

CART SHED AND BARN, WHARRAM PERCY FARM,  
WHARRAM PERCY, NORTH YORKSHIRE

ARCHITECTURAL AND  
WILDLIFE SURVEY



Ed Dennison Archaeological Services Ltd  
18 Springdale Way  
Beverley  
East Yorkshire  
HU17 8NU

CART SHED AND BARN, WHARRAM PERCY FARM,  
WHARRAM PERCY, NORTH YORKSHIRE

ARCHITECTURAL AND  
WILDLIFE SURVEY

Report no: 2009/354.R01  
Version: Final  
Date: March 2010  
Authors: Shaun Richardson & Ed Dennison

Ed Dennison Archaeological Services Ltd  
18 Springdale Way  
Beverley  
East Yorkshire  
HU17 8NU

On behalf of

The Birdsall Estates Company Ltd  
Estate Office  
Birdsall  
Malton  
North Yorkshire YO17 9NU

**ARCHITECTURAL AND WILDLIFE SURVEY,  
CART SHED AND BARN, WHARRAM PERCY FARM,  
WHARRAM PERCY, NORTH YORKSHIRE**

**CONTENTS**

EXECUTIVE SUMMARY

1	INTRODUCTION.....	1
2	HISTORICAL BACKGROUND.....	4
3	ARCHITECTURAL DESCRIPTION.....	9
4	WILDLIFE SURVEY.....	20
5	ARCHITECTURAL DISCUSSION AND CONCLUSIONS.....	25
6	STATEMENT OF SIGNIFICANCE.....	28
7	BIBLIOGRAPHY.....	30
8	ACKNOWLEDGEMENTS.....	32

Appendices

- 1 Photographic Record
- 2 Bat and Barn Owl Report
- 3 Listed Building Description
- 4 Natural England Project Brief
- 5 EDAS Methods Statement

## EXECUTIVE SUMMARY

In July 2009 Ed Dennison Archaeological Services Ltd (EDAS) were commissioned by Mr Peter Gaze Pace, architect on behalf of the Birdsall Estates Company Ltd to provide an input into a management plan for a cart shed and barn forming part of a larger farm complex at Wharram Percy Farm, near Birdsall, East Yorkshire (NGR SE847635). The project, which involved an architectural and ecological survey of the buildings, was required to inform the restoration of the buildings as part of a Higher Level Stewardship Scheme Agreement with Natural England.

The architectural survey found no evidence to contradict previous suggestions that the farm complex originated as a "high barn" complex, known as High House, built in either the late 18th or early 19th century. If it is of the former date, then it may be associated with the rebuilding of the nearby farmstead at Wharram Percy village in the late 18th century. The high barn complex appears to have been provided with domestic accommodation although this is not certain, and its original form has been somewhat obscured by later alterations. A division and dating of the existing buildings purely in terms of building materials, i.e. chalk and brick, seems to be an oversimplification, and raises a number of questions regarding the development of the high barn and the relative chronology of different buildings.

It is suggested that the recorded north-south aligned barn and the central part of the north range may be the earliest surviving parts of the high barn complex, perhaps dating to the late 18th century. The earliest fold yard may be represented by the existing west fold yard, although it is likely that the complex was modified several times before it became an independent farmstead. The original high barn complex would have been provided with a dew pond and perhaps also a windbreak, as represented by an area of plantation depicted close to the farm on mid 19th century maps. The existing windbreak may be a mid 19th century creation, which was considerably widened in the second half of the 19th century. The recorded east-west aligned cart shed is a later structure, more likely to date from the first half of the 19th century.

Although there is some slight disagreement in secondary publications as to exactly when High House became an independent farmstead, a combination of census and cartographic information indicates that it is most likely to have been in the mid 1840s. The creation of the farmstead was undertaken at the same time as the demolition of the earlier Wharram Percy farm in the medieval village, and the new Wharram Percy House (as it was called) became the centre of a 900 acre farm. Combined cartographic and structural evidence suggests that the east fold yard formed the main area for the accommodation of cattle by this date, with shelter sheds located along the east and south sides. The newly erected brick buildings around the north and north-west parts of the east fold yard, associated with the creation of the farmstead, were partly used for stabling, and it is likely that the horses and traps for use of the farmhouse were also accommodate here. The west fold yard may already partly have been given over to the processing and accommodation of feedstuffs and crops. By the late 19th century, the east fold yard had been reduced in size and, as a result of these alterations, a smaller "central" yard was created. This was covered over by 1911, apparently forming part of a pattern of similar alterations undertaken to estate farms during this period in line with wider national developments in agriculture. However, despite changes, some aspects of farm life remained little different to those of the late 19th century, as indicated by the graffiti surviving on the first floor walls of the cart shed.

The results from the wildlife survey show that the east-west cart shed contained a small common pipistrelle *Pipistrellus pipistrellus* summer roost within its roof rafters, although it should be noted that some parts of both the cart shed and barn were inaccessible for survey; the presence of a roost will need to be taken into account in any subsequent repair works. There is a possibility that the cart shed is also used as a small winter hibernation roost. No signs of any barn owls were recorded in either of the two buildings.

# 1 INTRODUCTION

## Reasons and Circumstances for the Project

- 1.1 In July 2009, Ed Dennison Archaeological Services Ltd (EDAS) were commissioned by Mr Peter Gaze Pace architect on behalf of the Birdsall Estates Company Ltd to provide an input into a management plan for a cart shed and barn forming part of a larger farm complex at Wharram Percy Farm, near Birdsall, East Yorkshire (NGR SE847635).
- 1.2 The project, which involved an architectural and ecological survey of the buildings, was required to inform the restoration of the buildings as part of a Higher Level Stewardship Scheme Agreement with Natural England (ref. AG00161602). The scope of the recording work was defined by a brief prepared by Dr Margaret Nieke, Yorkshire and Humber Historic Environment Advisor to Natural England (see Appendix 4), and this was supplemented by an EDAS methods statement (see Appendix 5). The architectural and ecological recording work was funded by the Birdsall Estates Company Ltd and Natural England.

## Site Location and Description

- 1.3 Wharram Percy Farm is located in an isolated and elevated position on the Yorkshire Wolds some 3km to the west of Wharram-Le-Street, and lies at an elevation of c.212m AOD (see figure 1). It is accessed via a long track which branches off the west side of the B1248 at Wharram-le-Street. The farm complex remains in agricultural use and is surrounded by a beech windbreak or shelter belt, U-shaped in plan and open to the south side; the elevation of the complex is such that the cooling towers of Saltend chemical works near Hull, over 45km to the south-east, are clearly visible in favourable viewing conditions. The farmhouse is a Grade II Listed Building (see Appendix 3).
- 1.4 The farm complex, including the barn and cart shed forming the focus of this report (see figure 2), has been the subject of previous detailed study by Dr Colin Hayfield. This work was undertaken as part of a long-running and continuing investigation into the wider landscape development of Wharram Percy parish, which is being conducted under the auspices of the Wharram Percy Research Project. Published work arising from this project has mostly concentrated on the prehistoric and Roman periods (e.g. Hayfield 1987), but some material relevant to the medieval and post-medieval landscape is available (e.g. Hayfield 1991; Hayfield 1995; Hayfield & Wagner 1998). In addition, other relevant material by other authors has been sought (e.g. Beresford & Hurst 1990; Giles & Giles 2007).
- 1.5 At the time of survey work, the majority of the cart shed and barn were in reasonable structural condition, with low level storage in both and some contamination by pigeon guano to the first floor of the cart shed.

## Survey Methodologies

- 1.6 As noted above, the scope of the architectural and ecological survey work was defined by a Natural England brief and a EDAS methods statement (see Appendices 4 and 5).

### *Aims and Objectives*

- 1.7 The primary aim of the architectural survey work was to provide a photographic, drawn and written record of the two buildings, while the bat and barn owl surveys were to identify any of the protected species in the buildings. The survey results would then help to inform the preparation of a management plan for the proposed restoration project, and would make appropriate recommendations for any mitigation work as part of the proposed restoration work.

### *Building Recording*

- 1.8 The building recording comprised four main elements, namely documentary research, drawn, photographic and written recording. Together, the four elements equate to a Level 2 visual and descriptive record as defined by English Heritage (2006, 13-14). The on-site drawn record was produced during the week of the 23rd July 2009, with the photographic record being made in the week of 24th August 2009.
- 1.9 As has already been noted above, Wharram Percy Farm has been the subject of a previous detailed survey by Dr Colin Hayfield, who was therefore asked to comment on a draft version of this report in the hope that some of his unpublished research would serve to enhance the EDAS survey data. In addition to the above, further background agricultural information was obtained from contemporary and later secondary sources. The Birdsall Estate Office and the Muniments Room at Birdsall House were also consulted for any readily-available information they might hold on the farm complex.
- 1.10 The drawn record comprised a ground floor plan of the buildings at a scale of 1:50, together with two representative cross-sections (including roof trusses), also at a scale of 1:50. The plans and sections show all significant detail such as inserted or blocked openings, original fixtures and fittings, and details of items relating to original and subsequent uses. Detailed inspections were undertaken behind and around any stored material to ensure that all relevant features were noted. The information for the drawn record was captured using both traditional hand-held and also remote measurement techniques. Final inked drawings were then produced by hand to publication standard and are presented as reduced versions of the full sized field drawings using conventions established by English Heritage (2006, 18-37).
- 1.11 The photographic record was achieved using 35mm and digital cameras. Once again, English Heritage guidelines were followed (English Heritage 2006, 10-13). Subject to access, all photographs contain a graduated scale, and artificial lighting was used where necessary, in the form of electronic flash. A total of 120 colour shots were taken and printed to a size of 6" by 4". The photographic record (see Appendix 1) includes a register detailing the location and direction of each shot, figures showing the position and direction of each shot, and black and white thumbnails of the photographs; good quality colour copies of selected prints accompany the main text of the report. A full set of photographic prints has been included with the project archive (see below).

### *Wildlife Survey*

- 1.12 The wildlife survey involved inspecting the two farm buildings for bats and barn owls, as well as undertaking a walkover of the site and its immediate surroundings.

