

Historic Landscape Restoration Plan Aske Estate, Richmond

Final

Prepared for
Zetland Estates

| Job No | Date | Status | Version | Prepared by | Reviewed by | Approved for Issue |
|--------|--------|--------|---------|----------------------|---------------|--------------------|
| D10199 | Jan 04 | Final | 3 | Richard Cordillan | Phillip Black | Phillip Black |



January 2004

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EXECUTIVE SUMMARY

As a result of an application for a Countryside Stewardship grant a Restoration Plan for the Historic Parkland of the Aske Estate is required to meet Countryside Stewardship Scheme recommendations to consider further the historical significance and recommend proposals for the Estate parkland and agricultural lands within the designed landscape.

The evidence stated in this report has suggested that the designed landscape has importance as an early 18th century parkland with major elements surviving until the present day. Parklands from this period which were not swept away are relatively uncommon and therefore this survival can be considered a significant one.

A number of constraints exist that will need to be considered in order to inform proposals for the Restoration Plan. The archaeological study shows that the Aske Estate lies within an area of high archaeological potential. Prehistoric activity has been found on the borders, with the majority of remains or extant earthworks relating the various stages of the designed landscape.

The ecological survey shows that non-statutory Sites of Importance for Nature Conservation is present on the Estate. There is also evidence for the presence of badgers, bats and breeding birds, which may restrict the type and timing of proposals being implemented. A badger survey should be carried out along Aske Beck to locate existing badger setts prior to any tree or shrub clearance. A survey for bat potential in existing trees and shrubs should be carried out prior to any clearance works or tree surgery. Also a survey should be carried out to locate scheduled birds, as their site of breeding cannot be disturbed, even outside of the normal breeding season.

The recommended approach for the conservation and restoration of the designed landscape at Aske is to follow the later designed period of the late 19th century whilst interpreting and conserving the remaining features linked with the mid 18th century landscape.

Proposals include the conservation of existing archaeological features, the conservation of listed monuments within the landscape, parkland tree planting, the removal of existing fences to open up and integrate the parkland areas and to revert grassland to pasture. The proposals that are not eligible for Countryside Stewardship Scheme funding are highlighted below.

It is anticipated that English Heritage may be able to contribute towards funding for the following elements of the Plan:

- Research into Nesfield's involvement in the design of gardens around the hall.
- Preparation of detailed Garden Restoration Plan.
- Archaeological investigation into water features along Aske Beck.
- Preparation of a Conservation Plan for main temple.
- Winter archaeological walkover survey to China Plantation.

It is likely that the restoration of the following features can only be carried out with funding from Zetland Estates:

- Garden restoration.
- Main Temple restoration.
- Restoration of water features along Aske Beck.

This Restoration Plan will form the basis of future applications to Countryside Stewardship for funds to assist in the management and conservation of the Estate parkland and agricultural lands. This application's content will be in accordance with the general objectives and the detailed policies contained within the Restoration Plan.

1. INTRODUCTION

1.1 BACKGROUND

Scott Wilson has been commissioned by Zetland Estates to undertake a Restoration Plan for the Historic Parkland on the Aske Estate, North Yorkshire.

Considerable work has already been completed by the Estate to prepare a Countryside Stewardship application for funds to assist in the management and conservation of the Estate parkland and agricultural lands. Initial proposals for the restoration and enhancement of the landscape of the Estate have been identified by family members and by Tango Fawcett – acting as consultant helping to prepare the earlier Countryside Stewardship application.

As part of this ongoing process, it has been identified that these proposals must be underpinned through the preparation of a Historic Landscape Restoration Plan to fully understand the historical significance of the landscape design and to inform the refinement and prioritisation of landscape restoration and enhancement proposals. This Restoration Plan will form the basis of future Countryside Stewardship applications to implement the works identified within this plan.

The listed landscape and surrounding areas are in the ownership of Zetland Estates.

1.2 THE ASKE ESTATE

The Aske Estate is listed by English Heritage on the *Register of Parks and Gardens of Special Historic Interest in England*. It is registered Grade II*. The listing contains the following description:

Aske Hall lies c. 1.5km north of Richmond in a rural and agricultural setting. The c. 165 ha site is on land which rises northwards from the valley of the Aske Beck, which runs along the south side of the site. Gilling Road forms the eastern boundary. Fences divide agricultural land from the southern boundary which follows the wooded edge of the valley of the Aske Beck for most of its length. The south-western boundary is formed by Washton Road and by a belt of trees called Mouldron Belt. The north-western boundary includes a drive through Mouldron Plantation, and walls and fences divide the northern boundary from agricultural land.

Estate extends to the east to include land around Olliver Duckett to Olliver, along Scots Dike.

Aske Hall and a number of structures situated across the landscape are listed by English Heritage on the *Forty Ninth List of Buildings of Special Architectural or Historic Interest*. The Hall and Temple in Crow Wood is registered Grade I, with the Temple at the side of the lake, registered Grade II.

The surrounding landscape consists of field systems and parkland. The majority of fields are grazed pasture with stone walls and hedgerows as boundary treatments. The topography undulates, with views out to the A1 and the North York Moors. A number of small farms and residential dwellings

surround the site with the village of Gilling West to the north and the town of Richmond to the south.

1.3 STUDY AREA

The study area includes the listed landscape as described above and three further areas of land; the land between the Mouldron Belt and the Washton Road, South Park to the north of St Osythe farm and the area south of St Osythe to the Parish boundary, and the area west of and including Olliver Ducket. See Figure 1.

1.4 AIMS

The Aims Of The Historic Landscape Restoration Plan are to: -

- Sustain the designed landscape
- Conserve the existing wildlife habitats and create the potential for further habitats
- To conserve or preserve existing historic features

1.5 APPROACH

The Plan sets out and understands the history of the site, archaeology that is present on site and current ecology. It also states describes the current condition of the parkland lake, woodlands on site, access arrangements, land management that is carried out and the different landscape character areas.

The plan then provides an analysis of significance of the various elements within the character areas. These include historical, archaeological and ecological significance of the current landscape.

Proposals are given to restore the current landscape and include parkland tree planting, removal of fencing, reverting grassland to pasture, establishing new public access, and undertaking further research. These proposals identify:

- Countryside Stewardship Scheme Proposals
- Non Countryside Stewardship Scheme Proposals
- Non Capital Proposals.

2. POLICY CONTEXT

2.1 LISTED LANDSCAPE

The listing on the *Register of Parks and Gardens of Special Historic Interest in England*, dated October 1999, by English Heritage for the Aske Hall parkland as Grade II* is exceptionally important in determining the extent of the parkland which is recognised to be of historical significance. It is further noted that the parkland is graded II* (i.e. 'two star') indicating an especially high level of historical significance.

2.2 PLANNING POLICY CONTEXT

Local policies are provided in the development plan comprising the North Yorkshire Country Structure Plan and the Richmondshire Local Plan.

2.3 NORTH YORKSHIRE COUNTY STRUCTURE PLAN

North Yorkshire County Council approved the North Yorkshire County Structure Plan (1995-2006) for adoption in July 1995. This document provides a series of strategic policies to guide and control development across the County and assist the District Councils in the preparation of their Local Plans. It provides broad guidance on the development in relation to historic and archaeological important features. The Structure Plan states that:-

Policy C2 Archaeology and the Built Historic Environment

The special interest, appearance, character and setting of archaeological and other historic features should be conserved and enhanced.

Development which, individually or in combination, would adversely affect the special interest of these resources should only be permitted where it can be clearly demonstrated that there are no alternative sites or solutions available to accommodate the development proposed and that it is in the overriding public interest that the development should be in that location.

Mitigation measures will be required to minimise the adverse effects of any development and, where appropriate, measures to enhance the resource should be sought.

3.18 North Yorkshire contains a rich variety of historic resources, the product of human activity over thousands of years. This legacy can be seen as a finite and non-renewable resource, comprising highly fragile and vulnerable elements, which includes:-

- The buried archaeological resource;
- Upstanding but unused/derelict monuments;
- Historic designed and/or maintained rural landscapes (plantations, walls and barns, parks and gardens);
- Historic route ways through the landscape

3.23 33 historic parks and gardens have been identified as being of special interest and have been included on English Heritage's register of such areas worthy of protection.

3.24 Listed buildings are buildings of national architectural or historic interest. There are 16730 listed buildings in the Structure Plan area classified in Grade I, II*, and II based on their relative importance.

3.25 An understanding of the character and value of the historic environment helps to maximise the contribution that historic assets can make to future economic growth and community well being. It is essential for strategies at all levels of government to identify the historic environment as an opportunity, locally and regionally, rather than seeing it as a constraint. In dealing with the historic environment, stress should be placed on the process of characterisation, protection of the distinctive and important, and enhancement of area character. The maintenance of comprehensive historic environment records, of buildings and archaeological sites in particular, is essential in understanding the contribution of the historic environment in creating successful and sustainable communities.

2.4 RICHMONDSHIRE LOCAL PLAN

Richmondshire Local Plan Deposit Draft (1999-2006) replaces or updates policies contained in the Local Plan (1991-2001) adopted in June 1998. The plan provides a series of policies to guide local development. It provides guidance on the development in relation to landscape and the environment. The Local Plan states that:-

Policy 7 Areas of Great Landscape Value

The proposals map defines AGLV, where the distinctive qualities of the countryside are worthy of special recognition. The District Council will expect development proposals to show that extra care, through design, siting, planting, and, where necessary, earth modelling or walling, has been taken to conserve the special qualities of the landscape. – Guidance note 4

Policy 10 Structural Tree Belts

In certain cases, where development is expected to take place on the fringe of a built-up area, substantial tree belts are needed to create a distinct visual edge to the settlement concerned. Planting of these structural tree belts will be required when the adjoining or associated development takes place, and will be the developer's responsibility.

Policy 19 Sites of Local Nature Conservation Importance

All the identified sites are located in the countryside, and in the normal course of events few will come under pressure for development. Where this does occur Policy 22 applies the advice in PPG9.

Policy 61 Parks and Gardens of Special Historic Interest

Development within the boundaries, or in the immediate vicinity of the registered Parks and Gardens listed below, will only be accepted if it respects and is compatible with the landscape design qualities of the registered area and its setting:

Aske Hall

Designed landscapes can be as important as historic buildings if most of their original design attributes survive, and although they are not legally protected, it is important that their value to Richmond's heritage should be widely recognised. The Register of Parks and Gardens of Special Historic Interest prepared by English Heritage includes the five sites referred to in the Policy, but it must be regarded as a starting point, and is likely to be followed by wider recognition of examples of formal landscape design as research progress.

Since the Register does not carry with it any statutory protection it is important that the District Council's planning powers should be used, as envisaged by this Policy, to intervene where the special interests of the areas concerned may be threatened by development.

3. HISTORIC LANDSCAPE APPRAISAL

3.1 INTRODUCTION

The historical research for the Aske Estate was commissioned to Janette Ray by Scott Wilson to provide background information to the Restoration Plan. Aske Hall's landscape setting was carved out of an agricultural landscape in the early 18th century to create the current parkland. The following historical outline traces its development from its origins to the present day. The analysis is largely confined to the park. It does not include a detailed study of the pleasure grounds, kitchen gardens and formal gardens that provide a setting for the Hall. These gardens however, are very fine and we would recommend their history be properly compiled and documented.

3.2 SOURCES OF INFORMATION

The key source for the historical study has been the Zetland Archive Hall in part at the North Yorkshire County Record Office and in part at Aske Hall itself. All relevant maps, plans and documentary sources held with the Zetland Archive have been consulted. In addition, several fine paintings of the landscape and a range of secondary sources have been studied for the information they reveal about the estate. Whilst there is excellent visual information for the 18th century, evidence for the development of the Hall, gardens and wider landscape earlier than this, is slight. Overall, few estate papers have survived which is disappointing. These would have undoubtedly been a useful source for understanding the relationship between the aesthetic form of the park, its land use and management. It is a property little mentioned in county topographies and guidebooks. Equally few contemporary made by tourists or period commentators have been located.

3.2.1 Organisation of the historical information

A short general history of the development of the estate landscape has been compiled. This has adopted the building history of the present and former Hall on the site as its basis. Building phases can generally be seen as a trigger to some or other development project in the landscape. A chronology has also been compiled as a further aid to understanding the sequence of events.

3.3 STAGES OF HISTORICAL DEVELOPMENT

The following have been identified as the key periods in the development of the landscape at Aske Hall.

- **The Medieval and Tudor period** when the Pele tower was constructed and hall built.
- **The Wharton Family Ownership 1611-1727** when the footprint of the present hall was established, gardens created around the Hall and the

terrace walk established along the south east front of the Hall which has been an enduring feature in the design.

- **Building and Estate projects of Sir Conyers D'Arcy 1727-1758** when the Hall was improved, a new walled kitchen garden constructed, pleasure grounds made at Low Wood and Crow Wood, the latter with the gothic temple at its heart, and a landscape park south east of the Hall created along geometric lines.
- **Building and estate projects of Sir Lawrence Dundas 1761-1781** when John Carr improved the Hall and domestic offices of the Hall and Capability Brown was consulted on aspects of the estate landscape.
- **The late 18th and early 19th century period** under the ownership's of the 1st and 2nd Lords' Dundas when the Hall was further modified and modernised, new farms constructed in outlying areas and the parkland expanded from the core to the north-west and south. This included the construction of drive from high lodge. Parkland tree planting was expanded and naturalised and boundaries of the Landscape Park defined.
- **The modern period embracing the 20th century** when work reconstruction work has focused closely on the Hall and its immediate setting. farming ceased to be a major economic activity within the designed landscape area of the estate.

3.3.1 The Medieval and Tudor period

Throughout this period the Hall and lands were the property of the Ask family. The last of their line died in 1510 and the property passed to the Bowes family c1522 who held an extensive range of property in the north of England. The pele tower at Aske was built during this period as a fortified Hall,¹ and possibly the basic form of the Hall dates before the beginning of the 17th century.

3.3.2 The Wharton Family Ownership 1611-1727

The Wharton family ownership spanned almost a century. Thomas Wharton purchased the estate in 1611. The purchase reputedly consisted of:

*"Manor & appurtenances consisted of 10 messuages, 10 cottages, 1 water-mill, 1 dove-Hall, 10 gardens, 10 orchards, 500 acres arable land, 200 acres meadow, 500 acres pasture, 10 acres wood, 100 acres juniper & briar, 2000 acres of moor and common of pasture and common of turbary with the appurtenances in Aske, Schalles als. Scales, Gingerfield, Askmore on the south part of Ask Beck, Coalgarth, Newclose, Heuitts als Yewetts, Richmond and Gilling"*²

¹ The pele tower was a strongly built tower, less grand than a tower keep, used for a place of refuge and look-out. They were built between 1200-1700s or after, and sometimes are difficult to date.

Most English pele towers were built in the 1500-1600s

² Speight: Romantic Richmondshire 1897 pp164-170

A succession of family members occupied Aske and during their ownership adding wings set the footprint of the hall. The dates of Hall construction and alterations have not been clearly established³ however the result was illustrated by Robert Kirkham on his map of 1720 (Figure 2) and also by Samuel Buck (1719) who included a sketch of Aske in his Yorkshire Sketchbook⁴ and also completed a detailed engraving of the Hall in 1720. Around the Hall were gardens and courts. (Figure 3). The Buck view indicates two entrance courts to the Hall from the terrace with gate piers and iron (?) gates.

Robert Kirkham's map⁵ (Figure 4) details the organization and use of the landscape in 1720 It provides details of the form of the Hall, field patterns, the layout of the area around the Hall, the drives and lanes which gave access to the Hall, and immediate surroundings. It indicates the tenants of the period. The core of the estate was tenanted to Mr Francis Bell and included the Hall and gardens. The land use was predominantly meadow or pasture with the exception of Wheat Field, the south-facing field, which later was used for the construction of the new walled productive garden. The map therefore reveals that with the exception of the Hall and immediate gardens the landscape was an agrarian one.

Notation indicates scattered trees between Low Pasture and High Close and there is woodland marked along the line of Aske Beck. A single belt of trees is shown between Cow Pasture and Wheat Field. Randall Wood is the only major woodland indicated at this time. Access to the Hall followed a straight line from the Richmond Gilling Road commencing at Mill close edging Cow Pasture and broad Close before making a right angled bend to join the terrace on the south east of the Hall. This route remained the major approach all through the 18th century. A second track is marked leading due east from the Hall front end at Squire Wharton's land. The formal planting around the Hall implies orchards and cultivated gardens.

Philip Wharton the final Wharton owner was tried for treason in 1719. This lead to the purchase of the estate by the D'Arcy family, Earls of Holderness and owners of Hornby Castle, seven miles south of Aske from the Trustees of the Duke of Wharton.

3.3.4 Building and Estate projects of Sir Conyers D'Arcy 1727-1758

*"The hall, at that time little more than one of those old castelets with some modern buildings added to it, was only inhabited by farmers, tenants of the Duke, and the land around it so swampy, that in the winter months it could not be approached but with difficulty."*⁶

³ Giles Worsley, Country Life March 1st 1990 suggests Thomas Wharton improved the Hall between 1611 and 1622. Other sources suggest the wings are later, the work of Philip Wharton 1683-4.

⁴ Samuel Buck's Yorkshire Sketchbook. Wakefield Historical Publications 1979 p355 The South Prospect of Aske Hall belonging to His Grace The Duke of Wharton.

⁵ A Survey of the Lordship of Ask situate in the Parish of Easby and Gilling near Richmond in the County of York etc belonging to his Grace the Duke of Wharton surveyed in 1720 by Robert Kirkham of York. Scale of 80 poles.

⁶ Clarkson, Christopher, *History of Richmond*, Thomas Bowman, 1821, 278

None of Sir Conyers D'Arcy's papers survive. However two maps provide excellent evidence for the Hall and landscape at the time he purchased the estate in 1727⁷ (Figure 5) and at the time it was sold in 1761⁸ (Figure 6).

The Hall was improved under Conyers D'Arcy who employed Francesco Vassali⁹ to decorate five rooms. The roofline was simplified and Venetian style windows introduced on the front elevation. The finished Hall is illustrated on the 1761 map (Figure 7) but seems to have been an early project of the new owner. The work was probably completed when Lady Oxford visited in 1745.¹⁰ She describes the Hall but not the landscape.

When D'Arcy purchased the estate the landscape was much as indicated on Kirkham's Plan of 1720. The Colbeck plan shows little variation in its detail. D'Arcy began to remodel the setting. The results are documented on the 1761 map. He carved the park out of the fields that skirted the south and south-east side of the Hall removing the field boundaries between Ox Pasture, Cow Pasture and Broad Close. Broad Close was then a meadow and the other two fields pasture. He created the lake as a formal pond fed by a canal and cascade, with a temple beside, in front of the Hall in what was formerly Broad Close. A painting in the family's private collection details the finalised project for this scheme. He also laid out avenues south-east and north west of the Hall on the line of the terrace, which ran in front of the Hall. A further secondary avenue was laid out on the north west side. The drive shown on the 1727 map was retained as the main entrance and lined with a double avenue of trees. The forms of all the avenues are clearly marked on the 1761 map. The map also indicates Low Wood and the formal walks, cascades and water works made in these, which implies a detached pleasure ground. China Plantation linked Low Wood to the gardens a narrow band of woodland thus creating a flanking plantation for the whole south area of the park. A building is marked close to the approach drive a later map is marked as The Menagerie.

D'Arcy commissioned a drawing from William Kent for a Gothick¹¹ tower, which is indicated as being 80 foot high on the drawing and which may have formed the basis for, arguably the grandest landscape building at Aske. (Figure 8) This is the Temple sited in Coney's Garth behind and thus higher up the hill than the Hall. The supervision of construction has been attributed to Daniel Garrett.¹² The setting for the building (Figure 9) is most clearly shown on the later 1769 map of Aske drawn by Jackson on the instructions of Lancelot Brown. This shows formal pleasure grounds skirting this building with meandering walks possibly through shrubbery. In front of the building is a lawn in the shape of an amphitheatre. There has been some speculation that the building may have been built in two stages with the flanking turrets possibly being later additions to the central range. If this was the case the whole structure was in place by 1769. The Kent drawing alternatively might have been for an improvement for Oliver Ducket, the castellated eyecatcher

⁷ J Colbeck Estate Map for Sir Conyer's D'Arcy NYCRO – ZNK M 1/1

⁸ . Plan of Lordship of Ask belonging to the Rt Hble Earle of Holderness Survey by G Jackson, 1761 NYCRO - ZNK M 1/3 MIC 2120/79-100

⁹ Accounts at Hoare's Bank 1731 and 1740

¹⁰ Hist MSS Comm Portland, VI, 182-91

¹¹ See Rowan Alistair, Garden Buildings RIBA Drawing Series 1968 plate 19

¹² See Peter Leach, Country Life 1974 for discussion of the relationship between Daniel Garrett and William Kent.

on outlying rising ground beyond the estate landscape proper. If this were the case the original idea for the Temple remains unclear. In support of this latter theory David Watkins suggests Kent only used the gothic when improving an existing building.¹³ Influential in the positioning of this mock temple was probably the view from it to Scots Dyke¹⁴ a *real* piece of antiquity.

D'Arcy's other major garden project was the development of the productive garden away from the Hall although the 1761 map indicates that there are still three courts or garden enclosures parallel with the terrace on the south east side of the Hall.

D'Arcy died in 1758, and his nephew became the 4th Earl of Holderness. He planned to remodel Hornby Castle and sold Aske with the estate and all the Richmond property to Sir Lawrence Dundas in 1763.

3.3.5 Aske under the ownership of Sir Lawrence Dundas 1761-1781

It is clear that following the acquisition of the estate from Conyers D'Arcy, Sir Lawrence Dundas was intent upon improving both the Hall and the estate landscape. Lawrence Dundas was contractor for the Army (1748-1759) and the 2nd son of successful Edinburgh merchant Thomas Dundas. John Carr of York visited Aske before the purchase by Dundas is complete.¹⁵ Lady Dundas was at Aske in November prior to the completion of the sale assessing what was wanted in the Hall. She also addressed purchase of milk cows for the following next spring.¹⁶ It is reported two years later that both sheep and cattle grazed the park.

Dundas's first projects were for the domestic offices associated with the Hall. John Carr also designed stables¹⁷. 'The buildings are going on well...'¹⁸ it was reported only two years after taking possession. Carr's accounts for work at Aske date from 1764-1768¹⁹. Carr was paid a further 50gns in October on account of supervising works at Aske.²⁰ In 1767 he produced his final scheme to create a classical façade for the Hall. This plan was rejected.

Following the work on the Hall attention was turned to the landscape setting for the Hall. In 1766 it was reported that '...the Gardens and Grounds are all in fine order ...Fields, grass, hay, cattle everything is flourishing...' ²¹ so perhaps their alteration was not pressing.

¹³ Watkin et al. *A House in Town: 22 Arlington Street and its owners and builders* 1984 p26

¹⁴ *Scots' Dyke*. - This great embankment extended from the borders of Scotland into Yorkshire, and it may still be traced with more or less distinctness in many places. In Northumberland it is called the "Black Dyke," and consists of a ditch, with the earth thrown up on each side. It is visible from the Hall and the temple.

¹⁵ Wragg, Brian, ed Giles Worsley, *The Life and Times of John Carr of York, Oblong, York, 2000*, 106

¹⁶ NYCRO ZNK X 1/2/18 MIC 543 Correspondence, 9th Nov 1762

¹⁷ Wragg op cit, Fig 35,44

¹⁸ NYCRO ZNK X 1/2/29 MIC 543, Correspondence, 4 Aug 1763

¹⁹ NYCRO ZNK X 1/7/57-66, MIC 862

²⁰ NYCRO ZNK X 1/7/60 MIC 862, Wragg, Brian, ed Giles Worsley, *The Life and Times of John Carr of York, Oblong, York, 2000*, 106

²¹ NYCRO ZNK X 1/2/81, MIC 543 Correspondence 3 Aug 1766

Dundas approached Brown and he visited Aske in 1769. On September 6, George Jackson, surveyor and mapmaker attended Mr Brown the improver for two days.²² This resulted in this Richmond surveyor preparing a plan in a "very particular manner for Mr Brown the Improver's use ...describing exactly on the plan all the Hills, Hollows, Levels, Walks, Waters, Woods, Trees and buildings ..." Aske n.d. (dated 1769 on verso of plan) Plan of grounds of Aske Hall & the Richmond – Gilling Road with proposed diversions to take it further away from the Hall. G Jackson]²³A tin case for the plan and carriage to Northallerton was made suggesting the map was sent to Brown.²⁴

This plan (Figure 10) is a superb document for indicating the layout of the park in careful detail. It serves two purposes. It shows the features of the estate in detail at this date and also indicates Brown's proposal to divert the Richmond Gilling Road, south of its existing line, build a new bridge and probably create a lake south of the existing road bridge over Aske Beck. Whilst Browns accounts for £52-10-0²⁵ were paid in 1771 for a journey to Aske Hall & plan for a Bridge & the Head of water where the new road was to go over. Paid²⁶ and Jackson again attended Brown "relative to the execution of his plan for Improvements at Aske."²⁷ in September, Brown's project was not implemented. Instead work seems to have commenced soon after in the area now called high park. In 1777 Muldring Fern" and Coalsgarth planted – latter with 2000 of beech, Scots pine and oaks.

Work continued in the gardens. In 1771 gravel paths are widened. And in 1777 another reference indicates the walled garden was still being developed with wall trees, apricots, peaches, nectarines, grapes. "New peach Hall finished."²⁸ In October John Aitken the head gardener was dismissed and new gardener, Thomas Wittinshaw from Cheshire employed from Lord Gower's at Trentham.²⁹

Two paintings were commissioned by Lord Dundas from George Cuit in about 1780. These respectively are views from the south³⁰ (Figure 11) and north east.³¹ (Figure 12) They show the Hall, park, geometric shaped lake with a lakeside temple, the temple behind the Hall, against a backcloth of trees and the parkland. The view from the south shows the bridge on the Gilling to Richmond Road and area south of the Gilling Road which was planned by Brown to be included in the park.. The images indicate the development of the landscape at Aske at the close of this period. They imply a naturalistic parkland landscape but still with some formal elements in place. Notable is the absence of the formal avenue, with quincunxes, south west of the Hall so clearly shown on the 1769 Jackson map. Giles Worsley in *Country Life*³²

²² NYCRO ZNK X 1/9/119, MIC 930

²³ NYCRO - ZNK M1/4 MIC 2708/133-144

²⁴ NYCRO ZNK X 1/9/119, MIC 930

²⁵ NYCRO ZNK X 1/12/5, MIC 930 Sir L Dundas account with Messrs Drummonds, 1769-71 This is exactly the same as in the Dundas Account in Drummond's Bank

²⁶ Brown's Account Book in RHS Lindley Library, page 114. No amount mentioned. No date.

²⁷ NYCRO ZNK X 1/9/119, MIC 930

²⁸ NYCRO ZNK X 1/2/257, MIC 543, Correspondence from Aitken, 18 April 1777

²⁹ NYCRO ZNK X 1/2/301, MIC 543, Correspondence from Thos Cornforth [Richmond] to Sir Lawrence, 28 Oct 1777.

³⁰ Harris J, *The Artist and the Country House: A History of Country and Garden View Painting 1540-1870*, Yale Univ Press, 1979

³¹ In Government Picture Collection.

³² *Country Life* March 8 1990 Aske Hall Yorkshire II pp98-99

suggests the painting might reflect how it was envisaged Aske might be after the Brown proposals were implemented. This is however unsubstantiated.

3.3.6 The late 18th and early 19th century period

Lord Thomas Dundas 1781-1820

After the death of Sir Lawrence Dundas in 1781, Moor Park was sold and Aske became the main family seat. The last years of the 18th century for the estate were dogged by difficult financial times and there was a major sale of assets in 1794. Surviving accounts and documents of Thomas Dundas imply an interest in farming and gardening. There is correspondence between W T Aiton and Lord Dundas relating to the appointment of Wilkie as head gardener in 1814³³ and other material relating to the estate farms, stock and crops and seed purchases.³⁴ Household accounts indicate his purchase of major gardening books and Dundas was a member of the Royal Horticultural Society. A plan of c1808 concerns specifically drainage on the estate compounding this evidence.³⁵

In 1813 Thomas Bradley drew a key survey of the estate.³⁶ This shows the geometric form of the lake but overdrawn with naturalistic edges. The bill for the plan states it was for the "lawns and park" at Aske. The Gilling lodge is shown for the first time. It also indicates that the drive beside the bridge on the Gilling to Richmond Road is still a key entrance. This is shown also on the Turner painting of Aske with gate piers.³⁷ The outline of a lake is shown on the south side of the Gilling Road. The map does not record details of planting at this date but coloured hatching marks the pleasure grounds, China Plantation and Low Woods and an area north of Calf Croft. (Figure 13) Red may indicate proposals at this time. If so, this includes the proposed drive from high lodge which crosses Aske Beck dissecting in its path the Menagerie, alterations to the lake, a new and expanded wall for the ha ha and several small plates shown possibly for tree planting. The plan shows the double avenue of trees north east of the gardens leading towards the Gilling Lodge. Around Oliver Duckett are red annotations suggesting new plantations either side of the public road in the field and also around St Osythe's. By the time the 1st edition 6 inch plan was published in 1857 the drive from High Lodge and the lodge itself, the work of Ignatius Bonomi (?) was in place. Interestingly no drive towards Mouldron was in place even at this date.

Lord Thomas Dundas 1839-73

Thomas, 2nd Baronet & 1st Lord Dundas died in 1820 to be succeeded by son Lawrence, 3rd Baronet & 2nd Lord Dundas then in 1839 by his son Thomas who lived at Aske until his death in 1873. The mid century had two focuses of activity farming and the gardens around the Hall itself. A new farm was constructed to a model design at Olliver's. W A Nesfield may have been involved in the gardens close to the Hall. The estate appears on Nesfield's County Map. The map included sites where Nesfield *thought* he may get a commission and there is no documentary evidence for his involvement except

³³ NYCRO ZNKX2/1/2045 and 1959 Aiton was keeper at Kew Gardens at the time.

³⁴ NYCRO ZNK X2/22/46 and 22/48

³⁵ NYCRO ZNK M1/14

³⁶ NYCRO ZNK M1/6 MC 21120.124 - A plan of Aske and Richmond Estates, the property of Rt. Hon. Dundas made by Thomas Bradley 1813 colours are not shown on the microfilm

³⁷ Reproduced in HILL David "In Turner's Footsteps" John Murray 1984. Plate 8

for the large Cedars and ornamental conifers planted around the Hall itself, which are sometimes indicators of his involvement.

The first edition 6 inch Ordnance survey map of 1857 (Figure 14) provides accurate information for the mid 19th century and is notable for showing all the current garden buildings, the park with the formal avenues all gone and the public footpath running across the park between Richmond and Gilling. The High Park area is still in a number of fields but fences have gone South of Low Wood suggesting the area was brought into the park when the new drive was made.

By the 1870s descriptions in guidebooks and illustrations of the Hall give useful information for the Hall setting and gardens. Wenham's study of Richmondshire is typical. A photograph of the south eastern aspect of the Hall, taken for the book, from the Richmond/Gilling West road, shows the hall covered in creeper with shrubs/small trees to front, parkland down to lake which has grass margin. Small island with young trees and trees including scots pine at bottom left of photograph on southeastern waters edge.³⁸

Other texts make favourable general comments on the estate.

*'The pleasure grounds are tastefully and thickly planted. Many of the views enjoyed from the Hall and grounds are extensive and of striking beauty, and Oliver Tower is a pleasing object in the landscape.'*³⁹

The third quarter of the 19th century saw another phase of alterations to the Hall, new stables and conversion of the Carr stables into a chapel. (1887) Information in estate records on the landscape at this time is scant. John Thirkell was head gamekeeper in 1890 and living in the Temple while Edward Letts was Head Gardener.⁴⁰ At this period, a keen interest of the family was hunting and shooting. The first edition 25 inch Ordnance survey map was produced in 1891 and between 1891 and 1913 indicates that there was new planting. (Figure 15) Adjacent to the China Plantation and Low Wood. The Mouldron Belt was also doubled in depth. Around the temple the setting was simplified although the amphitheatre lawn maintained. Both editions imply a belt of trees between Aske Bridge and Low Lodge on the Gilling Road, which has now largely disappeared. New gardens appear to have been developed against the southwest façade of the Hall and the form of the balustrading on the south east front altered around this time. The apsidal centre and turning circle for vehicles in front of the projecting wings disappeared by 1891 and the present balustraded terrace with gates and gate piers south east and north west of the terrace were in place. (Listed grade II – gates with elaborate scroll decoration look earlier than the gatepiers and it would be useful to get a professional opinion on these.) A reconsideration of the drives would probably have been required when the stables were constructed in their new position north east of the Hall. By 1891 gas works were placed by Aske Bridge next to the old approach. This would most certainly have ensured this approach was no longer one used as a main entrance.

³⁸ Wenham, L P, *Around Richmond in Old Photographs*, Alan Sutton, 1989, 100

³⁹ Whellan, 478

⁴⁰ Bulmer's Directory of Yorkshire 1890

3.3.7 The modern period embracing the 20th century

The modern period has seen:

- New plantations adjacent to the China Plantation and edging Low Wood which have eroded the original design lines of the pleasure gardens and their walks
- A variety of gardens related projects with the ornamentation of the pleasure grounds on the west of the Hall being the major recent project.
- the pleasure grounds skirting Aske Beck lost to planting probably to provide cover for birds.
- the amphitheatre in front of the Temple behind the Hall has lost its form through indiscriminate planting. In the park modern plantations
- Alterations to the Hall, truncating the projecting wing to work of the architect Claud Phillimore.
- Overlaying with a new garden the 19th century scheme on the west side of the Hall.

