land use for longer than 10 years.  Also, trees that have existing or potential conservation value which it may be desirable to preserve.
Light Green:	Retention Category A	Trees of high quality with an estimated remaining life expectancy of at least 40 years
Mid Blue:	Retention Category B	Trees of moderate quality with an estimated remaining life expectancy of at least 20 years
Grey:	Retention 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

There are four significant trees growing within the curtilage of the site; three trees (2x Ash, 1 x Sycamore) are categorised as B2 and are located close to

the north side of a partially enclosed concrete pad and derelict steel framed farm building. Total demolition of the building is possible without impact on the trees if it is undertaken with consideration for their close proximity.

A multi-stemmed self-sown Goat Willow is growing at the SE corner of the original, single storey piggery building ( Building no.3 / Building Identification Plan (BIP)). Proposals to develop this building will impact on this tree, however the tree is partially collapsed and as such is categorised as U and is not worthy of retention.

## **5.2 Tree constraints – above and below ground**

Tree Constraints Plan 1 shows the existing site layout, the locations of the trees and their estimated canopy spread. Root Protection Areas (RPAs) calculated using the guidance contained in BS 5837 (2012) are shown in relation to the proposed site layout in Tree Constraints Plan 2. Retained tree canopies are vertical constraints to development however pruning trees can sometimes provide adequate clearance to implement development proposals but should be carried out in accordance with the guidance contained in the British Standard: *Tree work – Recommendations* (BS 3998, 2010).

A tree's RPA is the minimum area of soil required by its roots to maintain healthy growth and should be considered a constraint to development if it is to be retained.

## **6.0 Arboricultural Impact Assessment in relation to design proposals.**

### **6.1 Trees growing close to the proposed development**

Tree Constraints Plan 2 shows the location of significant trees within the site and RPA required for each tree, including the location of groups of trees on third party land that are also implicated by the proposals.

## Trees within the site

All the trees directly associated with this site are of limited quality, reflected by their BS 5837 categorisation. The site is remote from other properties, with the exception of Faceby Manor and Faceby Lodge Cottages, located to the east and west of the farm buildings. Faceby Manor is separated from the buildings by its' own well stocked private gardens, a curtain wall and gate, and Faceby Lodge Cottages by a considerable distance across the fields.

Trees 1, 2 & 3 are located some way from the main area of development and as such they are not directly implicated in the redevelopment of the buildings however there is the potential for them to be damaged directly by construction vehicle movements on site, or indirectly via soil compaction from vehicle movements. There is also the potential that these trees could be damaged during the demolition of the building directly south of their location. In addition, demolition of the barn has implications for third-party owned trees within the adjacent pasture.

**Mitigation:** Protective fencing should be erected north of the trees to prevent accidental damage to the stems from vehicle movement on site. To the east of the trees' location is a field gate giving access onto the adjacent pasture and any fencing will need to accommodate ongoing access requirements for the field.

Demolition of the adjacent steel framed barn(east of No.9/BIP) can be wholly facilitated by dropping the walls and frame into the building footprint which is a concrete pad, thus removing all implications to any of the neighbouring trees.

Trees 1,2 & 3 are to be retained in their current locations, and the redevelopment can be undertaken without detriment to the trees.

Removal of T4 Goat Willow to facilitate the redevelopment of the old piggery will have no detrimental affect on the current landscape amenity to Faceby Lodge Cottages or the wider views from the highway.

### **Third party trees outside of the site**

The proposals for the site have limited impact on the three groups of trees located outside of the site boundary.

The redevelopment of the site has the potential to cause minor detriment to trees in Group 1, without undertaking suitable mitigation. Trees within Group 2 are not directly affected by the redevelopment, but could be damaged during the demolition of derelict barns if this were done without due care. Trees within Group 3 are implicated in serious structural damage to the property that requires immediate attention, and includes tree felling and remedial pruning, however this matter is outside the scope of this report.

**Group 1:** A mature, mixed specie group of trees is located on third party land adjacent to the farm track and a range of derelict storage sheds (Nos. 4 & 6 / BIP). The redevelopment of the site proposes the removal of these buildings and replacement with a parking area. The ground treatment within the parking area is not identified on the supplied plans, but any ground disturbance may affect the established rooting zone of these trees. ( A concrete pad may exist).

**Mitigation:** The sheds should be demolished inwards onto the footprint of the existing building. It is recommended that the surface finish for the parking area is non-invasive (no-dig construction) and porous eg. Cellweb or Geogrid with stone chips/gravel onto a porous geotextile membrane if a concrete pad is not extant.

**Group 2:** A mature but poor quality line of unmanaged trees, possibly a derelict hedge line, growing close to the side of a derelict steel framed building. Demolition of the building could affect the trees if demolished material were to fall out of the building footprint.

**Mitigation:** Maintaining care during demolition to ensure all materials fall within the building footprint.

**Group 3:** This group is a mix of mature planted stock, and semi-mature self-sown trees within a derelict garden to the west of the main buildings. A mature Horse Chestnut tree is causing direct physical damage to the roof of the building. Multiple self-sown trees are growing close to or touching the

brickwork of the barns. Direct rotation of the masonry will occur if they are not removed, however the detail of this matter is outside the scope of this report

**Mitigation:** In order to carry out redevelopment of the original farm buildings it will be necessary to fell self-sown trees damaging the fabric of the building.

Remedial pruning work to reduce the canopy spread of the mature Horse Chestnut is necessary to abate further damage to the building roof.