- 1.13 A daytime external and internal inspection for bats was undertaken on 6th and 7th August 2009. Each part of the two buildings was systematically searched for bats, bat droppings and any other signs beneath potential bat roost sites. Accessible cracks for bats were examined with the use of a Clulite Lamp (1,000,000 candle power), while ladders were used to access the various crevices between the walls as well as parts of the pitched roofs.
- 1.14 A dusk emergence survey was also undertaken on 6th August 2009 by three surveyors. Unfortunately, the very close proximity of the barns to a large cattle shed precluded any useful external views of the south and east elevations of the buildings. Batbox Duet detectors were used to aid bat identification, and for further identification the surveyors also recorded the echo-locations of bats that were picked up by the Batbox Duets into Edirol R-09HR players, and these were then saved in a series of three minute wave files for the duration of the survey. The dusk emergence survey was undertaken between 30 minutes before sunset until approximately 1.5 hours after sunset although, in this case the survey was foreshortened by heavy rain. The primary aim was to observe whether any bats emerged from any part of the barns.
- 1.15 The aim of the detectors was also to record the foraging activity of all species of bats in the vicinity of the barns. These are generally the common pipistrelle *Pipistrellus pipistrellus*, soprano pipistrelle *P. pygmaeus*, *Myotis* spp. (these include Daubenton's bat, *Myotis daubentonii*, Natterer's bat *Myotis nattereri*, Whiskered bat *Myotis mystacinus*, Brandt's bat *Myotis brandtii*, and Bechstein's bat *Myotis bechsteinii*), Noctule bat *Nyctalus noctula*, Leisler's bat *Nyctalus leisleri* and Brown long-eared bat *Plecotus auritus*.
- 1.16 All the bat survey work was supervised by Dr. Madeline Holloway (Licence No. 20091763). The weather on the evening of 6th August was overcast with very light rain. Nevertheless it was relatively warm (15°C), there was little wind and sunset was at 20.51. Unfortunately, however, heavy rain set in at approximately one hour after sunset and the survey had to be curtailed at this time (21.51).
- 1.17 The buildings were also searched for barn owls, barn owl droppings, pellets, feathers and/or nest debris as evidence of day-time roosts and/or nesting sites, at the same time as the bat survey. The walkover survey of the site and its surroundings was carried out on 8th August 2009.

### **Report and Archive**

- 1.18 This report forms a detailed written record of the buildings, prepared from the sources of information set out above, and analyses their form, function, history, and sequence of development, as far as is possible using the previously gathered information. The buildings are also placed within their historical, social and industrial context, where possible using the available documentary and secondary evidence. This report also includes a summary of the wildlife survey, while the full unedited Bat and Barn Owl Report (Holloway 2009) appears as Appendix 2.
- 1.19 The full archive, comprising paper, magnetic and plastic media, relating to the project has been ordered and indexed according to the standards set by the National Archaeological Record (EDAS site code WPH 09). It was deposited with Malton museum on the completion of the project.

## 2 HISTORICAL BACKGROUND

### Introduction

- 2.1 The two buildings forming the subject of this report, and the farm complex in general, lie within a rich archaeological landscape, not least of which is the nearby deserted medieval settlement of Wharram Percy. However, for the purposes of this report, only the history and development of the farm complex during the 18th and 19th centuries are discussed below, as these are most relevant to the recorded buildings.
- 2.2 As has already been noted in Chapter 1 above, the farm complex, including the buildings forming the focus of this report, have been the subject of previous detailed study by Dr Colin Hayfield as part of the consideration of the wider landscape development of Wharram Percy parish. In the time available for the compilation of this report, it was only possible to make a cursory inspection of the contents of the Birdsall Estate Office and the Muniments Room at Birdsall House. Nevertheless, a small amount of relevant material was obtained, although it is very likely that a thorough search would reveal additional information that would allow both the historical background of the farm and the conclusions reached in this report to be revised.

### The First Half of the 19th century: 1800-1850

- 2.3 Wharram Percy Farm is located within the north-western corner of Wharram Percy parish, within the township of Wharram Percy. By the late 18th century, the whole of the township was cultivated from this farm and the nearby Bella Farm to the north-east, under sheep and corn husbandry, with some cattle on the permanent grassland in the steep-sided dales (Beresford & Hurst 1990, 26).
- 2.4 The origins of the farm appear to lie in the very late 18th or early 19th century, when a "high barn" was erected here. High barns grew out of the peculiar conditions to be found on the chalk uplands of the Yorkshire Wolds, where post-enclosure farms were characterised by their large size and the poor nature of their soils. Prior to the agricultural improvement of the late 18th century, much of the Wolds were covered by sheep pastures and also latterly rabbit warrens (Harris 1961, 14-35). The low acreage of land that was given over to arable required comparably few horses to be worked, while soil fertility could be maintained by folding sheep flocks on weeds and stubble after harvest. However, from the late 18th century, a number of large landowners, including the Middletons of Birdsall, enclosed and cultivated the old sheep pastures, and this had profound consequences for the conduct of agriculture on the Wolds. The manpower and numbers of horses required to cultivate the enclosed arable lands increased greatly, necessitating the construction of new and larger farm buildings to house the horses and store the grain, and a correspondingly larger amount of manure was needed to fertilise the arable lands (Hayfield 1991, 33-34; Beresford & Hurst 1990, 115).
- 2.5 The high barns of the Wolds developed to serve this new enclosed arable landscape. Although there are several different types of high barn (see below), they all share some common characteristics, usually being sited some distance away from the main farmstead on the borders of the farm holding or on an isolated Wold top, and incorporating a foldyard where animals could be sheltered. The high barn thus fulfilled the function of an outpost from the main farmstead for housing animals, fodder and equipment, and the accumulated dung in the foldyard



become a valuable and convenient source of manure for the more remote fields of the farm holding, which would otherwise soon have become exhausted (Hayfield 1991, 33-34).

- 2.6 The simplest type of high barn was uninhabited and formed by one or more ranges of shelter sheds arranged around a central foldyard, such as the example at Manor Farm at Wharram le Street. However, these appear to have been relatively rare and the larger complexes that incorporated a barn into the perimeter of the foldyard were more common, such as those associated with the two new post-improvements farms at Towthorpe, probably dating to c.1800. Dewponds and wind-breaks were both also commonly found at the larger high barn complexes. Many of these larger high barn complexes were inhabited, usually being provided with a small cottage but sometimes also a larger detached house. As a result of later development into independent farmsteads, it is sometimes difficult to be sure if a high barn was originally inhabited or uninhabited, and cartographic evidence can sometimes be misleading; Hayfield suggests that the names “Wold House” or “High House” may indicate inhabited high barns (Hayfield 1991, 36, 38 & 41-42). By 1848, store cattle were regarded as being of growing importance on the Wolds, and with their barns, granaries and fodder houses providing a ready store for foodstuffs, the high barns were well suited to this purpose. The young beasts were purchased in the autumn, usually from farms on the Vale of York, herded up onto the Wolds and then overwintered in the foldyards of the high barns. They remained there until the following spring and were then sold for slaughter. Similar enclosed foldyards were also built elsewhere across the country for fattening cattle, such as in Norfolk, while regionally high barns can also be found elsewhere in East Yorkshire, such as on the Holderness plain (Hayfield 1991, 43-44).
- 2.7 Prior to the erection of a high barn on the Wharram Percy Farm site, the land was probably farmed from the farmstead at Wharram Percy village, located c.1 mile (1.6km) to the north-east. This farmstead, along with the nearby Bella Farm, had been rebuilt in the late 18th century by the Middletons of Birdsall, who had also invested substantial sums of money in new field boundaries and improved water supplies (Beresford & Hurst 1990, 115). Beresford and Hurst suggest that a probable high barn known as High House had been constructed on the Wharram Percy Farm site in the early 19th century, probably at the expense of Lord Middleton, whereas Hayfield and Wagner place the construction probably in the late 18th century (Beresford & Hurst 1990, 118-119; Hayfield & Wagner 1998, 10). Hayfield characterises the complex as being an “uninhabited high barn” (Hayfield 1991, 43) although census returns indicate there were seven male live-in staff at High House by 1841 (Hayfield 1995, 11).
- 2.8 There is some slight disagreement in the secondary publications as to exactly when High House became an independent farmstead. Beresford and Hurst state that the late 18th century farmstead at Wharram Percy village was demolished and replaced by the existing Wharram Percy Farm at some point between 1846 and 1851, possibly as a result of fears that road access would be worsened following the construction of the Malton to Driffield Railway and a lack of room for further expansion; the High House buildings were partly incorporated into the new farmstead (Beresford & Hurst 1990, 5 & 118-119). Hayfield places the conversion slightly earlier, either in the 1840s or by 1840, the earlier buildings being characterised by chalk walling with brick foundations, quoins and columns while the later ones are wholly of brick (Hayfield 1995, 19; Hayfield & Wagner 1998, 10).
- 2.9 The newly enlarged farmstead was located in the south-western part of the 900 acres which it worked (Hayfield 1995, 8). The complex included a large

farmhouse, described by Pevsner and Neave (1995, 752) as “a handsome five-bay brick house with a hipped slate roof with overhanging eaves. The broader end bays are flanked by pilasters”. The farmhouse, and particularly its internal tripartite arrangement designed to accommodate the farmer’s family, the male farm labourers and the female servants, has been subject to detailed investigation (Beresford & Hurst 1990, 121; Hayfield 1995, 18). In 1851, the farm employed a total of 18 male staff, including a foreman and another 13 who lived in, as well as three female live-in servants; the ages of the men varied between 14 to 40 (Hayfield 1995, 11-12). Many of these would have been employed in looking after and working the farm horses, and at a later date some of these horse lads left their names, occupations and other information in the form of graffiti in the farm buildings (see below) (Giles & Giles 2007).