3.4 SUMMARY

The estate's parkland landscape overlaid a previously agrarian landscape with pockets of woodlands. The development of the landscape at Aske follows a pattern of establishment and decoration of the form. The Wharton period established the Hall footprint with its projecting wings, its orientation to the south east and terrace. The period of Conyers D'Arcy established the landscape form of the southeast park and surrounding woodland belts and pleasure grounds. The early years of the Dundas ownership saw a gradual naturalising of the landscape form possibly influenced by Lancelot Brown. The key parkland planting took place in the 19th century when the Landscape Park with belts clumps and woodlands were established and clearly defined entrances to the estate and boundary walls were established. During this time the structural avenues which had given the park its form vanished probably through a combination of felling and selective thinning. Tree stumps in the park indicate the lines of the avenues in the western parts particularly. The last period has seen a variety of gardens related projects with the ornamentation of the pleasure grounds on the west of the Hall being the major recent project. Sadly the detached pleasure grounds skirting Aske Beck have been lost to utilitarian planting and rhododendron, probably to provide cover for birds. Similarly the amphitheatre in front of the Temple behind the Hall has lost its form through indiscriminate planting. In the park modern plantations adjacent to the China Plantation and edging Low Wood have eroded the original design lines of the pleasure gardens and their walks.

3.5 CONCLUSION

The landscape at Aske Hall demonstrates survivals from the first half of the 18th century notably in:

- the form of the park,
- the lakeside temple and lake's original location.
- the detached pleasure grounds in Low Wood ornamented with cascades and pools

- the pleasure grounds behind the Hall, which form the setting for the Gothick Temple at their heart.
- Oliver Duckett and its setting.

The vestige of the lime avenue on the north east of the Hall hints of the once magnificent formal avenues which would have accentuated the form and location of the Hall. Parklands from this period which were not swept away in the post 1750 period, in the wake of Capability Brown, are relatively uncommon and therefore this survival can be considered a significant one.

It would also seem that, although Lancelot Brown visited Aske his projects were not executed. Indeed the naturalization of the landscape at Aske, in so far as it was carried out with the planting of belts and clumps (and there are few of the latter) dates from the 19th century. Their introduction may have been more influenced by the need to provide an environment which supported the hunting and shooting interests of the family rather than a clear design intention. The major contributions from the 19th century are arguably

- The introduction of High Lodge and the grand serpentine drive towards the Hall which exploits the topography of the site.
- Planting the Mouldron belt and development of the High Park area
- Definition of the boundary on the Gilling Richmond Road by tree planting (now lost)
- Development of farms in the outlying areas of the estate

The major losses from the period of Conyer's D'Arcy comprise

- the avenues although there is on the ground evidence for their lines
- The setting of the Gothick Temple which probably was originally flanked by yew and holly and for which there is evidence at the site including the holly hedge along the northern boundary.
- The lakes in the Aske Beck valley excepting for the round pond.
- The form of the terrace along the southeast front of the Hall with its apsidal centre.

3.6 STATEMENT OF SIGNIFICANCE

The historical significance of Aske 's designed landscape is derived from the imaginative proposals of Conyer's D' Arcy. His works provided a foundation, which has endured throughout its history, up to date, and provided a basis for the present parkland pattern. This in turn complimented the older form of the Hall established before the time of his purchase. Its importance has already been recognized in according it grade II* status on the Register of Historic Parks and Gardens. The Hall itself and the Temple behind the Hall are Grade I listed buildings and the landscape provides the setting for a further twelve listed buildings.

The survival of the mid 19th century landscape that overlays the earlier design for the park provides a clear framework to enable restoration. The previous tree avenues are still evident through tree stumps on the ground as is the previous driveway, visible as a ridge.

The lake and temple have subsequently been altered from the earlier design. This shape is still evident and has not been destroyed in the later alterations. Views were once available from the Hall over the lake towards Scots Dyke. These views were lost through subsequent planting in the mid 19th century design.

The survival of the earlier pleasure grounds and ornamental water features are still evident, although overgrown with later dense planting of trees and laurels.

4. SITE APPRAISAL

This chapter includes the background, conclusions and recommendations of surveys that have been carried out to inform the restoration and conservation of the Aske Estate.

The first section covers the archaeology of the listed landscape and surrounding areas that would be impacted through the proposals. The second section covers the ecology of the study area and identifies designated areas surrounding the site.

The third section covers the parkland lake with further proposals to be found in appendix 6, the Lake Restoration Plan. The fourth chapter covers current access and potential access.

The fifth section covers the current landscape management that takes place on the Estate. Whilst the sixth section describes the current landscape.

4.1 ARCHAEOLOGY

4.1.1 Summary

This report presents the results of an appraisal of the known archaeological sites on and around the Aske Estate with a view to assessing the potential for the presence of archaeological remains within the landscape.

It also presents the results of a walkover survey although this was limited due to the fact that the undergrowth was too dense in the woodland areas.

The appraisal and survey have shown that the Estate lies in an area of high archaeological potential, particularly for the prehistoric period in the north western part of the site and the medieval period on the eastern side where the village of Aske is thought to have been sited.

Recommendations are made for further research and fieldwork in order to assess more fully the archaeological potential of the area.

4.1.2 Introduction

This document reports on the results of an archaeological appraisal as defined by the Association of County Archaeological Officers (1993, 4) and by the Institute of Field Archaeologists (1999, Appendix 1).

The appraisal forms part of the archaeological and historical assessment of the landscape of the Aske Estate, which will contribute to the preparation of an Historic Landscape Restoration Plan under Countryside Stewardship.

The study aims to assess the potential for buried archaeological remains or extant earthworks of archaeological interest within the Estate in order to inform the Restoration Plan.

The appraisal was undertaken in two parts comprising a consultation of the Sites and Monuments Record held by the Heritage Unit of North Yorkshire County Council, and a walkover survey of the Estate.

4.1.3 Procedure

Appraisal

A search was undertaken of the Sites and Monuments Record (SMR) database curated by the Heritage Unit of North Yorkshire County Council.

Since the area of study was located in an area where the database had not been completed, a visit was made to the Heritage Unit in order to consult the National Archaeological Record card index and the Ordnance Survey Archaeological Record card index. Parish files for Aske and for Gilling with Hartforth and Sedbury were also consulted.

Aerial photographs held at the SMR were consulted although there were no oblique shots for this area. The vertical photographs by Meridian Airmaps Ltd provided one complete view of the area, MAL 184-71-150, although this was taken for mapping purposes and no archaeological features are visible.

A small selection of published sources were consulted in order to enlarge on the information in the SMR.

Copies of historic maps were kindly supplied by Janette Ray and a map dating to 1720 was consulted in the Estate Office.

Sites defined by the appraisal have been plotted onto the Ordnance Survey 1:10,000 map and are presented in Figure 16.

A catalogue of sites is presented in Appendix 1.

Walkover Survey

A walkover survey of the Estate was undertaken on July 3rd 2003. The aim of the survey was to identify any extant earthworks, features or structures of archaeological interest, to indicate their position, and to assess their state of preservation, possible function and potential archaeological or historical significance.

Areas or features of interest were allocated a number and marked onto a copy of the Ordnance Survey 1:10,000 map in the field. The results of the survey are presented as a map showing these numbers (Figure 17) with a description of the areas or features in the text below.

4.1.4 Appraisal

Study Limitations

Only documents held by the Sites and Monuments Record were consulted and the area covered was restricted to 9km² site centred on NZ 175 035 (Figure 16).

Results

Prehistory

The prehistory of the area is attested by the find of a Neolithic stone axe (Site 1) in the Mouldron Plantation in the mid-19th century.

Evidence has also recently come to light for a prehistoric hut settlement thought to date to the Bronze Age or Iron Age, in the area covered by the Black Plantation (Site 2). The settlement has been identified as a series of low circular stone walls with linear walls, possibly defining enclosures, and clearance cairns, suggestive of agricultural practice. The extent of this settlement is unknown, but it seems to have covered a fairly large area and may have extended into the Mouldron Plantation area.

A circular earthen mound (Site 3), c.8m in diameter and c.1.8m high, identified during the walkover survey may also belong to the prehistoric or early medieval period. However, it only appears on maps dating from 1769 with the major landscaping plans, and it is planted with one very large lime tree. This may mean that the mound was constructed in order to give height to the young tree, as was common practice in the construction of gardens (J. Ray *pers. comm.*) or the tree may have been planted on a pre-existing mound.

An Iron Age farmstead has been excavated at Rock Castle, Gilling West to the northeast of the area (Fitts *et al.* 1994) but there is no evidence for this period on the Aske Estate.

The Roman Period

There is extensive evidence for the Roman period within Richmond and along Watling Street but no finds or sites of this period have been identified on the Estate.

The Early Medieval Period

It is clear from the archaeological record that Aske was an important area in this period. It lay immediately to the west of Scots Dyke, a substantial land boundary comprising an earthen bank and ditch running north-south (Sites 4, 5 and 6). The dyke was constructed between the 6th and 7th centuries AD.

Post-Medieval and later

The Aske Estate passed by marriage into the hands of the Bowes family in c.1522, and was held by the Wharton family from 1627 to 1727, when it was sold to Sir Conyers D'Arcy.

The lands continued to be exploited mainly for agriculture until the re-design of the gardens in the 1770s.

Prior to this there was probably a mill sited on the Aske Beck at NZ 1797 0294 (Site 14). Evidence from field names suggests its position here with Mill Close named to the north of the beck on the 1720 and 1727-58 maps and to the south of the beck on the 1761 and 1815 maps. The walkover survey also identified a deliberate regular cutting for the beck creating a square area at this point.

There were several limekilns in the area at this time (Sites 15, 16, 17 and 18) as well as a number of quarries shown on the Ordnance Survey maps, including a sandstone quarry on the Estate (Site 19).

Other sites included on the archaeological record (Sites 20 – 25) are described in the records of the English Heritage Register of Parks and Gardens and will not therefore be discussed here.

4.1.5 Walkover Survey

Constraints

The four small fields to the east of the Mouldron Belt were not surveyed.

The time of year meant that the undergrowth in the woodland areas was too dense to be able to identify any structures or earthworks within them. Therefore, only some areas of the Low Wood were walked in order to address specific questions.

Results

All areas of the site which were subject to survey are given at least a brief description irrespective of whether the area held features of archaeological importance. Findings are set out on Figure 17 and its accompanying schedule in appendix 2.

4.1.6 Discussion

The appraisal shows that the Aske Estate lies within an area of high archaeological potential. It contains within its boundaries find spots relating to prehistoric activity and borders the Black Plantation, which contains evidence for an extensive prehistoric settlement. It is likely that structures relating to this settlement survive in the area of the Mouldron Plantation.

There is evidence that the village of Aske (Site 7) already existed in this period as attested by its description in the Domesday survey (Page 1914; Beresford 1955). Its entry reads:

In Hasse [Aske], 6 carucates for geld, and 4 ploughs can be [there]. Now Wihomarc, the man of the Count, has on the demesne 1 plough, and 5 villeins and 3 bordars with 2 ploughs. The whole [has] 1 league in length and half [a league] in breadth. T. R. E. it was worth 20s.; now [it is worth] the same.

The area of Gilling was the principal seat of the Earls of Mercia from the 7th century and the last of these, Edwin, is thought to have built his Manor House on the site of the later Gilling Castle (Site 8).

To the north of Aske, Gilling West was also an important estate at the time of Domesday and according to Bede, Gilling was the site of an early medieval monastery (ASUD 1999). Although not directly in the area of study, it is important to note that several finds of this period have been recovered a short distance to the north of the Estate (SMR records). Some Anglo-Saxon coins were found by metal detectors at NZ 183 050; a 10th century hogback stone, a 9th century cross and some pre-Conquest sculpture has been recovered in the vicinity of NZ 179 053 (Medieval Archaeology 27, 1978: 127); and a pattern welded sword with a silver gilt hilt was found near Gilling Beck Bridge (NZ 1835 0524).

The Medieval Period

The village of Aske (Site 7) continued to exist into the medieval period and it is mentioned in the early 14th century Lay Subsidy returns and the 1377 Poll Tax (Beresford 1955). After this there appears to be no further mention of the village, and although local tradition states that it was destroyed in 1824 and replaced by a row of cottages, it does not appear on any of the historic maps. The walkover survey has identified uneven areas in the fields to the west of these cottages but there are no clear features.

Gilling Castle (Site 8) was constructed in stone by Count Alan in the late 11th century and is thought to have stood some 400m to the north of Mouldron Plantation on Castle Hill. There is no sign of the building now, and it is thought to have been destroyed in the early part of the 18th century.

In the medieval period the Aske Estate was owned by the de Aske family and most of the land was probably exploited for agriculture, as reflected in the land-use recorded on the 1720 Estate map held in the Aske Estate Office. The walkover survey has identified three fields with ridge and furrow earthworks which may date to this period (Sites 9, 10 and 11).

The parish boundaries were defined by earthen ditch and bank structures, such as that recorded in Gilling Wood at NZ 1515 0485 (Site 12) and the intersection between the three parishes of Aske, Whashton and Gilling with Hartforth and Sedbury was marked by a cross. The cross base is still *in situ* and is known as the Plague Stone. This name probably derives from the fact that food and provisions were left at this spot for plague victims, or that the cross was erected as a memorial to plague victims (Site 13).

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No evidence for the Roman period has been found but the proximity of Gilling and the documentary references to the village of Aske, suggest that there may have been considerable activity here in the early medieval period.

The medieval period has been researched from a historical viewpoint, but little is known archaeologically. Some ridge and furrow earthworks survive and a possible mill was sited on the Aske Beck.

4.1.7 Recommendations

It is recommended that a detailed walkover survey of the woodlands and of the fields under crop be undertaken during the winter months when the vegetation is low. Until this is completed, the potential for survival of archaeological remains cannot be fully assessed. This work needs to be undertaken before any large scale planting works are carried out in China Plantation.

Particular attention should be paid to the area thought to be the site of the medieval village of Aske, situated north of School Cottages, see Figure 16. It is possible that the channel feeding water to the lake, as seen on the 1769 map, crosses part of the village site. If the channel is to be re-cut, an archaeological watching brief is recommended.

4.2 ECOLOGY

4.2.1 Introduction

The Aske Estate lies immediately north of Richmond, North Yorkshire within the River Swale catchment area. The Estate covers an area of 176.33 ha which is mainly down to mixed plantation or sheep grazed pasture. The Phase I Habitat map shows the study area, see Figure 18.

4.2.2 Desk Top Survey

Consultation

The following organisations and individuals were contacted for information held with regard to areas of value to nature conservation and protected species:

- English Nature (EN)
- Environment Agency (EA)
- North and East Yorkshire Ecological Data Centre
- North Yorkshire Bat Group
- North West Yorkshire Vice County (VC 065) Botanical Recorder

The North Riding Badger Group was contacted but neither this group nor any other was reported to hold badger data for the Richmond area.

No response has yet been received from the North West Yorkshire Vice County Recorder but data will be forwarded should any become available.

Collated Information

The following sections summarise the information gathered as a result of the desk based study.

Statutory sites

One Site of Special Scientific Interest (SSSI) – Gingerfields (NGR NZ 162025, NZ 167022) – lies approximately 500 m from the Estate boundary. This site is located to the south west of Aske Estate, covers an area of 6.89 ha and was notified on 11th July 1991. Gingerfields SSSI comprises two meadows, which are botanically rich and managed by traditional grazing and mowing. The western of the two fields supports a large population of the regionally rare species, meadow saffron (*Colchicum autumnale*). For additional details see Appendix 2. None of the proposed restoration activities will affect this area.

Non-statutory sites

Two non-statutory sites of nature conservation importance, Sites of Importance for Nature Conservation (SINCs), were identified by the North and East Yorkshire Ecological Data Centre as lying in or within 500 m of the Estate.

Low Wood SINC (NGR NZ 165029) is located entirely within the boundary of the Estate. The SINC includes areas of introduced shrub, broadleaved plantation, conifer plantation, mixed plantation, semi-natural broadleaved woodland, tall ruderal herbs and part of Aske Beck. Low Wood SINC occupies 26.20 ha and also appears on the Ancient Woodland Inventory.

Gingerfield Wood (east) SINC (NGR NZ 160024) comprises bracken, broadleaved plantation, mixed plantation, semi-natural broadleaved woodland and includes part of Aske Beck. The site is 5.28 ha in area and lies to west of the Estate, to the north of Gingerfields SSSI. None of the proposed restoration activities will affect this area.

Species lists and maps of the SINC sites have been provided by the North and East Yorkshire Ecological Data Centre and are attached in Appendix 2.

Protected species

Badger are known to be present on the site, and setts and other evidence of badger are recorded on the Phase I habitat map.

Barn owl is known to be present on the site. Section 5.2.6 gives further details on barn owls.

The EA have records of otter in the general area of the Estate, but no water voles records are held by any of the organisations contacted.

The EA consider that white-clawed crayfish may be present in the area, but hold no records.

The North and East Yorkshire Ecological Data Centre do not have any records of protected species within the area, although this does not indicate absence of such species.

Additional information

Personal communication with Mrs Player during the course of the site survey revealed the presence of a number of faunal species: barn owl, thought to be nesting at St Osythe Farm; badger, with setts located on the south side of Aske Beck within Low Wood SINC; little owl, which regularly visits the mature trees surrounding Mrs Player's cottage; roe deer; hedgehog; stoat; and mink, which was observed in 1997.

Mrs Player is thought to be a reliable source of information and has recorded photographs and written notes of her sightings in the local area. She has been resident in the vicinity for over 60 years and currently lives at High Lodge, within the study area.

4.2.3 Survey Methodology

Extended Phase I Habitat Survey

An Extended Phase I Habitat Survey was undertaken by an experienced ecologist with full membership of the Institute of Ecology and Environmental Management (IEEM) on the 15th July 2003.

The walkover survey was conducted based on methodology devised by the Joint Nature Conservation Committee in 1993 (reprinted 2000) and amended by the Institute of Environmental Assessment (IEA, 1995). The study area was surveyed on foot, with areas of habitat mapped and coloured according to type. Dominant, typical and notable plant species were recorded and given a DAFOR (Dominant, Abundant, Frequent, Occasional and Rare) abundance rating. Target Notes were made for any areas of particular interest. The survey area was extended beyond the boundaries of the proposed development in order to include nearby features with ecological value where appropriate.

Signs of protected species, e.g. badger, bats and water vole, were noted if present, including tracks, droppings, latrine sites, roosting sites and dwellings. Trees were visually assessed with binoculars for possible usage as roosts by bats. Habitats were assessed for their potential to harbour protected species, or species which are not specially protected, but are found within national and/or local Biodiversity Action Plans. Casual records were made of any other faunal species, in particular birds and mammals.

In the sections below records of individual species activity are recorded but where no sign of activity has been recorded this must not be misinterpreted that the species is not present within the study area.

Survey Restrictions

The following limitations to the survey, due to the time of survey and other restrictions, have been considered:

- vernal species are best recorded during March-April and can be missed in July;
- no crepuscular survey for dawn and dusk species activity i.e. owls, bats;
- only one visit was undertaken which might potentially result in missed species;
- dense undergrowth/vegetation made badger activity difficult to observe and sett survey is usually recommended in February;
- access along the beck is restricted in places which might result in species being overlooked (for the purposes of Phase I HS full species lists are not required); and
- access on steep wooded slopes was restricted in places which might result in species being overlooked (for the purposes of Phase I HS full species lists are not required).

The results of the ecological survey are contained in Appendix 3.

4.2.4 Recommendations for Further Survey

It is recommended that the following further surveys are conducted:

- Full badger sett survey to be completed prior to any restoration works commencing on site along Aske Beck.
- A breeding bird survey is also proposed for any areas of scrub or woodland to be lost as part of the works.
- Bat roost potential survey of mature trees if felling or tree surgery is to be carried out.
- Design proposals and method statement for creation of a series of small permanent/semi-permanent ponds/pools in the borrow pit area. A Pond Management Plan is being produced by the Farming and Wildlife Advisory Group.

4.2.5 Constraints

The major ecological constraints on potential works are as follows:

- Low Wood SINC and associated broadleaved woodland – future planting will need to follow proposed species composition – see chapter 4.4
- Breeding birds on the site (particularly barn owl) – surgery and felling of trees needs to be carried out between March and January to avoid the breeding bird season.
- Badger activity especially in the south west section (see Phase I HS map)
- Bat activity (associated with large mature potential roost trees) - a bat potential survey of trees is to be carried out prior to any surgery or felling operations.

4.2.6 Summary

Because of the area covered by the site this report has described many different habitats and species, only a few of which are likely to be affected by

any proposed works. The species and habitats identified as being of potential major ecological constraint are recorded above. The information required is specific to the constraints identified but could become wider if other protected species come to light during these surveys.

The habitat creation proposals would provide a series of independent pools which would remain largely unaffected by surface drainage due to the local relief. The main species benefiting from these habitats would be invertebrates, birds, vegetation, and amphibians with other species such as bats benefiting due to increased feeding ranges.

Creating a series of pools with different water levels on both sides of the Richmond road would produce a stepping stone effect for the movement and survival of species in this area. The variety of water levels and vegetative development would improve the chances of occurrence for the conditions required for invertebrate development.

The main areas to avoid during the design process from the perspective of ecological value are therefore considered to be Aske Beck and its associated ground flora and adjacent woodland especially the section of woodland opposite Olliver Cottage, the area around St Osythes farm until bird survey has established the presence or absence of barn owls. Any large mature trees with the potential to act as bat roosts. The south western section of Aske Beck where known badger activity has been observed and the area of acid grassland on the hill top by TN11 as it has the potential for habitat creation.

4.3 PARKLAND LAKE

A site visit and visual survey of the main lake at Aske Estate was carried out on 3rd June 2003.

4.3.1 Main Lake

The main parkland lake in Aske Estate is situated to the south east of Aske Hall. The lake was originally geometric in shape, but has since been adapted with planting to give more naturalistic edges (though the overall shape and original location of the lake have been retained).

Physical Structure and Water Quality

The main lake has various inflows, mainly from agricultural field drains, and one outfall, which has a regulating valve. The banks are well protected from damage in the outfall area, with other banks appearing to be in good condition apart from a small number of eroded areas on the west shore. There is a water-jump for the eventing course present beside the outlet. An island is also present adjacent to the outfall, though this was not accessible at the time of survey.

More water enters the lake than leaves via the outfall, indicating that if there is a liner present in the lake, it is perforated.

The original depth of the lake appears to have been 1m or more, but it is currently heavily silted with only 0.3-0.5m of clear water remaining. The deeper silt is black and anaerobic, mainly formed from tree leaves that have dropped into the pond and broken down rapidly (due to the alkaline nature of the water). The surface silt is paler in colour, likely to have been brought in from runoff entering the lake. Other than the siltation, the water quality appears good (from the aquatic species present).

Flora and Fauna

There is no marginal or emergent aquatic vegetation within the main lake, due to a combination of factors – heavy shading by overhanging trees, grazing by wildfowl and the presence of signal crayfish. Only filamentous algae were present, covering about 50% of the pond in total.

A variety of wildfowl were observed using the lake, including swans, mallard, coots and other duck species. Fish observed within the lake included a small rudd, brown trout (probably stocked) and a small pike. Signal crayfish are present, having been introduced historically, other invertebrates observed through stone-turning included *Mystacides*, *Hydroptilidae*, *Asellus* and *Leptocerus*. A small angling club currently fish on the lake on very few occasions. The lake appears to have been stocked with fish historically.

Recommendations for the restoration of the lake are included in the Lake Restoration Plan. See Appendix 5.

4.4 WOODLANDS

4.4.1 Review of the Historic Woodlands

Aske Estate Woodlands were visited on Tuesday September 2nd 2003 in the company of the estate forester Shaun Purkiss. All of the woodlands within the English Heritage defined area of 'Garden and Other Land of Historic Interest' were inspected.

4.4.2 General Comments

The woodlands are generally in excellent condition and are very well managed. There are many fine stands of maturing hardwoods of both oak and beech.

4.4.3 Woodland Comments

Lake Wood

It is likely that this woodland would have been originally planted with oak and beech and possibly Horse chestnut. In more recent times Sycamore has become the dominant species in both the canopy and understorey. Examination of the historic maps indicates that the location of the woodland today is different to that in 1856 when it would appear that there was a cascade on the south east side with possible long distance views across the cascade from the Hall. Consideration should be given to the possible

restoration of this view provided additional trees further to the south east would not obscure it.

Elsewhere consideration should be given to the pollarding of the lakeside willows. In addition it would be sensible to consider the gradual removal of the mature sycamore and the removal of sycamore from the understorey. Different species could then be introduced with the aim of increased diversity and different autumn and spring colours when the trees are reflected in the lake. Suitable species would be oak wherever there is enough overhead light created by the sycamore removal plus beech, ash, horse chestnut and alder. These changes should be gradually effected with a maintenance of tree cover throughout.

Low Wood

This wood is comprised of a large number of relatively small compartments. The UKWAS management plan needs to be updated in this area and define a clear 10 or 20 year plan for this woodland. A number of operations should be undertaken with the ultimate objectives of restoring a proportion of the PAWS, the complete removal of conifers from the maturing plantations, the removal of all sycamore, laurel and rhododendron from the area and increasing the biodiversity of the wood and increasing its amenity value as a place to walk. Ideally this work would be combined with the restoration of the weirs, pools and cascades of the stream.

As the removal of both sycamore and conifers from this wood is an overall objective there is a need to consider alternative species to 'nurse' the hardwoods to be planted. Consideration should be given to the use of birch and alder. In addition it would appear that wild cherry grows well on the estate but no large specimens were seen. There may well be a reason that cherry has not been planted historically and the issue merits some further research. If there are no silvicultural reasons for the absence of the species from the estate then it is recommended as a constituent of future schemes on commercial, ecological and visual grounds.

China Wood

The UKWAS management plan recommends clear felling the larch in this area. An alternative that might be considered is to reduce the larch to around 100 to 150 stems per hectare and underplant with a hardwood mixture and conifer nurse. The pine around the edge of the area would stand. There may be problems with wind stability but if this is not considered a major problem then this solution will be less intrusive in the historic core of the estate than the proposed clear felling.

Mouldron Avenue

This double avenue has one row of sycamore and one row of Beech. The beech was almost certainly planted as a single row with the sycamore added at a later date. Some of the beech has failed and others will need removal in the near future. Consideration is being given to in filling the gaps in the beech row. I would strongly recommend that this action is not undertaken as it will result in a very uneven row of trees that will never have the appearance of an avenue. A number of options should be considered as follows.

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- a) Continue to remove the individual beech as they fail and when around 30% to 40% have failed fell the whole row of beech and replant.
- b) Plant two new rows of trees outside the existing avenue in the fields to either side of the avenue. Remove the trees from the internal rows as and when they fail and when the outer rows are around 50+ years old fell the internal rows and replant them.
- c) Plant a new row inside the existing beech row and remove the inner beech as they fail and fell and replant the remaining beech when around 30% to 40% have been removed.

Options b and c will necessitate the field to the south of the avenue moving from arable to pasture.

Mouldron Belt

The mixture of oak with sycamore is currently struggling as the oak have become etiolated and are in danger of being swamped by the sycamore. It is unlikely that enough good oak are present to form a final crop. This stand illustrates a general point that nursing of broadleaves seems to be essential to good stand establishment and that conifers do a better job than sycamore. However, in the more sensitive areas from a landscape and biodiversity viewpoint it is likely that some other nurse species will be required. It would be good to try birch and alder as nurse species in a small area to determine their suitability for this task.

In this stand consideration should be given to augmenting the quantity of oak in the stand and to releasing those oak that have survived as reasonable specimens. It is suggested that in areas where there are insufficient good quality oak that an area approximately 10m by 10m is cleared of all sycamore and a group of 16 oak established. Any existing oak would be included in the 16.

Mouldron Plantation

The restoration of this belt seems to be developing well.

Temple and Crow Woods

Examination of the historic plans shows that there was originally a large open area to the south east of the Temple. There would appear to be spectacular long distance views over the estate towards the hills of the North Yorkshire Moors that have been occluded by the plantation established on the original clearing. Given the current lack of use of the temple there is no immediate need to remove the trees. However, it should clearly be a medium term objective to cut back the larch so as to reveal the view from the Temple. Ideally this work would be undertaken in association with restoration works to the Temple. It is considered that as a minimum (and this work could be undertaken in the short term) all trees between within 8 metres of the edge of the cut grass should be removed and the area returned to grass. Trees further away than 8 metres should be heavily thinned and no new planting undertaken. The space created and the area in front of the Temple would

combine to make a fine setting for an open air theatre or other performance type events.

General Issue

A number of the plantations seen are in need of remedial work in the near future that will not necessarily be justifiable on commercial grounds. Woodland Improvement Grants have a role to play in partially funding the costs of this work but discussions with the estate forester revealed plans for the installation of a wood fuel system to heat the Hall and other buildings. Quite apart from any commercial considerations the demand of a wood fuel system for chips that can be produced from low grade material would be a major boost to the management of the woodlands on the estate. On the basis of a rough calculation around 10% of the annual increment of the Aske Woodlands would be more than sufficient to meet the woodchip demands and would be a significant driver towards management of some of the less commercial areas.

4.5 ACCESS

4.5.1 Current Access Network

At present there is a system of footpaths and bridleways that are located around the site. See Figure 20.

The main footpath running through the Estate is accessed from the north of Richmond and leads through a series of fields, before entering Aske Beck and the parkland. It then follows the road to the front of the ha-ha and northwards past the stables and the edge of High Park. This is a well used route with views across the parkland and lake and towards the house.

A bridleway runs from Olliver Cottages past Olliver and over Scots Dyke. This route provides good distant views to the Hall and treescape beyond. A number of other long distance footpaths lead from the north of Richmond northwards, but at present there is a lack of smaller circular walks.

4.5.2 Potential Access

The Estate are proposing to open up the area around Olliver Ducket for permissive access, to provide an area for leisure walks close to the local residents of north east Richmond. This route will also take advantage of the available outstanding views from the east towards the Hall and landscape.

The proposed route is shown on Figure 20.

4.6 LAND MANAGEMENT

4.6.1 Consultation

Discussions were held with the current woodland manager, Shaun Perkiss to determine the current management of land within the Study Area.

4.6.2 Staffing

Estate employed 5 staff members c. 10 years ago and included a waller and a fencing team. C. 5 years ago Lord Ronaldshay reduced staff numbers to forester plus one and a keeper, who is employed by the shoot. These staffing arrangements are in place to date.

4.6.3 Woodland Management

The status of the draft Woodland Management Plan has been approved by the Forestry Commission. This will run over a 5 year period and covers most of the woodland on the estate.

The Estate is now FSC accredited. Ensuring that any woodland is managed on a sustainable basis.

Under the Farm Woodland Premium Scheme tree planting was carried to double the tree belt along Washton Road and infill planting to the area between the southern end of High Park and China Plantation.

Aske Beck

Aske Beck has been restocked in the last 10 years with continuous removal of rhododendrons and laurel to the northern side by cutting down and stump treatment. To the south of the Beck, existing stand of beech and oak are to be retained with the removal of non native species. Under planting of oak and ash to be carried out by waters edge. Sycamores will be continued to be removed due to the problem with squirrel damage.

Area by the main entrance bridge has been cleared felled and replanted with larch as nurse species.

Forestry activity within this area is to be reduced to enable lower maintenance costs. Planting of nursery stock is to be discontinued and small groupings of native species of 8 to 9 trees with tubes are to be planted instead. Clear felling is to cease. Oak and ash will be planted without beech and area along road is to be opened up.

Areas within China Plantation will be opened up through zone felling to enable a pheasant pen to be sited in this area. Oak and ash will be planting over a period of time.

The deer population in this area is maintained through selective culling by a sub contractor and regularly deer are killed on the Washton Road due to the movement of the deer.

Mouldron Plantation

The plantation creates a skyline feature for the estate and also an entrance feature for visitors who use the West Lodge entrance and is considered a valuable asset.

The line of trees affronting the road from West Lodge have been retained, 3 areas behind were felled and selective areas replanted in 1995 and 1996. Previously 2 out of 3 pronounced wet areas from former quarrying, have been dug out to create open water, and used to encourage amphibian wildlife and diversify the habitat.

New planting will be ash, oak and nurse crop of Norway spruce.

Temple

Area of plantation planting to front of temple will be harvested by selective felling. The area will then be replanted at a lower density, with continuous cover.

Olliver

Trees have been planted in this area to create a parkland character, including 2 London plane and lime and oak. A number of self-sown trees area evident along the line of Scots Dyke.

4.6.4 Game Management

Pheasant shooting is carried out on the Estate by a tenant keeper. No rearing is carried out on the estate and poults are brought in, with 18-20 days shooting per annum and c. 7,000 birds released.

Pens are located in area that borders China Plantation and Aske Beck, south east of Aske Beck and in the north of China Plantation. The pheasants are mostly out in the high ground to the west, outside of the study area.

4.6.5 Farming

At present 3 tenant farmers occupy land on the estate for sheep grazing, High Park, Aske Park and South Park, these areas are let on an annual basis. These areas are also topped off from late May to September.

Lower Oliver area, Aske Park and St Osyth Farm is tenanted to Mr Turnbull. Area to south of Olliver is part arable and will continue as. Quarry, formerly the estate tip, has been reconverted to woodland c. 4 years ago and is known as Cokers Wood.

4.6.6 Riding

The parkland around Aske Park is currently let for 2 events per year for 9 years for commercial horse riding competitions and act as a fundraiser for the Zetland hunt.

4.6.7 Lakes/Ponds

A small angling club currently fish on the lake within Aske Park on very few occasions. The lake has a strong population of signal crayfish, possibly introduced by anglers.

A number of ponds are located along a ridge west of Oliver Duckett. A number of these may be dug out to create standing water and fenced off. The management of these will be covered under the Pond Management Plan produced by the Farming and Wildlife Advisory Group.

4.6.8 Public Access

A public footpath runs from the Richmond Golf Course club Hall, through Aske Beck, along the front of the Hall and up towards the Gilling Road. The use of this footpath is popular and presents no problems to the estate. Further permissive access is to be created around Oliver Duckett under Countryside Stewardship.

4.7 THE CURRENT LANDSCAPE

4.7.1 Wider Context

Aske Estate falls within the *Pennine Dales Fringe* (Character Area 22 identified by the Countryside Agency's national landscape characterisation). The area is characterised by a varied diverse landscape unified by a strong rural character, dominated by the influence in topography. The Pennine Hills form a physical and perceptual barrier to the west. This area has largely escaped industrial influences and agriculture has remained the predominant landuse creating a quiet, rural landscape with farms and parkland. Farming has traditionally been dominated by livestock rearing.