**Table 1**

Trees with RPAs and/or canopies that could be affected by demolition, construction or access

Tree IDs	Species	Age class	Retention Category	Height (m)	RPA as M <sub>2</sub>	RPA (m) as radius from tree	Structure
1	<b>Ash</b>	M	B2	18m	65.3	4.6m	Demolition of derelict barn (adj 9)
2	<b>Sycamore</b>	M	B2	12m	46.3	3.8m	Demolition of derelict barn (adj 9)
3	<b>Ash</b>	M	B2	16m	49.3	4.0m	Demolition of derelict barn (adj 9)
4	<b>G o a t Willow</b>	M	U	4m	18.1	2.4m	Piggery (building 3)
Grp 1	<b>M i x e d Con/BL</b>	M	N/A	M a x 18m	-	-	Creation of parking area by buildings 4 & 6
Grp 2	<b>Mixed BL</b>	M	N/A	M a x 10m	-	-	Demolition of derelict barn (adj 9)
Grp 3	<b>Mixed BL</b>	S M - M	N/A	M a x 15m	-	-	Redevelopment of buildings 2 & 7



## 6.2 Shading

The proposed development will not be significantly affected by shading from any trees currently on site.

**Mitigation:** N/A

## 6.3 Levels

Changes in ground levels limit available soil borne oxygen where root systems are present. Original ground levels must be maintained adjacent to all retained trees and hedges.

**Mitigation:** Original ground levels within a retained tree's RPA must be restored after development work.

## 6.4 Site access

The access to the site is currently via a stoned farm track onto the concrete hard standing within the farmyard and no restrictions were observed that could limit construction vehicles accessing the site.

**Mitigation:** In the interest of safeguarding (third party owned) Group 1 trees from vehicle movements on the access track it is recommended that temporary protective fencing is installed along the side of the track prior to development work commencing.

## 6.5 Storage of fuel, materials and equipment

Storing fuel, equipment and materials close to trees increases the likelihood of physical damage to trunks and branches, soil compaction or contamination with toxic substances.

**Mitigation:** All materials, fuel and equipment, if left on site, to be stored in a position away from any retained tree. A suitable location to be identified prior to site works commencing well away from retained trees or trees in third party ownership.

## 6.6 Activity under tree canopy

Activity under a tree's canopy, such as mixing cement, storing equipment, plant and materials, or bonfires, may damage tree branches or stems. Mature

boundary hedging is also susceptible to damage from these activities and mitigation should be followed where any hedging is present.

Where trees or hedging are in a third party ownership this is particularly pertinent.

**Mitigation:** No bonfires within 10m of the outside canopy edge; no mixing of cement; no washing equipment or pouring away washings within or uphill of the RPA; no storage of plant, equipment or vehicles under the canopy of the tree. Lifting gear should not be used under the tree canopy. No redirection of surface water runoff into or out of the RPA. No temporary buildings, sheds, or offices without prior discussion, and agreement of the Local Planning Authority (LPA), and full consideration by a suitably experienced and qualified arboricultural advisor.

No dumping of materials, whether in a skip or on the ground.

## 6.7 Installation of utilities

### Utilities and drainage

A utilities and drainage layout plan was not available at the time of writing this report.

Where underground utilities are to be installed within the RPA of a retained tree the guidance contained within the National Joint Utilities Group Volume 4 (Guidelines for the Planning, Installation and Maintenance of Utility Apparatus in Proximity to Trees (Issue 2, 2007); [www.njug.org.uk](http://www.njug.org.uk) ) should be followed.

**Mitigation:** Utilities to be installed along existing areas of highway/paved access outside of any tree's RPA where practical to minimise damage to roots and disturbance of soils.

## 6.8 Landscaping

Detailed landscaping proposals have not been made available for the purpose of writing this report however the Proposed Site Plan indicates significant tree planting and extensive garden areas to enhance the redevelopment of the site. The current tree cover offers very limited amenity to site users, neighbours or the wider landscape.

**Mitigation:** Where landscaping activities are undertaken near retained trees a tractor mounted post-hole driver or other lifting gear must not be used under the canopy of any tree where there is a potential danger of damaging those trees. Vehicles must not be positioned within the RPA while operational unless ground protecting boards/tank track or similar is used to avoid soil compaction.

## **7.0 Arboricultural Method Statement**

### **7.1 Initial Site Preparation Works**

Prior to any development activity on site any recommended tree work should be carried out by a competent, qualified and insured contractor. The contractor should carry out all tree work in accordance with the recommendations contained in the British Standard: *Tree Work – Recommendations* (BS 3998, 2010).

In this instance, this work will also include the felling and pruning of trees on land outside of the development site boundary, where they are causing direct damage to the buildings. Stumps should be ground out where possible, or poisoned to avoid potentially damaging regrowth.

Unless otherwise indicated and approved by the Local Planning Authority (LPA) temporary tree protection barriers should be erected outside the RPAs and canopies of retained trees. These barriers must be robust enough to withstand impacts from machinery and plant that will operate close to them. 'Construction Exclusion Zone' notices should be prominently attached to the protective fencing to avoid any confusion (refer to APPENDICES 1, 2 & 3).

However, on this site T1, T2, & T3 are positioned close by an existing field access gate and as such, protective barriers must be positioned to maintain access along with protecting the RPAs, and it is acknowledged that the full RPAs may not be protected. A need for common sense must be exercised in this instance.

Tree protection should not be moved without the written consent of the LPA.

A site storage compound and any material storage must be made away from any RPA as indicated in section 6.5 above.

Prior to any demolition or construction work commencing on site, it is normal to have preparation work assessed by a suitably qualified arboricultural advisor to ensure that all tree protection measures are in place. In this instance as the impact on retained trees is minimal, mitigation has been detailed in section 6.1, above, stating that all demolition work must take place within the footprint of the subject building, however this mitigation does not remove the need for regular checks to be undertaken throughout the development process to ensure continued compliance.