### **The Second Half of the 19th century: 1850-1900**

- 2.10 The overall layout of the farm soon after its enlargement can be gained from two sources; the 1855 Ordnance Survey 6” map and a plan of the same date held in the Muniments Room at Birdsall House (Bi M39). The former names the farm as “Wharram Percy House” and essentially shows two fold yards with building ranges laid out around them, the farmhouse to the east on a different angle, and a narrow east-west aligned detached range to the north (see figure 3). There is a circular dew pond to the immediate south of the west fold yard, with another further west beyond the outer windbreak. The farmhouse is set within an area of plantation which continues north and then east, possibly to form an L-shaped inner windbreak or shelter-belt. There is much narrower outer windbreak on the west, north and east sides, and the space between the two is occupied by small regular enclosures, with a “Chalk Pit” shown on the north side. The main access to the farm complex was from trackways leading in from the north and west. The slightly smaller west fold yard has ranges of buildings occupying the whole of the west and north sides, with a slight external projection at the north end of the west range. The east range occupies only the northern half of the shared boundary wall with the east fold yard. The latter has ranges along the north, east and south sides, the last being somewhat narrower than the other two.
- 2.11 The 1855 plan held in the Muniments Room at Birdsall House shows a similar overall layout but is at a larger scale and slightly more detail is discernable. The fields to the north, west and south-west are named as “High Wold” and that to the south as “Low Wold”. The farmhouse has a small structure attached to the west end, and then small ranged outbuildings in a small yard attached to the east range of the east fold yard. A joint is shown in the north range of the fold yard where it narrows. A joint is also shown approximately half way along the west range of the west fold yard, but with no projection at the north end. However, the small structure at the internal angle of the north and west ranges appears to have a canted plan, reminiscent of a horse-engine house. The dew pond shown to the south of the west fold yard on the Ordnance Survey 6” map does not appear on the larger scale 1855 map.
- 2.12 The census returns show that in 1861 there 14 live-in male workers and four female live-in servants at the farm, while by 1871 there were five female live-in servants, ten live-in male workers and 20 male workers in total (Hayfield 1995, 11). Slightly earlier in 1868, under Wharram Percy, the estate accounts list a William S Gofton (the same as who appears on the 1855 map) as the tenant, farming 885 acres 3 roods and 28 perches for a rental of £1040 per annum (Muniments Room, Birdsall House). In 1881 there were two female live-in servants, 13 live-in male workers and a total of 17 male workers, but in 1891 only three female live-in

servants are listed, with no live-in male workers (Hayfield 1995, 11). By the latter date, the farm also had a detached “hind house”. The “hind” probably started off as a form of bailiff who managed a farm for an absentee landlord or tenant, but by 1870s they appear to have become more common on the Wolds, and to have effectively been used to distance farmers from the day-to-day management of the farm and maintenance of the workforce (Hayfield 1995, 8 & 26-27).

- 2.13 The hind house is shown on the 1893 Ordnance Survey 6” map to the north-east of the main farm complex, at the point where the track leading in from the north runs through the outer windbreak/shelter belt. The main difference from 1855 is that the outer windbreak had been trebled in width (the increase taking place on the outside), while the possible inner windbreak/shelter belt has been felled (see figure 4). The east-west aligned detached structure to the north of the main complex had been doubled in length since 1855 and is shown as open-sided to the south, perhaps forming an implement shed or supplementary cart shed; it was connected to the hind house by a path. A similar north-south aligned structure is shown to the south-west. Turning to the main farm complex, the east range of the west fold yard had been doubled in length, while in the east yard a west range had been created with a narrow central gap leading through into the reduced yard area. This alteration had effectively created a central ‘yard’, making three enclosed spaces in total.

### **The 20th century**

- 2.14 There had been further alterations at the complex by the time that the 1911 Ordnance Survey 6” map was published (see figure 4). The western arm of the outer wind-break/shelterbelt had been extended south for a short distance and a pump installed in the north-east corner of the reduced east fold yard; another pump had been installed at the hind house. The presence of the pump may have caused a decreased use of the dew pond to the south of the west fold yard, although it is still shown in 1911; stock access to a similar dew pond at the west high barn at Towthorpe was blocked following the provision of a well and pump in the fold yard (Hayfield 1991, 38). The central yard created between 1855 and 1893 had been covered over by 1911; drawings held in the Muniments Room at Birdsall House indicate that several of the other estate farms had open fold yards covered over in the late 19th or early 20th centuries using long-span timber trusses, and so this action at Wharram Percy Farm seems to have formed part of an estate-wide response to changing agricultural practice. The fully covered yard was becoming popular over much of England by the 1880s and was advocated by many national commentators, although in some parts of the country, such as south Lincolnshire, there were some misgivings about the effect of depriving cattle of sunlight (Barnwell & Giles 1997, 57).
- 2.15 The Midgley family were tenant farmers at Wharram Percy from the 1940s until the 1980s (Beresford & Hurst 1990, 25) and, as might be expected, the farm underwent continued change to keep abreast of modern agricultural practices. Many of the buildings shown in 1911 were subsequently demolished and replaced by large concrete or steel-framed sheds after the Second World War. Nevertheless, the farm remained the home of one of the last Wold Rangers until his death in the late 1990s. The Wold Ranger, according to Nellist, was a man that “chose to live cheap and consequently rough” (Nellist und., 34); they were itinerant workers who toured the area looking for casual work on the farm (Antrim 1981). The man at Wharram Percy was of Irish descent and was believed to have done military service (Mr Hoddy, farm manager, *pers. comm.*). He lived in a small single-storey single cell building at the north-east corner of the large yard to the north of

the farm complex. His room was heated by a small cast-iron fireplace set at the north-east angle, and a bed, a jacket, boots, two rat traps and other possessions still remain as he left them, albeit now in poor condition.

### 3 ARCHITECTURAL DESCRIPTION

#### Introduction

- 3.1 The buildings are described below in a logical sequence. The plan form, structure and architectural detailing of each building is described first, followed by the external elevations and a circulation description of the interior, from the lowest to the uppermost floor level. Reference should also be made to the ground floor plan (figure 5), sections (figure 6) and plates, and the photographic record which appears as Appendix 1; the photographs are referenced in the following text in bold type and square brackets, the numbers before the stroke representing the film number and the number after indicating the frame, e.g. [5/32].
- 3.2 The cart shed, forming the northern range of the surveyed buildings, is on a very slight north-east/south-west alignment but, for ease of description, it is considered to be aligned east-west; likewise the barn, forming the western range of the surveyed buildings, is considered to be aligned north-south. Unless otherwise noted, the terms used to describe the roof structures are taken from Alcock *et al* (1996) and Campbell (2000). Where possible, specific architectural terms used in the text are as defined by Curl (1977). Finally, in the following text, “modern” is used to denote features or phasing dating to after c.1945.
- 3.3 The buildings forming the subject of the architectural survey stand at the north-west corner of the complex of conjoined buildings now forming the farm. The cart shed faces north onto the large open yard to the north of the farm, and an unsurfaced track leaving the south-west corner of this yard gives access to the barn. The barn was once also associated with an enclosed fold yard to the east; this is now covered by a large concrete-framed shed, but elements of the earlier layout remain visible. To the east of the cart shed, there are extensive farm buildings of various dates running east toward the farmhouse, and there is also a dew pond to the south of the farm complex. Within the wider landscape, the area is open to the south, but surrounded by a beech windbreak or shelter belt to the west, north and east.
- 3.4 The architectural survey was undertaken to provide a sufficient level of background and detailed information which could then inform the separate management plan, so that appropriate recommendations for any mitigation work could be made as part of the proposed restoration of the buildings.

#### The Cart Shed

##### *Plan form, structure and materials*

- 3.5 The cart shed forms the northern range of the recorded buildings, standing at the west end of the north range of the farm complex, and at the north-west corner overall (see figure 2). The ground floor walls clearly butt, and therefore post-date, the central part of the north range to the immediate east, while the first floor and east gable are built over the same structure. Both the Ordnance Survey 1855 6” map and the Birdsall House farm plan of the same date show a structure of similar dimensions to the cart shed in this position, although on both maps it is considerably wider than the central part of the north range, whereas the existing buildings are of the same width (see figure 3); this discrepancy might be caused by a narrow structure once running parallel to the cart shed’s south elevation which has since been demolished (see below).

- 3.6 The cart shed is rectangular in plan, with maximum external dimensions of 19.20m east-west by 6.60m north-south (see figure 5). It is of two storeys, with a pantiled roof, pitched to the east end but hipped to the west. Internally, the building has a maximum total height of 7.90m from ground floor level to the underside of the roof ridge.
- 3.7 The cart shed has load-bearing external walls (average width 0.50m to 0.65m), all built of similar material but treated slightly differently according to the elevation. The majority of the walls comprise a coursed squared hard yellowish-cream chalk set with a buff lime mortar. Above the cart openings of the north elevation, the stonework of the first floor is not nearly as well coursed or squared as that to the south elevation or west gable (see plate 1). However, there are some limestone quoins with diagonal tooling and margin dressing to the north-east corner at eaves level, and the first floor window lintels have herringbone tooling marks, also with margin dressing. The external walls also make limited use of brick, principally to the cart arches of the north elevation and also as quoins to the north-west corner of the building [3/91 and 3/92] (see plate 2), but the bricks are smaller and a brighter red than those used in the cart entrances. There are internal partitions of varying date to the ground floor, while extensive wall plaster retaining graffiti of early 20th century date survives to the first floor. Internally, the height of the ground floor measures 2.30m from the internal floor to the underside of the floor beams over. The height of the first floor is slightly lower, measuring 2.10m from the board floor to the underside of the roof trusses.
- 3.8 The roof trusses are of softwood, as are all other structural timbers surviving within the building. Many of the timbers throughout the building also retain either painted or incised marks. A single beam to the ground floor (the west face of the second beam from the east end) and a single tie-beam of a roof truss (the east face of the third truss from the east end) retain extensive incised marks to either their sides or the soffits [3/53]. These marks are in the form of rows of characters, some simple slashes, others more complex, and they occur in strings of between 10 and 25. They are characteristic of the “Baltic timber marks”, relating to the export of softwood from the Baltic into Britain through ports such as Hull. The marks were clearly made after the trees had been squared but before they were quartered or otherwise divided, as some strings are truncated to the top or bottom. They are generally thought to have been put onto the timber in the Baltic ports by timber merchants there, and they may denote the merchant, the port from which the timber was shipped, and/or other information. In addition, the first, second and third trusses all bear assembly marks to their west faces, not in the form of the usual incised marks, but as large numerals marked faintly in red paint or crayon. The various parts of the first truss are all numbered “1”, the second truss “2” and so forth [3/54 and 3/55]. This practice of marking assembly information in paint/pencil rather than incised marks was probably more common than surviving evidence might suggest; for example, the use of similar red paint or crayon to mark the size of timbers, or perhaps an order number, has been noted at an early 19th century maltings in West Yorkshire (Richardson & Dennison forthcoming), while pencil notations on a tie-beam reading “For Tie Beam 22 ft” were recorded at an early 19th century model farm in Cumbria (Buckley & Dennison 2005).