The landscape in some areas is generally small in scale, with becks in narrow valleys, varied topography, small pastures, and a network of narrow, twisting rural roads. These valleys of the smaller tributaries have steeper sides, and are distinguished by small hedged or walled grasslands and pastures, and belts of trees following streams. Trees and woodlands are a locally important component of the landscape. In some areas there are many broadleaved woodlands especially on the sides of valleys, as well as coniferous and mixed plantation woodlands. These usually occur on estates and are generally under positive management for timber production and shooting interests.

Aske Hall looks out onto an area of open parkland, comprising sheep grazed pasture, ornamental lake with temple and parkland trees. A number of mature park land trees are present with a number of newly planted trees scattered across the western side and single avenues along the entrance road from High Lodge and the Gilling Road. A ridge and tree stumps are evidence of the previous entrance road. The present main entrance to the Hall and a public right of way run through the park. A number of horse jumps are placed around the park, one of these being located close to the rear of the lake. A Grade 1 Listed temple building set within plantation and mixed woodland (Crow Wood), is located north west from the hall.

4.7.2 Description of Current Landscape Character

South Park contains the entrance road, leading from High Lodges through sheep grazed pasture with clumps of mature trees. This area extends down to the north of Richmond retaining much the same character.

Olliver and Oliver's Duckett lie to the east of the Gilling Road and mainly consist of sheep grazed pasture with clumps and scattered mature trees. Oliver's Duckett is a listed Dove Cote and a prominent feature upon the landscape.

Aske Beck runs along the southern edge of the listed landscape, an area of previous native woodland that includes ornamental water features dating from the 18th century. The vegetation comprises of mature native broadleaved and conifer tree species, areas of new tree planting and laurel and rhododendron species. An enclosed track runs along the north side with filtered views onto the beck and to the water features.

China Plantation links Aske Beck (Low Wood) to the Walled Garden and Crow Wood, with a track leading through the plantation and up to the hall. Areas of previous clear fell and new planting create an open character in some areas. Two single storey buildings and a tennis court are located adjacent to the Walled Garden.

High Park lies to the north of China Plantation and comprises of sheep grazed pasture, an arable crop and a number of parkland trees. The Mouldron Plantation lies west to High Park. The plantation provides a strong skyline views from around the estate and a strong focal point for visitors arriving from West Lodge. It comprises of mixed plantation with rhododendron shrubs.

Horse Pastures are located to the east of High Park and China Plantation and mainly comprise of small divided fields with timber fencing and beech hedges as boundaries. Todd Hills lie to the south, two small hills that are currently grazed pasture.

4.7.3 Parkland Trees

A detailed tree survey has been carried out to identify parkland trees within Aske Park and the location of tree stumps. An informal survey was carried out to South Park, High Park and Olliver Duckett, (See Figure 21 and Appendix 6). The information that was gathered for the detailed tree survey included:

- Location
- Species
- Size – Height, spread and diameter of girth,
- General condition rating
- Prescriptive notes – whether the tree should be retained, felled or have surgery, and
- General notes

The trees have been identified on plan as large trees, over seventy centimetres girth and small trees. Stumps are also identified with their approximate diameter of girth.

The main species found on site contain, Oak species, Lime species, Ash and Sycamore. The majority of existing trees and large stumps on site are shown on the 1856 plan in the same locations. The form of the previous avenues can be seen through existing trees and stumps. Previous parkland tree planting has been consumed as Low Wood/Aske Beck has grown.

This information will inform future parkland tree planting including locations, numbers and species composition. It will also inform tree planting to homogenous even aged stands of trees to ensure their survival as historic stands.

5. ANALYSIS AND SIGNIFICANCE

The layers of the different design stages are present in some form on site. The previous entrance road, shape of the lake and past locations of tree planting survive as evidence on the ground. At present some of the historical built elements are at threat, the water features along Aske Beck and the two temples, and would benefit from conservation to ensure their future survival. Current areas of parkland trees will require future additional planting to enable the retention of trees in historical locations and groups of trees, including appropriate species.

5.1 CHARACTER AREAS

A number of character areas have been identified across the study area based on their chronological development and different landscape types. See Figure 22. A chronology of the landscape development has been produced to clarify the significant stages of the implementation of the designed landscape. See Figure 23 and 24.

5.1.1 Aske Hall

New gardens were developed against the south west façade of the Hall and the form of the balustrading on the south east front altered around the late 18th and early 19th century. The present balustraded terrace with gates and gate piers south east and north west of the terrace were in place during this period.

The mature garden setting of the Hall dates from around the mid 19th century and can possibly be attributed to Nesfield. A more modern 20th century garden has replaced earlier designs to the west of the Hall. Further planting to these areas should reflect and preserve the earlier known garden designs. Inappropriate planting could change the character of these areas and impact upon previous design intentions. The areas that hold the most importance are the gardens around the Hall and the front terrace.

5.1.2 Aske Park

The parkland to the front of the Hall dates from the mid 18th century projects by Sir Conyers D'arcy. This landscape was later naturalised in the mid 19th century by Lord Dundas. This is the landscape that mainly survives today, with remnants of the previous entrance road and tree avenues visible as a ridge and decayed stumps. Mature parkland trees exist scattered through the park with dense overgrown tree planting situated around the lake. The setting of the lake and temple provide important views from the Hall and previously beyond to Scots Dyke. The continuous tree cover around the lake had prevented the views that were available in the mid 19th century.

The parkland grass is mainly sheep grazed pasture with fencing breaking up the once open sweep of land. Signs of ridge and furrow are evident to the northern end of the park.

Re-planting of inappropriate species and locations would change the character of these areas. Planting should continue to follow the lines and locations of historic positions, away from any archaeological features. Lack of maintenance to the trees around the lake will continue to prevent views to the landscape beyond, and continue to raise the high nutrient levels of the pond.

5.1.3 Aske Beck (Low Wood)

The vegetation along the beck is designated as a Site of Importance for Nature Conservation, is very species rich and appears on the ancient woodland inventory. Pleasure grounds were created along the beck under Sir Conyers D'arcy in the mid 18th century, as formal walks, cascades and weirs. During the 20th century the form of the pleasure grounds skirting the beck were lost through indiscriminate planting of rhododendrons and laurels. At present the ornamental water features are unmaintained and at threat of further damaged by water seepage.

5.1.4 Crow Wood and Temple

The pleasure grounds and temple at Crow Wood were created under Sir Conyers D'arcy in the mid 18th century. During the 20th century the lawn area to the front of the temple was planted with larch, now at harvestable age. This has meant that any previous views from the temple have been restricted and the open character that surrounded the temple, lost. At present the temple is not used, but would benefit from some appropriate maintenance to conserve the Grade 1 listed building.

5.1.5 China Plantation

China Plantation was planted in the mid 18th century by Sir Conyers D'arcy, as a linking pleasure ground from Low Wood to the gardens around the Hall. The planting was increased in width in the early 20th century with further planting taking place in the late 20th century when the plantation extended into Aske Park and High Park.

The species diversity within this area needs to be carefully considered to nurse the planted hardwoods and to provide ecological benefit. Further archaeological exploration may need to be carried out in this area during the winter months.

5.1.6 High Park and Mouldron

High Park was planted in the late 18th century using Scots pine, Beech and Oak. Historically was grazed pasture, with part of the site now being used for arable crops. The form of High Park is controlled by the extension of China Plantation by contemporary tree planting. Views to the Park are only available from the road from West Lodge, which provides access to the estate from the Washton Road. The character of this area partially echoes that of South Park, created around the same period.

The Mouldron is shown on plans dating back to the early 18th century, prior to the estate creating the western access road. The estate, regard this area of planting highly, as a dominant skyline feature. The Mouldron Plantation is maturing well, recent planting has meant that no further specific works would be required in this area in the near future.

5.1.7 South Park

The High Lodge and entrance drive were constructed and parkland trees planted by the mid 19th century. The decision of a change of driveway was reinforced due to the gasworks being built to service the Hall, on the drive from Olliver Cottages.

The land further south has been included due to its similar character to South Park. The area contains some mixed hardwood and conifer stands of mature trees on the high ground leading down towards the farm. A number of small sandstone quarries are located at the southern end with a larger quarry further north, east of the farm, creating interesting historic landforms.

At present this area has a similar character to when it was constructed, with the exception of the trees becoming veteran. Future tree planting, should retain the mature tree clumps, adding interest to the landscape and views beyond.

5.1.8 Stables

The stables were constructed in the third quarter of the 19th century when a new driveway was created to Low Lodge. The stature of the Riding School dominates views from across the estate. The character of the mature lime avenue and a number of veteran trees needs to be retained through replanting of appropriate species.

Any development to this area needs to be carefully considered so as not to detract from the character of High Park and adjacent land.

5.1.9 Horse Pastures

The horse fields have been formed from previously larger pasture fields. The Mouldron Belt was in existence since the early 18th century and doubled in depth in the late 19th century. It is considered that replanting of this area is necessary to ensure good stand development in the future.

The pastures for horse grazing are let and have been delineated through ornamental beech hedges and varying types of fencing. In the future it would be advisable to plant native hedgerows to delineate any necessary boundaries.

5.1.10 Olliver

A public footpath extends through this area towards the ancient monument of Scots Dyke, which is currently visible from the Hall and previously the temple. Recent tree planting has taken place in various areas with self sown trees growing on top of Scots Dyke. Further tree planting in this area should ensure the integrity of the ancient monument and retain the character of this area.

5.1.11 Tod Hills

A natural landform to the south west of the hall, historically and currently grazed pasture.

5.1.12 Walled Garden

The walled garden is currently being developed as a residence.

6. RESTORATION PROPOSALS

The overall vision for the restoration of the historic landscape of the Aske Estate is to:

- Preserve the surviving remnants and archaeological features of the formal early eighteenth century landscape design, and;
- Restore and enhance the existing landscape to reflect the informal landscape character prevalent in the early eighteenth century and beyond.

English Heritage has been consulted on the restoration proposals for the Estate and the significance of the two landscape design dates. They agree with the preservation of the earlier landscape and the use of the later design to provide restoration objectives.

The scope of the physical landscape restoration proposals includes:

- The conservation of existing archaeological features.
- The conservation of listed structures within the landscape.
- Reversion of areas of arable and ley grassland to permanent grazed pasture.
- Removal of fence lines to reintegrate areas of enclosed parkland.
- Replacement parkland tree planting.
- Changes in the woodland management regime to reflect the role of woodlands in the historical character of the landscape.

In addition, the Restoration Plan includes a number of recommendations regarding the desirability of additional research and archaeological investigations for key features and areas. It also identifies a number of proposals to increase public access (both physical and visual) to key areas of the historic landscape design.

The Restoration Proposals are summarised and illustrated by Figure 25.

The following detailed proposals are separated into the nine landscape character areas identified in Chapter 5 and on Figure 22. For each character area, the detailed schedule of proposals is then separated into:

- Non-capital proposals (such as further research and investigations). Potential sources of funding are identified.
- Capital and management proposals to be incorporated into the existing Countryside Stewardship Agreement through a process of revision and refinement. The location for proposed tree planting is shown on Figure 25. Tree felling and surgery is identified in Appendix 5 and located on Figure 21. The lake management proposals are contained in Appendix 6.

- Other capital proposals to be achieved through other sources of funding (e.g. non CS-eligible features such as woodlands).

Potential funding streams include:

- Countryside Stewardship (CS)
- Woodland Grant Scheme (WGS)
- English Heritage (EH)
- Zetland Estates (ZE)

6.1 ASKE HALL

6.1.1 Vision

The vision for the immediate setting of Aske Hall is to conserve its current visual relationship with Aske Park to the south east (see section 6.2). The primary objective will be to maintain mature specimen trees to both wings of the Hall and an open area to the front elevation to enhance views to and from the Hall, including the front court and ha-ha. It is essential that the tree planting character to the wings and front of the Hall is retained and its importance as a possible Nesfield landscape is reflected through the species and stature of new trees planted.

Further research is desirable into the garden areas around the Hall to confirm W A Nesfield's involvement and design intentions, to refine the restoration proposals and to inform any future garden developments. Treatment of the landscape and gardens behind and to the south west of the Hall should reflect the 'pleasure grounds' form i.e. parterre planting and gravel paths. There are no obvious sources of outside funding for the restoration of this part of the Estate due to its proximity to the private household and public inaccessibility.

6.1.2 Conservation and Restoration Objectives

The key objectives for this area are to:

1. Carry out further research into the possible involvement of W A Nesfield to inform the design of any future developments of the garden areas immediately around the Hall and Estate Office including the tree flanks, front court and ha ha.

6.1.3 Detailed Schedule of Proposals

| Character Area 1: Aske Hall | |
|--|--|
| Location/CSS Ref' | Description of Work |
| Non Capital Proposals | |
| N/A | Carry out further research to determine W A Nesfield's involvement with the garden design around the Hall to include the front court and ha-ha. Possible sources of funding: English Heritage. Zetland Estates. |
| N/A | Development of a detailed garden restoration scheme for the garden areas in the immediate vicinity of the Hall to include the tree flanks, front court and ha-ha. To include consultations with English Heritage and drawing on research recommended above. Possible sources of funding: Zetland Estates, English Heritage. |
| Countryside Stewardship Proposals (see figure 25) | |
| | None |
| Non Countryside Stewardship Proposals [identify funding source – i.e. | |
| N/A | Implementation of a detailed garden restoration scheme for the garden areas in the immediate vicinity of the Hall, including a programme of replanting to tree flanks. Possible sources of funding: Zetland Estates. |

6.2 ASKE PARK

6.2.1 Vision

The vision for this key area of parkland that forms the foreground in views to and from the Hall is to recreate the open parkland character (with the lake and temple at the centre and scattered parkland trees) as indicated by the 1856 plan relating to the mid 19th century design period. Views from the Hall and parkland to the lake and beyond to Scots Dyke and the North York Moors/Cleveland Hills will be re-established through selective tree removal and thinning.

6.2.2 Conservation and Restoration Objectives

The key objectives for this area are to:

1. Conserve and protect the archaeological remains of the previous entrance road, water cascade and canal and tree stumps, through appropriate maintenance of sheep grazed pasture in these areas.
2. Restore the lakeside temple through a programme of maintenance to re-point the stonework in an appropriate mortar mix.
3. Selective tree removal to selected areas around the lake.
4. Create an open parkland setting with stands of mature parkland trees through the removal of fenced enclosures. Stock control will be required through the implementation of fencing. Assess impacts of horse jumps and relocate to less sensitive location where possible.
5. To restore the lake and its immediate setting by undertaking de-silting works.

6.2.3 Schedule of Detailed Proposals

| Character Area 2: Aske Park | |
|--|--|
| Location/CSS Ref | Description of Work |
| Non Capital Proposals | |
| N/A | Review location of horse jumps to ensure the least impact upon views across the landscape and the conservation of archaeological features and parkland trees. Possible sources of funding: Zetland Estates. |
| NZ 1803 1539 | Assessment of temple by a Conservation Architect. Possible sources of funding: CSS. |
| | SPR: Bat potential survey of trees to be felled or to have tree surgery, prior to works being carried out. |
| Countryside Stewardship Proposals (see figure 25) | |
| NZ 1803 0655 | R1: Grassland to be reverted to pasture |
| NZ 1803 0655 | E: Fences to be removed (refer to Figure 25) |
| NZ 1703 8514 | TS1/TS2: Tree surgery and removal of parkland trees to take place in the parkland (15 surgery/4 removed – see Appendix 6 and Figure 21) |
| NZ 1703 8514 | STT/TP: Parkland tree planting – see proposals plan (Appropriate species: beech, oak spp.; 70 number – see Figure 21) |
| NZ 1803 1539 | SPC: Restoration works to lake including silt removal (Refer to Lake Management Plan – Appendix 6) |
| NZ 1803 1539 | Restoration/conservation of temple |
| Non Countryside Stewardship Proposals | |
| NZ 1803 1539 | A number of trees around the lake to be removed and the willows pollarded. Possible sources of funding: Woodland Grant Scheme. |

6.3 ASKE BECK

6.3.1 Vision

To make visible the previous pleasure grounds character with improved views to the beck and ornamental water features. Woodland planting will be native and of local provenance to further enhance the natural character.

6.3.2 Conservation and Restoration Objectives

The key objectives for this area are to:

1. Clear of rhododendron, laurel and other non-native species and further clearance of vegetation to enable the previous walks to be recreated and enable views to the ornamental water features.
2. Research to gain a further understanding of the ornamental water features. Once this has been carried out conservation or restoration of the features should be carried out to preserve them.

6.3.3 Detailed Schedule of Proposals

| Character Area 3: Aske Beck | |
|--|---|
| Location/CSS Ref' | Description of Work |
| Non Capital Proposals | |
| N/A | Detailed archaeological survey of the ornamental water features along the Beck. Possible sources of funding: English Heritage. |
| Countryside Stewardship Proposals | |
| | None |
| Non Countryside Stewardship Proposals | |
| N/A | Removal of Rhododendrons and Laurels Source of funding: Woodland Grant Scheme. |
| N/A | Clearance of trees and scrub to recreate woodland glades and rides. Source of funding: Woodland Grant Scheme. |
| N/A | Conservation of the ornamental water features Source of funding: Zetland Estates. |

6.4 CROW WOOD AND TEMPLE

6.4.1 Vision

To recreate historic setting of temple as an open grassland amphitheatre to the front, leading down towards the Hall with pleasure footpaths leading through the woodland.

13.4.2 Conservation and Restoration Objectives

The key objectives for this area are to:

1. Restore the Grade 1 Listed temple, bring it back into use and conserve through appropriate maintenance.
2. Restore the historic setting of the temple through Larch clearance and thinning of existing broadleaved woodland to recreate open amphitheatre and recreate views that were once available to Scots Dyke.
3. General management of the surrounding woodland.

13.4.3 Detailed Schedule of Proposals

| Character Area 4: Crow Wood and Temple | |
|---|---|
| Location/CSS Ref' | Description of Work |
| Non capital proposals | |
| N/A | Preparation of a Conservation Plan for the Temple Possible sources of funding: English Heritage. Zetland Estates. |
| Countryside Stewardship Proposals | |
| | None |
| Non Countryside Stewardship Proposals | |
| N/A | Harvesting of Larch to create an open area to a minimum of 8m beyond existing tree line and not replant. Thinning of all existing Larch. Source of funding: Woodland Grant Scheme. |
| N/A | Thinning of trees to eastern area of Crow Wood to provide possible views to and from temple and Scots Dyke. Source of funding: Woodland Grant Scheme. |
| N/A | Restoration and subsequent maintenance of temple to conserve historic importance using appropriate materials. Source of funding: Zetland Estates. |

6.5 CHINA PLANTATION AND WALLED GARDEN

6.5.1 Vision

Maintain character of area with a diverse range of tree species to provide commercial, visual and ecological benefit.

6.5.2 Conservation and Restoration Objectives

The key objectives for this area are to:

1. To selective fell the larch, rather than clear fell, and to under plant with hardwoods and conifer nurse species.
2. Any future tree planting should not encroach onto the adjacent areas.

6.5.3 Detailed Schedule of Proposals

| Character Area 5: China Plantation and Walled Garden | |
|---|---|
| Location/CSS Ref' | Description of Work |
| Non Capital Proposals | |
| N/A | Archaeological walkover survey to identify potential for survival of archaeological remains. Possible sources of funding: English Heritage. Zetland Estates. |
| Countryside Stewardship Proposals | |
| | None |
| Non Countryside Stewardship Proposals | |
| N/A | Selective fell larch to 100-150 stems per hectare Source of funding: Woodland Grant Scheme. |
| N/A | Tree planting of hardwoods and conifer nurse species. Source of funding: Woodland Grant Scheme. |

6.6 HIGH PARK AND MOULDRON

6.6.1 Vision

Retain strong visual character of the Mouldron Plantation as a backdrop setting for the estate. High Park to be reverted to pasture in the future, with any tree planting being of a suitable species and location.

6.6.2 Conservation and Restoration Objectives

The key objectives for this area are to:

1. Ensure tree planting is carried out in specific locations to create historic parkland setting.
2. Future planting to take place within the Mouldron Plantation to ensure survival of a mature woodland belt at this location.

6.6.3 Detailed Schedule of Proposals

| Character Area 6: High Park and Mouldron | |
|---|--|
| Location/CSS Ref' | Description of Work |
| Non capital proposals | |
| | None |
| Countryside Stewardship Proposals | |
| NZ 1703 1756 | R1: Arable field to be reverted to pasture |
| NZ 1703 0834 | STT/TP: Parkland tree planting to High Park (Appropriate species: beech, oak spp.; 16 number – see Figure 21) |
| Non Countryside Stewardship Proposals | |
| NA 1703 1756 | Re-plant Mouldron Avenue (See Chapter 4.4.3) Source of funding: Woodland Grant Scheme. |

6.7 SOUTH PARK

6.7.1 Vision

To maintain a mature parkland character, with stands of trees to guide views and provide shelter.

6.7.2 Conservation and Restoration Objectives

The key objectives for this area are to:

1. Existing quarries to be retained as archaeological features.
2. The existing dew pond will be restored in line with Farming and Wildlife Advisory Group's recommendations to increase the ecological benefit in this area.
3. The structure of the stands of trees should be retained through selective replanting to ensure continued tree cover. This replanting will take place over a period of time, every two or five years a percentage replanting should be undertaken (2-5%). Full use should be made of local forestry and Estate knowledge, it is advised that the Head Forester is consulted prior to any new planting. Each new tree should be individually fenced.
4. Area should continue to be grazed pasture.

6.7.3 Detailed Schedule of Proposals

| Character Area 7: South park | |
|--|--|
| Location/CSS Ref' | Description of Work |
| Non capital proposals | |
| | None |
| Countryside Stewardship Proposals | |
| NZ 1702 9971 NZ 1802 0331 | STT/TP: Parkland tree planting to High Park in existing stands (Appropriate species: oak spp.; 21 number – see Figure 21) |
| Non Countryside Stewardship Proposals | |
| | None |

6.8 Horse Pastures and Todd Hill

6.8.1 Character Area 8

No historic landscape restoration proposals are required within this character area.

6.9 OLLIVER AND OLLIVER DUCKETT

6.9.1 Vision

Retention of rough parkland character and mature stands of trees, to retain and enhance strong views to and from the Hall and temple. Ensure the conservation of Scots Dyke. Increase public access to this area to create circular walks.

6.9.2 Conservation and Restoration Objectives

The key objectives for this area are to:

1. The conservation of Scots Dyke may include the removal of any existing self sown trees and the continued clearance of future self sown trees. English Heritage should be consulted further on the conservation of this ancient scheduled monument.
2. Tree planting should be of an appropriate species, in locations reflecting previous planting areas. Existing saplings or small standards inappropriately planted should be removed.

6.9.3 Detailed Schedule of Proposals

| Character area 9: Olliver and Olliver Duckett | |
|--|--|
| Location/CSS Ref' | Description of Work |
| Non Capital Proposals | |
| N/A | Consultation with English Heritage on conservation objectives for Scots Dyke. |
| Countryside Stewardship Proposals | |
| N/A | STT/TP: Parkland tree planting (Appropriate species: beech, larch, oak spp.; 30 number – see Figure 21) |
| Non Countryside Stewardship Proposals | |
| | None |

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- A Plan of the Estate of Aske surveyed for the Right Hon^{ble} Earl of Holderness
- Plan of the grounds of Aske Hall and the Richmond-Gilling Road with proposed diversions to take it further away from the Hall. (1769 written on the back of the plan).
- Plan of Aske and Richmond Estates, the property of the Rt Hon^{ble} Lord Dundas. By Thomas Bradley, 1813
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FIELD ARCHAEOLOGIST CATALOGUE OF SITES

| Site No | SMR No | Cross Ref | Eastng | Northing | NGR | Parish | Period | Description | Sources |
|---------|--------|------------------|--------|----------|-----------------------------|------------------------------------|-----------------------|---|--|
| 1 | 15847 | NAR: NZ 10 SE 36 | 416300 | 503800 | NZ 163 038 | Aske | Neolithic | Stone Axe found 366m SW of Castle Hill | Arch. J. 6, 1849, 349 |
| 2 | 23552 | | 415600 | 503900 | NZ 156 039 | Aske | Bronze Age - Iron Age | Prehistoric hut settlement in Black Plantation. Low circular stone walls, linear walls of enclosures and clearance cairns | SMR records |
| 3 | | | 417960 | 503180 | NZ 1796 0318 | Aske | undet | Earthen mound identified during walkover survey | Shown as the site of a tree on various maps dating from 1769 |
| 4 | 15388 | SAM 26959 | 418630 | 502540 | NZ 1863 0254 - NZ 1872 0309 | Aske / Skeeby | Early Medieval | Section of Scots Dyke linear boundary running south from Olliver East for 550m | I-Smith, E. 1990. <i>Scots Dyke earthwork, North Yorkshire</i> . University of Durham Certificate Course in Archaeology and Local History Project. 2 - EH Record for SAM 26959 |
| 4 | 15388 | SAM 26959 | 418720 | 503090 | NZ 1863 0254 - NZ 1872 0309 | Aske / Skeeby | Early Medieval | Section of Scots Dyke linear boundary running south from Olliver East for 550m | I-Smith, E. 1990. <i>Scots Dyke earthwork, North Yorkshire</i> . University of Durham Certificate Course in Archaeology and Local History Project. 2 - EH Record for SAM 26959 |
| 5 | 15380 | | 418720 | 503690 | NZ 1872 0369 | Gilling with Hartforth and Seabury | Early Medieval | Section of Scots Dyke linear boundary | I-Smith, E. 1990. <i>Scots Dyke earthwork, North Yorkshire</i> . University of Durham Certificate Course in Archaeology and Local History Project. 2 - EH Record for SAM 26959 |
| 6 | 20880 | SAM 28207 | 418720 | 503190 | NZ 1872 0319 | Aske | Early Medieval | Section of Scots Dyke linear boundary 1.50m ENE of Olliver | I-Smith, E. 1990. <i>Scots Dyke earthwork, North Yorkshire</i> . University of Durham Certificate Course in Archaeology and Local History Project. |
| 7 | 15364 | NAR: NZ 10 SE 19 | 418200 | 503400 | NZ 182 034 | Aske | Medieval | Aske deserted medieval village, mentioned in Domesday, in early 14th century Lay Subsidy Returns and in 1377 Poll Tax. Local tradition states that it was destroyed in 1824 and replaced by a row of cottages N of Aske Beck. No mention on early maps. Not visible from the air. | I-Smith, E. 1990. <i>Scots Dyke earthwork, North Yorkshire</i> . University of Durham Certificate Course in Archaeology and Local History Project. 2 - EH Record for SAM 28207 |
| 8 | 15653 | NAR: NZ 10 SE 13 | 416390 | 504250 | NZ 1639 0425 | Gilling with Hartforth and Seabury | Medieval | Gilling Castle (site of), Seat of Edwin, Earl of Mercia, and possibly head of the castlery of Count Alan before transferring to Richmond | I - Arch. J. 6 1844, 348-9; 2 - Arch. J. 1881, 32, 358; 3 - VCH Yorks NRI 1914, 72; 4 - Clark, G.T. 'Richmond Castle' YAJ 9 1886, 34 |
| 9 | | | 417900 | 503000 | NZ 179 030 | Aske | Med - Post-Med | Ridge and furrow earthworks | |
| 10 | | | 417600 | 503000 | NZ 176 030 | Aske | Med - Post-Med | Ridge and furrow earthworks | |
| 11 | | | 418200 | 503700 | NZ 182 037 | Aske | Med - Post-Med | Ridge and furrow earthworks | |
| 12 | | YAS 1058 | 415150 | 504850 | NZ 1515 0485 - NZ 1525 0515 | Gilling with Hartforth and Seabury | Med - Post-Med | Earthen bank and ditch situated along part of the parish boundary in Gilling Wood | OS 6" map 1957 |
| 12 | | YAS 1058 | 415250 | 505150 | NZ 1515 0485 - NZ 1525 0515 | Gilling with Hartforth and Seabury | Med - Post-Med | Earthen bank and ditch situated along part of the parish boundary in Gilling Wood | OS 6" map 1957 |
| 13 | | SAM 28243 | 415570 | 504540 | NZ 1557 0454 | Seabury | Medieval | Cross base | EH Scheduled Monument record |

FIELD ARCHAEOLOGIST CATALOGUE OF SITES

| Site No | SMR No | Cross Ref | Eastings | Northing | NGR | Parish | Period | Description | Sources |
|---------|--------|------------------|----------|----------|-----------------------------|------------------------------------|-----------------------|--|---|
| 1 | 15847 | NAR: NZ 10 SE 36 | 416300 | 503800 | NZ 163 038 | Aske | Neolithic | Stone Axe found 366m SW of Castle Hill | <i>Arch. J.</i> 6, 1849, 349 |
| 2 | 23552 | | 415600 | 503900 | NZ 156 039 | Aske | Bronze Age - Iron Age | Prehistoric hut settlement in Black Plantation. Low circular stone walls, linear walls of enclosures and clearance cairns | SMR records |
| 3 | | | 417960 | 503180 | NZ 1796 0318 | Aske | undet | Earthen mound identified during walkover survey | Shown as the site of a tree on various maps dating from 1769 |
| 4 | 15388 | SAM 26959 | 418630 | 502540 | NZ 1863 0254 - NZ 1872 0309 | Aske / Skeebby | Early Medieval | Section of Scots Dyke linear boundary running south from Olliver East for 550m | 1-Smith, E. 1990. <i>Scots Dyke earthwork, North Yorkshire</i> . University of Durham Certificate Course in Archaeology and Local History Project. 2- EH Record for SAM 26959 |
| 4 | 15388 | SAM 26959 | 418720 | 503090 | NZ 1863 0254 - NZ 1872 0309 | Aske / Skeebby | Early Medieval | Section of Scots Dyke linear boundary running south from Olliver East for 550m | 1-Smith, E. 1990. <i>Scots Dyke earthwork, North Yorkshire</i> . University of Durham Certificate Course in Archaeology and Local History Project. 2- EH Record for SAM 26959 |
| 5 | 15380 | | 418720 | 503690 | NZ 1872 0369 | Gilling with Hartforth and Sedbury | Early Medieval | Section of Scots Dyke linear boundary | University of Durham Certificate Course in Archaeology and Local History Project. |
| 6 | 20880 | SAM 28207 | 418720 | 503190 | NZ 1872 0319 | Aske | Early Medieval | Section of Scots Dyke linear boundary 150m ENE of Olliver | 1-Smith, E. 1990. <i>Scots Dyke earthwork, North Yorkshire</i> . University of Durham Certificate Course in Archaeology and Local History Project. 2- EH Record for SAM 28207 |
| 7 | 15364 | NAR: NZ 10 SE 19 | 418200 | 503400 | NZ 182 034 | Aske | Medieval | Aske deserted medieval village, mentioned in Donnesday, in early 14th century Lay Subsidy Returns and in 1377 Poll Tax. Local tradition states that it was destroyed in 1824 and replaced by a row of cottages N of Aske Beck. No mention on early maps. Not visible from the air. | 1 - <i>VCH Yorks</i> 1914; 2 - Beresford, M. W. <i>Lost Villages of Yorkshire</i> YAJ 38, 1955, 294 |
| 8 | 15653 | NAR: NZ 10 SE 13 | 416390 | 504250 | NZ 1639 0425 | Gilling with Hartforth and Sedbury | Medieval | Gilling Castle (site of). Seat of Edwin, Earl of Mercia, and possibly head of the castlery of Count Alan before transferring to Richmond | 1 - <i>Arch. J.</i> 6 1844, 348-9; 2 - <i>Arch. J.</i> 1881, 32, 358, 3 - <i>VCH Yorks</i> NRI 1914, 72; 4 - Clark, G.T. <i>Richmond Castle</i> YAJ 9 1886, 34 |
| 9 | | | 417900 | 503000 | NZ 179 030 | Aske | Med - Post-Med | Ridge and furrow earthworks | |
| 10 | | | 417600 | 503000 | NZ 176 030 | Aske | Med - Post-Med | Ridge and furrow earthworks | |
| 11 | | | 418200 | 503700 | NZ 182 037 | Aske | Med - Post-Med | Ridge and furrow earthworks | |
| 12 | | YAS 1058 | 415150 | 504850 | NZ 1515 0485 - NZ 1525 0515 | Gilling with Hartforth and Sedbury | Med - Post-Med | Earthen bank and ditch situated along part of the parish boundary in Gilling Wood | OS 6" map 1957 |
| 12 | | YAS 1058 | 415250 | 505150 | NZ 1515 0485 - NZ 1525 0515 | Gilling with Hartforth and Sedbury | Med - Post-Med | Earthen bank and ditch situated along part of the parish boundary in Gilling Wood | OS 6" map 1957 |
| 13 | | SAM 28243 | 415570 | 504540 | NZ 1557 0454 | | Medieval | Cross base | EH Scheduled Monument record |

APPENDIX 1:
FIELD ARCHAEOLOGIST CATALOGUE OF SITES

Aske Estate, Richmond

| Site No | SMR No | Cross Ref | Easting | Northing | NGR | Parish | Period | Description | Sources |
|---------|--------|---------------------------|---------|----------|--------------|------------------------------------|-----------------|--|---|
| 14 | | | 417970 | 502940 | NZ 1797 0294 | Aske | Med - Post-Med? | Site of mill on Aske Beck. | Field name Mill Close to south of beck on 1761 and 1815 maps, to north of beck on 1720 and 1727-58 maps. Clearly cut course of beck seen on ground. |
| 15 | 14685 | | 418260 | 504230 | NZ 1826 0423 | Gilling with Hartforth and Sedbury | Post-Medieval | Lime Kiln | OS maps |
| 16 | 14575 | | 416120 | 502530 | NZ 1612 0253 | Aske | Post-Medieval | Lime Kiln | SMR Records |
| 17 | 14287 | | 416970 | 504080 | NZ 1697 0408 | Gilling with Hartforth and Sedbury | Post-Medieval | Lime Kiln | OS maps |
| 18 | 14756 | | 417360 | 502220 | NZ 1730 0222 | Aske | Post-Medieval | Lime Kiln | OS maps |
| 19 | | | 417350 | 503550 | NZ 1735 0355 | Aske | Post-Medieval | Sandstone Quarry | OS maps |
| 20 | 14462 | NAR: NZ 10 SE 15; GD 2058 | 417760 | 503400 | NZ 1776 0340 | Aske | Post-Medieval | Aske Hall. Listed Grade I. Incorporates Peel Tower and a 16thC hall. Wings date from 17thC. Building remodelled mid-18thC, 19thC and 20thC alterations. North-east wing listed Grade II*, contains chapel. Also 19thC stable block, listed Grade II to NE of the hall. | EH Register of Parks and Gardens; SMR Records |
| 21 | 14462 | NAR: NZ 10 SE 15; GD 2058 | 417760 | 503400 | NZ 1776 0340 | Aske | 15th C | Peel Tower. Incorporated within Hall. Listed Grade I. | EH Register of Parks and Gardens; SMR Records |
| 22 | | NAR: NZ 10 SE 18; GD 2058 | 417440 | 503880 | NZ 1744 0388 | Aske | Post-Medieval | The Temple. Listed Grade II*. Late 18thC neo-Gothic castellated summer house and lodge | EH Register of Parks and Gardens; NMR Records |
| 23 | | GD 2058 | 418080 | 503050 | NZ 1808 0305 | Aske | Post-Medieval | Aske Bridge. Listed Grade II. Late 18thC with plaster buttresses and shell niches. | EH Register of Parks and Gardens |
| 24 | | GD 2058 | 417900 | 503550 | NZ 1790 0355 | Aske | Modern | Piers and gates. Listed grade II. Mid-late 19thC. Across road leading from north to SE side of the Hall | EH Register of Parks and Gardens |
| 25 | | GD 2058 | 418100 | 502530 | NZ 1810 0253 | Aske | Modern | High Lodge entrance. Listed Grade II. Mid-late 19thC. In the form of a triumphal arch with cast iron gates. | EH Register of Parks and Gardens |

APPENDIX 2: ARCHAEOLOGY SCHEDULE

- 1) This small area of woodland is known as Gas House Plantation and contains a circular brick-lined structure cut into the ground at least 1m. This is the 'Gas House' and is assumed to have held a tank for the storage of gas supplied to the Hall, probably in the Victorian period.
Immediately to the north of this is a mound of slag, ash, and post-medieval and modern pottery and glass. This was probably dumped here recently from somewhere else, since it was not overgrown.
- 2) Area under rough pasture. It contains a few uneven areas but no clear features. This part of the field comprises a higher area on the edge of which to the west and running NE-SW are two ridges.
- 3) These two ridges probably represent the feeder for the landscaped lake as seen on the 1769 plan of the estate.
- 4) Next to the lake, along its south-western boundary, is a circular earthen mound approximately 8m in diameter and 1.8m high. It has planted on its summit a large old lime tree. Both mound and tree could form part of the garden landscaping, or the mound could be an earlier feature, such as a prehistoric or early medieval burial mound, later exploited as a platform for the tree.
- 5) Field under pasture. Slopes gently up from east to west.
- 6) Small temple-style summerHall on the northern edge of the lake. Surrounded on its northern side by woodland in a long scoop at a lower level than the lake.
- 7) Fairly high ground under rough pasture, which made observation difficult. However, there do seem to be a number of uneven areas which are not the remains of ridge and furrow ploughing, but may be of archaeological interest, since they are in the area thought to have been occupied by the medieval village of Aske. The boundary between this field and field number 8) is along a low point, possibly the site of a previous water course.
- 8) Pasture gently sloping up from east to west. May have been recently ploughed, and in the right conditions may show signs of ploughed out ridge and furrow. Not clear. The boundary between fields 8 and 5 no longer exists.
- 9) Field under pasture, shows signs of fairly well-preserved ridge and furrow earthworks.
- 10) Ridge along which probably ran the road shown on the 1769 map.
- 11) Square area around which the Aske Beck has been deliberately re-cut. Place name evidence suggests that this was the site of a mill and leat.
- 12) Area now containing sparsely spaced trees but showing remains of ridge and furrow earthworks orientated NW-SE.