Where a significant tree occurs adjacent to the development site, temporary ground protection should be used where access is required across soft ground (e.g. soils & lawn) within the RPA.

Depending on the weight of machinery to be used, the most appropriate temporary ground protection measure (listed below) should be installed prior to any construction activity on site.

- For heavy construction vehicles (>2t), use reinforced concrete slabs, the three dimensional cellular confinement or an alternative engineered solution capable of supporting the likely loading without deforming and compacting the underlying soil.
- For lighter machinery (<2t), use inter-linked ground protection boards placed on 150 mm depth of woodchip, laid on a geotextile membrane.
- For pedestrian traffic, use a single thickness of scaffold boards placed either on a driven scaffold frame, so as to form a suspended walkway, or placed on top of 100 mm depth of woodchip, laid onto a geotextile membrane.

## **7.2 Tree protection during demolition and construction phases**

The following tasks are prohibited within the RPA or under the tree canopies :

Storage of building materials, fuel, building waste and vehicles

No re-fuelling mechanical equipment.

No storage or mixing of cement.

No washing cement mixers within or uphill of the RPA.

No bonfires within 10m of the outer edge of the crown or RPA.

No raising the soil level without prior discussion, and agreement of the Local Planning Authority (LPA), and full consideration by a suitably experienced and qualified arboricultural advisor.

No excavations without prior discussion, and agreement of the LPA , and full consideration by a suitably experienced and qualified arboricultural advisor.

No redirection of surface water run-off into or out of the RPA.

No temporary buildings, sheds, or offices without prior discussion, and agreement of the Local Planning Authority (LPA), and full consideration by a suitably experienced and qualified arboricultural advisor.

No dumping of materials, whether in a skip or on the ground.

Site notices must not be fixed to any retained tree.

Where soil is exposed, no operation or parking of vehicles and plant unless the soil is suitably protected as recommended by a suitably experienced and qualified arboricultural advisor, and with agreement of the Local Planning Authority (LPA).

Where plant or boomed vehicles are used, care should be taken to ensure there is no contact between the retained tree or the protective fencing, and that adequate clearance exists prior to any lifting operation.

Follow the guidance contained within the National Joint Utilities Group Volume 4 (Guidelines for the Planning, Installation and Maintenance of Utility Apparatus in Proximity to Trees (Issue 2, 2007); [www.njug.org.uk](http://www.njug.org.uk) ) when installing underground services within the RPA of a retained tree.

### **7.3 Post- construction considerations**

Once all demolition and construction work has been completed and the site cleared, any protective fencing used in addition to the existing fencing and

structures to be retained, may be removed.

#### **7.4 Reporting damage to the tree and protective fencing and/or temporary ground protection**

Should any damage occur to trees noted for retention either by the above works or as the result of any other action, the damage must be reported to the site manager immediately. The site manager shall report up the chain of responsibility and also to the retained arboricultural consultant or in the absence of such an appointment to an appropriately qualified arboricultural advisor, to enable remedial measures to be specified and implemented as appropriate.

Should protective fencing become damaged so as to impair its function in protecting trees, all work shall cease in the vicinity of the damage until the fence has been returned to standard.

## 8.0 Sequence table for arboricultural work

**Table 3** Sequence of arboricultural work

Tree ID	Initial site preparation pre-demolition	Construction phase	Post-construction phase
Faceby Lodge Farm Trees 1,2,3.	Install protective fencing around retained trees as per Tree Protection Plan. Monitor trees during demolition of adjacent building.	Maintain integrity of protective fencing and tree protection area.	Remove protective fencing.  Commence planting scheme, where replacement planting is specified as a condition of development.
Tree 4	Fell and poison or excavate stump.	N/A	N/A
Group 1	Install temporary protective fencing between access track/ tree group. Monitor tree group during demolition of adjacent sheds.	Install temporary protective fencing on the boundary between the tree group & parking area	Remove temporary fencing.  Some remedial pruning and felling within the group is recommended to reduce suppression of better quality trees within the group and to improve the overall amenity potential.
Group 2	Monitor trees during demolition of adjacent building.	N/A	N/A
Group 3	Following agreement with landowner- fell self-sown trees and prune Horse Chestnut to mitigate ongoing damage to farm buildings.	N/A	Condition survey of remaining trees advised.

## 9.0 CONCLUSIONS

Based on my observations on site and my professional experience together with the considerations contained within this report I can confirm the following:

- I inspected the trees at Faceby Lodge Farm on 4<sup>th</sup> March 2019, and noted four trees of significance within the curtilage of the development proposals. Three groups of trees outside of the site boundary were identified as potentially vulnerable to development activity.
- My comments regarding the trees, their current condition and my recommendations for immediate work are recorded in Appendix 5 of this report, together with a retention category value, in accordance with British Standard BS 5837, 2012 : *Trees in relation to design, demolition and construction – Recommendations*.
- It is my professional opinion that none of the trees have sufficient quality or merit to be considered a constraint to the redevelopment of the site.
- The provision of a strong landscaping scheme with appropriately chosen native tree species will add wider landscape value to the property.