#### *External elevations*

- 3.9 The main (north) elevation faces north onto the large yard located to the north of the farm complex, and this area always provided the main point of access to the cart shed. Such a siting is typical; cart sheds are often north-facing, as wooden wagons are damaged by direct sunlight, and need a large clear area to the front to

manoeuvre the carts and wagons (Barnwell & Giles 1997, 56). The north elevation is six bays in length [3/88 and 3/89] and, as noted above, each bay has a single broad arched cart entrance standing 2.30m high in the centre, separated from one another by tall brick piers with bull-nosed corners [3/90] (see plates 1 and 2). These broad arched openings are built from red handmade bricks (average dimensions 230mm by 110mm by 70mm) set with a gritty buff lime mortar [3/92]. Above, to the first floor, there is a small square window to each bay, each fitted with the same type of shutter (see below), apart from the third bay from the east end, where there is a loading doorway [3/90 and 3/109].

- 3.10 The south elevation rises from a 0.60m high plinth of brickwork, built of red handmade brick (average dimensions 230mm x 110mm x 70mm) laid in English bond (one stretcher course to one header course) and set with a lime mortar. Above, the elevation is built of neatly coursed and squared chalk, laid to a watershot profile [1/22]. The south elevation was originally completely blank, the existing central doorway being a later, and relatively recent, insertion [1/21]. The west gable also rises from a brick plinth, with coursed and squared chalk above laid to a slightly watershot profile. The majority of the gable is obscured by render, scored and lined to resemble ashlar [3/47]; a blocked loading doorway is visible within the render to the first floor, subsequently reduced in size and fitted with a window. No remains are visible of the small structure shown projecting from the west gable in 1855, but which had been removed by 1893, and the wall may have been deliberately rendered when this was demolished to conceal the scar.

*Circulation: ground floor*

- 3.11 At the time of survey, access to the interior ground floor of the building was either through the cart entrances in the north elevation or the inserted doorway in the south elevation; the ground floor was used for low-level storage, with a large tank to the west of centre. The majority of the ground floor was floored with earth, with a rectangular concrete base towards the east end and a modern concrete floor to the westernmost two bays.
- 3.12 The ground floor is divided into six bays of equal size, equating to the cart entrances in the north elevation, with narrower half bays to the very east and west ends. A blockwork partition has been inserted towards the west of centre, isolating the two westernmost bays, which had been dry lined and fitted with a sliding door to serve as a store for agricultural chemicals [1/2, 1/3 and 1/4]. The interior walls are of random chalk rubble, much less well coursed/squared than to the exterior, and have horizontal timbers set into them at 1.50m above floor level [3/87]. The only exception is the east wall, which belongs to the earlier central part of the north range which the cart shed butts, and which is built of coursed and squared chalk rising from a brick plinth [3/86]. The half bay at the eastern end of the ground floor is separated from the rest by a post and board partition, with a doorway retaining a plank and batten door at the north end [3/85]. The doorway gives access to a flight of steeply inclined wooden steps leading to the first floor [3/62 and 3/63].

*Circulation: first floor*

- 3.13 The steeply inclined wooden steps formed the only existing access to the first floor, although it could once also have been reached via the first floor of the adjacent barn (see below). The first floor is formed by a single space, and was used for low-level storage at the time of the survey [3/59, 3/60 and 3/61]. It is floored with north-south aligned softwood boards, varying between 0.12m to 0.20m in width but all of a standard 30mm depth, and crossed by six roof trusses. As has been noted

on the ground floor, the east wall, belonging to the earlier range which the cart shed butts, is built of coursed and squared chalk. There is a blocked doorway in this wall, with the base set slightly below existing first floor level, which could not be accessed from the internal steps of the cart shed and so which must have become disused when the cart shed was built. Otherwise, the internal first floor walls are of the same random rubble as is visible on the ground floor.

- 3.14 There is an approximately central doorway to the north wall [3/58], flanked by three windows to the west and two to the east. All the windows in the north wall, indeed all windows to the first floor, are fitted with a single board shutter pivoting vertically about the centre. The shutter cannot be turned to lie completely horizontal, as the interior of the each window is fitted with two slender horizontal wrought-iron bars to the interior [3/49] (see plate 4). There are four similarly-fitted windows in the south wall, approximately opposed to those in the north wall, and with a doorway to the west leading through to the first floor of the adjacent barn. There is a single window to the centre of the west wall, set within a blocked doorway. This window is fitted with the same shutter as all the others to the first floor and, given that it does not appear to be an original feature, it may have been fitted with the shutter re-used from a window that perhaps formerly existed at the west end of the south wall, but which was destroyed by the creation of a doorway here.
- 3.15 The surviving whitewashed render to the south wall preserves a large amount of largely pencilled graffiti of early 20th century date; similar graffiti apparently located within a first floor granary at the east end of the north range has previously been recorded (Giles & Giles 2007). Much of the graffiti in the cart shed is formed by columns of figures relating to weights in pounds, stones and hundredweights, recording the number or weight of sacks of agricultural produce, including barley and oats. However, these figures are also accompanied by written descriptions and sketches. Almost all of these are located between or above the windows in the north and south walls, and there is seemingly no surviving graffiti on the shorter west and east walls. While this may in part be due to partial survival of wall plaster, it also appears to reflect the historical distribution of the material.
- 3.16 The written and sketched graffiti is listed below, commencing at the west end of the north wall. Between the first and second windows, there is a single column of figures together with a sketch of a traction engine driving a threshing machine and straw elevator, dated 1925 [3/64 and 3/65] (see plate 6). There are more column figures between the second and third windows, together with “Barley” and “Oats” and accompanying tally marks over the third window. The barley tally numbers ten, expressed as the traditional four vertical lines with a single diagonal line struck through them, but the oats tally numbers thirty, expressed as two vertical lines with a single diagonal struck through them [3/68]. Between the third and the fourth window, there are column figures, the name “Thos” and a sketched figure entitled “Humphrey” [3/66 and 3/67] (see plate 5); the form of his outfit, particularly the trousers, suggest that this a portrait of a horse lad, similar to that recorded elsewhere on the farm (Giles & Giles 2007, 341-342). There is no graffiti around the doorway, but between the fourth and fifth windows there is a small sketch of a heavily laden wagon and a foaming tankard entitled “The Pint”, as well as some illegible writing [3/69, 3/70 and 3/71]. There is a partially surviving sketch of another wagon to the east of these [3/72].
- 3.17 Turning to the east end of the south wall, between the first and second windows, there is a sketch of a wide-mouthed flask or bottle [3/73], accompanied by column figures, and the initials “GM, LA, JR, JH, BB, SS, TD” also arranged in a column [3/74]. Below these, an inscription reads “20th April last trash” (or possibly task).



There are a lot of figures between the second and third windows but these are largely illegible. There is also a large quantity of written inscriptions between the doorway at the west end of the south wall and the west wall itself, some dating to as early as 1903, but these too are unfortunately very faint and difficult to read. Nevertheless, some can still be made out. The names "Billy Parker 1925", "J Dallan 1988" [3/76], "R Boyes and Ted Boyes" can still be read, as well as the inscription "Thrashing rakings 13 Oct 1935". There is an undated list of names reading "(?) Hubbard, J Reeves, G (Sparter?), J Brent, H Brent, A Blake, J (Procter or Brother?), B How" and another list dated either 1914 or 1919 reading "A Sadler, T Wright, S Willis" [3/75] (see plate 7). These appear to be overlain by the capital letters 'P I' or 'D I', which seem to have been ruled on the wall to be shaded in but this was only partly completed. Amongst these inscriptions there are at least two sketch profiles of unnamed individuals [3/78 and 3/79], and also some initials in a red dye or paint which again appear to overlie the pencil inscriptions. There is a small amount of graffiti to either side of the blocked doorway in the west wall, but the vast majority of this is no longer legible.

- 3.18 The first floor is crossed by six roof trusses, spaced at equal centres, and are virtually all of the same king-post form (see plate 3). The slightly tapered king-post has a symmetrically joggled foot, and is through-bolted to the tie-beam [3/56 and 3/57] (see figure 6). Raking braces rise from the foot of the king-post to the principal rafters; each principal supports a pair of staggered purlins with keyed through-tenons and there is a plank ridge-piece to the roof apex. The westernmost truss is slightly different in that it has to support the hipped west end of the roof. It is therefore set at a 45 degree angle to the north-west corner of the first floor, with subsidiary half tie-beams, principals and braces bolted to the main parts of the truss [3/50, 3/51 and 3/52].

## The Barn

### *Plan form, structure and materials*

- 3.19 The barn forms the western range of the recorded buildings, and indeed forms the western range of the farm complex overall (see figure 2). The east and west walls appear to butt the cart shed to the immediate north. A building of the same dimensions as the barn is shown here from 1855 to 1911 (see figures 3 and 4). There was once a building of similar dimensions to the barn running south from its south end, again shown between 1855 and 1911 but subsequently demolished. There were further structures attached to the east elevation of the barn, and these are discussed further in the following text.
- 3.20 The barn is rectangular in plan, with maximum external dimensions of 18.45m north-south by 6.65m east-west (see figure 5). It is of two storeys, with a pitched pantiled roof. Internally, the majority of the building is open to the roof ridge, the underside of which is placed 7.70m above ground floor level.
- 3.21 The barn has load-bearing external walls (average width 0.50m), rising from brick plinths and built of coursed squared chalk, apparently laid in diminishing courses, and set with lime mortar; as with the cart shed, the building materials are slightly differently treated according to the elevation, although taken as a whole, the walling chalk is generally of a poorer quality than that of the cart shed. However, there are some limestone quoins with herringbone tooling marks and margin dressing around the possible belt-drive opening to the west elevation. Apart from the plinths, brick is generally used for door heads, or as quoins to the south-east

and south-west corners, where bull-nosed bricks are used. The south gable is built entirely in brickwork but this is obscured externally by render.

- 3.22 The interior is formed by a single space, largely open to roof level, with the remains of a first floor over the north end. The roof trusses appear to be softwood, as are all other structural timbers surviving within the building (see plate 10 and figure 6). The soffit of the southern surviving first floor beam is incised with similar "Baltic timber marks" as described in the cart shed. However, the marks on the barn beam are more complex, comprising a short string at the east [3/82] and west [3/81] ends of the soffit, and a very complex string in the centre [3/80]. Other than this, no other assembly or trade marks were noted on any of the timbers. The east and west interior walls are faced with chalk rubble, while the south wall is entirely in brick [3/15]. There is a large amount of whitewash still to the east wall, although no graffiti was noted within the building.