- 13) Naturally undulating pasture with sheep on it at present. Traversed by a road leading up to High Lodges.
- 14) Level rectangular platform cut in to a depth of c.1m at the southern end and raised c.1m at the northern end. Measures c.30m N-S and c.9m E-W. Now under pasture like the rest of the field but may represent the site of a building or parking area.
- 15) Area of ground disturbance, rectangular cuts and spoil heaps. Probably fairly recent, since the cuts look machine made, although the spoil heaps are overgrown.
- 16) Possible headland or N-S earthwork
- 17) Possible ridge and furrow earthworks orientated NW-SE. Seem to be bounded along the north-eastern edge by a line of old trees. The trees probably relate to garden landscaping but may reflect an earlier boundary.
- 18) Undulating rough pasture.
- 19) Ha-ha in small coursed stone. The ha-ha wall has a later wall imposed on top of it associated with the gateway to the south-east of the Hall.
- 20) Now pasture but looks as though it was recently ploughed. One of the large trees towards the centre is surrounded by a stone wall. No archaeological features evident.
- 21) This end of the field is under crop. The perimeter of the area 20-21 is defined by a ditch and bank which is part of the formal layout of the park.
- 22) China Plantation contains various drains belonging to the formal gardens but the undergrowth was too thick to look for archaeological features.
- 23) High Park was newly planted with trees and thick in undergrowth.
- 24) This whole field was under crop. Nothing visible.
- 25) Old sandstone quarries marked on the 1st edition Ordnance Survey map. They are sited immediately to the north of the original drive leading to West Lodge. They have been backfilled with dumps of slag, clinker and ash mixed with a substantial amount of 19th-20th century pottery and glass.
- 26) The area around and to the east of the temple is wooded and densely overgrown.
- 27) The bank of the Aske Beck on the southern side is very steeply sloping and heavily wooded.
- 28) The weirs and ford along the beck are in good condition. There are signs of cobbled drainage gullies along the northern side of the track and the northern bank, although overgrown allows the original landscaped paths and drains to be traced.
- 29) A ditch and bank boundary is visible along the eastern edge of this field.

APPENDIX 3:

CITATION REPORT FOR GINGERFIELDS SSSI AND LOW
WOOD NORTH FROM EAST YORKSHIRE ECOLOGICAL DATA
CENTRE

BioDAT - Phase One Habitats Legend

| | | | | | |
|---|--|--|--|---|--|
| (A) Arable | | (EB) Earth Bank | | (RH) Species-Rich Native Intact Hedge | |
| (AC) Acid/Neutral Inland Cliff | | (ESP) Ephemeral/Short Perennial | | (RH-) Species-Rich Native Defunct Hedge | |
| (ADH) Acid Dry Dwarf Shrub Heath | | (F) Fence | | (RHT) Species-Rich Native Hedge and Trees | |
| (AF) Acid/Neutral Flush | | (FB) Felled Recently Broad-Leaved Woodland | | (RW) Running Water | |
| (AG) Acid Grassland Unimproved | | (FC) Felled Recently Coniferous Woodland | | (S) Spoil | |
| (AM) Amenity Grassland | | (FM) Felled Recently Mixed Woodland | | (SAG) Semi-Improved Acid Grassland | |
| (AR) Acid/Neutratl Other Rock Exposure | | (FPM) Flood-Plain Mire | | (SB) Scattered Bracken | |
| (AS) Acid/Neutral Scree | | (GA) Green Algal Beds | | (SCG) Semi-Improved Calcareous Grassland | |
| (BA) Brown Algal Beds | | (HC) Hard Cliff | | (SDC) Saltmarsh Dense Continuous | |
| (BB) Blanket Sphagnum Bog | | (I) Improved Grassland | | (SNG) Semi-Improved Neutral Grassland | |
| (BC) Basic Inland Cliff | | (IBR) Intertidal Boulders/Rocks | | (SP) Swamp | |
| (BDH) Basic Dry Dwarf Shrub Heath | | (IMS) Intertidal Mud and Sand | | (SS) Scattered Scrub | |
| (BF) Basic Flush | | (IS) Introduced Scrub | | (SWALL) Sea Wall | |
| (BG) Bare Ground | | (ISC) Intertidal Shingle/Cobbles | | (TR) Tall Ruderal Herb and Fern | |
| (Black) Structure | | (IV) Inundation Vegetation | | (VM) Valley Mire | |
| (BM) Basin Mire | | (LP) Limestone Pavement | | (W) Wall | |
| (BMF) Basic Fen | | (MG) Marshy Grassland | | (WB) Wet Modified Bog | |
| (BP) Broad-Leaved Parkland | | (MI) Mine | | (WGM) Wet Heath/Acid Grassland Mosaic | |
| (BPW) Broad-Leaved Plantation Woodland | | (MP) Mixed Parkland | | (WH) Wet Dwarf Shrub Heath | |
| (BR) Basic Other Rock Exposure | | (MPW) Mixed Plantation | | | |
| (BS) Basic Scree | | (MSC) Maritime Soft Cliff | | | |
| (BW) Broad-Leaved Semi-Natural Woodland | | (MSW) Mixed Semi-natural Woodland | | | |
| (CA) Cave | | (MV) Marginal Vegetation | | | |
| (CB) Continuous Braken | | (NG) Neutral Unimproved Grassland | | | |
| (CG) Calcareous Grassland | | (NR) Tall Herb and Fern (Non-Rudral) | | | |
| (COG) Coastal Grassland | | (OW) Open Water | | | |
| (CP) Coniferous Parkland | | (P) Bare Peat | | | |
| (CPW) Coniferous Plantation Woodland | | (PH) Species Poor Intact Hedge | | | |
| (CS) Caravan Site | | (PH-) Species Poor Defunct Hedge | | | |
| (DB) Dry Modified Bog | | (PHT) Species Poor Hedge and Trees | | | |
| (DD) Dry Ditch | | (Q) Quarry | | | |
| (DGM) Dry Heath/Acid Grassland Mosaic | | (R) Refuse-Tip | | | |
| (DS) Dense/Continuous Scrub | | (RB) Raised Sphagnum Bog | | | |

BioDAT - Phase One Habitats Legend

| | | | | | |
|---|--|--|--|---|--|
| (A) Arable | | (EB) Earth Bank | | (RH) Species-Rich Native Intact Hedge | |
| (AC) Acid/Neutral Inland Cliff | | (ESP) Ephemeral/Short Perennial | | (RH-) Species-Rich Native Defunct Hedge | |
| (ADH) Acid Dry Dwarf Shrub Heath | | (F) Fence | | (RHT) Species-Rich Native Hedge and Trees | |
| (AF) Acid/Neutral Flush | | (FB) Felled Recently Broad-Leaved Woodland | | (RW) Running Water | |
| (AG) Acid Grassland Unimproved | | (FC) Felled Recently Coniferous Woodland | | (S) Spoil | |
| (AM) Amenity Grassland | | (FM) Felled Recently Mixed Woodland | | (SAG) Semi-Improved Acid Grassland | |
| (AR) Acid/Neuutral Other Rock Exposure | | (FPM) Flood-Plain Mire | | (SB) Scattered Bracken | |
| (AS) Acid/Neutral Scree | | (GA) Green Algal Beds | | (SCG) Semi-Improved Calcareous Grassland | |
| (BA) Brown Algal Beds | | (HC) Hard Cliff | | (SDC) Saltmarsh Dense Continuous | |
| (BB) Blanket Sphagnum Bog | | (I) Improved Grassland | | (SNG) Semi-Improved Neutral Grassland | |
| (BC) Basic Inland Cliff | | (IBR) Intertidal Boulders/Rocks | | (SP) Swamp | |
| (BDH) Basic Dry Dwarf Shrub Heath | | (IMS) Intertidal Mud and Sand | | (SS) Scattered Scrub | |
| (BF) Basic Flush | | (IS) Introduced Scrub | | (SWALL) Sea Wall | |
| (BG) Bare Ground | | (ISC) Intertidal Shingle/Cobbles | | (TR) Tall Ruderal Herb and Fern | |
| (Black) Structure | | (IV) Inundation Vegetation | | (VM) Valley Mire | |
| (BM) Basin Mire | | (LP) Limestone Pavement | | (W) Wall | |
| (BMF) Basic Fen | | (MG) Marshy Grassland | | (WB) Wet Modified Bog | |
| (BP) Broad-Leaved Parkland | | (M) Mine | | (WGM) Wet Heath/Acid Grassland Mosaic | |
| (BPW) Broad-Leaved Plantation Woodland | | (MP) Mixed Parkland | | (WH) Wet Dwarf Shrub Heath | |
| (BR) Basic Other Rock Exposure | | (MPW) Mixed Plantation | | | |
| (BS) Basic Scree | | (MSC) Maritime Soft Cliff | | | |
| (BW) Broad-Leaved Semi-Natural Woodland | | (MSW) Mixed Semi-natural Woodland | | | |
| (CA) Cave | | (MV) Marginal Vegetation | | | |
| (CB) Continuous Braken | | (NG) Neutral Unimproved Grassland | | | |
| (CG) Calcareous Grassland | | (NR) Tall Herb and Fern (Non-Rudral) | | | |
| (COG) Coastal Grassland | | (OW) Open Water | | | |
| (CP) Coniferous Parkland | | (P) Bare Peat | | | |
| (CPW) Coniferous Plantation Woodland | | (PH) Species Poor Intact Hedge | | | |
| (CS) Caravan Site | | (PH-) Species Poor Defunct Hedge | | | |
| (DB) Dry Modified Bog | | (PHT) Species Poor Hedge and Trees | | | |
| (DD) Dry Ditch | | (Q) Quarry | | | |
| (DGM) Dry Heath/Acid Grassland Mosaic | | (R) Refuse-Tip | | | |
| (DS) Dense/Continuous Scrub | | (RB) Raised Sphagnum Bog | | | |



NZ10-02

| | | |
|---------------|--------------|------------|
| Low Wood | Site No. | NZ10-02 |
| Andrew Weston | Date Printed | 22/07/2003 |
| | Scale | 1:10169 |

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Citation Report

Site Code: NZ10-02 **Site Name:** Low Wood

Site Code: NZ10-02 **Time On Site:** 0d 02h 45m **Site Area:** 26.19805 Hectares

Site Name: Low Wood **Location:** 2 km north of Richmond Square **Parish:** Aske

Survey Date: 05/05/2000 **Surveyor:** Andrew Weston **Aspect:** (None)

Grid Reference: NZ165029 **District:** Richmondshire **Proximity:** Gingerfield Wood

Natural Area: Pennine Dales Fringe **Soil Type:** Brown Earths **Adjacent Land Use:** Agricultural

Designation (at Survey): Site of Importance for Nature Conservation

Data Entry By: Bullen Consultants - Bradford

Exposed Strata?:
Data Entry Date: 17/07/2000

Geology: Drift from Palaeozoic & Mesozoic sandstone & shale

Habitats: Buildings\Structure (0.17106), Introduced Shrub (0.91082), Plantation Broad-Leaved Woodland (30.57008), Plantation Conifer Woodland (7.30084), Plantation Mixed Woodland (11.6545), Running Water (1.3496), Semi-Natural Broad-Leaved Woodland (0.14324), Tall Ruderal (0.05984)

NVC: W10, W7, W8

Site Description: An ancient woodland of mixed age stands along the shallow valley of Aske Beck with possible semi-natural/semi-planted remnants in the central-southern part, where oak (*Quercus* spp.) is frequent. However, the most abundant trees are beech (*Fagus sylvatica*), sycamore (*Acer pseudoplatanus*) and hybrid larch (*Larix x marschlinsii*), with less Norway spruce (*Picea abies*), Scots pine (*Pinus sylvestris*), Lawson cypress (*Chamaecyparis lawsonia*) and, at the western end, planted ash (*Fraxinus excelsior*) and oak. The understorey consists mainly of occasional wych elm (*Ulmus glabra*) and there is locally frequent silver birch (*Betula pendula*) regeneration. There are areas of introduced shrubs, mainly cherry laurel (*Prunus laurocerasus*).

The field layer is not species rich, for a wood of its size, but has abundant bluebell (*Hyacinthoides non-scripta*) with locally dominant dog's mercury (*Mercurialis perennis*) or ramsons (*Allium ursinum*). Other species include wood sedge (*Carex sylvatica*), wood anemone (*Anemone nemorosa*), opposite leaved golden saxifrage (*Chrysosplenium oppositifolium*), primrose (*Primula vulgaris*), wood sorrel (*Oxalis acetosella*) and water avens (*Geum rivale*).

Species List

Site Code: NZ10-02

Site Name: Low Wood

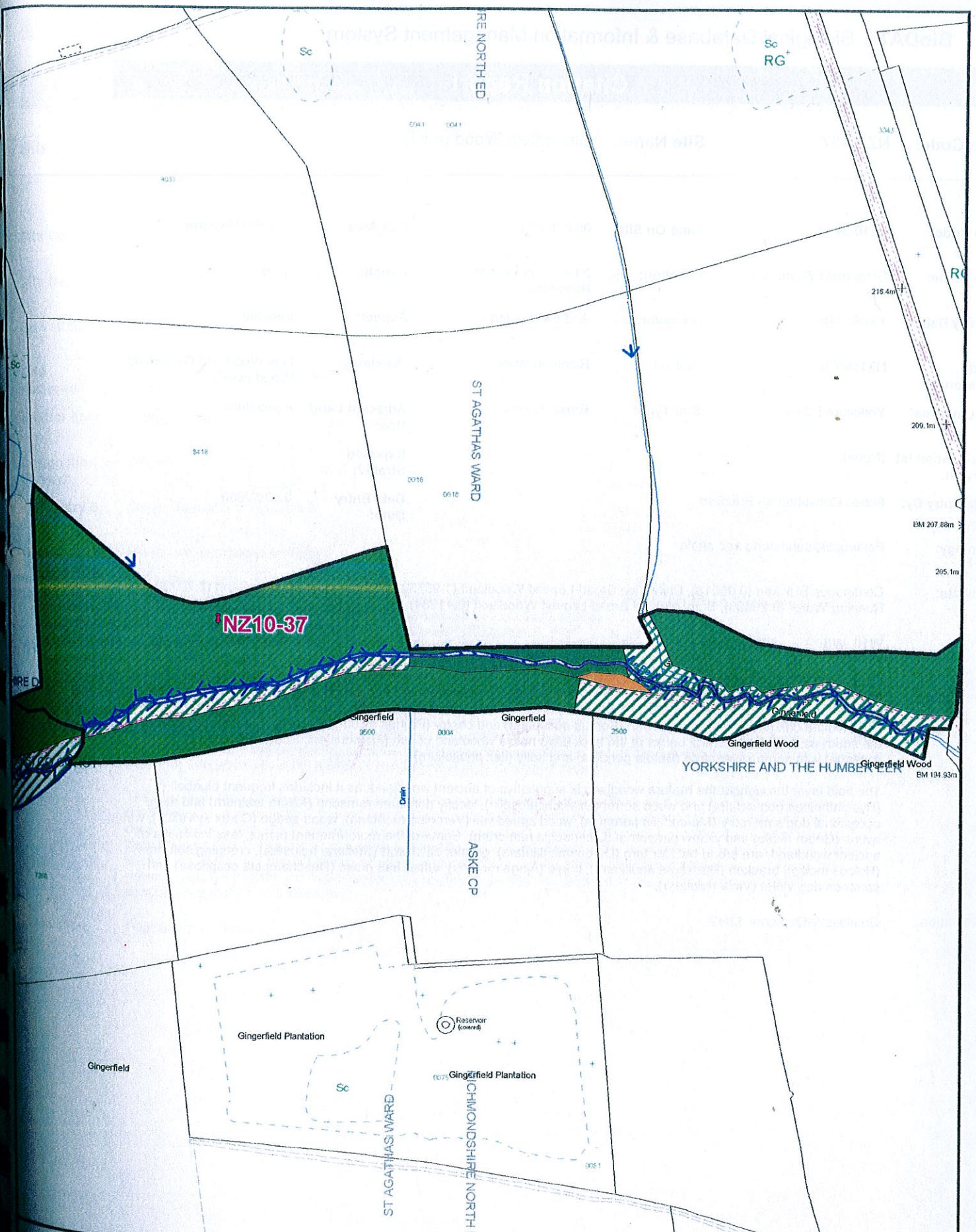
| Latin Name: | English Name: | Species Code: |
|--|---|---------------|
| Acer pseudoplatanus | sycamore | P0005 |
| Adoxa moschatellina | moschatel | P0019 |
| Aegopodium podagraria | ground-elder | P0020 |
| Aesculus hippocastanum | horse-chestnut | P2241 |
| Agrostis capillaris | common bent | P0040 |
| Ajuga reptans | bugle | P0046 |
| Alchemilla vulgaris | lady's-mantle | P0058 |
| Alliaria petiolata | garlic mustard | P0064 |
| Allium ursinum | ramsons | P0075 |
| Anemone nemorosa | wood anemone | P0105 |
| Angelica sylvestris | wild angelica | P0109 |
| Anthriscus sylvestris | cow parsley | P0125 |
| Arctium agg. | burdock | P0150 |
| Arum maculatum | lords-and-ladies | P0176 |
| Athyrium filix-femina | lady-fern | P0211 |
| Bellis perennis | daisy | P0231 |
| Betula pendula | silver birch | P0239 |
| Brachypodium sylvaticum | false brome | P0250 |
| Callitriche agg. | starworts | P2249 |
| Carex sylvatica | wood-sedge | P0421 |
| Carpinus betulus | hornbeam | P0428 |
| Chamaecyparis lawsoniana | Lawson's cypress | P2398 |
| Chamerion angustifolium | rosebay willowherb | P0477 |
| Chrysosplenium oppositifolium | opposite-leaved golden-saxifrage | P0506 |
| Cornus alba | | p0547 |
| Cruciata laevipes | crosswort | P0875 |
| Fragaria vesca | wild strawberry | P0838 |
| Fraxinus excelsior | ash | P0841 |
| Galium aparine | cleavers | P0873 |
| Galium odoratum | woodruff | P0183 |
| Ceranium robertianum | herb-robert | P0918 |
| Galium rivale | water avens | P0924 |
| Galium urbanum | wood avens | P0925 |
| Hedera helix | ivy | P0952 |
| Helleborus sphenodylium | hogweed | P0968 |
| Holcus mollis | creeping soft-grass | P0984 |
| Hyacinthoides non-scripta | bluebell | P0687 |
| Hericum hirsutum | hairy st john's-wort | P1010 |
| Ilex aquifolium | holly | P1023 |
| Ilex effusus | soft-rush | P1067 |
| Ilex x marschlinii = Larix decidua x Larix kaempferi | Hybrid Larch (European Larch x Japanese | P2303 |
| Malva periclymenum | honey-suckle | P1188 |
| Matricaria nemorum | yellow pimpernel | P1221 |
| Malva sylvestris | crab apple | P1230 |
| Meles meles | badger | A0370 |
| Mercurialis perennis | dog's mercury | P1291 |
| Myosotis sylvatica | wood forget-me-not | P1325 |
| Myosotis mascula | early-purple orchid | P1387 |
| Myosotis acetosella | wood-sorrel | P1413 |
| Myosotis hybridus | butterbur | P1447 |
| Myosotis scolopendrium | hart's-tongue | P1466 |
| Abies | norway spruce | P1470 |
| Abies sitchensis | sitka spruce | P2367 |
| Abies viridis | green woodpecker | B3380 |
| Abies sylvestris | scots pine | P1484 |
| Abies nemoralis | wood meadow-grass | P1504 |
| Alnus aculeatum | hard shield-fern | P1546 |
| Alnus x canadensis var. serotina | italian poplar | P1550 |
| Alnus anserina | silverweed | P1584 |
| Alnus sterilis | barren strawberry | P1596 |
| Alnus vulgaris | primrose | P1607 |
| Alnus avium | wild cherry | P1611 |

Species List (cont.)

Site Code: NZ10-02

Site Name: Low Wood

| | | |
|--|---------------------|-------|
| <i>Prunus laurocerasus</i> | cherry laurel | P1615 |
| <i>Prunus padus</i> | bird cherry | P1616 |
| <i>Prunus spinosa</i> | blackthorn | P1617 |
| <i>Pseudotsuga menziesii</i> = <i>Pseudotsuga heterophylla</i> | douglas fir | P1618 |
| <i>Pteridium aquilinum</i> | bracken | P1619 |
| <i>Quercus petraea</i> | sessile oak | P1638 |
| <i>Quercus robur</i> | pedunculate oak | P1640 |
| <i>Ranunculus ficaria</i> | lesser celandine | P1649 |
| <i>Ranunculus repens</i> | creeping buttercup | P1660 |
| <i>Rhododendron ponticum</i> | rhododendron | P1687 |
| <i>Ribes alpinum</i> | mountain currant | P1693 |
| <i>Ribes sanguineum</i> | flowering currant | P2448 |
| <i>Rubus fruticosus</i> agg. | bramble | P1728 |
| <i>Rubus idaeus</i> | raspberry | P1729 |
| <i>Rumex sanguineus</i> | wood dock | P1753 |
| <i>Salix caprea</i> | goat willow | P1788 |
| <i>Sambucus nigra</i> | elder | P1815 |
| <i>Sanicula europaea</i> | sanicle | P1819 |
| <i>Scrophularia auriculata</i> | water figwort | P1865 |
| <i>Scrophularia nodosa</i> | common figwort | P1867 |
| <i>Silene dioica</i> | red campion | P1259 |
| <i>Sorbus aucuparia</i> | rowan | P1960 |
| <i>Sorbus intermedia</i> | swedish whitebeam | P1966 |
| <i>Stachys sylvatica</i> | hedge woundwort | P2005 |
| <i>Symphytum grandiflorum</i> | | P4397 |
| <i>Taraxacum officinale</i> | common dandelion | P2034 |
| <i>Teucrium scorodonia</i> | wood sage | P2046 |
| <i>Vicia europaea</i> | gorse | P2112 |
| <i>Ulmus glabra</i> | wych elm | P2119 |
| <i>Urtica dioica</i> | common nettle | P2126 |
| <i>Valeriana officinalis</i> | common valerian | P2140 |
| <i>Veronica beccabunga</i> | brooklime | P2166 |
| <i>Veronica chamaedrys</i> | germander speedwell | P2168 |
| <i>Veronica montana</i> | wood speedwell | P2172 |
| <i>Viburnum opulus</i> | guelder-rose | P2185 |
| <i>Vicia sepium</i> | bush vetch | P2198 |
| <i>Vicia riviniana</i> | common dog-violet | P2218 |



| | | | | | |
|-----------|-------------------------|--------------|------------|---------|--------|
| Site Name | Gingerfield Wood (east) | | Site No. | NZ10-37 | |
| Surveyor | Andrew Weston | Date Printed | 10/07/2003 | Scale | 1:3554 |

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Citation Report

Site Code: NZ10-37 Site Name: Gingerfield Wood (east)

| | | | | | |
|--------------------------|-------------------------------|------------------|-----------------------------|--------------------|--------------------------------------|
| Site Code: | NZ10-37 | Time On Site: | 0d 01h 20m | Site Area: | 5.27599 Hectares |
| Site Name: | Gingerfield Wood (east) | Location: | 2 km north west of Richmond | Parish: | Aske |
| Survey Date: | 13/06/2000 | Surveyor: | Andrew Weston | Aspect: | Variable |
| Grid Reference: | NZ158030 | District: | Richmondshire | Proximity: | Low Wood and Gingerfield Wood (west) |
| Natural Area: | Yorkshire Dales | Soil Type: | Brown Earths | Adjacent Land Use: | Agricultural |
| Designation (at Survey): | (None) | Exposed Strata?: | <input type="checkbox"/> | Data Entry Date: | 02/08/2000 |
| Data Entry By: | Bullen Consultants - Bradford | | | | |

Geology: Palaeozoic sandstone and shale

Habitats: Continuous Bracken (0.06618), Plantation Broad-Leaved Woodland (1.95752), Plantation Mixed Woodland (7.7909), Running Water (0.29698), Semi-Natural Broad-Leaved Woodland (0.41284)

NVC: W10, W8

Site Description: Gingerfield Wood is largely a mixed plantation presently dominated by conifers: mainly hybrid larch (*Larix x marschlinsii*) and Scots pine (*Pinus sylvestris*), with some sycamore (*Acer pseudoplatanus*) and beech (*Fagus sylvatica*) to the north of the beck, and young sitka spruce (*Picea sitchensis*) to the south of the track, accompanied by Norway spruce (*Picea abies*), pedunculate oak (*Quercus robur*), rowan (*Sorbus aucuparia*) and cherry (*Prunus avium*). There is also a stand of beech to the south-east, and the central banks of the beck have native woodland of ash (*Fraxinus excelsior*) and hazel (*Corylus avellana*) with some silver birch (*Betula pendula*) and holly (*Ilex aquifolium*).

The field layer throughout the mature woodland is suggestive of ancient woodland, as it includes frequent bluebell (*Hyacinthoides non-scripta*) and wood sorrel (*Oxalis acetosella*), locally dominant ramsons (*Allium ursinum*) and more occasional dog's mercury (*Mercurialis perennis*), wood speedwell (*Veronica montana*), wood sedge (*Carex sylvatica*), water avens (*Geum rivale*) and yellow pimpernel (*Lysimachia nemorum*). Some of the more frequent plants, less indicative of ancient woodland, are broad buckler fern (*Dryopteris dilatata*), greater stitchwort (*Stellaria holostea*), creeping soft-grass (*Holcus mollis*), bracken (*Pteridium aquilinum*), bugle (*Ajuga reptans*), tufted hair grass (*Deschampsia cespitosa*) and common dog violet (*Viola riviniana*).

Valuation: QualifiesWd3c score 13/12

Species List

Site Code: NZ10-37

Site Name: Gingerfield Wood (east)

| Latin Name: | English Name: | Species Code: |
|--|---|---------------|
| Acer pseudoplatanus | sycamore | P0005 |
| Ajuga reptans | bugle | P0046 |
| Alchemilla vulgaris | lady's-mantle | P0058 |
| Alliaria petiolata | garlic mustard | P0064 |
| Allium ursinum | ramsons | P0075 |
| Alopecurus pratensis | meadow foxtail | P0085 |
| Anthriscus sylvestris | cow parsley | P0125 |
| Arctium agg. | burdock | P0150 |
| Athyrium filix-femina | lady-fern | P0211 |
| Bellis perennis | daisy | P0231 |
| Betula pendula | silver birch | P0239 |
| Betula x aurata | hybrid birch | P2298 |
| Bromopsis ramosa | hairy-brome | P0272 |
| Caltha palustris | marsh-marigold | P0310 |
| Carex sylvatica | wood-sedge | P0421 |
| Cerastium fontanum | common mouse-ear | P0467 |
| Cerastium glomeratum | sticky mouse-ear | P0466 |
| Chamerion angustifolium | rosebay willowherb | P0477 |
| Chrysosplenium oppositifolium | opposite-leaved golden-saxifrage | P0506 |
| Circaea lutetiana | enchanter's-nightshade | P0513 |
| Cirsium palustre | marsh thistle | P0520 |
| Gonopodium majus | pignut | P0541 |
| Corylus avellana | hazel | P0557 |
| Crataegus monogyna | hawthorn | P0569 |
| Cynosurus cristatus | crested dog's-tail | P0597 |
| Dactylis glomerata | cock's-foot | P0607 |
| Deschampsia cespitosa | tufted hair-grass | P0627 |
| Digitalis purpurea | foxglove | P0640 |
| Dryopteris dilatata | broad buckler-fern | P0661 |
| Dryopteris filix-mas | male-fern | P0664 |
| Echium hirsutum | great willowherb | P0692 |
| Equisetum palustre | marsh horsetail | P0717 |
| Fagus sylvatica | beech | P0810 |
| Festuca rubra | red fescue | P0824 |
| Galium ulmaria | meadowsweet | P0833 |
| Galium vesca | wild strawberry | P0838 |
| Fraxinus excelsior | ash | P0841 |
| Galium aparine | cleavers | P0873 |
| Galium robertianum | herb-robert | P0918 |
| Galium sylvaticum | wood crane's-bill | P0921 |
| Galium rivale | water avens | P0924 |
| Galium urbanum | wood avens | P0925 |
| Galium x intermedium | hybrid avens | P0923 |
| Galium lanatum | yorkshire-fog | P0983 |
| Galium molle | creeping soft-grass | P0984 |
| Galium hoides non-scripta | bluebell | P0687 |
| Galium folium | holly | P1023 |
| Galium x marschlinii = Larix decidua x Larix kaempferi | Hybrid Larch (European Larch x Japanese | P2303 |
| Galium periclymenum | banjo-suckle | P1188 |
| Galium nemorum | yellow pimpernel | P1221 |
| Galium uniflora | wood melick | P1263 |
| Galium aquatica | water mint | P1272 |
| Galium perennis | dog's mercury | P1291 |
| Galium trinervia | three-nerved sandwort | P1305 |
| Galium acetosella | wood-sorrel | P1413 |
| Galium abies | norway spruce | P1470 |
| Galium sitchensis | sitka spruce | P2367 |
| Galium sylvestris | scots pine | P1484 |
| Galium major | greater plantain | P1488 |
| Galium tenens | smooth meadow-grass | P1506 |
| Galium la sterilis | barren strawberry | P1596 |
| Galium vulgaris | primrose | P1607 |

Species List (cont.)