## **10.0 REFERENCES**

BS 5837, 2012. *Trees in relation to design, demolition and construction – Recommendations*

BS 3998, 2010. *Tree work - Recommendations*

## **Appendix 1**

### **Extracts from the British Standard: Trees In Relation To Design, Demolition and Construction – Recommendations (BS 5837, 2012)**

#### **TREE PROTECTION**

The RPA forms the basis for a construction exclusion zone (CEZ) and requires protection during the development by means of barriers and/or ground protection fit for ensuring the successful long-term retention of the trees. Section 6.2.1.1 of the standard states:

*‘All trees that are being retained on site should be protected by barriers and/or ground protection (see 5.5) before any materials or machinery are brought onto the site, and before any demolition, development or stripping of soil commences. Where all activity can be excluded from the RPA, vertical barriers should be erected to create a construction exclusion zone. Where, due to site constraints, construction activity cannot be fully or permanently excluded in this manner from all or part of a tree’s RPA, appropriate ground protection should be installed.’*

#### **TREE PROTECTION BARRIERS**

With regard to barriers erected to protect the retained trees, Section 6.2.2.1 of the standard states:

*‘Barriers should be fit for the purpose of excluding construction activity and appropriate to the degree and proximity of work taking place around the retained tree(s). Barriers should be maintained to ensure that they remain rigid and complete.’*

In addition, Section 6.2.2.2 states:

*‘The default specification should consist of a vertical and horizontal scaffold framework, well braced to resist impacts, as illustrated in Figure 2. The vertical tubes should be spaced at a maximum interval of 3 m and driven securely into the ground. Onto this framework, welded mesh panels should be securely fixed. Care should be exercised when locating the vertical poles to*

*avoid underground services and, in the case of the bracing poles, also to avoid contact with structural roots. If the presence of underground services precludes the use of driven poles, an alternative specification should be prepared in conjunction with the project arboriculturist that provides an equal level of protection. Such alternatives could include the attachment of the panels to a free-standing scaffold support framework.'*

## **GROUND PROTECTION**

With regard to protecting the soil within the RPA from compaction, Section 6.2.3.3 of BS 5837 (2012) states:

*'New temporary ground protection should be capable of supporting any traffic entering or using the site without being distorted or causing compaction of underlying soil.'*

**NOTE** *The ground protection might comprise one of the following:*

- a) for pedestrian movements only, a single thickness of scaffold boards placed either on top of a driven scaffold frame, so as to form a suspended walkway, or on top of a compression-resistant layer (e.g. 100 mm depth of woodchip), laid onto a geotextile membrane;*
- b) for pedestrian-operated plant up to a gross weight of 2 t, proprietary, inter-linked ground protection boards placed on top of a compression-resistant layer (e.g. 150 mm depth of woodchip), laid onto a geotextile membrane;*
- c) for wheeled or tracked construction traffic exceeding 2 t gross weight, an alternative system (e.g. proprietary systems or pre-cast reinforced concrete slabs) to an engineering specification designed in conjunction with arboricultural advice, to accommodate the likely loading to which it will be subjected.'*

## **HARD SURFACES WITHIN THE RPA OF RETAINED TREES**

Section 7.4.2 of BS 5837 (2012) states:

*'7.4.2.1 The design should not require excavation into the soil, including through lowering of levels and/or scraping, other than the removal, using hand*

tools, of any turf layer or other surface vegetation. If it is intended to use the new surface for construction access, it is essential that the extra loading and wear arising from this are taken into account during the design process.

7.4.2.2 The structure of the hard surface should be designed to avoid localized compaction by evenly distributing the loading over the track width and wheelbase of any vehicles expected to use the access.

7.4.2.3 New permanent hard surfacing should not exceed 20% of any existing unsurfaced ground within the RPA.

7.4.2.4 If the new surface is likely to be subject to de-icing salt application, an impermeable barrier should be incorporated to prevent contamination of the rooting area. Run-off should be directed away from the RPA (see also 8.6.5).

7.4.2.5 Where a permeable surface is to be used by vehicular traffic, a geotextile should be used at the base of construction to help prevent pollution contamination of the rooting area below.

*7.4.2.6 Permeable hard surfacing can result in soil volume moisture content remaining at or near field capacity for long periods. Where there is a risk of waterlogging, the design should incorporate appropriate land drainage (see also 4.3 and 8.6.5). Land drainage within the RPA should be designed to avoid damage to the tree and the soil structure, e.g. sand slitting formed by compressed air soil displacement with the slits set radially to the tree.*

*7.4.2.7 The hard surface should be resistant to or tolerant of deformation by tree roots, and should be set back from the stem of the tree and its above-ground root buttressing by a minimum of 500 mm to allow for growth and movement. Resulting gaps may be filled using appropriate inert granular material.*

**NOTE 1** *Appropriate sub-base options for new hard surfacing include three-dimensional cellular confinement systems. Alternatively, piles, pads or elevated beams can be used to support surfaces to bridge over the RPA or, following exploratory investigations to determine location, to provide support within the RPA while allowing the retention of roots greater than 25 mm in diameter.*

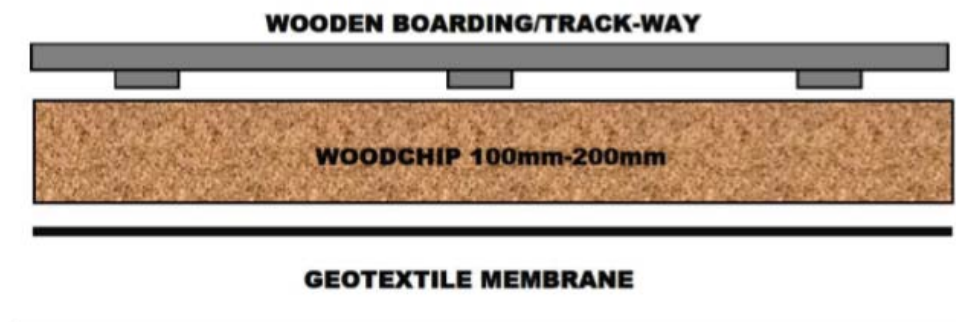
**NOTE 2** *The use of two-dimensional load suspension systems is not recommended for surfaces intended for use by vehicles.'*