#### *External elevations*

- 3.23 At the south end of the barn's east elevation the remains of the east wall of the building depicted here in 1855 can be seen [1/16]. The remains comprise a brick plinth, rising from a footing of headers laid on edge. The plinth stands 0.70m high and is built of pinkish handmade bricks (average dimensions 225mm by 110mm by 80mm), set with a lime mortar but not laid in any particular bonding pattern, with bands of headers and stretchers within the same course.
- 3.24 The barn's east elevation also rises from a brick plinth, standing a maximum of 1.86m in height above the surface of the adjacent covered yard. The bricks used in the plinth are red and handmade (average dimensions 220mm by 110mm by 70mm), laid in a variation of English Garden Wall bond (six stretcher courses to each header course) and set with a lime mortar. Above, the elevation is built of coursed and squared chalk [1/19 and 1/25]. The elevation contains two ground floor doorways, the sills of which are both now set substantially above the level of the adjacent covered yard. Both doorway openings are framed in brick; the southern doorway has right-angled jambs to the exterior and has been blocked with blockwork [1/17]. To the north, there is a slit ventilator, also blocked, and beyond this another blocked ventilator beneath a small blocked window. The northern doorway has one jamb (the south) that is right-angled, and the other is bull-nosed [1/18]. To the north of the doorway, scarring and blocking preserves the pitched roof line of a single storey structure running parallel to the cart shed, and apparently shown on maps between 1855 and 1911. The space below the former roof line is infilled largely with deep red handmade bricks, slightly larger than those used in the barn's plinth and laid in a rough header bond. The brickwork incorporates two windows, one large and one small [1/20], created after the single storey structure had been demolished but then themselves subsequently blocked. It is noticeable that the chalk and limestone above the former roof line of the single storey structure is much less well coursed and squared than that to the south in the main body of the elevation.
- 3.25 The 1855 farm survey plan held at Birdsall House shows another structure on the east side of the barn, to the south of that described above, running parallel to the cart shed. On the survey, the structure appears to have a canted east end, reminiscent of that sometimes seen to horse-engine houses. Using the scar left by the structure running parallel to the cart shed as a guide, the horse-engine house would have been placed in front of northern doorway in the east elevation. A horse-engine house, added to an 18th century barn, was recorded in a similar position at High Farm, Throxenby, North Yorkshire (Dennison & Richardson 2002,

17). Although the barn at Wharram Percy lacks the structural evidence that one might expect from a horse-engine house, such as blocked beam-housings for example, these may have been removed/obscured by later alterations. It is interesting to note that a horse-engine house here would have blocked one of the opposing doorways of the barn's internal threshing floor (see below); the addition of such a structure to power machinery which replaced hand threshing and winnowing techniques was a common occurrence in North Yorkshire during the 19th century (RCHME 1987, 167-169). Few features are visible at first floor level in the east elevation, the principal one being a large window, approximately centrally placed, flanked by further slit ventilators. The window has been skilfully blocked using chalk almost identical to that in the rest of the elevation, so that it is now difficult to discern externally; there appears to be a further blocked slit ventilator within the window blocking itself.

- 3.26 The south gable of the barn has been rendered and is now almost completely blank, although the scar left by the demolition of the building to the south can clearly be seen within the render as a single storey pitched roof line [3/12, 3/13 and 3/14] (see plate 8). Both ends of the gable are finished in bull-nosed bricks, while the apex rises from moulded stone kneelers to either side.
- 3.27 The west elevation is built in a similar manner to the east, with a brick plinth rising to a maximum of 1.13m above the external ground level, and chalk/limestone above. Moving from south to the north, the southern end of the elevation has been disturbed by the insertion of a tall sliding door, possibly an enlargement of an original smaller doorway, flanked by blocked slit ventilators and with an area of blocking/rebuilding above [3/46] (see plate 8). To the north, there is a smaller original doorway, again flanked by blocked slit ventilators and opening onto one end of the internal threshing floor [3/45]. Above, there is an area of repointing or rebuilding over the doorway with the sliding door, and a smaller window to the north fitted with a board shutter carried on spearhead strap hinges. Beyond this, there is a tall narrow opening, once fitted with a stable type board door on strap hinges, although the lower leaf has been removed [3/48] (see plate 9). The appearance of the limestone quoins on the north side of the opening suggest that it is a later insertion, possibly to allow a belt-drive to pass through the wall and power machinery located on the first floor. The belt-drive would presumably have been powered by an external traction engine or other form of portable steam engine, although a spoked pulley for a flat belt-drive mounted on an external wall was a more common method of transferring power to internal machinery. Some farms even had small stationary steam engines placed outside barns in the later 19th century with no protection from the elements (Richardson 2005, 249), but there is no evidence for this at Wharram Percy. If a horse-engine house was built against the barn's east elevation, it must have been demolished after 1911.

### *Circulation*

- 3.28 At the time of the survey, access to the interior ground floor of the building was through the opposed doorways towards its northern end, both of which open onto the remains of a small threshing floor, formed from smooth and neatly-cut flagstones [3/21 and 3/22]. Other than this, the interior was floored with concrete and largely empty, with the exception of two large diesel storage tanks [3/16]. The interior is divided into six bays of equal size by the roof trusses. There are few features visible internally that cannot be seen externally [3/16, 3/24, 3/28 and 3/29], with the exception of the south wall, where there is a ground floor doorway and a slit ventilator (both blocked) concealed by the external render, and two further blocked ventilators over. Additionally, to the immediate south side of the north

doorway in the east wall [3/20], there is a recess in the wall, T-shaped in plan, placed c.1.3m above ground level and of uncertain function.

- 3.29 The first floor surviving over the north end of the ground floor [3/17] once extended further to the south than at present, as indicated by the arrangement of blocked first floor windows and other openings [3/18 and 3/19], although there is no clear surviving evidence for floor beams in the interior walls. At the time of the survey, the first floor comprised two large scantling beams supporting north-south joists and a board floor over [3/84]; the beams themselves are supported on inserted brick pillars of varying form [3/23 and 3/27]. Where the boards have been cut away, the first floor doorway leading to the cart shed can be seen. This doorway must have remained in use after the boards were cut away, as a metal handrail of recent appearance has been installed along one side of the “walkway” created by the removal of the boards [3/83]. There is no surviving indication of how the first floor was accessed from within the barn.
- 3.30 The interior of the barn is crossed by five trusses, spaced at c.3m centres, and all of similar form (see plate 10). They appear to be softwood but their height precluded any close inspection for carpenters’ marks or other assembly details. Short raking braces rose from the tie-beam to the principal rafters, which in turn each supported a pair of staggered purlins with keyed through-tenons, There may once have been a further, wider, pair of braces closer to the roof apex; their empty mortices can be seen in the soffits of the tie-beams of the third truss from the south wall, but they are not clearly visible in the other trusses. The principals appear to be lapped at the apex and there is a plank ridge-piece [3/25 and 3/26].

### **Other Farm Buildings**

- 3.31 Although no study of the other buildings within the farm complex was required as part of the works, a brief description is necessary in order to place the cart shed and barn within their proper structural context, and to better understand the development of the farm.

#### *The North Range*

- 3.32 As has already been described, the cart shed butts the building to its immediate east that forms the central part of the north range. This building is of two storeys and has a pitched pantiled roof, slightly lower than that of the cart shed but at the same height as that of the brick eastern half of the north range [3/93]. The north elevation rises from a brick plinth and is built of coursed squared chalk laid in diminishing courses, as is that portion of the former west gable visible from within the cart shed. There was once a first floor doorway in the west gable, presumably accessed from external steps. The doorway, and two windows in the north elevation, suggest that there was once an internal first floor to the western half of the interior [3/94]. There is a ground floor doorway with a tripartite lintel placed approximately centrally to the north elevation, which is otherwise largely blank [3/95]. Much of the south elevation has been rendered, obscuring any historic detail [3/35]. However, to the immediate west of the boundary wall between the east and west fold yards, the render is absent, delineating the roof scar left by the north-south aligned single storey structure shown here in 1855 and 1893 [3/31 and 3/32]. Within the scar, the exposed chalk walling is coursed and squared to the same degree as the north elevation. Towards the west end of the elevation, there are several ground floor doorways [1/23, 1/24 and 3/30], one of which retains a tripartite lintel as seen to the north elevation. The interior is formed by a single space, open to the roof trusses, which are of very similar form to those on the first

floor of the cart shed. The internal walls are whitewashed but it appears that the chalk is largely laid in the same diminishing courses to the exterior. There is a blocked first floor doorway to the east wall with an area of brick rebuilding beneath [3/34] and a similar feature to the west wall [3/33].

- 3.33 The central part of the north range is in turn butted by the east part. This east part, which extends for some distance to form a large proportion of the north range, is of two storeys with a pantiled roof (replaced by corrugated sheeting to the south slope), hipped to the east end [3/98] (see plate 11). It is brick built throughout, using brownish-red handmade bricks laid in a variation of English Garden Wall bond (five stretchers courses to each header course) and set with a lime mortar; the north-east corner is bull-nosed at ground floor level. Described from west to east, there is a large inserted sliding door, flanked by plain ground floor doorways. The brickwork of this area has been either repointed or perhaps even partly rebuilt, as it changes markedly at first floor level; perhaps this section of the building was originally of a single storey only. There is then a pair of closed cart or carriage sheds with a loading door and window over to the first floor, and towards the west end, further first floor windows [3/96]. Much of the south elevation is obscured by later building, although the point at which the wider brick part of the north range meets the narrower chalk central part is still visible [3/36]. The interior of this part of the range was not inspected during the survey work.

#### *East fold yard*

- 3.34 The east gable of the north range (positioned at the north end of the east range) has a possible trap house at ground floor level, flanked by a tack room to the south (see below) [3/98] (see plate 11). There are two small windows above to the first floor, and the space over appears to have been used as a granary/bothy [3/100], and is presumably the "room over a wagon shed" where the graffiti recorded by Giles and Giles is located (Giles & Giles 2007, 345).
- 3.35 Only the very north end of the east range of the east fold yard as shown in 1855 survives relatively unaltered. Although only of a single storey, as opposed to the two storeys of the north range, the two parts of the farm complex are clearly built of contemporary brickwork [3/97 and 3/100]. Internally, the north end of the east range preserves a single stable partition, of ramped tongue and grooved boarding with a timber heel-post, manger and hay rack [3/105]. To the north of the stable partition, there is a former heated tack-room with well preserved internal fittings. This tack room was heated by a small cast-iron grate placed across the north-west angle of the room, with a corner wall cupboard above for displaying trophies and awards [3/104]. The pegs and hooks for hanging tack on, including those for saddles, are mounted on boards affixed to the south and west walls [3/102 and 3/103]. The north wall retains a number of prize certificates of the late 1950s and 1960s, including many for the Christmas Fat Stock Show And Sale at Malton and Seamer, covering such categories as "Champion Beast in the Show", "Best Polled or Dehorned Bullock", "Best Butcher's Beast" and "Best Pen of 3 Butchers' Hoggs" [3/101].
- 3.36 To the south, the remains of the east range are covered by a modern steel-framed shed, and only the former east wall of the range survives. While it has been much altered, the majority is formed by a chalk rubble wall standing almost 2m in height [3/106]. The south wall of the fold yard is also of chalk, although it contains at least one straight joint, and there are also differences between the coursing of the chalk in the different sections to either side of the straight joint [3/42]. There are also a number of blocked recesses, perhaps for structural timbers, to the north face of the

wall; these may have housed one end of roof trusses of the range shown here in 1855 [3/40 and 3/41].