Site Code: NZ10-37

Site Name: Gingerfield Wood (east)

| | | |
|-------------------------|------------------------|-------|
| Prunella vulgaris | selfheal | P1610 |
| Prunus avium | wild cherry | P1611 |
| Pteridium aquilinum | bracken | P1619 |
| Quercus robur | pedunculate oak | P1640 |
| Ranunculus repens | creeping buttercup | P1660 |
| Rhododendron ponticum | rhododendron | P1687 |
| Ribes alpinum | mountain currant | P1693 |
| Rosa canina | dog-rose | P1708 |
| Rubus fruticosus agg. | bramble | P1728 |
| Rubus idaeus | raspberry | P1729 |
| Salix caprea | goat willow | P1788 |
| Salix cinerea | grey willow | P1789 |
| Sambucus nigra | elder | P1815 |
| Sanicula europaea | sanicle | P1819 |
| Scrophularia auriculata | water figwort | P1865 |
| Scrophularia nodosa | common figwort | P1867 |
| Senecio jacobaea | common ragwort | P1899 |
| Silene dioica | red campion | P1259 |
| Sorbus aucuparia | rowan | P1960 |
| Stellaria holostea | greater stitchwort | P2010 |
| Stellaria media | common chickweed | P2012 |
| Sylvia borin | garden warbler | B4600 |
| Teucrium scorodonia | wood sage | P2046 |
| Ulex europaeus | gorse | P2112 |
| Ulmus glabra | wych elm | P2119 |
| Veronica beccabunga | brooklime | P2166 |
| Veronica chamaedrys | germander speedwell | P2168 |
| Veronica montana | wood speedwell | P2172 |
| Veronica officinalis | heath speedwell | P2173 |
| Veronica serpyllifolia | thyme-leaved speedwell | P2180 |
| Vicia sepium | bush vetch | P2198 |
| Viola riviniana | common dog-violet | P2218 |

FULL SAMPLE REPORT

SITE NAME: NEAR ASKE HALL

NGR: NZ 18100 030

WATERBODY: ASKE BECK

REGIONAL REF: NR10.0699

SAMPLE DETAILS

SAMPLE DATE: 06-AUG-1991 TIME: 15:40

SAMPLE TYPE: INVERTEBRATE: All macroinvertebrate samples

SAMPLE METHOD: 3-MIN POND NET (BT001): 3-min active sampling, 1-min hand search as per B

SAMPLE REASON: ROUTINE: Any sample collected regularly for 'local' monitoring purposes

SAMPLER: CHRISTOPHER GADD

TIME VARIANT DETAILS

INFLUENCE

SHADE:

TURBIDITY:

ODOUR:

FLOW:

FLOW RATE:

SALINE: N

WEED CUTTING: N

DREDGING:

LAND USE:

CHANNEL VARIABLE DETAILS

AVG. WIDTH: 2

AVG. SAMPLING DEPTH:
[Not used in RIVPACS]

AVG. CHANNEL DEPTH: 20
[Used in RIVPACS]

BEDROCK:

BOULDERS: 45

COBBLES:

PEBBLES: 45

GRAVEL:

SAND: 0

SILT: 10

CLAY:

ALKALINITY:

CONDUCTIVITY: 400

CALCIUM:

HARDNESS:

DETRITUS:

SEWAGE LITTER:

BED STABILITY:

RUBBISH: N

OIL FILM: N

OIL DEPOSIT: N

ERODING: N

DEPOSITING:

COVER:

%AGE: DENSITY:

FILAMENTOUS ALGAE

NON FILAMENTOUS ALGAE

OCHRE

SEWAGE FUNGUS ABOVE STONES

SEWAGE FUNGUS UNDER STONES

MACROPHYTE

PERCENTAGE: Actual percentage cover (gu) 75

MOSS

NONE: None present

HABITAT TORRENT:

N RIFFLE:

N POOL:

RUN:

N GLIDE:

N SLACK:

DITCH:

N WATERFALL:

N CASCADE:

RAPID:

N PONDED REACH:

N MARGINAL DEADWATER:

EXPOSED BEDROCK:

N UNVEGETATED MID CHANNEL BAR:

N VEGETATED MID CHANNEL BAR

MATURE ISLAND:

N UNVEGETATED SIDE BAR:

N VEGETATED SIDE BAR:

SILT DEPOSITS:

N SAND DEPOSITS:

N

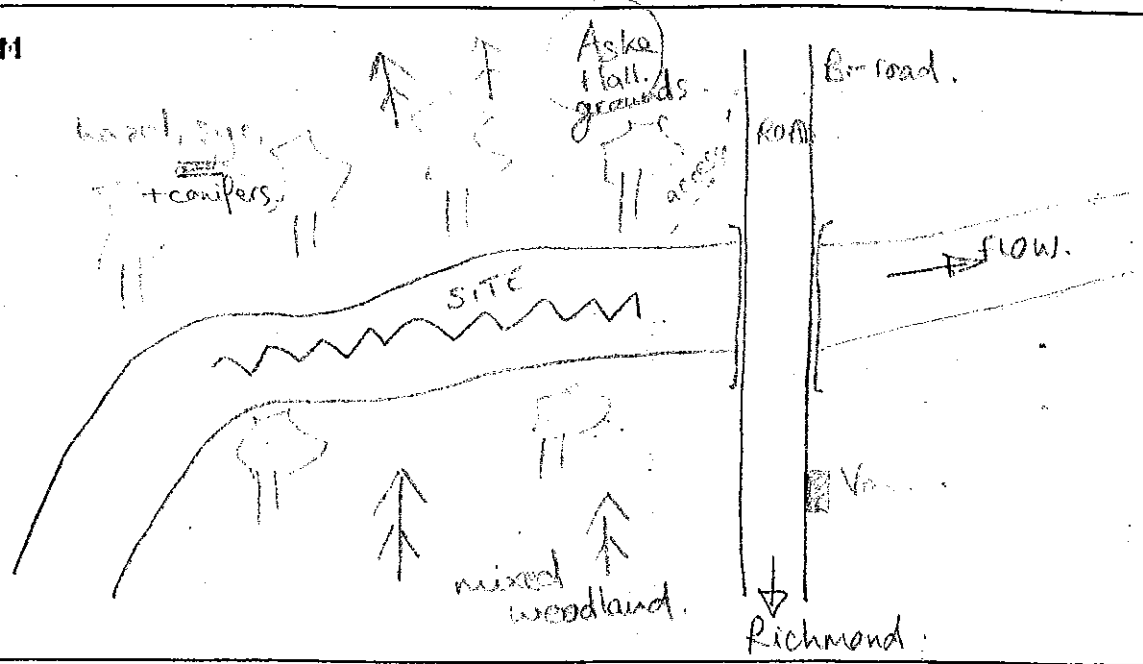
COMMENT:

BIOLOGICAL FIELD DATA SHEET

12410333

RIVER NGR DATE
 SITE SITE CODE TIME
 SAMPLE METHOD NRA NO.
 SAMPLER

SITE DIAGRAM



pebble
SUBSTRATE
SIZE

WATER slightly murky + river bed covered by a thin layer of silt.
 bank veg. grass, fern, bramble, raspberry, blackberry, ivy, cleavers, crosswort, willowherb, hemlock, campion, nettles, liverwort, moss, butterbur

| | | |
|-------------------|----------------------------------|---------------------------|
| DEPTH @ 1/4 WIDTH | <input type="text" value="30"/> | cm. |
| DEPTH @ 1/2 WIDTH | <input type="text" value="19"/> | cm. |
| DEPTH @ 3/4 WIDTH | <input type="text" value="10"/> | cm. |
| MEAN WIDTH | <input type="text" value="2"/> | m. |
| WATER TEMPERATURE | <input type="text"/> | pH <input type="text"/> |
| CONDUCTIVITY | <input type="text" value="400"/> | D.O. <input type="text"/> |

| | | |
|--|--|---|
| SUBSTRATE Boulders { <input type="text" value="10"/> % Pebbles { <input type="text" value="35"/> % Gravel { <input type="text" value="35"/> % Sand { <input type="text" value="10"/> % Silt { <input type="text" value="10"/> % | LAND USE URBAN <input type="checkbox"/> ARABLE <input type="checkbox"/> GRAZING <input type="checkbox"/> PRIVATE CULTIVATED <input type="checkbox"/> DECIDUOUS WOODLAND <input checked="" type="checkbox"/> CONIFEROUS WOODLAND <input type="checkbox"/> | PLANT COVER % ALGAL COVER <input type="text" value="70"/> <i>fil. covered in silt</i> MOSS COVER <input type="text" value="5"/> HIGHER PLANT <input type="text"/> MACROPHYTE COVER <input type="text"/> |
|--|--|---|

| | | |
|---|---|---|
| FREQUENCIES CUTTING <input type="text"/> LOGGING <input type="text"/> MANAGEMENT <input type="text"/> MANAGEMENT <input type="text"/> | SHADING NIL/LIGHT <input type="checkbox"/> MODERATE <input checked="" type="checkbox"/> HEAVY <input type="checkbox"/> | FLOW (CM/SEC) SLACK (<10) <input type="checkbox"/> SLOW (10-25) <input type="checkbox"/> MODERATE (25-50) <input checked="" type="checkbox"/> FAST (50-100) <input type="checkbox"/> SPATE (>100) <input type="checkbox"/> |
|---|---|---|

cobble
400

CHECKED: IDENTIFICATION CHECKED: DATA SHEET COMPLETED:

JM identifier EA

Location of Woods on the Inventory

The following maps show the location of the woodlands in Craven and Richmondshire which are thought to be ancient. Each map is reproduced from the OS 1:50000 Landranger Series last fully revised in 1976, 1979 and 1981. Semi-natural woodland, replanted woodland and sites which have been cleared since the reproduction the OS 1:25000 First Series maps have all been outlined on these maps.

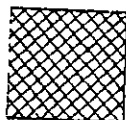
The location of each map is shown in the key plan of the county.

KEY TO MAPS



Ancient semi-natural woodland.

Ancient replanted woodland.



Woodland cleared since the production of the OS 1:25000 First Series (1884 to 1935)



| | |
|---------------------|--|
| Job | |
| Original | |
| Enclosures | |
| Action | |
| Scott Wilson, Leeds | |
| 11 JUL 2003 | |
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| Copy | |
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| Copy | |
| Copy | |

Director: Simon Pickles
N&EYEDC
5 College Street
York
YO1 7JF

Telephone: 01904 557235
email: info@neyedc.co.uk

10th July 2003

Kirsty Stocks
Scott Wilson
The Design Innovation Centre
46 The Calls
Leeds
LS2 7EY

Dear Kirsty

Ecological data search for Aske Estate

Thank you for your request for an ecological data search for the above area.

The Gingerfields SSSI lies within your search area. We do not hold details of statutory sites therefore if you require further information you should contact English Nature on 01904 435500. There are also two non-statutory nature conservation sites, or SINCs (Sites of Importance for Nature Conservation) within the area. These are listed below and further details are enclosed. One of these sites (Low Wood) also appears on the Ancient Woodland Inventory.

We do not hold the Phase I habitat survey for this area. If you require this you should contact Tim Thom at the Yorkshire Dales National Park Authority (01756 752748).

Our species database did not include any records in the area. Please note that a lack of survey information for any particular area or taxonomic group does not necessarily mean that there is no nature conservation interest present and I would therefore recommend that a site survey is carried out in order to assess any ecological interest that might be present before proceeding with the development.

One particular point to bear in mind is that many bridges in North Yorkshire provide good opportunities for bats and support bat roosts. Please consult the North Yorkshire Bat Group regarding this aspect if the proposal is likely to require working close to or within the structure of any bridge. Bats are European Protected Species under the Conservation (Natural Habitats & c.) Regulations 1994. As you are probably aware, should a proposal be likely to affect or disturb bats and/or their roosts and therefore require derogation from the Regulations, a licence application to DEFRA is required in advance of the

works commencing. The relevant contact is: John Drewett, Chairman, North Yorkshire Bat Group, Granary Flat, Carlton, Leyburn, North Yorks, DL8 4BD, Tel: 01969 640544.

In due course we would hope to acquire additional data relating to this area so please do not hesitate to contact us in the future. Our fee for carrying out this work is £35. Please find attached an invoice for this amount.

Yours sincerely

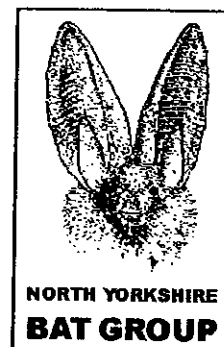
James A. J. Mortimer

James A. J. Mortimer
Ecological Information Officer

Sites listed

| Site code | Site name | Grid reference |
|-----------|-------------------------|----------------|
| N/A | Gingerfields | NZ160024 |
| NZ10-37 | Gingerfield Wood (east) | NZ158030 |
| NZ10-02 | Low Wood | NZ165029 |

The Granary
Carlton
Leyburn
North Yorkshire DL8 4BD
Tel: 01969 640544
Email: john@drewettj.freeseerve.co.uk
www.nyorkbats.freeseerve.co.uk



Kirsty Stocks
Scott Wilson
46 The Calls
Leeds
LS2 7EY

10 July 2003

Dear Kirsty


Aske Estate, Richmond

Thank you for your letter of 9 July requesting bat records for this site. Having conducted a data search I regret to inform you that we do not hold any records for the locality.

The majority of the records on our database have been collected as a result of enquiries about bats from the public and so do not constitute the results of a comprehensive survey. We would advise that a bat survey is carried out to assess the status of bats in the area, as it has obvious bat potential.

Sorry we cannot be of more help at this stage.

Yours sincerely


John Drewett

Our ref: NL/DVO/122
Your ref: D101919 Aske



ENVIRONMENT
AGENCY

Date: 15 July 2003

Kirsty Stocks
Scott Wilson
46 The Calls
Leeds
LS2 7EY

Dear Kirsty

ASKE ESTATE RICHMOND

Further to your letter dated 9 July 2003, please find enclosed relevant macro-invertebrate data.

Otters are present in the general area, although not a good area for water voles. There is a possibility of the presence of white clawed crayfish, but the Agency has no records.

This information is based on that currently available to the Environment Agency and is subject to our standard notice. The Agency accepts no liability for any loss or damage arising from its use. The interpretation of the information is your responsibility. If you have any queries please do not hesitate to contact me using the details below.

Yours faithfully

A handwritten signature in cursive script, appearing to read "Diana Orr".

DIANA ORR
Customer Contact Officer

Direct dial 01904 822681
Direct fax 01904 822649

| | |
|---|--|
| Job | |
| Original | |
| Enclosures | |
| Action | |
| Scott Wilson, Leeds RECEIVED 17 JUL 2003 | |
| Copy | |
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Date Notified: 11.7.91

County: North Yorkshire Site Name: Gingerfields

Status: Site of Special Scientific Interest (SSSI) notified under Section 28 of the Wildlife and Countryside Act, 1981, as amended.

Local Planning Authority: Richmondshire District Council

National Grid Reference: NZ 162025, NZ 167022

Ordnance Survey Sheet 1:50,000: 92 1:10,000: NZ 10 SE

Area: 6.89 (ha) 17.02 (ac)

First Notified: 1991

Description:

Gingerfields comprises two meadows in close proximity which are botanically rich and depend on the continuation of traditional grazing and mowing management for the survival of their flora. Such meadows have become increasingly rare nationally due to agricultural intensification.

The eastern field ('McGuinnesses') is bounded by trees and shrubs including ash *Fraxinus excelsior*, hazel *Corylus avellana*, blackthorn *Prunus spinosa* and dog-rose *Rosa canina*. The sward is characterised by sweet vernal-grass *Anthoxanthum odoratum*, crested dog's-tail *Cynosurus cristatus*, yellow oat-grass *Trisetum flavescens*, quaking-grass *Briza media* and false oat-grass *Arrhenatherum elatius*. Herbs are abundant and include wood crane's-bill *Geranium sylvaticum*, meadow crane's-bill *G. pratense*, oxeye daisy *Leucanthemum vulgare*, red clover *Trifolium pratense*, cowslip *Primula veris*, meadow vetchling *Lathyrus pratensis*, lady's-mantle *Alchemilla* agg., betony *Stachys officinalis* and goat's-beard *Tragopogon pratensis*.

The western field supports two distinct grassland types. Areas of thin soils have a calcicolous (lime-loving) sward typified by sheep's-fescue *Festuca ovina*, salad burnet *Sanguisorba minor*, common rock-rose *Helianthemum nummularium*, lady's bedstraw *Galium verum* and mouse-eared hawkweed *Hieracium pilosella*. The majority of the field supports a more neutral sward of crested dog's-tail, sweet vernal-grass, common bent *Agrostis capillaris* and perennial rye-grass *Lolium perenne*. Herbs include ribwort plantain *Plantago lanceolata*, cat's-ear *Hypochoeris radicata* and great burnet *Sanguisorba officinalis*. Most notably, the field supports a large population of the regionally rare species, meadow saffron *Colchicum autumnale*.

APPENDIX 4: RESULTS OF ECOLOGICAL SURVEY

1.1 Flora

The Handbook for Phase I habitat survey (a technique for environmental audit) details the following categories, among others, which have particular relevance to this survey. Some habitat types included in the handbook were not encountered during the survey and have therefore not been included in this section. The flora types described below were all identified on the Aske Estate.

1.2 Woodland

Woodland is defined as vegetation dominated by trees more than 5 m high when mature, forming a distinct, although sometimes open, canopy. Dominant species are coded and the understorey and ground layers target noted where appropriate.

The main categories used in these sites includes:

1. broadleaved woodland: 10% or less conifer in the canopy
2. coniferous woodland: 10% or less broadleaved in the canopy
2. mixed woodland: 10-90% of either broadleaved or conifer in the canopy

Where tree cover is less than 30% the area is shown as scattered trees over the background habitat. Where the tree cover is greater than 30% but there are large open spaces target notes are used to describe the ground flora.

Semi-natural woodland comprises all stands which do not obviously originate from planting. The distribution of species generally reflected natural variations in the site and its soil. Woodland with both semi-natural and planted trees was classified as semi-natural where the planted trees accounted for less than 30% of the canopy composition, but as plantation when more than 30% was planted. Scrub is seral or climax vegetation dominated by locally native shrubs, usually less than 5 m tall.

1.3 Mixed plantation

Mixed plantation dominates Low Wood SINC in the south of the site (TN7), either side of Aske Beck. A large area of mixed plantation also extends through the middle of the Estate. *Quercus* spp. and *Larix* spp. are common in these areas. *Rhododendron ponticum* and *Prunus laurocerasus* have become and are becoming established to the exclusion of other species especially along the woodland paths. Originally it is likely that the Victorian estate managers would have planted *Rhododendron ponticum* along the rides for the flower displays and scent. The species is often found alongside *Prunus laurocerasus* and is at a similar stage of development probably having

been planted at a similar time. Within the plantation compartments development of these two shrubs is less advanced possibly as a result of forestry clearance.

1.4 Broadleaved plantation

Areas of broadleaved plantation are found throughout the site. *Quercus* spp. dominate these areas with a variety of herb species underneath. There are areas of newly planted *Quercus robur* woodland and shelterbelt to the west of the site bordering a series of semi-improved neutral grassland fields. These sections provide important shelter and woodland fringe foraging habitat for bats, birds, badgers and also provide habitat for numerous small mammals and invertebrates.

As they mature dead standing timber and dead branches attached to trees form a suitable habitat for more diverse invertebrate communities and continues to increase in value with age. It would be beneficial for nature conservation for these areas to be allowed to develop naturally.

1.5 Broadleaved semi-natural woodland

Broadleaved semi-natural woodland is located around the lake margin at the east of the Estate, and at the eastern end of the Low Wood SINC. The canopy close to Aske Beck is dominated by a wide range of species, with no individual species dominant. *Betula pendula*, *Fagus sylvatica*, *Fraxinus excelsior*, and *Acer pseudoplatanus*, *Quercus robur* (TN4) are all present in substantial quantities. The ground flora is diverse and heavily shaded, indicated by various ferns (shade tolerant) along the stream banks. The mature trees in the woodland may have potential for bats. *Chrysosplenium oppositifolium* was noted. There was no sign of water vole or otter observed during the survey. Considerable species diversity was found to be associated with the woodland between the stone bridge and Olivers Cottage some of the species recorded in the field layer include *Dryopteris filix-mas*, *Dryopteris dilatata*, *Circaea lutetiana*, *Viola riviniana*, *Hedera helix*, *Geum urbanum*, *Mercurialis perennis*, *Athyrium filix-femina*, *Bromopsis ramosa*, *Silene dioica*, *Oxalis acetosella*, *Ajuga reptans*, *Glechoma hederacea*, *Hyacinthoides non-scripta*, *Poa nemoralis*, *Scrophularia nodosa* and *Stachys sylvatica*.

Based on the species diversity this area might be considered of more than local value to nature conservation but this is based on only a brief site visit and must not be considered as a substantial analysis.

There is also an area of secondary woodland (TN 3) adjacent to the road immediately south of Olivers Cottages which is also an area of secondary woodland with *Ulmus glabra*, *Acer pseudoplatanus* and *Urtica dioica*. The area is fenced off from the stock around the perimeter of woodland. *Urtica dioica* has grown underneath the trees (*Aesculus hippocastanum* and introduced *Quercus* spp.) but has been sprayed recently with a herbicide. Semi-improves neutral grassland species in the shade of the trees includes *Lolium perenne*, *Holcus lanatus* and *Dactylis glomerata* and this extends down the road to a tall herb community comprising *Chamerion angustifolium*, *Sambucus nigra*, *Corylus avellana* and *Urtica dioica*. This section is relatively species poor in comparison with the broadleaved woodland adjacent to Aske

Beck and based on the floral composition was considered unlikely to be of more than local importance to nature conservation.

1.6 Semi-improved neutral grassland

Extensive areas of semi-improved neutral grassland are found in the south east and central part (TN9) of the Estate and at the west of the site. To the south-east, the grassland is dominated by *Poa* spp. with occasional *Cynosurus cristatus*, and to the west the grassland is dominated by *Lolium perenne*, *Dactylis glomerata*, *Holcus lanatus*, *Cirsium arvense*, *Trifolium repens*, *Taraxacum officinale* and *Ranunculus repens*. All areas have been improved by the addition of livestock manure, surface levelling as well as weed control. This habitat type, is on the whole, species poor but smaller more species rich areas may be identified if more detailed survey were to be undertaken. This habitat type was not considered to form a major constraint to any potential landscape plans. Semi-improved neutral grassland is a widespread and common habitat type which often develops into ruderal tall herb communities and the scrub if left unmanaged.

1.7 Semi-improved acid grassland

Semi-improved acid grassland is restricted to the south east extremity of the site. This area (TN11) is dominated by *Agrostis capillaris*, *Cynosurus cristatus* and *Rumex acetosella*. The sections of thin acid grassland are bisected by the main Richmond road and are bounded by a stock proof fence which is in good condition. Numerous small borrow pits are located in this area which is situated on a small raised hill overlooking High Lodges to the south east of the site. The area to the west of the road contains a small sycamore shelter belt plantation and there are some patches of gorse scattered along the ridge line. Other species recorded in this area include *Juncus articulatus*, *Eleocharis palustris*, *Juncus effusus*, *Sparganium erectum* and *Callitriche stagnalis* which are established at the base of banks and damp hollows (old borrow pits).

The borrow pits are between 1m and 15m wide with short acid grassland back from the lip of the depression and taller moisture tolerant marginal species such as *Epilobium hirsutum* inside the bowl and *Juncus effusus* and *Juncus articulatus* on the dampest internal areas. There is the opportunity for the establishment of a series of small independent pools in this area which would be more likely to be unaffected by contamination from surface water runoff than lower lying pools. The value to nature conservation could be considerably increased in this area by relatively minor works to the existing depressions.

1.8 Amenity grassland

Amenity grassland comprises intensively managed and regularly mown grasslands, typical of lawns and urban 'savannah' parks, in which perennial rye-grass (*Lolium perenne*) with or without white clover (*Trifolium repens*) predominates. The sites typically contained meadow-grass (*Poa* spp.), especially annual meadow-grass (*Poa annua*) established along side perennial rye-grass forming a characteristic short mown nutrient rich sward. Ribwort plantain (*Plantago lanceolata*), daisy (*Bellis perennis*) and dandelion (*Taraxacum officinale* agg.) are usually frequently recorded.

Sections of amenity grassland were to be found surrounding parts of the main Aske Hall buildings however due to the presence of scattered mature trees and the importance of potential bat roosts in this habitat these sections have been recorded as Mixed Parkland.

1.9 Introduced shrubs

Introduced shrubs comprise of recently planted areas, dominated by shrub species that are not locally native. Species common to the Estate include cherry laurel (*Prunus laurocerasus*), rhododendron (*Rhododendron ponticum*) and dogwood (*Cornus* sp.). The habitat that has become most effected by the introduction of non native shrubs is the mixed plantation woodland (see section 5.1.2) and recommendations.

There is little value to nature conservation associated with these introduced species and their removal is often beneficial (TN7).

1.10 Tall herb communities

Areas of tall herbs are found adjacent to mixed plantation especially where recent clearance has occurred (TN 6,8). Field margins and newly disturbed areas close to the main buildings have also become inundated with tall herb community vegetation but these are very localised in their distribution. *Epilobium hirsutum*, *Urtica dioica*, *Cirsium arvense*, *Cirsium vulgare*, *Chamerion angustifolium* and *Cirsium vulgare* are often the first species to become dominant following dense tree canopy removal.

This community type has particular value for invertebrates and also for small mammals which find cover and foraging in the tall grasses herbs.

1.11 Ephemeral / short perennial

Ephemeral/ short perennial habitat comprises short, patchy plant associations typical of recently ploughed farmland / set aside or derelict urban sites and quarries. The land is typically free draining, and usually has a shallow stony soil (not so on farmland). The vegetation usually lacks a clear dominant species, but consists of a mixture of low-growing plants, often less than 25 cm high, such as ribwort plantain (*Plantago major*), creeping buttercup (*Ranunculus repens*), white clover (*Trifolium repens*), colt's-foot (*Tussilago farfara*), ox-eye daisy (*Leucanthemum vulgare*) and ragwort (*Senecio jacobea*) species, or of taller hedge mustard (*Sisymbrium officinale*.) and melilot (*Melilotus* sp.). There is an area of recently disturbed ground to the north of Target Note 7 with the area to the west planted with broadleaved plantation. The ground was dominated by what is now called *Persicaria maculosa* previously *Polygonum persicaria* or redshank.

1.12 Broadleaved parkland

Large areas of broadleaved parkland dominate the site (TN1,9). *Quercus* spp. are the most common tree species, with *Poa* spp., *Lolium perenne* and *Holcus lanatus* beneath. The most commonly recorded species were *Quercus robur* and *Quercus cerris* which were standing in small scattered groups and as individuals surrounded by semi-improved grassland. The major ecological constraint associated with these trees is likely to be potential bat roosts and any specific protection afforded by tree preservation orders

(TPOs). The usual restrictions with regard to bird roosts also apply and the value of the collective mature trees is considered to be of more than local importance to nature conservation. Mature trees should be preserved as they stand (excepting routine safety maintenance) wherever possible.

1.13 Mixed parkland

An area of mixed parkland surrounds Aske Hall, with *Quercus* spp. and *Larix* spp. Small patches of mixed parkland are also found at the south east of the site, surrounded by semi-improved neutral grassland. Although many of the specimen trees are non native they still have considerable value associated with them and comments which apply to broadleaved parkland also apply to mixed parkland i.e. the major ecological constraint associated with these trees is likely to be potential bat roosts and any specific protection afforded by tree preservation orders (TPOs). The usual restrictions with regard to bird roosts also apply and the value of the collective mature trees is considered to be of more than local importance to nature conservation. Mature trees should be preserved as they stand (excepting routine safety maintenance) wherever possible.

1.14 Bare ground

Bare ground on the Estate has been mapped where exposed soil or aggregate chippings lie on the surface and there is no or very sparse vegetation. This category appears where shading, recent disturbance or thick applications of gravel substrate inhibit vegetation establishment. Immediately in front of the Volteyeur iron gateway (named after the 1856 Derby winner) which is flanked by two Grade II listed cottages (built in 1847 and 1897) is an area of bare ground. This area has been mapped but most areas were too small to map to standard Phase I Habitat Survey methodology. Bare ground can have value for many invertebrate species but is usually a rapidly transitional habitat and therefore unlikely to be a major ecological constraint to any proposed development other than by its proximity to other sites.

1.15 Arable

There are several arable fields situated at the eastern end of the study area adjacent to Olivers Cottages. An old vegetated quarry lies within one of the fields but no survey was made of this old excavation. Desktop consultations did not reveal any sites of nature conservation interest or protected species within this section of the site footprint, this does not however preclude the occurrence of mobile species.

The arable crops were being intensively managed with few arable weeds present and very little border left between the spraying margin and adjacent hedges. There are no known ecological constraints associated with areas of arable farmland on the Aske Estate.

1.16 Standing water

Only one area of standing water was observed during the Estate grounds survey – the lake by the School Cottages and (the reservoir within High Park is thought to be subterranean). Open Standing Water is defined as water beyond the limits of swamp or emergent vegetation, although it may contain submerged, free floating-leaved vegetation. The lake and aquatic issues are

referred to in chapter 7. There were no major ecological constraints associated with the pond margins or related vegetation observed during the site visit. A variety of water fowl were using the lake to breed and feed and their presence would need to be considered when setting dates for any works in this area.

2. FAUNA

2.1 Bats

Bats are known to use several types of roosts including cavities in trees formed by falling branches, fungal activity or physical damage. There are numerous fully mature trees scattered across the site which are considered to have high bat roost potential and the area comprises large sections of suitable bat foraging habitat supporting diverse invertebrate populations.

The Aske Beck corridor and associated valley sides provides all the habitats necessary to sustain bat populations. Prior to any work on mature trees (for the purposes of this report a mature tree is classed as any tree that is greater than 0.4m diameter at chest height) or structural works, an Ecologist may be required to carry out a preliminary assessment of the likelihood of trees or structures being used as a roost by bats. In cases of doubt, a Bat Specialist will carry out a further, more detailed assessment.

Roosts may legally be obstructed, damaged or destroyed only under permission granted by the Statutory Nature Conservation Organisation (SNCO) (this is English Nature in England). It is not yet known whether any such works will be required during the restoration of the Estate.

2.2 Badger

Badger are known to be active in the woods around Aske Beck especially in the south western part of the site. And numerous signs of their presence were observed as well as verbal evidence of their presence. Full sett survey is recommended prior to any works by the western section of Aske Beck. As the site is densely wooded further badger sett survey would be required to established is there are any other active setts on the site.

The badger is fully protected by law, and any development works that will result in the disturbance of badgers require a licence to be issued by English Nature. Without such a licence, 'The Protection of Badgers Act 1992' makes it a criminal offence to :

- knowingly attempt to, or successfully kill, damage, restrict or mal-treat a badger,
- damage, destroy or interfere with a badger sett, including its entrances or access routes,
- disturb a badger whilst occupying a sett.

Since it is often difficult to predict what badgers may find disturbing, English Nature (the statutory conservation body responsible for badgers in England) have issued guidelines highlighting those activities considered licensable.

2.3 Amphibians and reptiles

All native British species of reptile are protected under the Wildlife and Countryside Act 1981. The Act makes it an offence to cause wilful injury to any reptile. In addition, special protection is afforded to certain reptile species listed in Schedule 5 of the Act, although these species are not anticipated to be affected by restoration works.

Reptiles which may be encountered include common lizard, slow worm and grass snake. Amphibians may include newts, frogs or toads. Amphibians and reptiles may be encountered under or around rubble or fallen tomb stones, or near areas of water such as ponds or marshy ground. If an amphibian or reptile is encountered the Site Manager and Ecologist should be notified, and any advice given followed. Further more specific survey is not recommended for amphibians due to the lack of vegetation (required for great crested newt egg laying), the presence of signal crayfish and the presence of large predatory fish. No further survey is recommended for reptiles unless the proposed works impact upon Aske Beck directly. These species are not considered to be a major ecological constraint.

2.4 Birds

Active bird nests and birds are protected under the Wildlife and Countryside Act. Clearance of trees, shrubs and scrub outwith the breeding season should ensure that bird nests are (legally) destroyed whilst the birds are not present. When scrub clearance or tree felling is planned during the bird breeding season an Ecologist or suitably qualified person should undertake a survey to ensure that no nests, eggs or fledglings are disturbed or harmed. If a nest is discovered, clearance or other construction works will be stopped immediately for a zone generally within 10 metres of the nest. The exact size of the exclusion zone will be determined by the Ecologist and will be confirmed in writing to the Project Manager, depending upon the nature of the habitat, the species of bird concerned and the activities occurring close by. The exclusion zone will be fenced with high visibility tape. The nest will then be monitored weekly by the Site Manager. Once the Ecologist or Site Manager has confirmed in writing to the Project Manager that the young birds have flown (and that no other nests are in use within the exclusion zone), restoration may recommence unimpeded.

2.5 Barn owl

Recent records exist for barn owl which is reported to be nesting at St Osyth farm in some out buildings. The record comes from Mrs Player, a long standing resident of both the local area and Aske Estate. Barn owl requires a matrix of habitats in which to hunt and successfully breed including woodland/grassland fringe, out buildings or large tree cavities and grassland capable of supporting small mammal populations.

The barn owl is protected under Schedule 1, Part 1 of the WCA above the standard level of protection given to all Britain's wild birds and it is currently at amber level warning (Birds of Conservation Concern in the United Kingdom).

2.6 Little owl

Photographic records exist for little owl (Mrs Player) which although only receiving standard protection under the WCA. Little owl populations are currently being monitored by the British Trust For Ornithology due to a variety of concerns but it has not been placed on the alert list yet (possibly due to lack of statistical data).

2.7 Water fowl

Various water fowl were using the main lake including over 20 coot, moorhen and mute swan all of which had successfully bred. A coots nest was observed close to the bank on the eastern side of the lake. The presence of water fowl on a lake tends to raise the nutrient status as their faeces accumulate over time.

2.8 Song birds

The site is populated by numerous song bird. The range of habitats, the availability of invertebrates and the control of predators may all be contributing to the substantial bird populations on the site.

2.9 Small mammals

Areas of woodland fringe and rough grassland were interlaced with small mammal runways and burrows. The margins and bankside of Aske beck was also scattered with signs of small mammal activity. Although not positively identified (apart from wood mouse see Section 5.2.11) it is likely that the species present included common shrew, bank vole and common rat. A dead mature wood mouse was observed close to Aske beck (see Phase I Map). These species do not represent a major ecological constraint to the proposed development.

2.10 Stoat

A fully grown stoat was seen hunting on a section of woodland fringe in the western part of the Estate (see Phase I Map).

2.11 Rabbit

There was a large and well established rabbit warren close to the northern edge of the lake and signs of numerous individuals throughout the estate.

2.12 Roe Deer

A roe deer fawn was seen hiding in the area of tall herb community by target note 6 (see Phase I Map).