**The objective is to minimize soil compaction**

**Example 1** - *for pedestrian movements only, a single thickness of scaffold boards places either on top of a driven scaffold frame, so as to form a suspended walkway, or on top of a compression-resistant layer (e.g.) 100mm depth of woodchip), laid on to a geotextile membrane.*

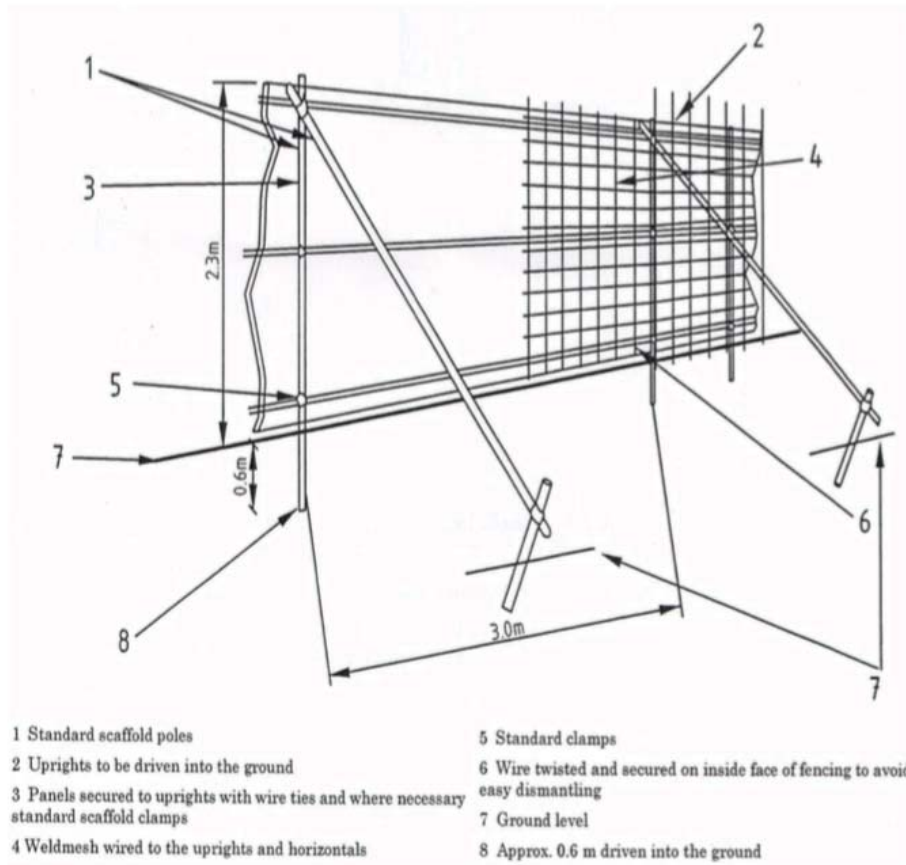
**Example 2** - *For pedestrian-operated plant up to a gross weight of 2 t, proprietary inter-linked ground protection boards placed on top of a compression-resistant layer (e.g. 150mm depth of woodchip), laid onto a geotextile membrane;*

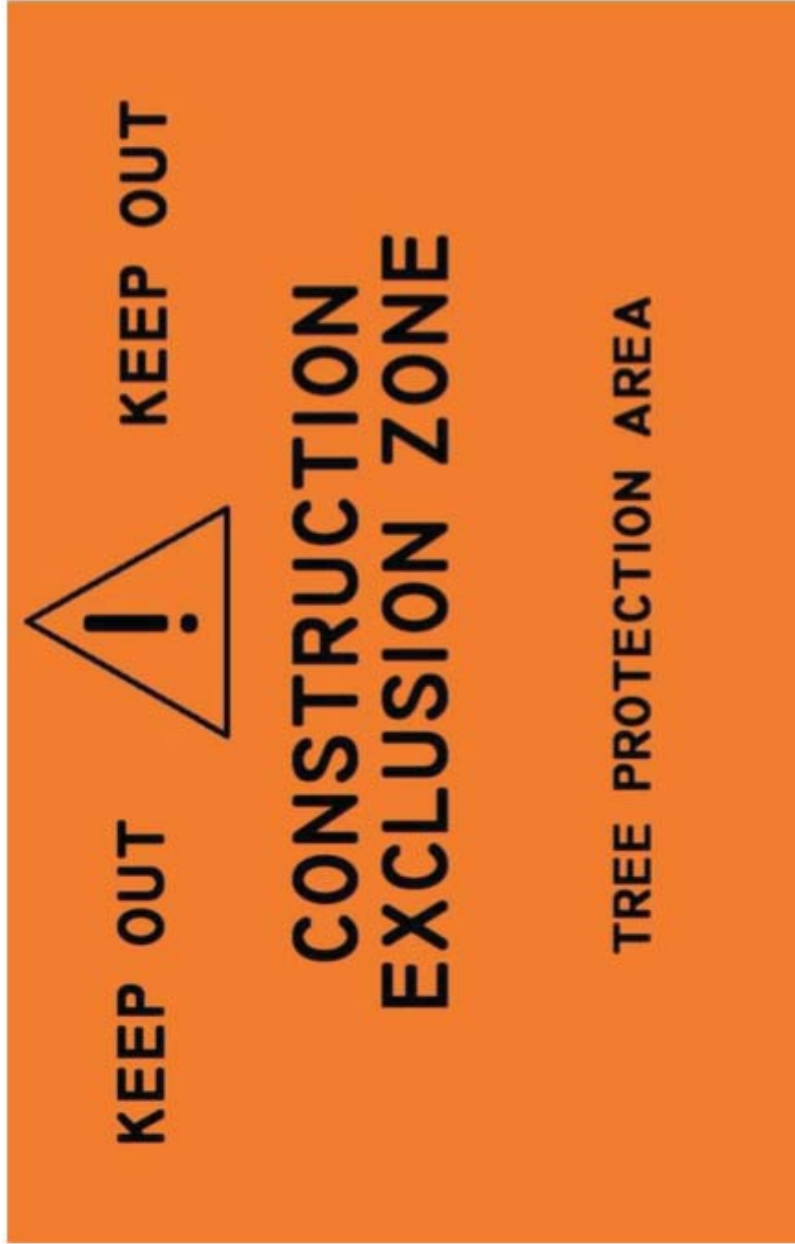
**Example 3** - *For wheeled or tracked construction traffic exceeding 2 t gross weight, an alternative system (e.g. proprietary systems or pre-cast reinforced concrete slabs) to an engineering specification designed in conjunction with arboricultural advice, to accommodate the likely loading to which it will be subjected.*