- 3.37 The east fold yard was partly infilled between 1855 and 1893 by the addition of a west range, creating a smaller enclosed yard with an entrance in the centre of the west range, and a “central” yard to the west. That part of the west range to the south of the central entrance has been demolished, but the structure to the north survives, and is formed by a three and a half bay cart shed [3/37]. The cart shed occupies only the west half of the building; the east half, accessed from the smaller yard of 1893 appears to be formed by two loose boxes with hay racks. There are further loose boxes and stable accommodation within a rectangular structure of mixed chalk and brick construction situated against the south side of the eastern part of the north range, now covered completely by the modern steel-framed shed.

#### *West fold yard*

- 3.38 The east wall of the west fold yard (i.e. the boundary wall initially between the two yards and then between the west and “central” yards) is more substantial than that which survives around the east fold yard. There is a break to the east of the south end which may once have formed a gateway into the “central” yard created between 1855 and 1893. The east wall stands c.2.50m in height and is of mixed brick and chalk construction [3/38]. It is broken by a central gateway, probably a later insertion. To the north of the gateway, the wall has been subject to much alteration but it can be seen to butt the south elevation of the central part of the north range. To the south of the gateway, there is generally a lower band of brickwork, a wider central band of coursed squared chalk and then another band of brickwork, although there has been much alteration; this section of the wall also incorporates a blocked doorway [3/39]. The difference in construction may in part result from the section of wall to the north of the gateway being part of a building already in place by 1855 (but still post-dating the chalk central part of the north range) and that to the south belonging to an extension of the building erected between 1855 and 1893.
- 3.39 The south wall of the west fold yard is of a similar construction to the south part of the east wall, and indeed appears once to have been continuous with it, although the joint between the two has been disturbed by later alteration; it retains flagstone capping for part of its length and contains regularly spaced small blocked brick openings [2/5 and 3/43]. The dew pond to the south of the west fold yard is still visible as an earthwork, but no remains of any lining could be seen at the time of the survey [3/44].

#### *Other structures*

- 3.40 The principal elevation of the farmhouse faces south [3/107] and, as might be expected, has received the highest degree of architectural treatment. The north elevation facing onto the farm area is plainer and also somewhat longer with more fenestration [3/99]. There are a wash-house and outbuildings to the west, partly housed within a single storey lean-to shown in 1855. As previously noted, the farmhouse is a Grade II Listed Building (see Appendix 3).
- 3.41 A small square structure used until the late 1990s as a home by the Wold Ranger stands at the north-east corner of the large open yard to the north of the farm complex. It is a single storey brick structure with a pitched pantiled roof and a doorway in the west gable, and is lit by a window in the south wall [3/116 and 3/117] (see plate 12). It is built onto or partly incorporates a now ruinous structure,

the rear (north) wall of which is built of chalk; this may be a remnant of the long east-west aligned structure shown here between 1855 and 1911. The plank and batten door in the west gable has the inscription "P O W" painted onto it [3/114]. The interior is fairly spartan and now in poor condition, although it paints rather a poignant picture of the Ranger's last years as many of his possessions still remain within. A shelf mounted on the north wall carries a couple of rattraps [3/110 and 3/115] and his jacket hangs on the east wall [3/113]. His bed stands adjacent to the window in the south wall [3/112] and there is a small cupboard to the south-east corner; the interior is bare but there are a couple of cigarette cards of film stars glued to the door, along with other paperwork now unreadable. The room was heated by a small cast-iron grate at its north-east angle [3/111].

- 3.42 Many of the buildings shown on the historic maps (see figures 3 and 4) have subsequently been demolished, most probably after the Second World War. They were replaced by large sheds covering the former fold yard areas [3/108], although as noted above, the central "yard" had been covered over between 1893 and 1911, apparently forming part of similar changes being undertaken to other estate farms during this period. The shed over what used to be the east fold yard is steel-framed and now houses machinery and implements. The sheds over the west fold yard are concrete framed and probably slightly earlier [2/6]; one of the stanchions has the date "1964" painted onto it using red paint. In the large yard area to the north of the farm complex, there is a Dutch barn in the same position as the north-south aligned structure shown here in 1893 (but not 1911), while opposite on the east side there is another large steel-framed shed.

## 4 WILDLIFE SURVEY

### Introduction

- 4.1 As noted in Chapter 1 above, a summer bat and barn owl survey was also undertaken of the two farm buildings. The two barns were identified as Barn A and Barn B, which represent the east-west aligned cart shed and north-south aligned barn respectively. The resulting Bat and Barn Owl Report (Holloway 2009) appears as Appendix 2, while the following text provides a summary of the findings.
- 4.2 All species of bats are protected under The Wildlife and Countryside Act 1981 and the Conservation (Natural Habitats, &c.) Regulations 1994. Under this legislation, it is an offence for any person to:
- intentionally kill, injure or take any wild bat;
  - intentionally disturb any wild bat while it is occupying a structure or place that it uses for shelter or protection;
  - intentionally damage, destroy or obstruct access to any place that a wild bat uses for shelter or protection;
  - be in possession or control of any live or dead wild bat, or any part of, or anything derived from a wild bat; or
  - sell, offer or expose for sale, or possess or transport for the purpose of sale, any live or dead wild bat, or any part of, or anything derived from a wild bat.
- 4.3 The Countryside and Rights of Way Act 2000 amends the above Wildlife and Countryside Act to also make it an offence to intentionally or recklessly damage, destroy or obstruct a place that bats use for shelter or protection.
- 4.4 Within the Wildlife and Countryside Act 1981 (as amended), barn owls are listed on Schedule 1. Under this legislation it is an offence for any person to:
- intentionally kill, injure or take any wild barn owl;
  - intentionally take, damage or destroy any wild barn owl nest whilst in use or being “built”;
  - intentionally take or destroy a wild barn owl egg;
  - have in one’s possession or control a wild barn owl (dead or alive), or egg, (unless one can show that it was obtained legally);
  - intentionally or recklessly disturb any wild barn owl whilst “building” a nest or whilst in, on, or near a nest containing eggs or young; and
  - intentionally or recklessly disturb any dependent young of wild barn owls.
- 4.5 The bat and barn owl surveys were therefore undertaken to identify any of these protected species, to have an input into the management plan, and to make appropriate recommendations for any mitigation work as part of the proposed restoration of the buildings.

### Survey Results

#### *Status of bat species and barn owls in the local/regional area*

- 4.6 The barns at Wharram Percy Farm are within the natural range of several species of bats, with Common pipistrelle *Pipistrellus pipistrellus*, Soprano pipistrelle *Pipistrellus pygmaeus*, Noctule *Nyctalus noctula*, Leisler’s bat *Nyctalus leisleri*, Brown long-eared bats *Plecotus auritus*, Natterer’s bat *Myotis nattereri*,



Daubenton's bats *Myotis daubentonii*, Whiskered bats *Myotis mystacinus* and Brandt's bats *Myotis brandtii* all being recorded within 100km of the farm (see Table 1 of Appendix 2). Species recorded with a 2km radius of the farm include Pipistrelle species, Brown Long-eared Bat, Daubenton's Bat, Whiskered Bat, Natterer's Bat and Brandt's Bat (see Table 2 of Appendix 2).

#### *Habitat description*

- 4.7 The Wharram Percy Farm buildings surround a stone yard, to the west of Wharram Percy House. The brief walk-over survey recorded hawthorn *Crataegus monogyna* hedges along some of the species-poor, cattle-grazed, pastures that border the buildings. Occasional mature sycamore *Acer pseudoplatanus* and ash *Fraxinus excelsior* also occurred either within the hedges and/or within the pastures. The relatively small, cattle-grazed pastures were surrounded by blocks of high-forest woodland plantation c.150m to the north, west and east of the buildings. The even-aged plantations were dominated by mature beech *Fagus sylvatica* with more occasional ash *Fraxinus excelsior*, larch *Larix decidua*, cherry *Prunus spp.* and elder *Sambucus nigra*. The woodland to the west of Wharram Percy House had frequent additional trees and shrubs, including sycamore *Acer pseudoplatanus* and holly *Ilex aquifolium*. The buildings otherwise sat within a sea of large arable fields which had little ecological value. Nevertheless, the woodland blocks, individual mature trees and hawthorn hedges are host to numerous insects and are therefore an important food source for bats.

#### *Bat survey - daytime inspections*

##### Cart shed (Barn A)

- 4.8 Six, large, open brick arches occurred on the northern elevation of the ground floor and the internal area was mostly used for farm storage, including farm machinery. All the windows of this building were blocked-up with wood. Much of the pointing between the stonework above the arches had fallen out resulting in several crevices which were suitable for bat entry into potential bat roosts, although closer inspection recorded no signs of bats in these crevices. Nevertheless, 14 old bat droppings were scattered on the stone wall beneath the guttering, between the first floor wooden door and adjacent, blocked-in window to the west. Just above this location a black roof membrane was visible, jutting out from under the red pantiles, but was broken in several places just above the guttering. On closer inspection a small triangular space was recorded between where the black membrane overlapped the stone stringcourse (to which the adjacent gutter was fixed) and the adjacent stone wall immediately beneath the red pantiles. The indication is that this area could be used as a bat roost, but no fresh bat droppings were recorded in any of these spaces.
- 4.9 No signs of bats were recorded in the west elevation. The barn was slightly taller than the adjacent barn that occurred at the east elevation, and the gable end was partially visible above the latter building. The gable end was too high for a comprehensive bat inspection, although it appeared to be well pointed and no bat signs were visible from the top of a ladder.
- 4.10 A large cattle shed shared the middle and eastern sections of the south elevation's stone wall, and no signs of bats were recorded within the stonework. However, a fascia board along the top of the wall, to which a gutter was attached, had gaps suitable for bat entry into potential roosts between the stone wall and the board.