SURVEY OF PARKLAND TREES

| No. | Location | | Species | Size | Height | Spread | Girth Diameter | General condition A/B/C/D | Prescription notes | Notes |
|-----|----------|----------|----------------|------|--------|--------|----------------|---------------------------|--------------------|---|
| | Grid Ref | Grid Ref | | | | | | | | |
| T1 | 417906 | 503529 | Beech | | 1.6 | 1.2 | 0.05 | b | r | no strong leader |
| T2 | 417921 | 503495 | Sycamore | | 21 | 14 | 1.2 | b | r | black spot, lower branches removed |
| T3 | 417914 | 503491 | Sycamore | | 36 | 9 | 1 | c | s | forked 9m, poor lower branch form, black spot |
| T4 | 417923 | 503484 | Lime sp. | | 18 | 11 | 1 | b | r | v straight, no lower branches to west side |
| T5 | 417912 | 503474 | Horse Chestnut | | 17 | 25 | 1.3 | b | s | lower branches, cracked off, twisted form |
| T6 | 417921 | 503471 | stump | | | | 1.4 | | | |
| T7 | 417916 | 503465 | Lime sp. | | 21 | 12 | 1 | b | s | large no decurrent lower branches |
| T8 | 418011 | 503704 | stump | | | | 0.8 | | | |
| T9 | 418013 | 503708 | Sycamore | | 16 | 9 | 0.8 | b | s | black spot, remove lower branches |
| T10 | 418015 | 503710 | Sycamore | | 16 | 11 | 1 | b | r | black spot, leaning towards road |
| T11 | 418028 | 503729 | stump | | | | 1.2 | | | |
| T12 | 418040 | 503734 | Sycamore | | 18 | 11 | 1.2 | b | r | black spot, leaning towards road |
| T13 | 418043 | 503749 | Sycamore | | 18 | 16 | 1.5 | b | s | black spot, remove lower branches |
| T14 | 418053 | 503767 | stump | | | | 1 | | | very weathered, possibly very large |
| T15 | 418059 | 503775 | stump | | | | 2 | | | very weathered, possibly very large |
| T16 | 418074 | 503776 | Oak Sessile | | 18 | 19 | 1.5 | b | s | tidy up lower branches, fissured vertically |
| T17 | 418080 | 503783 | stump | | | | 1.75 | | | |
| T18 | 418077 | 503796 | Sycamore | | 20 | 15 | 1.2 | b | r | black spot |
| T19 | 418077 | 503808 | Oak Common | | 20 | 12 | 1.2 | c | r | branched at top, some dieback |
| T20 | 418091 | 503797 | stump | | | | 1.5 | | | |
| T21 | 418101 | 503799 | stump | | | | 1.5 | | | bracket fungus |
| T22 | 418158 | 503872 | Beech | | 24 | 16 | 2 | a | r | v straight, small amount of dieback at top |
| T23 | 418199 | 503873 | Beech | | 18 | 10 | 2 | c | r | lopsided canopy |
| T24 | 418200 | 503854 | Sycamore | | 18 | 16 | 1.7 | c | r | lopsided form |
| T25 | 418208 | 503862 | Sycamore | | 16 | 8 | 0.75 | c | r | v upright, no lower branches |
| T26 | 418217 | 503850 | Lime sp. | | 6 | 8 | 0.5 | b | r | Good Form |
| T27 | 418228 | 503851 | Lime sp. | | 7 | 7 | 0.5 | b | r | Good Form |

SURVEY OF PARKLAND TREES

| No. | Location | | Species | Size | Height | Spread | Girth | General condition | Prescription notes | Notes |
|-----|----------|----------|----------------|------|--------|--------|-------|-------------------|--------------------|---|
| | Grid Ref | Grid Ref | | | | | | | | |
| T28 | 418246 | 503843 | Lime sp. | | 8 | 8 | 0.5 | b | r | Good Form |
| T29 | 418271 | 503835 | Lime sp. | | 8 | 8 | 0.7 | b | r | Good Form |
| T30 | 418271 | 503834 | stump | | | | 2 | | | |
| T31 | 418283 | 503835 | stump | | | | 3 | | | |
| T32 | 418210 | 503594 | Field Maple | | 7 | 6 | 0.5 | c | r | some dieback |
| T33 | 418191 | 503603 | Field Maple | | 8 | 6 | 0.5 | b | r | |
| T34 | 418031 | 503674 | Ash | | 7 | 6 | 0.5 | c | f | lightning damage, no leader |
| T35 | 418043 | 503597 | Oak Common | | 20 | 15 | 1.5 | c | s | lower branch not good form |
| T36 | 418059 | 503586 | Oak Common | | 20 | 15 | 1.5 | c | r | forked very low, dead branches |
| T37 | 418059 | 503596 | stump | | | | 2.5 | | | |
| T38 | 417901 | 503436 | Sweet Chestnut | | 18 | 12 | 1.2 | b | r | |
| T39 | 417900 | 503425 | Sycamore | | 22 | 12 | 1.2 | b | r | |
| T40 | 417894 | 503411 | Lime sp. | | 25 | 8 | 2 | b | r | very broad |
| T41 | 417801 | 503170 | Oak Common | | 20 | 10 | 1.5 | c | r | small amount of dieback |
| T42 | 417796 | 503170 | Oak Common | | 20 | 10 | 1.2 | c | r | some dead wood, small amount of dieback |
| T43 | 417804 | 503145 | Lime sp. | | 20 | 8 | 1 | b | r | dense crown, nr horse jump |
| T44 | 417816 | 503139 | Oak Common | | 25 | 8 | 1 | b | r | dead wood, fissures, bracked fungus |
| T45 | 417776 | 503117 | Horse Chestnut | | 18 | 18 | 1 | d | s | lot of dieback at top of crown |
| T46 | 417815 | 503106 | Oak Turkey | | 25 | 20 | 1.2 | b | r | lopsided form |
| T47 | 417833 | 503115 | Oak Common | | 22 | 18 | 1 | b | r | |
| T48 | 417926 | 503173 | Ash | | 24 | 15 | 2 | c | r | big fissures lightning damage/dead wood |
| T49 | 417939 | 503164 | Oak Common | | 25 | 15 | 1.5 | c/d | s | lightning damage/dead woo |
| T50 | 418002 | 503108 | stump | | | | 1.5 | | | |
| T51 | 417986 | 503089 | Ash | | 20 | 18 | 1 | c/d | s | lopsided, dieback, holes for mammals |
| T52 | 417995 | 503086 | Ash | | 25 | 15 | 1.2 | c/d | s | lightning damage, leaning, hole 2m up |
| T53 | 417973 | 503029 | stump | | | | 1.5 | | | |
| T54 | 417967 | 503028 | Oak Sessile | | 25 | 8 | 1 | c | r | straight, lopsided crown |
| T55 | 417958 | 503035 | stump | | | | 2 | | | |

| No. | Location | | Species | | Size | | | General condition | Prescription notes | Notes |
|-----|----------|----------|----------------|-------|--------|--------|-------|-------------------|-----------------------------------|--|
| | Grid Ref | Grid Ref | | | Height | Spread | Girth | A/B/C/D | Retain Fell Surgery (no and size) | Condition Visibility/landscape contribution |
| T56 | 417924 | 503089 | stump | | | | 2 | | | |
| T57 | 417894 | 503111 | stump | | | | 2.5 | | | good form, small amount of dieback |
| T58 | 417879 | 502955 | Oak Common | Qu ro | 25 | 15 | 1 | b | r | lightning damage, no leader, fissure to bottom |
| T59 | 417736 | 502936 | Oak Common | Qu ro | 18 | 15 | 1.7 | d | s | low branches some dieback |
| T60 | 417714 | 502967 | Beech | Fa sy | 25 | 20 | 1.7 | b | r | lopsided form, large fissure 1m |
| T61 | 417680 | 502993 | Horse Chestnut | Ae hi | 2 | 20 | 2 | d | r | lightning damage, no leader |
| T62 | 417698 | 503015 | Beech | Fa sy | 20 | 20 | 1.7 | c | r | some dieback, protected |
| T63 | 417688 | 503043 | Sycamore | Ac ps | 8 | 6 | 0.2 | c | r | protected |
| T64 | 417658 | 502990 | Norway Maple | Ac pl | 10 | 5 | 0.2 | b | r | lower branch on ground |
| T65 | 417619 | 503021 | Oak Common | Qu ro | 15 | 20 | 1.5 | b | s | poor specimen |
| T66 | 417609 | 503022 | Scots Pine | Pi sy | 15 | 3 | 0.4 | d | f | good form |
| T67 | 417388 | 502907 | Oak Common | Qu ro | 20 | 20 | 1.2 | b | r | very good form |
| T68 | 417184 | 502902 | Oak Common | Qu ro | 15 | 10 | | a/b | r | forked low down one side removed |
| T69 | 417312 | 502964 | Oak Sessile | Qu pe | 15 | 12 | | d | f | leaning, dead wood |
| T70 | 417316 | 502966 | Scots Pine | Pi sy | 20 | 8 | 1 | c | r | twisted, mammal hole base, fissures, dead wood |
| T71 | 417428 | 503072 | Oak Common | Qu ro | 20 | 10 | 2 | c | s | black spot |
| T72 | 417466 | 503135 | Sycamore | Ac ps | 3 | 2 | 0.07 | c | r | dead wood |
| T73 | 417567 | 503054 | Oak Common | Qu ro | 20 | 15 | 1.2 | c | r | dead wood |
| T74 | 417572 | 503051 | stump | | | | 1.2 | | | |
| T75 | 417574 | 503046 | Lime sp. | T sp. | 22 | 20 | 1.7 | b | s | dead wood |
| T76 | 417595 | 503052 | Oak Common | Qu ro | 20 | 20 | 1.5 | a/b | r | good form |
| T77 | 417625 | 503051 | stump | | | | 3 | | | |
| T78 | 417592 | 503101 | Oak Common | Qu ro | 20 | 20 | 2 | b | r | good form s db, dw |
| T79 | 417630 | 503124 | Oak Common | Qu ro | 30 | 25 | 3 | a | r | some dead wood |
| T80 | 417635 | 503124 | Oak Common | Qu ro | 25 | 20 | 1.2 | b | r | some dead wood |
| T81 | 417659 | 503116 | stump | | | | 4 | | | |
| T82 | 417686 | 503080 | Oak Common | Qu ro | 20 | 20 | 3.5 | c | r | fissures, holes, no leader, leaning |
| T83 | 417712 | 503091 | Field Maple | Ac ca | 5 | 2 | 0.3 | c | f | no strong leader, |

SURVEY OF PARKLAND TREES

| No. | Location | | Species | Size | Spread | Girth | General condition | Prescription notes | Notes |
|------|----------|----------|----------------|------|--------|-------|-------------------|--------------------|------------------------|
| | Grid Ref | Grid Ref | | | | | | | |
| T84 | 417738 | 503138 | Purple Beech | 8 | 4 | 0.3 | b | r | protected |
| T85 | 417775 | 503113 | Horse Chestnut | 20 | 18 | 1 | a/b | r | good form some dieback |
| T86 | 417762 | 503167 | Oak Common | 5 | 2 | 0.1 | b | r | plant for 2000 |
| T87 | 418116 | 503362 | Sycamore | 20 | 12 | 1 | c | r | no strong leader, |
| T88 | 418124 | 503372 | stump | | | 1.2 | | | |
| T89 | 418101 | 503415 | Oak Common | 20 | 14 | 1.5 | b | r | forked low down |
| T90 | 418140 | 503417 | stump | | | 1.2 | | | |
| T91 | 418155 | 503458 | Oak Common | 22 | 12 | 1.6 | b | r | forked low down |
| T92 | 418162 | 503475 | Ash | 22 | 6 | 1 | c | r | bulbous at base |
| T93 | 418184 | 503480 | Oak Common | 22 | 12 | 1.6 | b | r | forked |
| T94 | 418190 | 503481 | Oak Common | 22 | 10 | 1.2 | b | r | |
| T95 | 418206 | 503474 | stump | | | 0.8 | | | |
| T96 | 418210 | 503478 | stump | | | 0.2 | | | |
| T97 | 418216 | 503474 | stump | | | 1.2 | | | |
| T98 | 418213 | 503465 | stump | | | 1.2 | | | |
| T99 | 418215 | 503464 | stump | | | 1.2 | | | |
| T100 | 418216 | 503455 | stump | | | 1.2 | | | |
| T101 | 418206 | 503460 | Oak Common | 20 | 12 | 1.4 | c | r | poor form |
| T102 | 418202 | 503453 | stump | | | 1.2 | | | |
| T103 | 418200 | 503450 | stump | | | 1.2 | | | |
| T104 | 418204 | 503424 | stump | | | 1.2 | | | |
| T105 | 418186 | 503420 | stump | | | 1.2 | | | |

SURVEY OF PARKLAND TREE GROUPS

| No. | Location | Grid Ref | Species composition | Size | Height | Spread | Girth Diameter | General condition A/B/C/D | Prescription notes | Notes |
|-----|----------|----------|--|------|--------|--------|----------------|---------------------------|--------------------|---|
| G1 | 417902 | 535210 | Lime sp. 14 | | 27 | 13 | 1.4m | a | r | good |
| G1 | 417921 | 503600 | Lime sp. 15 | | | | | | | |
| G2 | 418115 | 503821 | Sycamore 10 | | 20 | 15 | 1.2 | c | r | black spot |
| G3 | 418268 | 503816 | Lime sp. 20 Evenly space 1 gap before last one | | 5 | 4 | 0.2 | a/b | r | protected tree guards, various sizes |
| G3 | 418028 | 503694 | Lime sp. 20 Evenly space 1 gap before last one | | | | | | | |
| G4 | 418300 | 503771 | Lime sp. 4 Hornbeam 1 | | 4 | 1 | 0.1 | b/c | r | protected tree guards, various sizes |
| G4 | 418249 | 503631 | Lime sp. 4 Hornbeam 2 | | | | | | | |
| G5 | 418241 | 503588 | Oak Common 3 | | 15 | 8 | 1 | c | r | some dieback |
| G9 | 417939 | 503033 | Oak Common 3 | | 30 | 15 | 1.5 | b | r | some dieback/dead wood |
| G10 | 417908 | 502993 | Oak Common 3 Sessile 1 | | 30 | 20/15 | 1.5 | b/c | r | some dead wood/ 1 gnarled |
| G11 | 417466 | 503135 | larch sp. 4 | | 25> | 8/10 | 0.5 | b | r | |
| G12 | 417505 | 503136 | Sycamore 4, Oak Common 1 | | 2 | 0.7 | 0.05 | c | r | black spot |
| G13 | 417496 | 503078 | Oak Common 6 | | 25 | 10/15 | 1 | c | r | cankers all way up, dead wood, good stand |

APPENDIX 6:

LAKE RESTORATION PLAN

1.0 Baseline Assessment – Main Lake

A site visit was carried out on 3rd June 2003. A visual survey of the main lake was undertaken.

1.1 Main Lake

The main parkland lake in Aske Estate is situated to the south east of Aske Hall. The lake was originally geometric in shape, but has since been adapted with planting to give more naturalistic edges (though the overall shape and original location of the lake have been retained).

1.11 Physical Structure

The main lake has various inflows, mainly from agricultural field drains, and one outfall, which has a regulating valve. The banks are well protected from damage in the outfall area, with other banks appearing to be in good conditions other than a small number of eroded areas on the west shore.

At the time of survey it was apparent that there was more water entering the lake than leaving it. If this is consistently the case, it is likely that the liner, if present, is perforated (as there is no evidence that the lake overflows regularly). Any liner present is probably formed of clay, which can deteriorate over time – especially from drying out and damage caused by signal crayfish.

There is a water-jump for the eventing course present beside the outlet. An island is also present adjacent to the outfall, though this was not accessible at the time of survey.

1.12 Water Quality

The original depth of the lake appears to have been 1m or more, but it is currently heavily silted with only 0.3-0.5m of clear water remaining. The deeper silt is black and anaerobic, mainly formed from tree leaves that have dropped into the pond and broken down rapidly (due to the alkaline nature of the water). The surface silt is paler in colour, likely to have been brought in from runoff entering the lake.

Other than the siltation, the water quality within the lake appears to be good (from the species present), with clear water visible for a depth of up to 0.5m.

1.13 Flora

There is no marginal or emergent aquatic vegetation within the main lake on Aske Estate. This is due to a combination of factors – heavy shading by overhanging trees, grazing by wildfowl and the presence of signal crayfish. Only filamentous algae were present, covering about 50% of the pond in total.

1.14 Fauna

A variety of wildfowl were observed using the lake, including swans, mallard, coots and other duck species. Fish observed within the lake included a small rudd, brown trout (probably stocked) and a small pike. Signal crayfish are present within the lake,

having been introduced at some stage, probably by anglers. Other invertebrates observed through stone-turning included *Mystacides*, *Hydroptilidae*, *Asellus* and *Leptocerus*. The presence of these species indicates that the water quality is very good within the water column.

1.15 Amenity uses

A small angling club currently fish on the lake on very few occasions. The lake appears to have been stocked with fish historically.

2.0 Recommendations – Main Lake

2.1 Liner Repair

The liner of the lake will be inspected, in order to assess the construction and the integrity. Should damage to the liner be identified, the lake will need to be drained and repairs carried out to the liner before it is re-filled, by cutting out damaged areas and re-packing with vibro-tamped clay. Small defects will be mended by hand-packing clay.

The small areas of eroded banks (total length requiring repair estimated at 75m) will also be repaired, and suitable bank protection installed where necessary. This protection would take the form of timber uprights and/or stone working, to match work that has been undertaken elsewhere on the lake, with reinforced soil backing.

2.2 De-silting

The lake needs to be de-silted to improve the quality and restore the original depth of the lake, through mechanical or suction dredging (depending on the status of the liner and whether the lake needs to be drained to carry out liner repairs). A survey of silt depth will be carried out initially, in order to assess the volume of silt to be removed. The most appropriate method to use in this instance is likely to be draining the lake and excavation, with the silt spread to the receptor site using a muck-spreader once it has been de-watered.

The volume of silt has been estimated at approximately 8000m³ in total. This assumes an average depth of 0.5m across the lake, and should be taken only as a guide. A full survey of the silt will be undertaken to determine the total volume to be removed, prior to dredging commencing.

Should the chemical content of the silt and the surrounding land prove to be appropriate, silt will be disposed of onto adjacent land in temporary lagoons, and then spread on a suitable receptor site. The receptor site selected should ideally be impoverished agricultural land, which will benefit from organic improvement.

Once the silt is removed from the lake, bank and liner repairs will be carried out.

2.3 Signal Crayfish

Signal crayfish have been introduced to the lake historically. This species is not native to this country, having been introduced to the UK through crayfish farming. They can cause damage to both the liner of the lake (through burrowing), and any emergent or marginal vegetation that might be introduced (through eating or stripping the vegetation). Through their burrowing activity and direct predation, signal crayfish can also substantially affect invertebrate diversity within lakes (and other water

bodies), resulting in an overall reduction in both habitat and ecological diversity within the water body.

Though there are no records for the area, during the desktop study the Environment Agency stated that they consider that white-clawed crayfish may be present in the general area. The white-clawed crayfish is a protected species (under the Habitats Regulations, 1994), and populations can be decimated by the presence of signal crayfish. This can occur through direct competition (the signal crayfish usually out competes the native white-clawed crayfish) and through the spread of crayfish plague, of which signal crayfish are carriers.

Crayfish can travel by either water or crawling over land, therefore the population of signal crayfish poses a threat to both Aske Beck and other local watercourses (even if there is no direct connection).

It is therefore recommended that the existing population of signal crayfish within the main lake at Aske Estate be eradicated as part of the restoration of the lake. This will allow the habitat enhancements to be successful, and will protect both the lake and the surrounding watercourses.

Research is ongoing currently to find the most effective eradication techniques for signal crayfish, and an eradication programme will be developed that is appropriate for the main lake at Aske Estate.

2.4 Emergent vegetation

Once the liner has been inspected and repaired, and the other restoration proposals carried out, emergent and marginal vegetation will be planted. This will be direct into the lake sediments, or supported in gabions filled with stone where the sediments are not suitable. Appropriate species will be selected, in order to provide habitat diversity, and would include non-invasive emergent species such as *Iris*, *Carex spp.* (sedges) and *Juncus spp.* (rushes); semi-aquatic species such as *Glyceria fluitans* (Floating sweet-grass) and *Mentha aquatica* (Water mint) in the margins.

2.5 Re-stocking – fish

Once the repairs have been carried out to the lake, and marginal/emergent vegetation has been planted, the lake will be re-stocked with appropriate numbers and species of fish, to be agreed with the landowner in order to meet both the ecological and amenity requirements for the lake.

2.6 Tree clearance

Any trees within 0.5m of the bank edge will be removed, to protect the integrity of the bank. All other trees overhanging the lake will be cut back to reduce the volume of leaf litter entering the lake (approximately 50 in total).

3.0 Detailed Schedule of Proposals

| Character Area: Main Lake | |
|--|---|
| Location/CSS Ref | Description of Work |
| Non Capital Proposals | |
| | None |
| Countryside Stewardship Proposals (see figure 25) | |
| NZ 1803 1539 | SPC: Check and repair lake liner by clay packing damaged areas, repair 75m of eroded banks with timber/stone-working protection |
| NZ 1803 1539 | SPC: De-silt lake using mechanical removal and dispose of silt to suitable nearby receptor site |
| NZ 1803 1539 | SPC: Eradicate signal crayfish |
| NZ 1803 1539 | SPC: Plant Emergent and marginal vegetation |
| NZ 1803 1539 | SPC: Re-stock with appropriate numbers and species of fish |
| NZ 1803 1539 | SPC: Remove/cut back overhanging trees (approx. 50) |
| Non Countryside Stewardship Proposals | |
| | None |

4.0 Management Proposals – Main Lake

Silt Management

It has not been possible to establish, without further analysis, what the sources of silt are. Cutting back the trees and establishing a buffer zone of marginal vegetation is likely to reduce the silt load via decomposition of tree leaves and runoff from disturbed ground. If, in future, a single source of silt entering the lake via run-off is identified, a silt trap could be constructed to enable ease of clearance.

In the meantime however, it is proposed that no silt trap is installed as part of the restoration works. De-silting will be required on occasion in the future using the same method as employed in the restoration works. A continuous management programme of periodic removal in accessible areas with a vacuum tanker would reduce the overall de-silting frequency (to perhaps every 25 years).

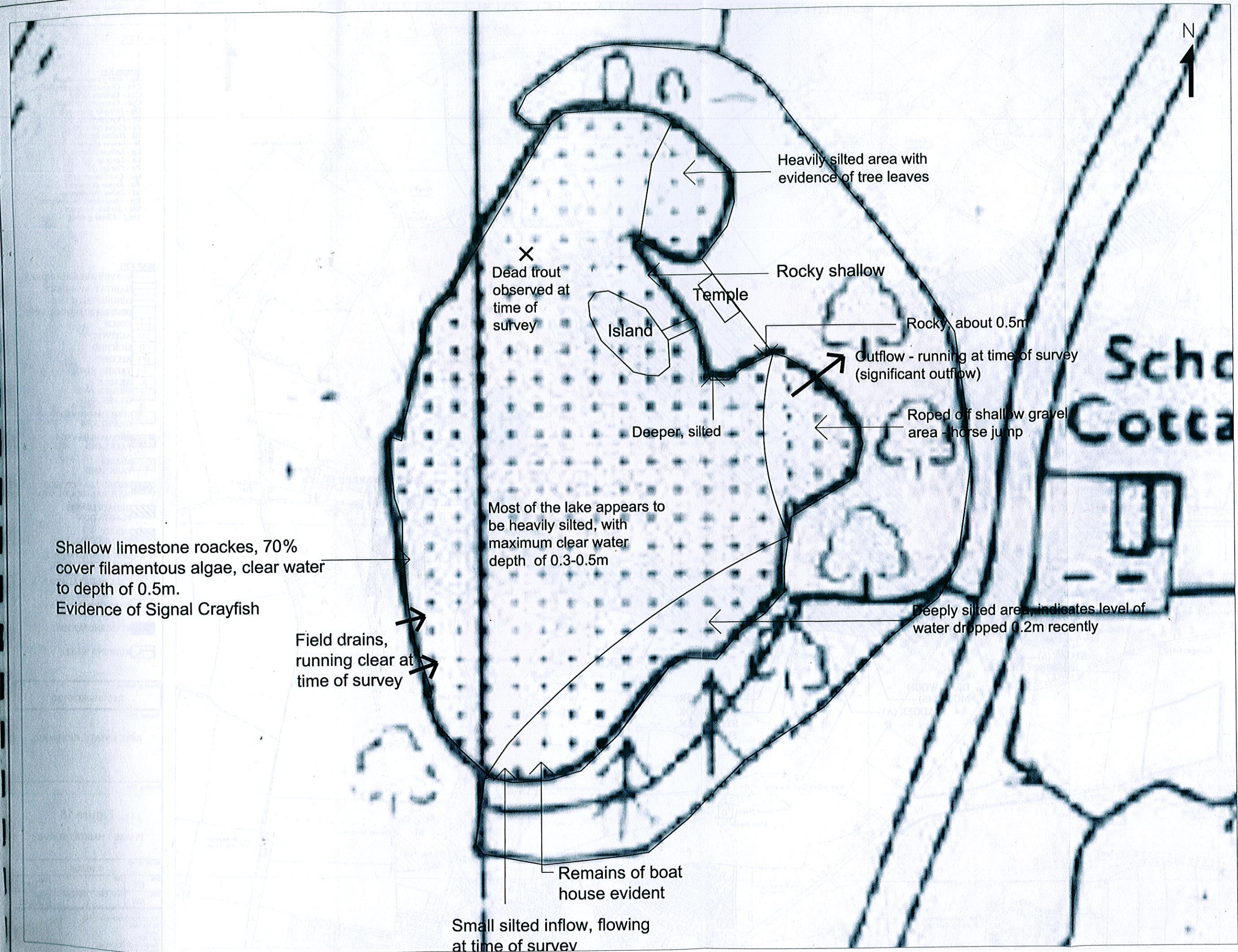
Vegetation Maintenance

An angle from the water's edge will be agreed, to be maintained clear of overhanging vegetation (e.g. 45degrees), which will allow light to enter for marginal vegetation to grow and reduce leaf-fall into the lake. This will need to be maintained annually, with trees and tall herbs cut back at the appropriate times of year.

A breadth of marginal vegetation within the lake will be agreed, to which the vegetation will be cut back should it become too extensive. Annual weeding by hand or using a glyphosate weed-wipe (with knapsack sprayer to maintain localised spraying only) to maintain only those species deliberately planted (in particular willows; cat-tails and common reed should be removed).

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| Drawing Number | Revision |
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Project Title

ASKE ESTATE, RICHMOND

Drawing Title

Figure 19

Sketch of Parkland Lake

Scale at A4 1:1000




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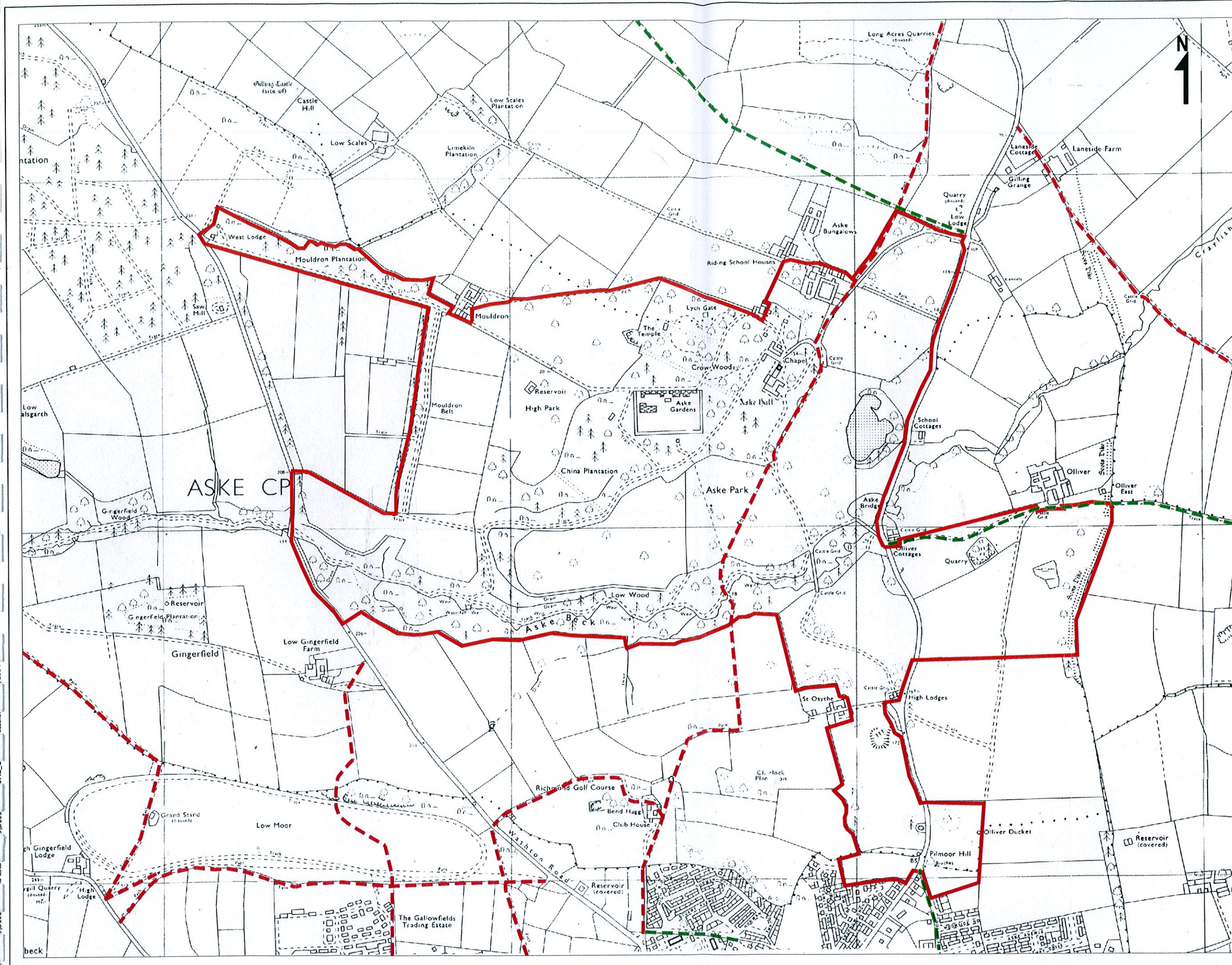
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Key

-  Study area
-  Bridleway
-  Footpath



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| ASKE ESTATE, RICHMOND | | | | |
| Drawing Title | | | | |
| Figure 20 | | | | |
| Current Access Network | | | | |
| Scale of A4 | | | | |
| N.T.S. | | | | |
| Dm | RC | Det | Appd PB | |
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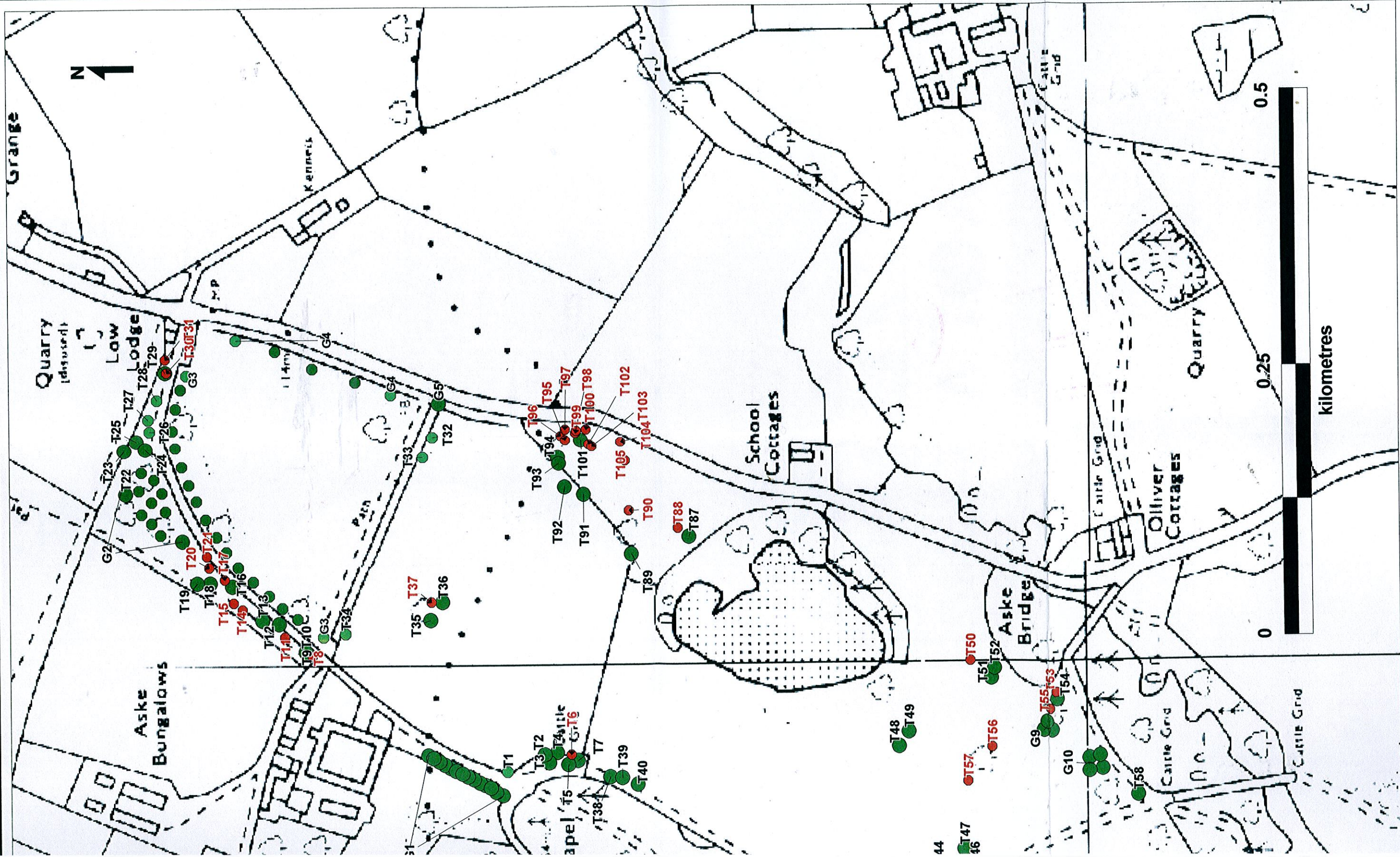
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Key