## APPENDIX 2

### Appendix 2: Tree Protection Fence – Specification





## APPENDIX 4 – Cascade chart for Tree Quality Assessment

TREES UNSUITABLE FOR RETENTION (see Note)			
<p><b>Category U</b></p> <p>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</p>	<ul style="list-style-type: none"> <li>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)</li> <li>Trees that are dead or are showing signs of significant, immediate, and irreversible overall decline</li> <li>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</li> </ul> <p>NOTE Category U trees can have existing or potential conservation value which it might be desirable to preserve; see 4.5.7 below.</p>		
TREES TO BE CONSIDERED FOR RETENTION			
Category and Definition	1. Mainly arboricultural qualities	2. Mainly landscape qualities	3. Mainly cultural values, including conservation
<p><b>Category A</b></p> <p>Trees of high quality with an estimated remaining life expectancy of at least 40 years</p>	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)
<p><b>Category B</b></p> <p>Trees of moderate quality with an estimated remaining life expectancy of at least 20 years</p>	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
<p><b>Category C</b></p> <p>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</p>	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



## APPENDIX 5

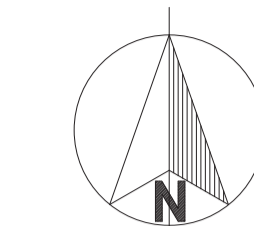
## Trees within proposed development site

Table 1

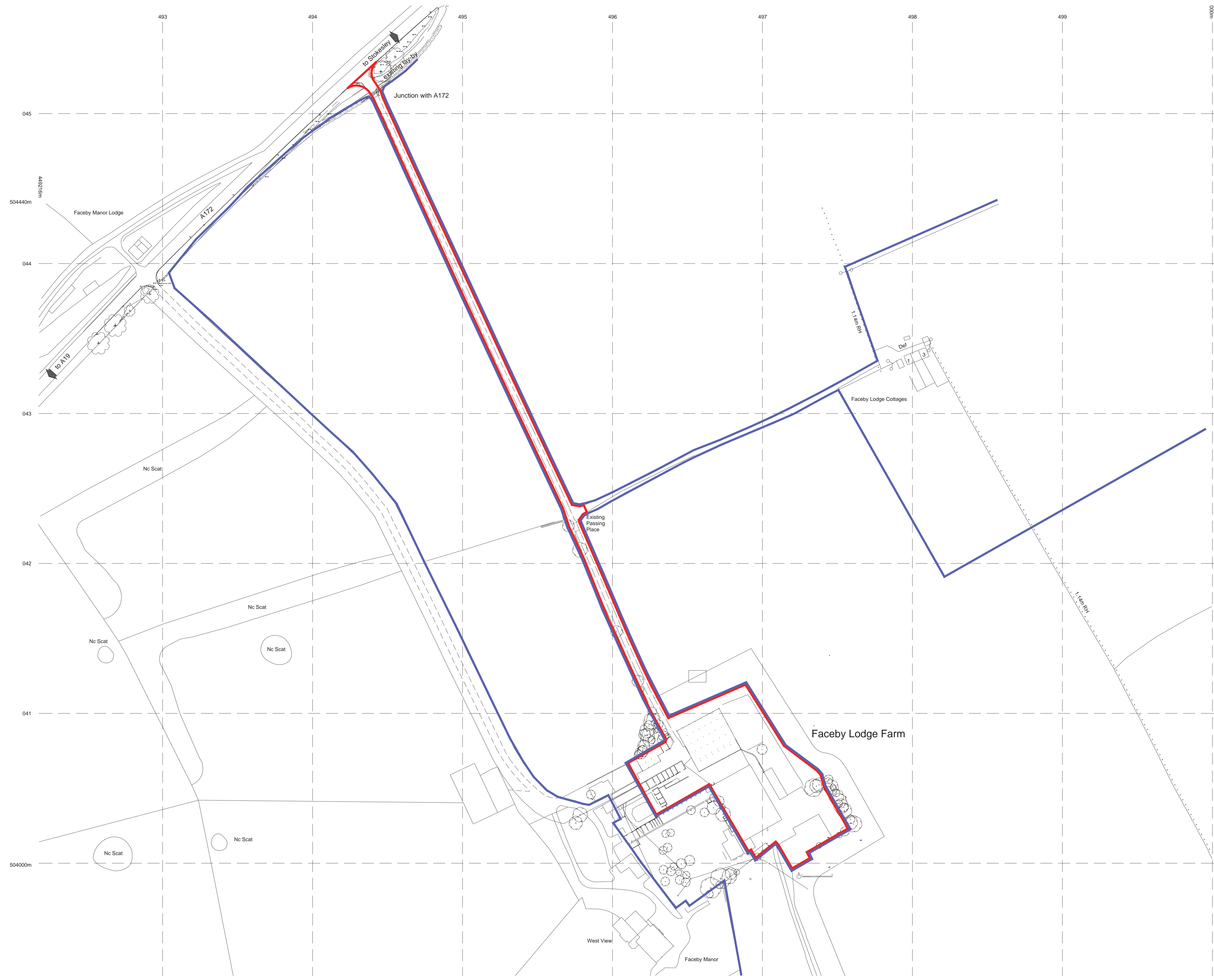
No	Species	DBH mm @1.5m	Ht	Crown spread N S E W	Age	RPA m2 Radius from tree in metres	Structural condition/ Defects Likely failure points	Retention category	Work & Priority
1	Ash Fraxinus excelsior	380mm	10	5 4 2 7	M	<b>65.3m2</b> 4.6m	Unbalanced canopy due to competition with T2	B1	Formative pruning to balance canopy- Low priority
2	Sycamore Acer pseudoplatanus	320mm	9	3 2 1 2	M	<b>46.3m2</b> 3.8m	Canopy suppressed by T1 & T3	B1	
3	Ash Fraxinus excelsior	330mm	10	5 3 5 2	M	<b>49.3m2</b> 4.0m		B1	Minor formative pruning
4	Goat Willow Salix caprea	200mm	4.5	3 3 5 2	SM	<b>18.1m2</b> 2.4m	Multi-stemmed. Stems have failed at basal union	U	Fell & poison/dig out roots. High priority