Nevertheless, no signs of bats were recorded. The western section of this elevation was occupied by the adjacent barn (Barn B).

- 4.11 Internally, a swallow nest was recorded tucked into the roof rafters but no signs of bats were recorded. Sliding wooden doors on the eastern elevation, towards the northern end of the building, led into a “sealed” room with an asbestos ceiling and a concrete floor. Crevices suitable for bat entry into potential bat roosts occurred at the junction between the ceiling and internal stone walls, but the room was lit by florescent lighting and so was unsuitable for roosting bats. This room was used to store farm chemicals and no signs of bats were recorded.
- 4.12 A central ridge beam, together with a partially broken black membrane, was visible over the roof-rafters on the north-facing half of the pitched roof, which had red pantiles. In contrast, the south-facing half of the pitched roof was uninsulated and composed of corrugated sheeting, resting on an off-centre timber ridge beam. A small crevice, with fresh bat droppings at its entrance, was recorded towards the top of the third king post (looking in a westerly direction from the stairwell), at the junction between the king post and slightly off-centre ridge beam. In addition, over 100 bat droppings were recorded on the adjacent principal rafter at this location, just below the off-centre ridge beam, immediately beneath the corrugated sheet roof. The evidence indicated the presence of a bat roost between the main roof rafter at this location and the corrugated sheet roof.
- 4.13 One bat dropping was also recorded above the eastern edge of the third, blocked-up, first floor window (looking in a westerly direction from the stairwell) of the southern elevation. Several gaps suitable for bat access were also noted above the other boarded up windows along the first floor of the southern elevation, although no further bat droppings were recorded here. A further four droppings were recorded on the floor below the entrance to the bat roost described above. Further bat droppings may have occurred but pigeon droppings and general debris made it difficult to positively identify bat droppings on the first floor. Pigeons and substantial piles of pigeon droppings were strewn along the ground, under the ridge beams at the centre of the first floor. Two swallow nests were recorded in the roof rafters at the western edge of the first floor.

#### Barn (Barn B)

- 4.14 The wall of the west elevation consisted of a brick foundation layer over-topped by rough stone. Occasional crevices in the stonework appeared to be suitable for bat entry into potential bat roosts but no signs of bats were recorded. Indeed, white bird droppings and nest material were noted in some of the crevices which were indicative of bird usage. No signs of bats were recorded.
- 4.15 The walls of south gable end had been rendered, and no signs of bats were noted either here or within the coping stones that lined the gable edge. A large cattle shed shared the stone wall of the east elevation stone of this barn, making it difficult to comprehensively inspect. Nevertheless, no signs of bats were recorded. Barn A formed the north elevation of this barn.
- 4.16 Internally, the northern quarter of the barn was occupied by a first floor. However, this was unsafe to walk on and could not, therefore, be inspected comprehensively for signs of bats. The rest of this tall barn was partially lit by florescent lighting, although several dark and damp areas still occurred. The black felt insulation of the pitched, red pantile roof was in bad repair and several broken tiles were visible within the roof. Pigeons were audible in the upper reaches of the barn and

pigeon droppings were recorded across the damp floor. The damp patches on the ground made searching for bat droppings here a difficult task. Internal crevices within the window lintels and overlapping purlins were all inspected and all the roof timbers that could be viewed were covered in dust and debris. No signs of any bats were recorded in any part of the internal space of this barn.

*Bat survey - nocturnal inspections*

4.17 The results of the nocturnal survey are given in the table below. No activity was recorded by Recorder C, located outside Barn B on the south elevation.

Time	Recorder A (located within the first floor of Barn A)		Recorder B (located outside Barn A on the north elevation)	
	Species	Activity	Species	Activity
20.53	Com. Pip	1 bat (or possibly 2 bats) seen flying within the first floor of the barn. The echolocations were heard for at least one minute before one bat was seen to exit from the top of the third window (a bat dropping was located here - see above)		
21.09			Com. Pip	One passing call
21.10			Com. Pip	Two passing calls
21.13			Com. Pip Noctule	Four passing calls One passing call
21.19			Com. Pip	Two passing calls
21.26			Com. Pip	Three passing calls; one bat seen flying from west to east across the building
21.29			Com. Pip	Two passing calls
21.35			Com. Pip	Foraging activity for about 30 seconds
21.38			Myotis spp.	Two passing calls
21.42			Com. Pip	One passing call
21.45			Com. Pip	One passing call

Com. Pip = Common pipistrelle bat *Pipistrellus pipistrellus*  
 Noctule *Nyctalus noctula*

4.18 A maximum of two common pipistrelle *Pipistrellus pipistrellus* bats emerged from the roost located between the principal roof rafter and corrugated sheet roof of Barn A. These bats emerged only two minutes after sunset and, after foraging briefly within the first floor, quickly left the barn via small gaps that occurred just above the blocked-up, third (looking in a westerly direction from the stairwell), first floor window of the southern elevation. No other bat activity was recorded within the first floor of Barn A for the duration of the survey.

4.19 The first common pipistrelle *Pipistrellus pipistrellus* bats to be recorded flying in the vicinity of the northern elevation of the building occurred at 21.09, 18 minutes after sunset. Common pipistrelle *Pipistrellus pipistrellus* bats were then recorded sporadically flying and foraging along the northern elevation of Barn A from 21.09 until the end of the survey at 21.51. A passing noctule *Nyctalus noctula* bat was recorded at this location at 21.13, approximately 22 minutes after sunset, and the echo-locations of *Myotis spp.* bats were heard at 21.38, approximately 47 minutes after sunset.

*Barn Owl survey*

4.20 No signs of barn owls were recorded in either Barn A or Barn B.

### *Interpretation/evaluation of survey results*

- 4.21 A small common pipistrelle *Pipistrellus pipistrellus* non-breeding summer roost was recorded within the roof rafters of the cart shed (Barn A). It remains unknown whether this barn is also used as a small winter hibernation roost, although this is a possibility. The survey results also indicate that the surrounding habitat is used for foraging purposes by common pipistrelle *Pipistrellus pipistrellus*, noctule *Nyctalus noctula* and *Myotis spp.* bats.
- 4.22 One of the main constraints of the survey results was that parts of the buildings were inaccessible. This included the unsafe first floor of the barn (Barn B). In addition, the roofs of each barn were too high for a thorough inspection, as were the gable ends, and the spaces between the red pantiles and underlying black membrane were generally inaccessible. Also, the adjacent, large, cattle shed prevented a full inspection of the southern elevation of the cart shed (Barn A) and the eastern elevation of the barn (Barn B). Finally, the dusk emergence survey was foreshortened by heavy rain.

### **Impact Assessment in Absence of Mitigation**

- 4.23 Short-term disturbance to the small summer bat roost within the cart shed (Barn A) would occur from scaffolding the roofs and walls in order to undertake repair works. In addition, the extra noise, vibration and dust that would occur from the presence of site operatives and machinery may also cause some disturbance.
- 4.24 The proposed repair works would permanently remove the small summer bat roost in the cart shed. In addition, the works would probably include the removal of the openings above the blocked-up, first floor, windows on the southern elevation, which would permanently prevent bats from being able to access the first floor of the cart shed and, therefore, their current roosting site within the roof rafters. This may have a small adverse impact on the population of common pipistrelle *Pipistrellus pipistrellus* at the local level.
- 4.25 There is therefore a legal requirement to apply for a Bat Licence from Natural England to cover the proposed repair works. The Licence would require a mitigation strategy aimed at ensuring that no net loss of the existing bat roost capacity in Wharram Percy Farm occurred as a result of the proposed repair works.

## 5 ARCHITECTURAL DISCUSSION AND CONCLUSIONS

- 5.1 The architectural survey has found no evidence to contradict previous suggestions that the farm complex originated as a high barn, known as High House, built in either the late 18th or early 19th century. If it is of the former date, then it may be associated with the rebuilding of the farmstead at nearby Wharram Percy village. Hayfield characterises the complex as an “uninhabited high barn” (Hayfield 1991, 43) although census returns indicate there were seven male live-in workers at High House by 1841 (Hayfield 1995, 11), suggesting that there was some form of accommodation on site. Without further, more detailed study of the other parts of the farm complex, it is difficult to be certain as to the original form of the high barn; as Hayfield notes, the evolution from high barn to independent farmstead can be complex, the transition destroying or clouding structural evidence for earlier forms, while cartographic evidence is not always reliable (Hayfield 1991). The structural relationship between different buildings can provide relative chronologies, but it is not always possible to date these changes closely. Nevertheless, on the basis of the structural and cartographic evidence gathered during the survey, a number of suggestions can be made.
- 5.2 Hayfield and Wagner suggest that the farmstead at Wharram Percy Farm demonstrates the completion of the transitional phase between chalk and brick building on the Yorkshire Wolds, with the surviving probable late 18th century buildings being chalk walled with brick foundations, quoins and columns, while the later buildings of the independent farmstead, including the farmhouse, are wholly of brick (Hayfield & Wagner 1998, 10). However, a division based purely upon building materials, with chalk denoting the earlier phase, would place the boundary walls of the east and west fold yards, the barn, the cart shed, the central part of the north range, the small structure on the south side of the east part of the north range and the remains of the east-west structure on the north side of the yard to the north of the farm complex as all being earlier than the creation of the farmstead. The eastern part of the north range (effectively its eastern half), the north end of the east range and the farmhouse itself would thus date to the creation of the farmstead.
- 5.3 As regards the earlier, high barn, phase, this would clearly be a significant oversimplification. Comparison with the east and west high barns recorded at Towthorpe by Hayfield (1991, 38-39) suggests that the wall dividing the east and west fold yards is a later insertion; it clearly butts the chalk-built central part of the north range. However, the combined area of the fold yards gives a rectangle measuring c.73m east-west by c.40m north-south, approximately twice the length of the high barn yards at Towthorpe. There are also differences in the form of the walling and use of chalk in the boundaries of the east and west fold yards. It therefore seems possible that only one of the yards at Wharram Percy Farm represents the original high barn fold yard and, given the concentration of substantial chalk buildings at the north-west corner of the farm complex, it is perhaps more likely to have approximated to the west fold yard. If this were to be the case, then the east fold yard might be a later addition to the high barn prior to its conversion to a farmstead, perhaps providing extra shelter sheds, or an addition associated with the farmstead itself. If the latter, then this might indicate that chalk was still being used as a construction material in the mid 19th century; could the chalk pit shown nearby to the north of the farm complex between 1855 and 1911 have been the source of building materials? Alternatively, earlier chalk buildings could have been demolished and re-used.