- Tree with girth greater than 0.7m
- Tree with girth less than 0.7m
- Stumps

See Appendix 6 for Tree schedule



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ASKE ESTATE, RICHMOND

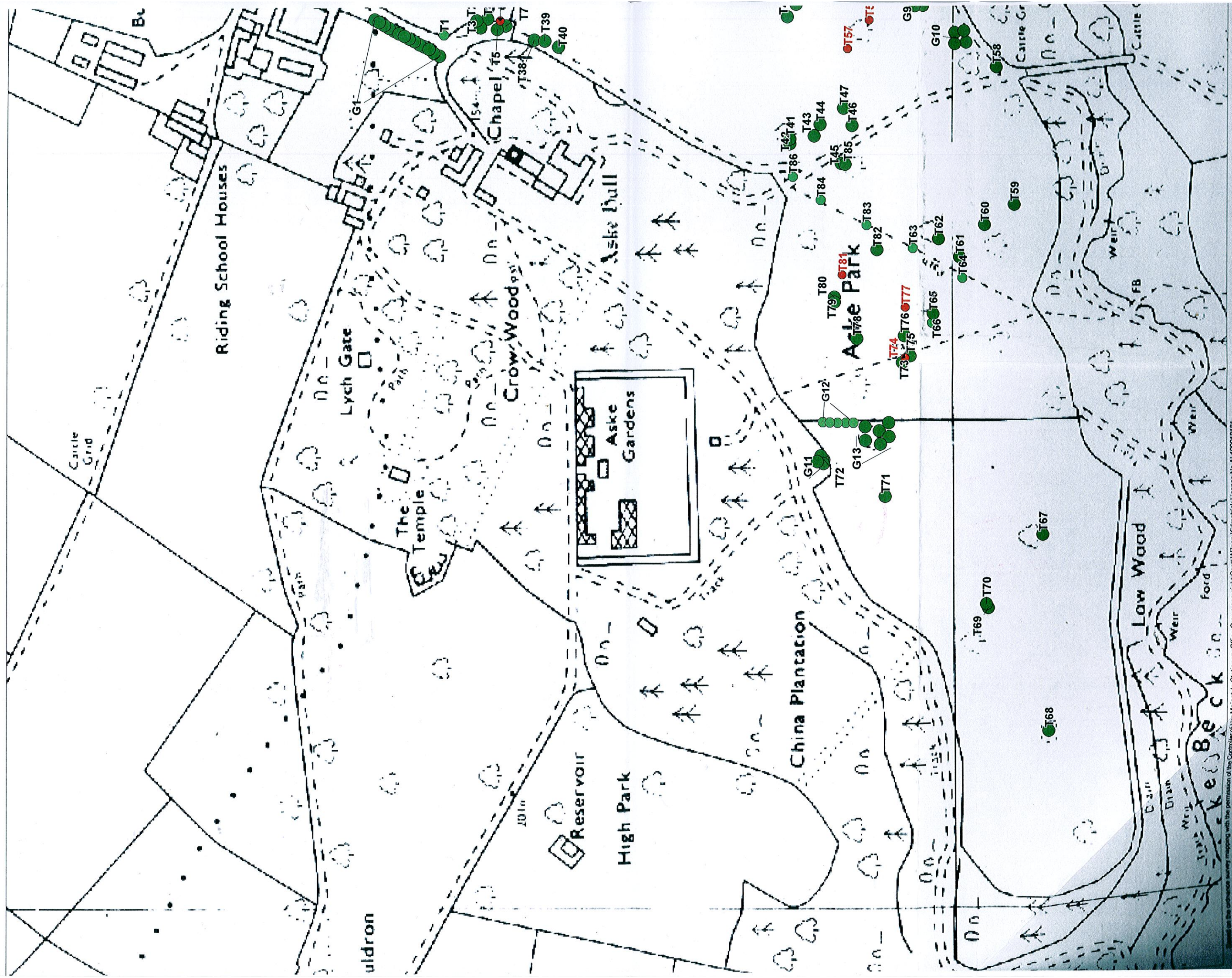
Figure 21
Survey of Parkland Trees

See Scale Bar

| | | | |
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| Scale of A1 | | | |
| Drawn | AJ | | |
| Checked | RC | | |
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



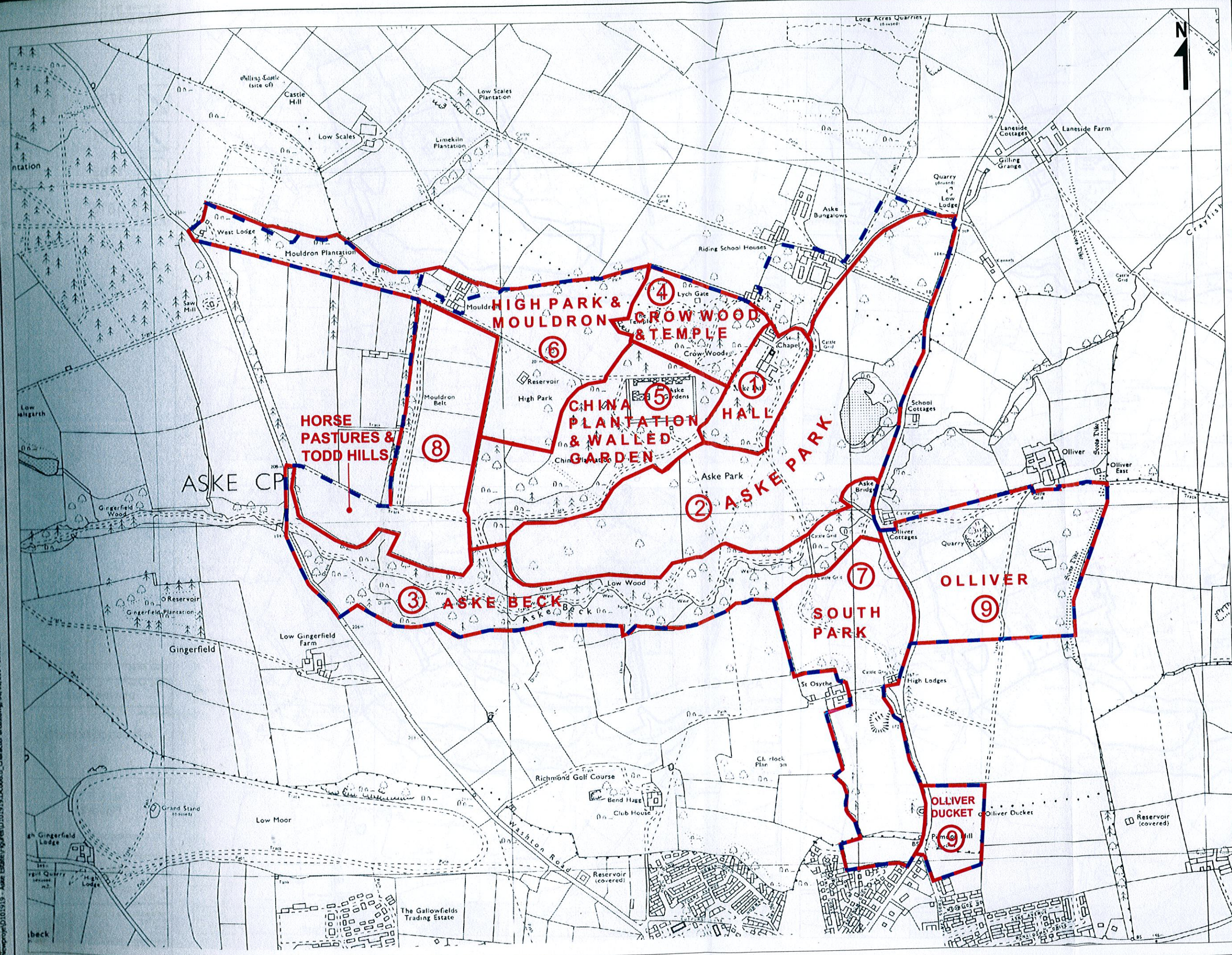


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Key



-  Study Area
-  Character Areas

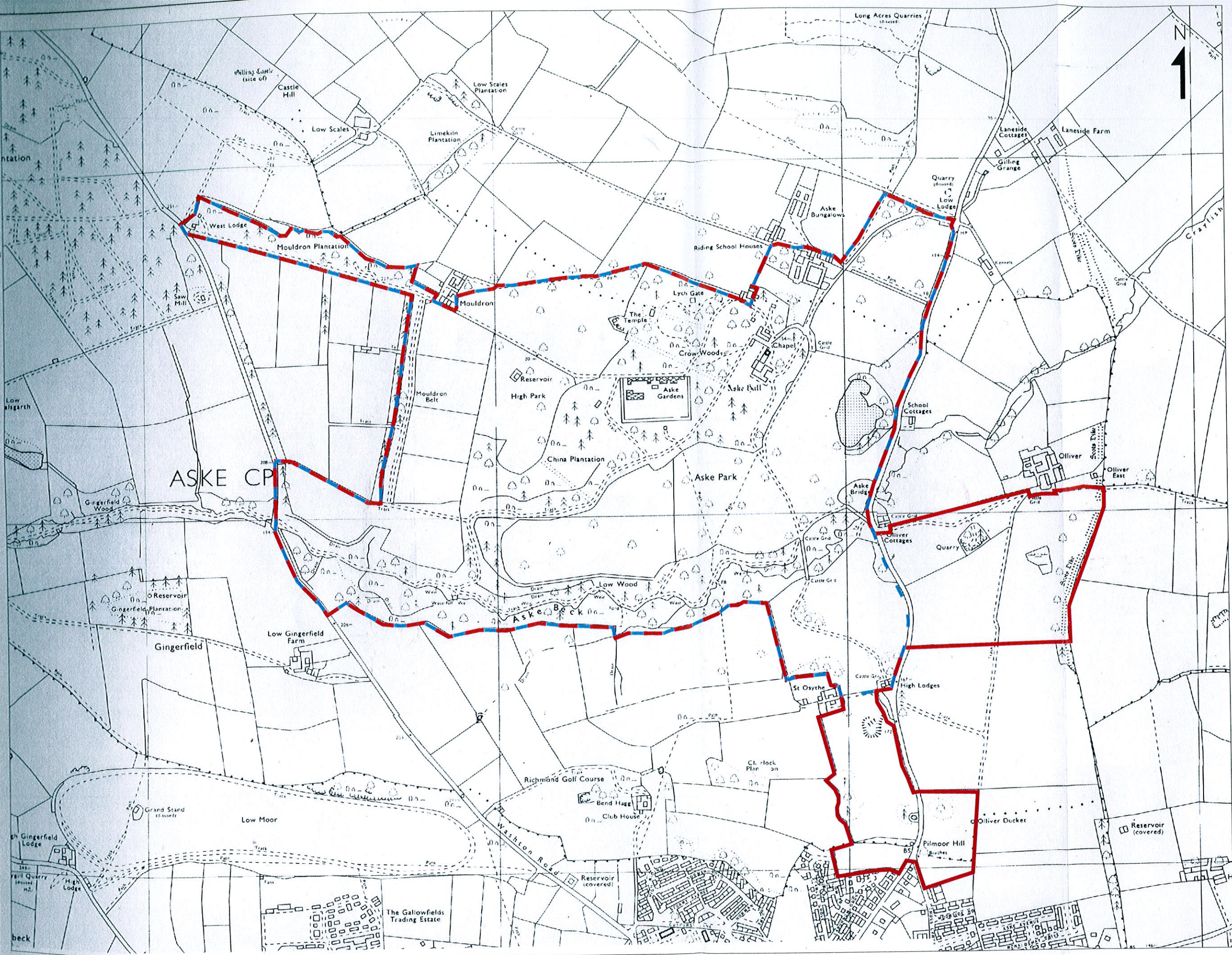


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| Figure 22 | | | | |
| Character Areas | | | | |
| Scale of A3 | | 1:10,000 | | |
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| Chk | HB | Tech Chk | Det Chk | PB |
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Key

-  Study Area
-  English Heritage Listing Boundary



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Project Title
ASKE ESTATE, RICHMOND

Drawing Title
Figure 1
Study Area

Scale at A3 1:10,000

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Figure 6

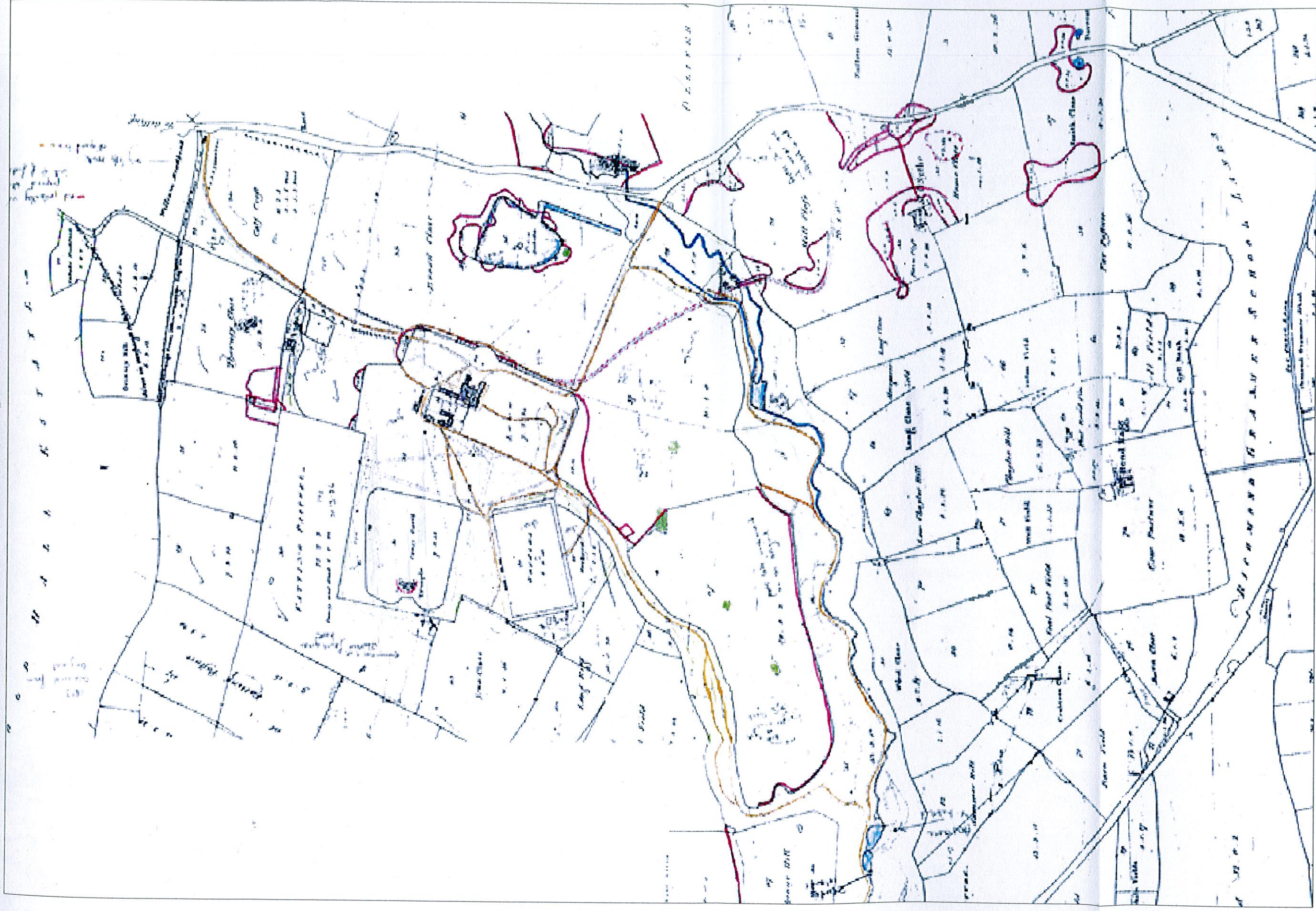
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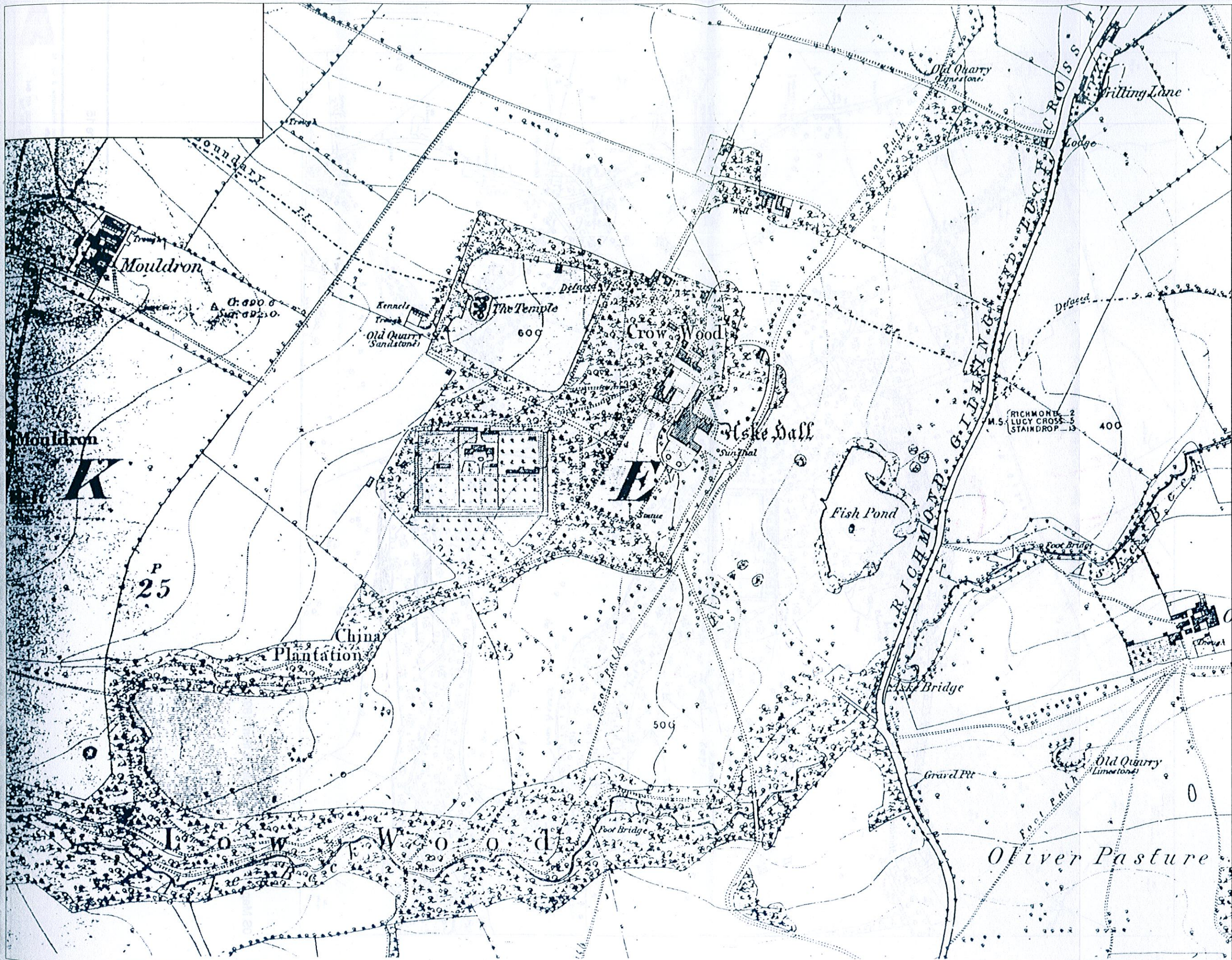
George Jackson's 1769 survey

Figure 10



Thomas Bradley's plan with coloured annotations - 1813

Figure 13



OS Map 1857

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Figure 14

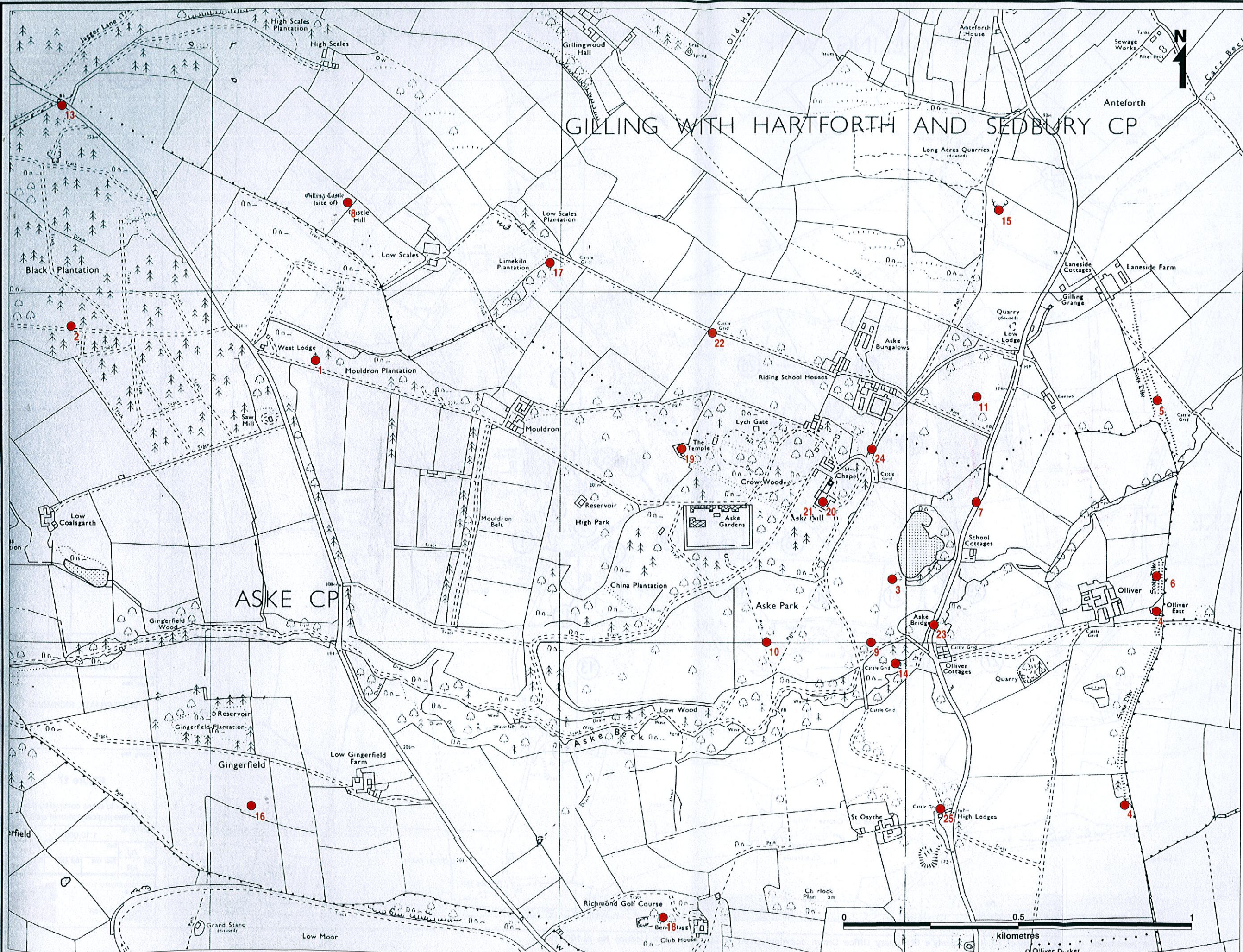
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OS Map 1913 showing alterations from 1893

Figure 15



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Key
 ● Location of archaeological site with text reference

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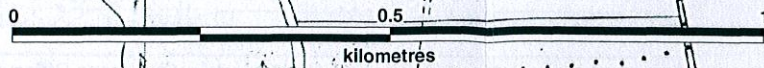
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Project Title:
ASKE ESTATE, RICHMOND

Drawing Title:
**Figure 16
 Distribution of archaeological sites**

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Key



Reference to areas or features described in text

GILLING WITH HARTFORTH AND SEDBURY CP

ASKE CP



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| ASKE ESTATE, RICHMOND | | | | |
| Drawing Title | | | | |
| Figure 17 | | | | |
| Index to areas covered by the archaeological walkover survey | | | | |
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NOTES

- Species Key**
 Ap - *Acer pseudoplatanus*
 Cha - *Chamerion angustifolium*
 Cirs - *Cirsium Sp. (p)*
 Cyc - *Cynosurus cristatus*
 Dg - *Dactylis glomerata*
 Dr - *Dryopteris sp. (p)*
 Fs - *Fagus sylvatica*
 Hl - *Holcus lanatus*
 Je - *Juncus effusus*
 Lp - *Lolium perenne*
 Lx - *Larix sp. (p)*
 Po - *Poa sp. (p)*
 Qu - *Quercus sp. (p)*
 Ra - *Rumex acetosella*
 Rf - *Rubus fruticosus*
 Rp - *Rhododendron ponticum*
 Sac - *Sorbus Aucuparia*
 Umg - *Ulmus galbra*

MAP KEY

- SURVEY AREA BOUNDARY
- HABITAT BOUNDARY
- GINGERFIELDS SSSI
- GINGERFIELD WOOD SINC
- FENCE
- ACTIVITY
- SIGHTING
- RECORD
- TARGET NOTE
- ARABLE
- UNIMPROVED GRASSLAND
- SEMI-IMPROVED GRASSLAND
- BROAD-LEAVED PARKLAND
- MIXED PARKLAND
- BROAD LEAVED SEMI-NATURAL WOODLAND
- BROAD-LEAVED PLANTATION
- MIXED PLANTATION
- EPHEMERAL / SHORT PERENNIAL
- TALL RUDERAL HERB
- BARE GROUND
- STANDING WATER
- RUNNING WATER