## Trees outside the proposed development site ( eg.third party ownership)

Group number	Tree species	Comment
1	Mixed broadleaf & conifers inc. Laburnum, Hawthorn, Beech, Sycamore, Scots Pine, Lawson Cypress, White Willow, Horse Chestnut	Unmanaged corner group by access track. Oak & Beech would make reasonable quality trees if managed.
2	Hawthorn, Sycamore, Ash	Line of field trees, very compacted soil and damaged bark from livestock congregating around trees.
3	Horse chestnut, Bird Cherry, Sycamore, Ash	Unmanaged trees in derelict walled garden. Planted and self-sown. Causing direct physical damage to the fabric of the barns. Requires immediate attention.



Location Plan



REVISIONS:

<b>SPA ARCHITECTS</b>		incorporating DKS Architects	
1 Burdon Way, Stokesley Business Park, Stokesley, Middlesbrough, TS9 5PY			
Client:		S J & J MONK	
Project:		Faceby Lodge Farm	
Drawing:		Location Plan	
Status:	PLANNING	Date:	29 November 2018
Drawn by:	NRT	Checked by:	MD
Scale:	1/1250 @A1		
Project No:	18030	Originator:	SPA
Volume:	00	Level:	00
Type:	DR	Role:	A
Dwg No:	P100	System:	location
Subsidiary:	S0	Subsidiary Description:	PLANNING
Rev:			



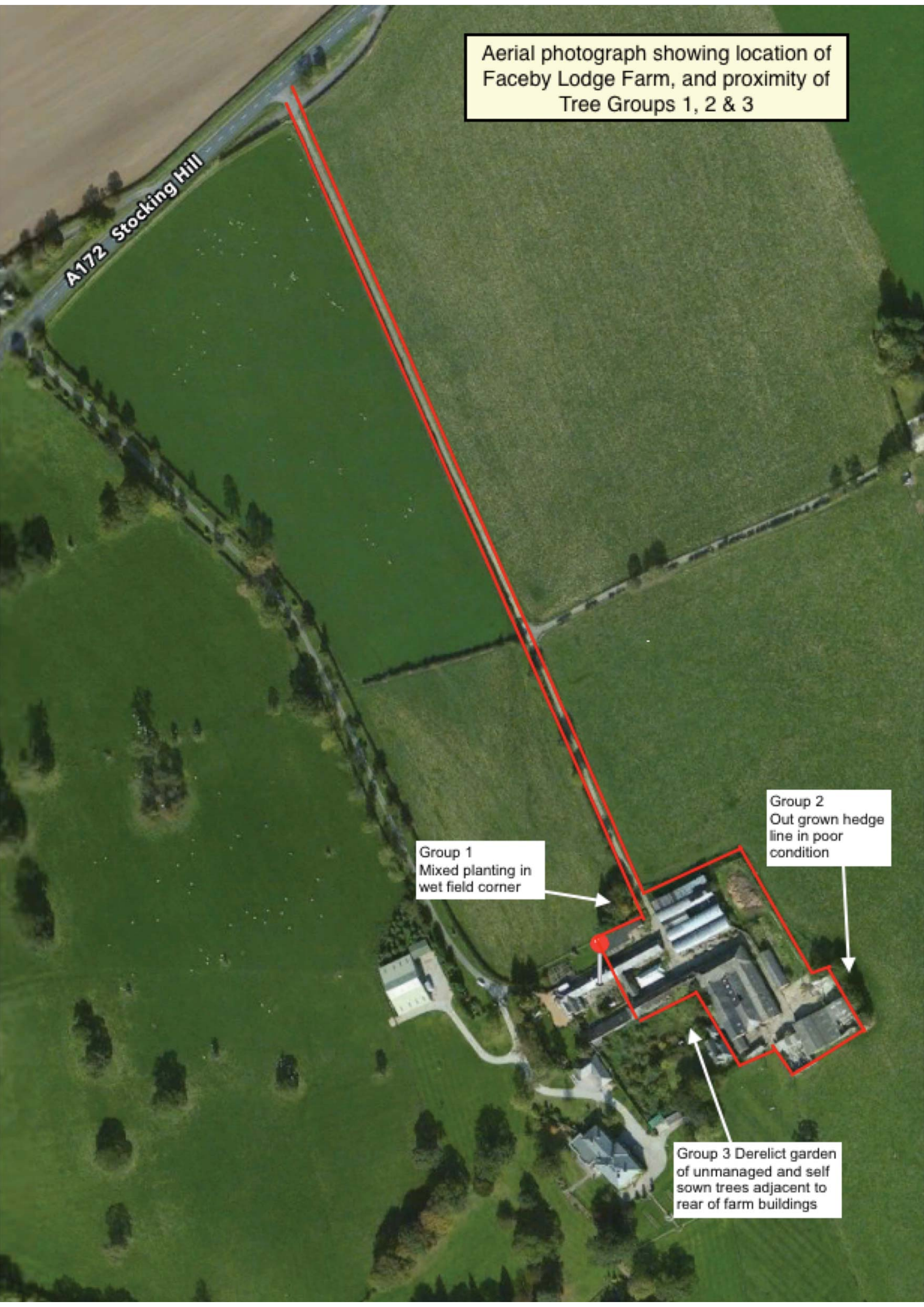
Aerial photograph showing location of Faceby Lodge Farm, and proximity of Tree Groups 1, 2 & 3