Drawing Number
D101919/EC/010/0

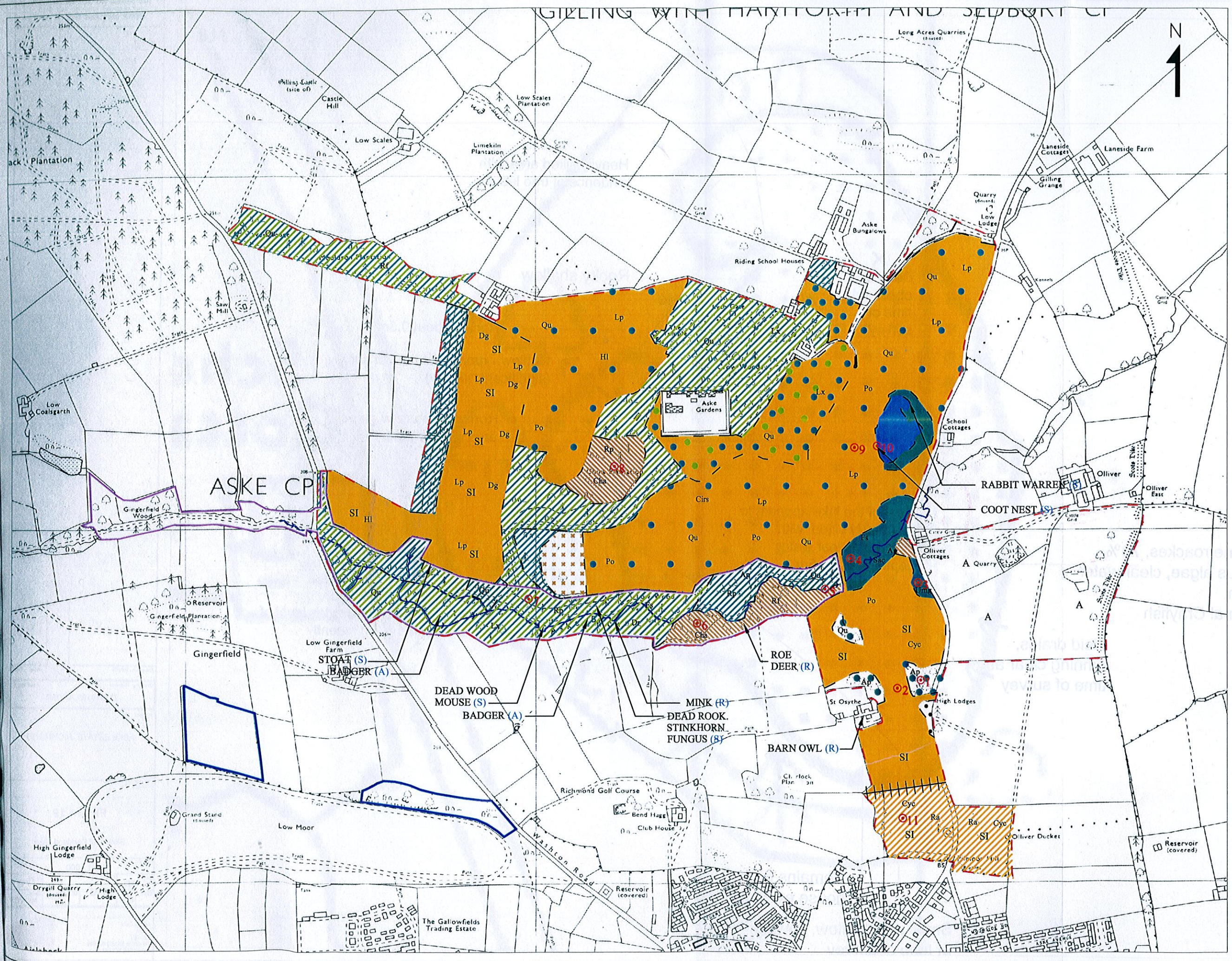
Project Title
ASKE ESTATE, RICHMOND

Drawing Title
Figure 18
PHASE 1 HABITAT SURVEY

Scale of A3
1:10,000





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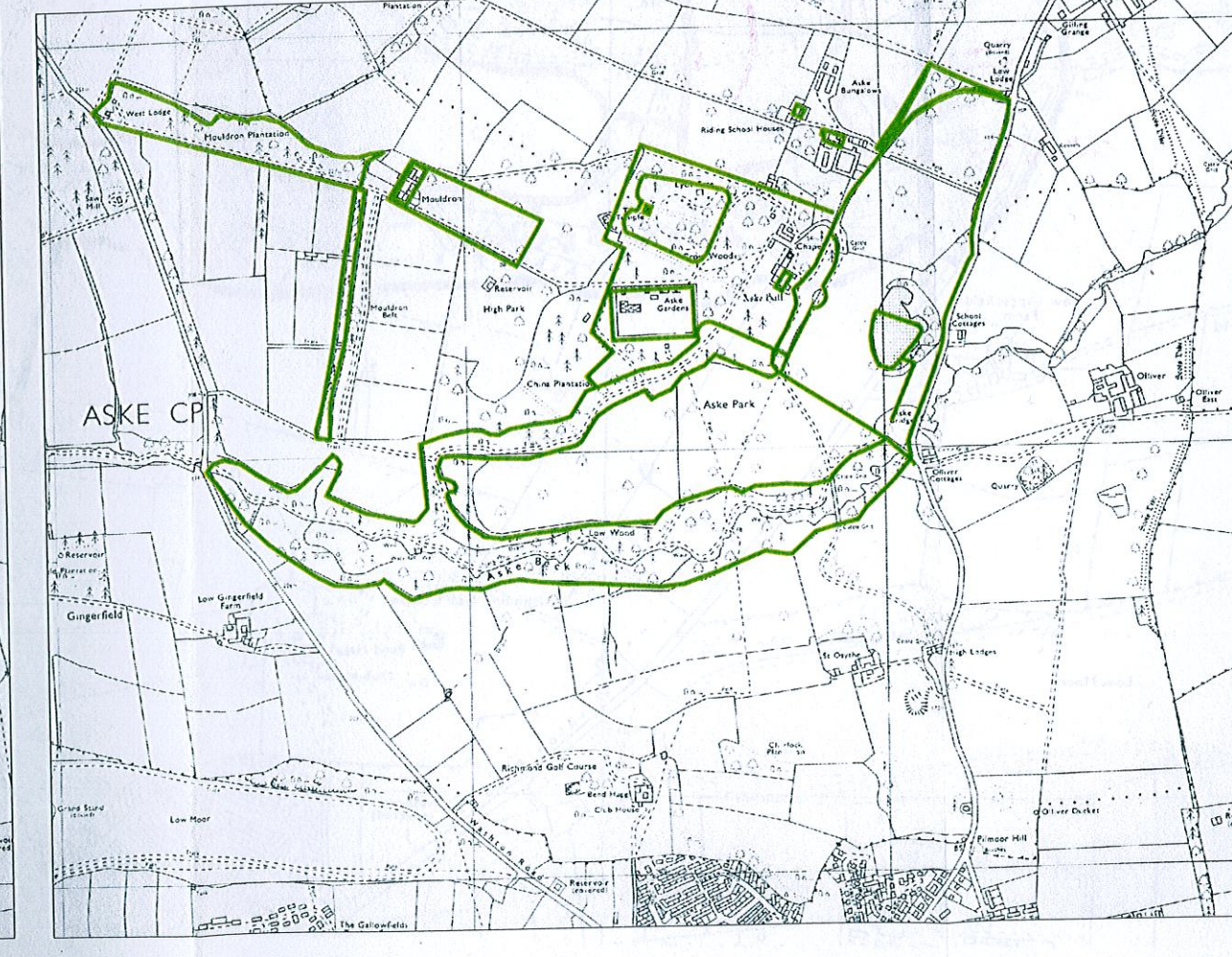
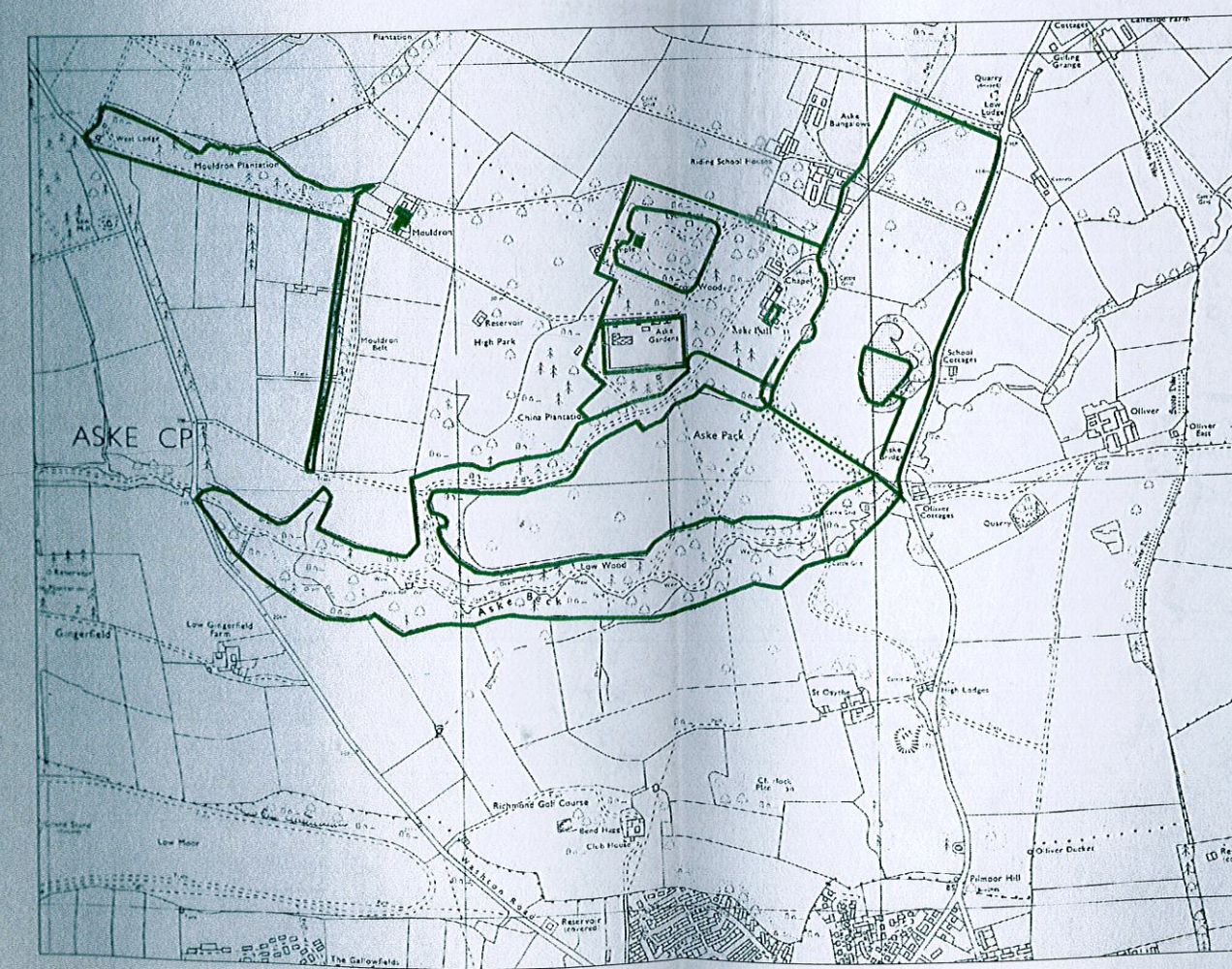
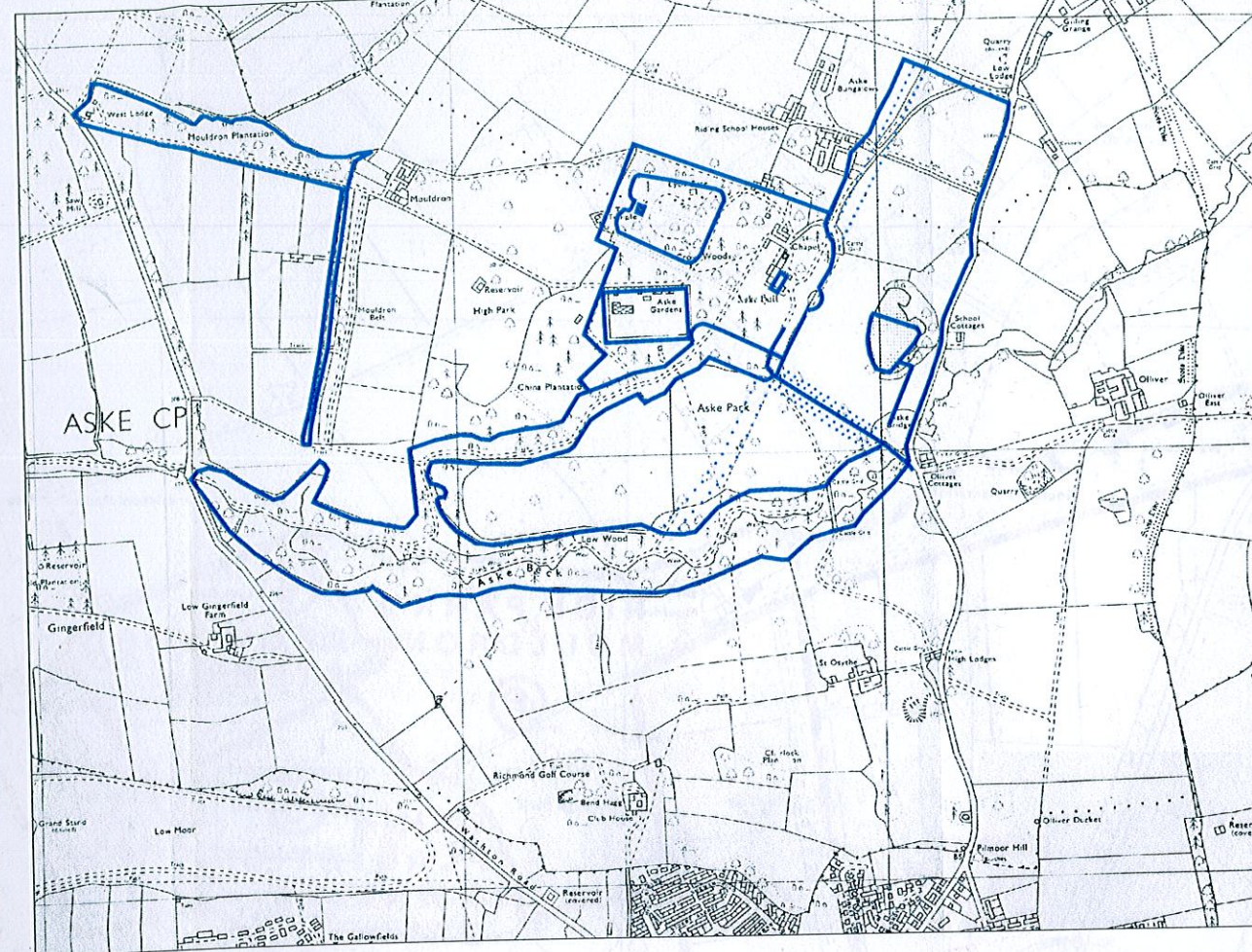
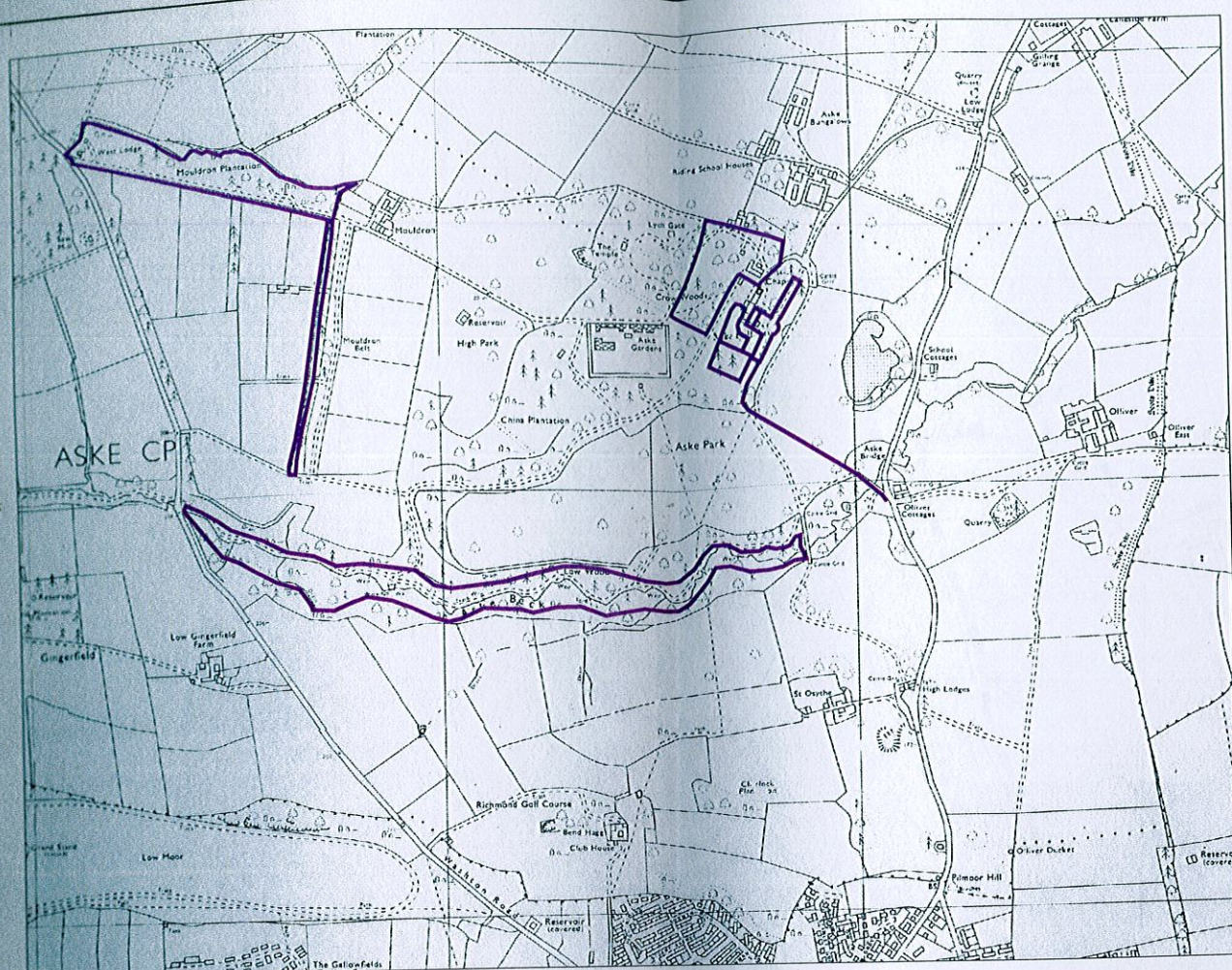
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Key

-  1720
-  1761
-  1769
-  1813



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Project Title

ASKE ESTATE, RICHMOND

Drawing Title

Figure 23

Chronological Development
1720-1813

Scale at A3

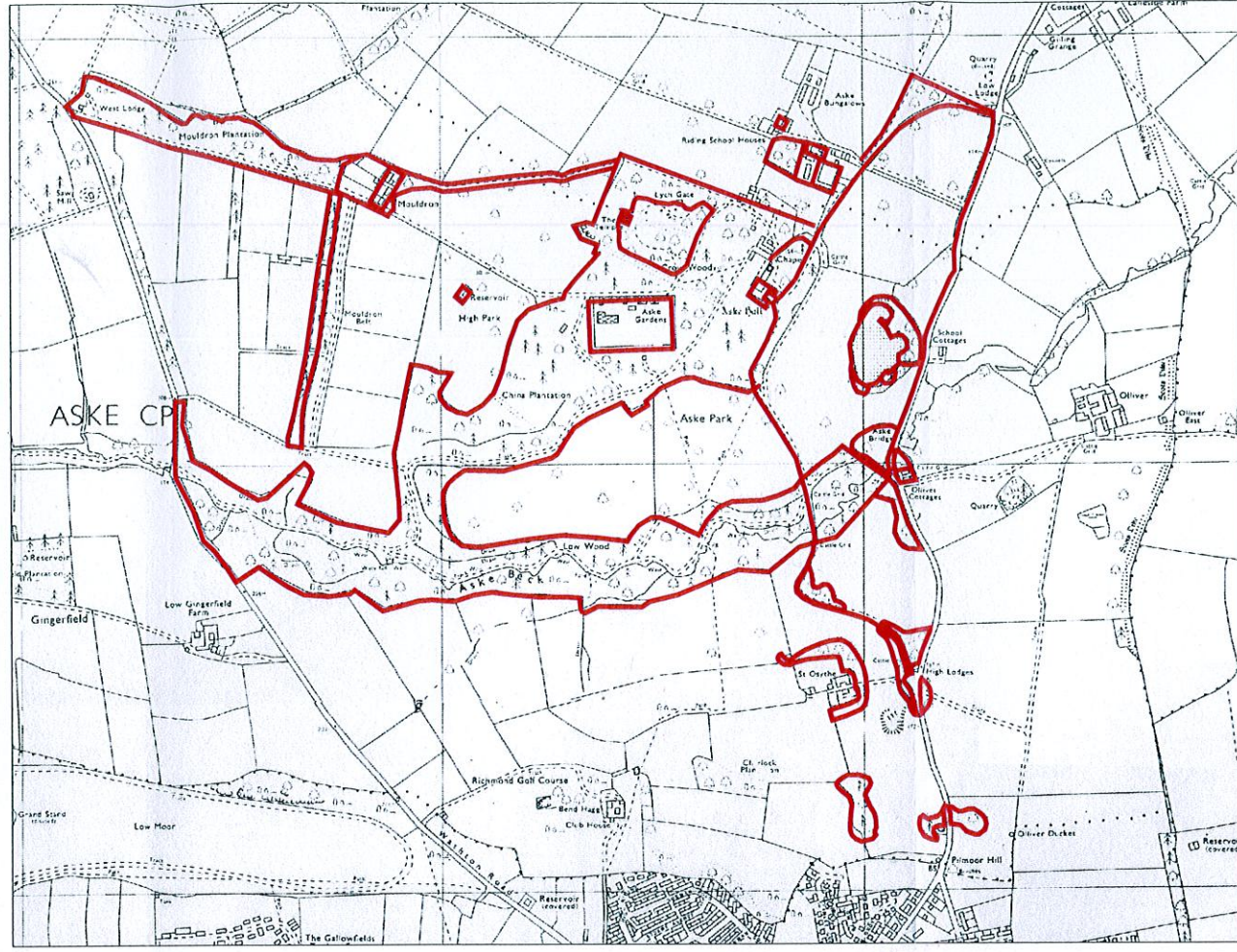
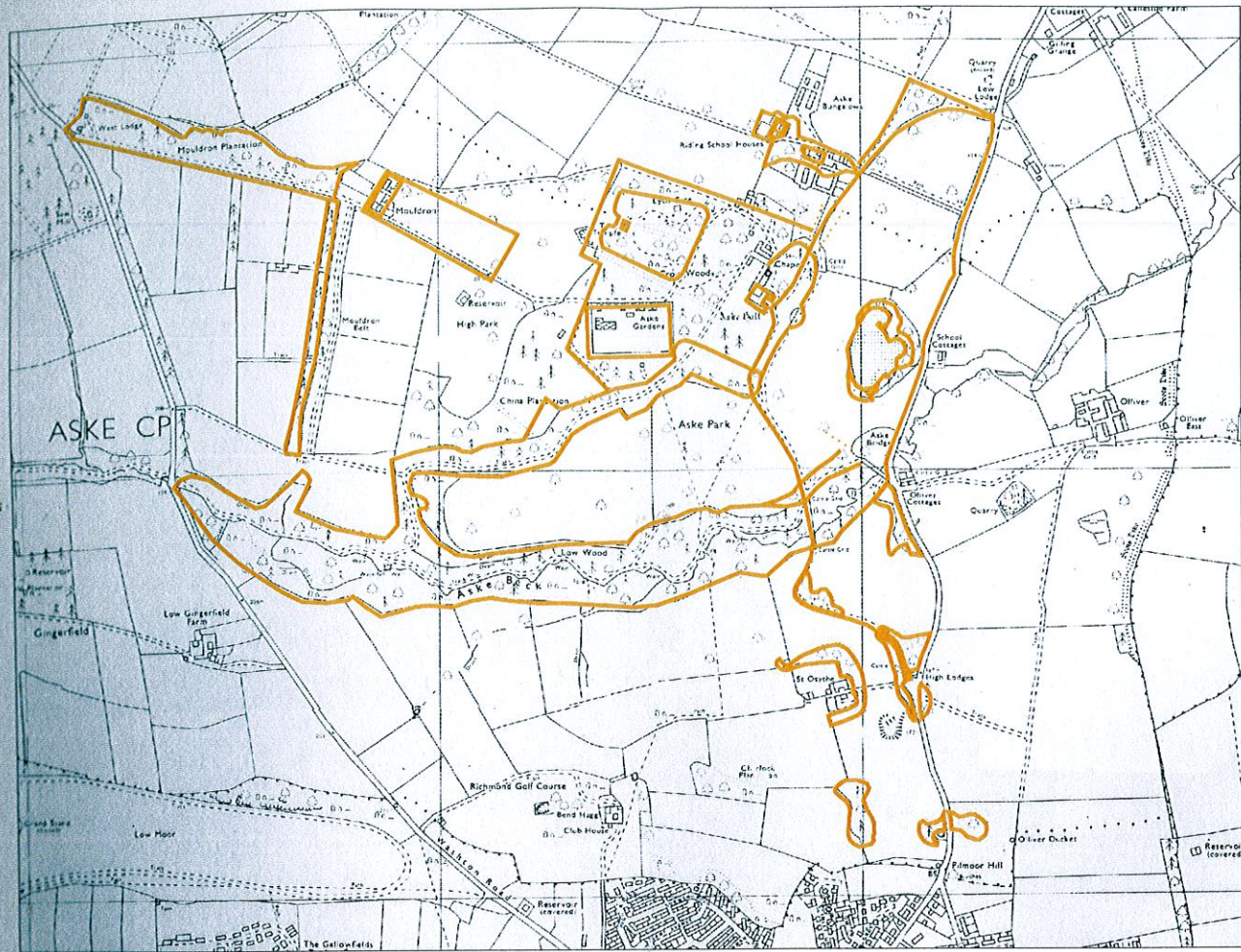
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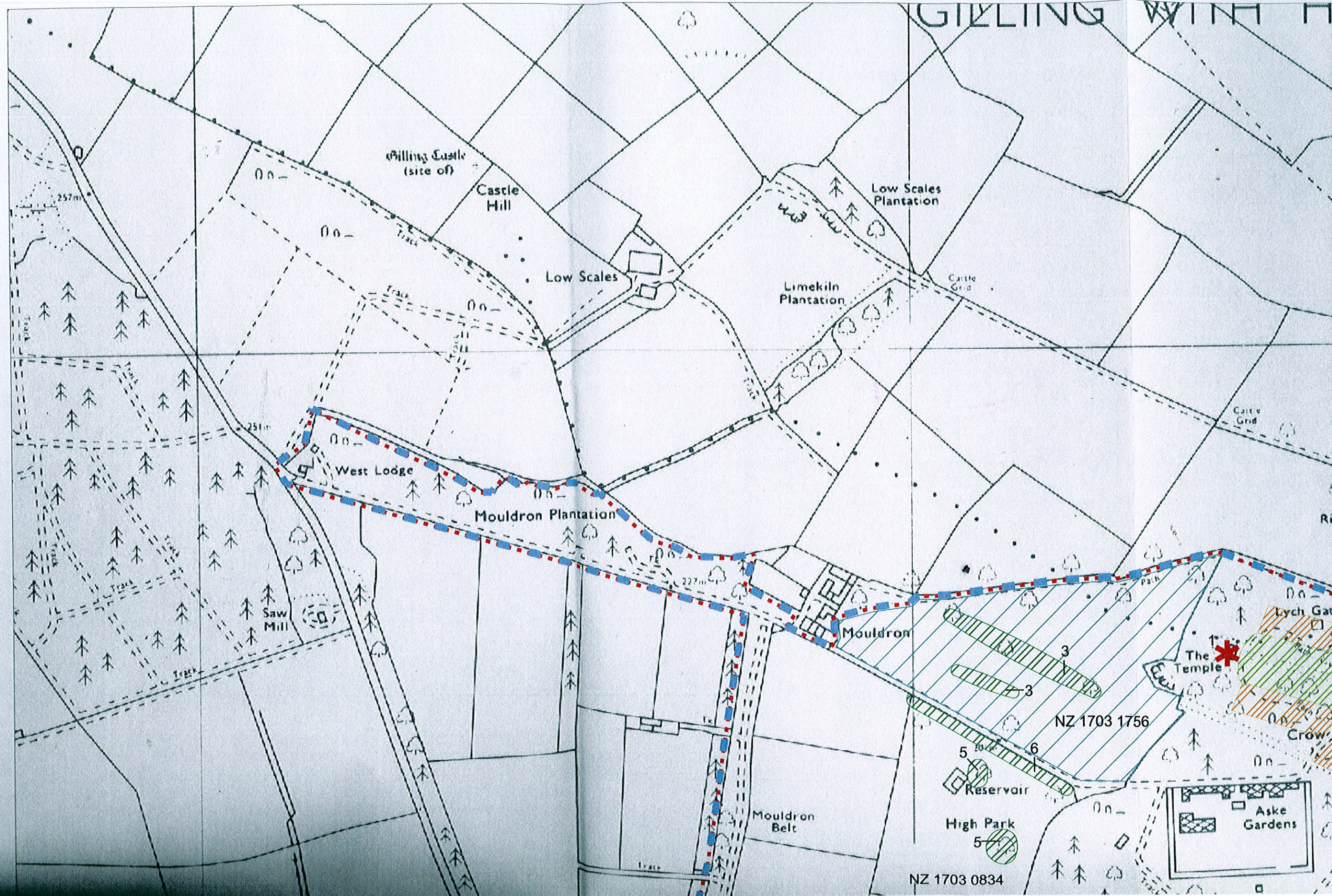
Key

-  1856
-  1913

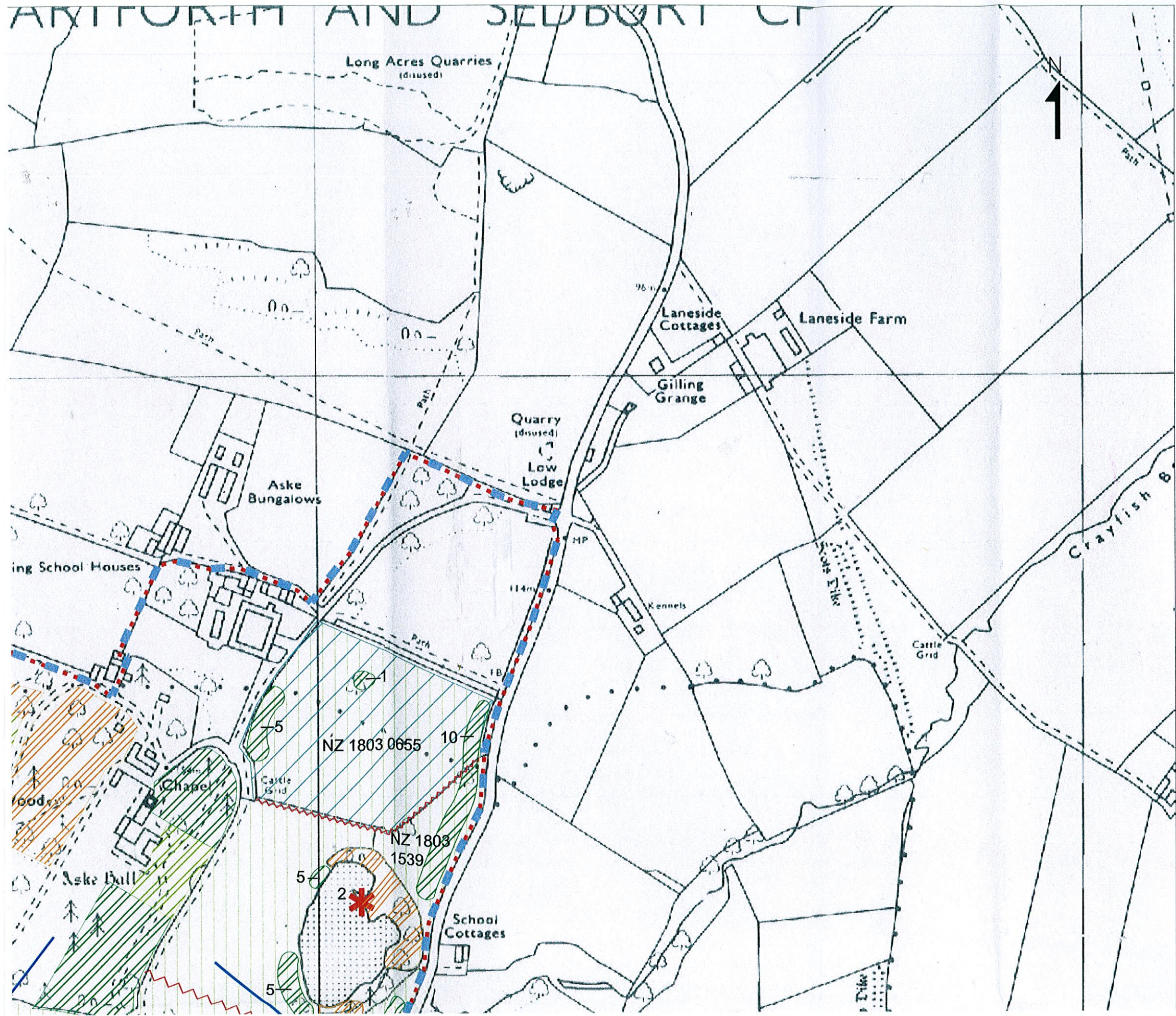












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| ASKE ESTATE, RICHMOND | | | | |
| Drawing Title | | | | |
| Figure 24 | | | | |
| Chronological Development 1856-1913 | | | | |
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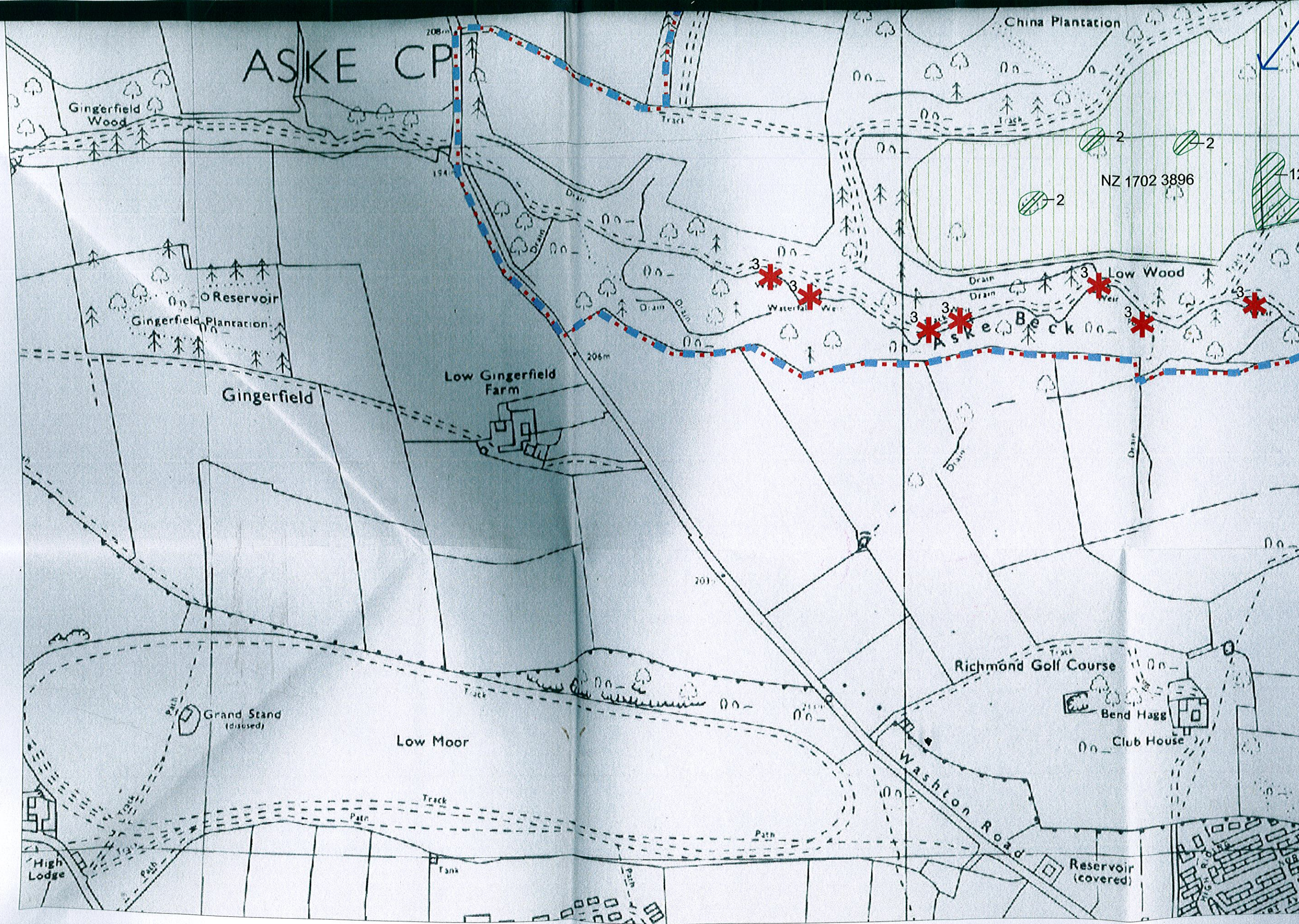
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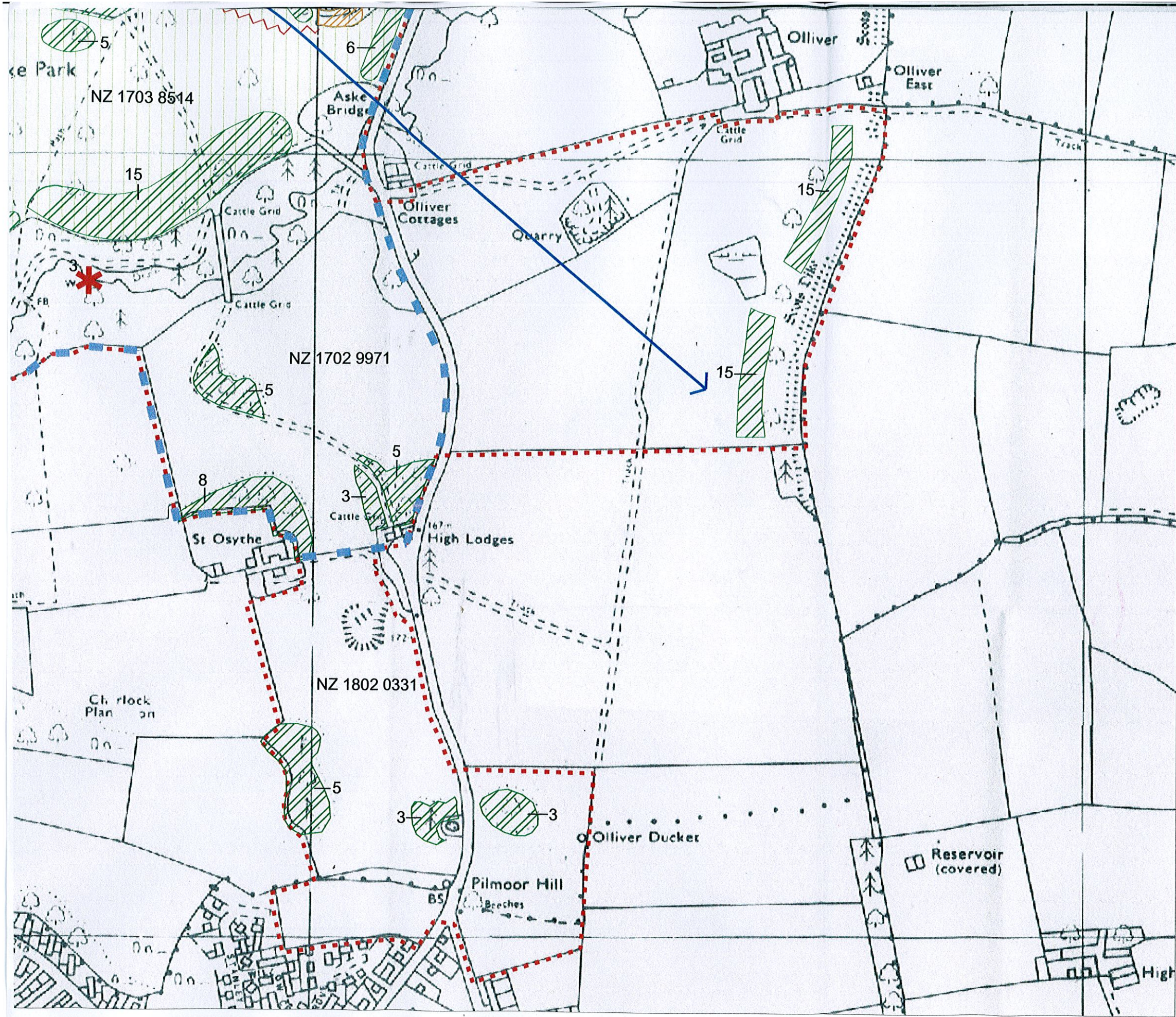


- Key**
-  Study Area
 -  English Heritage Listing Boundary
 -  Parkland character to be retained.
 -  Maintain or create open space
 -  R1: Restore area to permanent pasture (Sheep grazed)
 -  E: Remove fence lines
 -  Proposed extent of selective tree removal
 -  STT/TP: Proposed tree planting with numbers
 -  Proposed views to be created
 -  Historic built elements (See Schedule)
 - 1. Crow Wood Temple
 - 2. Lakeside Temple
 - 3. Water Features
 - ① Architects Survey
 - ② Revenue (CS)
 - ③ Conservation Plan



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Project Title
ASKE ESTATE, RICHMOND

Drawing Title
Figure 25
Restoration Proposals

Scale at A1
1:5000

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| Chk PB | Tech Chk | Det Chk |
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