A172 Stocking Hill

Group 1  
Mixed planting in  
wet field corner

Group 2  
Out grown hedge  
line in poor  
condition

Group 3 Derelict garden  
of unmanaged and self  
sown trees adjacent to  
rear of farm buildings





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# PLANNING

N504100

N504050

Tree Constraints Plan 1  
Existing tree canopy spread shown in green



**SPA ARCHITECTS**  
Incorporating DKS Architects  
1 Burton Way, Stokeney Business Park, Stokeney, Witham, Essex, SS20 8PY

Client: SJ & J Mark

Project: Facoby Lodge Farm

Drawing: Building Identification Plan

Issue	Date
PLANNING	29 November 2018
Drawn by: DM	Checked by: MD
Scale: 1:500 @A3	

Project No:	Client:	Volume:	Level:	Type:	Rev:	Drawn by:
18030	SPA	00	00	DR	A	P113
Subsidiary:	Subsidiary:	Subsidiary:	Subsidiary:	Subsidiary:	Subsidiary:	Rev:
	PLANNING					



PLANNING

N504100

**Tree Constraints Plan 2**

Root Protection Area (RPA) category

- U - Dark Red
- A - Light Green
- B - Mid Blue
- C - Grey

N504050



**SPA ARCHITECTS**  
Incorporating DKS Architects  
1 Burdon Way, Stokesley Business Park, Stokesley, Middlesbrough, TS9 5PY

Client :  
SJ & J Monk

Project :  
Faceby Lodge Farm

Drawing :  
Building Identification Plan

Status : PLANNING	Date : 29 November 2018					
Drawn by : DM	Checked by : MD					
Scale : 1:500 @A3						
Project No. : 18030	Originator : SPA	Volume / System : 00 / 00	Level / location : DR	Type : A	Role : A	Dwg No. : P113
Suitability : PLANNING	Suitability Description :					Rev :



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 DO NOT SCALE. THE CONTRACTOR IS RESPONSIBLE FOR CHECKING DIMENSIONS UNLESS OTHERWISE STATED

PLANNING

N504100

Tree Protection Plan  
 Temporary protective fencing shown in BLUE

N504050



**SPA ARCHITECTS**  
 Incorporating DKS Architects  
 1 Buxton Way, Sokesley Business Park, Sokesley, Middlesbrough, TS9 9PY

Client:  
 SJ & J Monk

Project:  
 Faceby Lodge Farm

Drawing:  
 Building Identification Plan

Status:	Drawn:
PLANNING	29 November 2018

Drawn by:	Checked by:	Scale:
DM	MD	1:500 @A3

Drawn No	Designer	Volume	Level	Type	Rev	Drawn No
18030	SPA	00	00	DR	A	P113
Subsidiary	Subsidiary Description					Rev
	PLANNING					

## **Appendix 6**

### **Qualifications and experience of Elisabeth Airey.**

#### **Qualifications:**

- Elisabeth Airey was awarded a Higher National Diploma in Arboriculture in 1996.
- In 2001 she was awarded a Master of Science degree in Environmental Management.
- In 2001 she was awarded Professional Membership of the Arboricultural Association.
- In 2011 she was awarded a Certificate in Sustainable Woodland Management.

#### **Experience:**

- Since 1996 Elisabeth has worked as a professional within the arboricultural and forestry sector.
- From 1996-2008 she held the post of Arboricultural Officer at Gateshead, South Tyneside and Middlesbrough Councils.
- From 2008-2013 she was the Woodland Officer for the North Pennines AONB Partnership.
- Langton Airey Associates was established in 2003.
- She has travelled to Romania and Slovakia to study wildlife conservation, access and cultural woodland practices within the Carpathian Uplands as part of the European Union's Leonardo da Vinci programme of vocational learning and training.
- Since 1994 Elisabeth has been involved with working forestry horses, and actively promotes the use of horses for the specialist extraction of timber.
- Prior to 1996 she was employed by ADAS(Agricultural Development and Advisory Service)

#### **Continuing Professional Development**

Elisabeth regularly attends conferences, seminars and workshops run by forestry and arboricultural organisations, colleges and universities.

#### **Membership of professional organisations**

Professional Member of the Arboricultural Association (2001)





- Trees 1, 2 & 3

Tree 4 -



Group 3 Trees within derelict walled garden -







**- Group 1 trees adjacent to storage sheds**



**- Group 2 trees adjacent to derelict steel-framed barn and Trees 1,2 & 3**