- 5.4 It is likely that the dew pond is associated with the original high barn, but the outer beech windbreak may not be. One interpretation of the inner right-angled area of plantation shown in 1855, and the enclosures to the immediate west, is that both were the remains of an earlier windbreak planted to go with the original high barn; the space in between, formed by the large open area to the north of the farm complex, might have been used partly as a stackgarth, as at Towthorpe west high barn (Hayfield 1991, 38). The outer windbreak could then have been planted when the farmstead was created. The latter was considerably deepened (or thickened) in the second half of the 19th century, to provide additional shelter and perhaps also to provide extra income for the Birdsall Estate as managed plantation.
- 5.5 The relative chronology and relationship of the chalk buildings around the west and north sides of the west fold yard raises similar questions. The cart shed butts the building forming the central part of the north range, and appears itself to be butted by the north-south aligned barn to the south. However, on the basis of constructional detail, particularly the form of the roof trusses and the evidence for changes in threshing techniques from hand to horse and perhaps eventually steam-powered, the north-south barn appears to be the earlier structure of the two; the barn could well be late 18th century in date, while the cart shed is more likely to belong to the first half of the 19th century. The barn has clearly been subject to much alteration, the entire south gable being rebuilt in brick, and so perhaps rather than butting the cart shed, the north end of the barn may have been cut back to allow for its construction, although this is not wholly convincing. The structural detailing of the central part of the north range also suggests a date earlier than the cart shed, and it too may be late 18th century. The similarity of the roof trusses in the two buildings suggest that it may have been re-roofed when the cart shed was built. It too might have functioned partly as a barn originally, but was perhaps also partly used as stabling. It is therefore suggested that the barn and the central part of the north range are the two earliest surviving structures associated with the High House high barn, and that the cart shed is a later addition. If the cart shed pre-dates the creation of the farmstead, as the chalk construction would suggest, then it might be a relatively uncommon feature, as neither of the other larger high barn complexes published by Hayfield had such generous provision for carts. Alternatively, as suggested with the fold yards above, perhaps the cart shed could indicate that chalk was still being used as a building material at Wharram Percy in the mid 19th century.
- 5.6 Although there is some slight disagreement in secondary publications as to exactly when High House became an independent farmstead, a combination of census and cartographic information indicates that it is most likely to have been in the mid 1840s. The creation of the farmstead was undertaken at the same time as the demolition of the earlier Wharram Percy farm in the medieval village, and the new Wharram Percy House (as it was called) became the centre of a 900 acre farm. The map and survey plan dating to 1855 suggest that the east fold yard formed the main area for the accommodation of cattle by this date, with shelter sheds along the east and south sides. The newly erected brick buildings around the north and north-west parts of the east fold yard associated with the creation of the farmstead were partly used for stabling and associated functions, and it is likely that the horses and traps for the use of the farmhouse were also accommodate here. The west fold yard may already partly have been given over to the processing and accommodation of feedstuffs and crops.
- 5.7 By the late 19th century, the east fold yard had been reduced in size, and the principal access point almost certainly changed at the same time to the west side. A pump was installed in the north-east corner of the reduced yard, and it seems

likely that much of this area was still given over to the accommodation of horses. As a result of these alterations, a smaller “central” yard was created. This was covered over by 1911, apparently forming part of a pattern of similar alterations undertaken to estate farms during this period in line with wider national developments in agriculture. However, despite changes, some aspects of farm life remained little different to those of the late 19th century, as indicated by the graffiti surviving on the first floor walls of the cart shed. This shares many similarities with that previously recorded at the east end of the north range by Giles and Giles; for example, the tendency for it to be clustered around door and window openings, and the probable sketch portrait of a horse lad in his distinctive working clothes (Giles & Giles 2007, 345). None of the list of names recorded could be explicitly linked to the horse lad community, but some of the activities recorded by the sketches would certainly have involved them; for example, the threshing set drawn on the north wall and dated 1925 would still have been moved to the required location the day before using horses (Nellist und., 14-15). One might also speculate that the heavily-laden wagon and the foaming pint on the north wall are a record of a thirsty day’s work and the eagerly anticipated reward.

- 5.8 Like many other farms on the Yorkshire Wolds, the buildings at Wharram Percy Farm underwent radical alteration in the period after the Second World War. Many of the buildings shown on the historic maps were demolished, and from the south the farm is now dominated by large concrete/steel-framed sheds, although the view from the north still largely preserves its 19th century appearance.

## 6 STATEMENT OF SIGNIFICANCE

- 6.1 The Natural England project brief (see Appendix 4) also required the preparation of a Statement of Significance, which would “assess the structure [of the recorded buildings] from both a local and regional perspective, and comment on the contribution of the building to the local landscape character, public amenity and biodiversity”.
- 6.2 When assessing the significance of the buildings recorded during this project, it is of course impossible (and would also be gravely mistaken) not to consider them as part of the larger surviving Wharram Percy Farm complex, which itself is a part of the wider local and regional landscape. Nevertheless, to start solely with the buildings themselves, both (and in particular the earlier north-south aligned barn) have been subject to significant alteration, particularly in the latter half of the 20th century, and this detracts from their general significance as surviving 18th and 19th century farm buildings. However, as this report has demonstrated, both retain evidence for structural modification driven by changing agricultural practices; in the case of the slightly later east-west aligned cart shed, this not only includes purely structural elements such as roof trusses, or building materials, but also historic graffiti. The significance of the buildings is also enhanced because they do not exist in isolation, but form part of a larger farmstead which, although it too has been subject to much 20th century alteration which caused particularly heavy loss of original yard structures on its south side, it again preserves a variety of structural evidence relating to changing farming methods.
- 6.3 Wharram Percy Farm might, in one respect, be described as “typical” in that it demonstrates the evolution of a Wold high barn into an independent farmstead. However, the comprehension of what a “typical” evolution was has only been possible due to the detailed study of a number of individual such complexes by Hayfield, each of which preserved evidence unique to itself. As has been noted above in the Discussion and Conclusions chapter, even after such detailed study, the Wharram Percy Farm buildings seemingly raise a number of questions regarding historical use of constructional materials and relative developmental chronologies which have yet to be resolved. From a local and a regional perspective, they therefore retain the ability to contribute to an understanding of not only this type of building, but more broadly the changing nature of farming practices and their impact upon the landscape across the Yorkshire Wolds and elsewhere where similar practices may be discerned, for example in Holderness or Norfolk. The former living accommodation of the Wold Ranger in the north-east corner of the yard to the north of the farmstead also contributes to its regional significance. Although no body of published evidence exists to back up any statement regarding scarcity of survival, it is considered highly unlikely that there can be many more such examples of living accommodation which have been left undisturbed and with the Ranger’s possessions still intact. The accommodation was partly photographed as part of this project, but it is to be hoped that it is subject to a more detailed future record as a matter of urgency, particularly while a rich body of oral evidence as to the life of the Ranger is still available amongst estate staff.
- 6.4 In terms of its contribution to local landscape character, the farmstead is surrounded by an agricultural landscape typical of those farmed from such a complex. It retains non-structural elements of its contemporary 19th century agricultural landscape, such as the dewpond and the shelter belt. The latter, although highly necessary in terms of the location of the farmstead, serves the dual purpose of both protecting the farmstead within the local landscape but perhaps



also of diminishing its local landscape character in terms of public amenity. The farmstead is located on private land, and there is currently no public access; the only public “access” that would be possible would be to view the farm from the public road to the north, and the shelter belt prevents this. Should public access to the farmstead be enhanced in the future, then the north side still largely preserves its 19th century appearance. Even on the south side, now dominated by large concrete/steel-framed sheds, the visitor may be surprised to find that on a clear day the farmstead is sufficiently elevated to give a view of Saltend chemical works on the Humber estuary some 45km distant, thus enhancing their understanding of its position within regional topography.

- 6.5 Finally, the farmstead is one of the more recent developments in a local landscape which has been the subject of some of the most intensive historical and archaeological study in the north of England. The scope of this study, which continues today, considerably enhances the local and regional significance of the farmstead, in that it is seen as a part of an ongoing process of landscape development taking place over thousands of years rather than in isolation. As such, it can be better placed within its proper context of historic landscape development than any other similar farmsteads lying outside the area Wharram Percy area.

## 7 BIBLIOGRAPHY

### Primary sources

- 1855 Ordnance Survey 6" to 1 mile map sheet 142 (surveyed 1851)
- 1855 "Plan of a Farm Situate at Wharram Percy belonging to Henry Willoughby Esq and in the Occupation of W S Gofton Surveyed 1855" (Birdsall House Muniments Room Bi M39)
- 1868 Lord Middleton's Estates Accounts November 1st 1868 (Birdsall House Muniments Room)
- 1893 Ordnance Survey 6" to 1 mile map sheet 142SE
- 1911 Ordnance Survey 6" to 1 mile map sheet 142SE

### Secondary sources

Alcock, N W, Barley, M W, Dixon, P W & Meeson, R A 1996 *Recording Timber-Framed Buildings: An Illustrated Glossary* (Council for British Archaeology Practical Handbook in Archaeology No 5)

Antrim, A 1981 *The Yorkshire Wold Rangers*

Barnwell, P & Giles, C 1997 *English Farmsteads 1750-1914*

Beresford, M & Hurst, J 1990 *Wharram Percy Deserted Medieval Village*

Buckley, J & Dennison, E 2005 *Building Recording of Farm and Stable Complex, The Nunnery, Staffield, Penrith, Cumbria* (unpublished Golder Associates (UK) Ltd report for Mr David Hodgkiss)

Campbell, J 2000 "Naming the Parts of Post-Medieval Roof Structures". *Vernacular Architecture* vol 31, 45-51

Curl, J 1977 *English Architecture: An Illustrated Glossary*

Dennison, E & Richardson, S 2002 *High Farm, Throxenby, Scarborough, North Yorkshire: Non-Intrusive Archaeological Survey* (unpublished EDAS report 2002/154.R02 for St Catherine's Hospice Trust)

English Heritage 2006 *Understanding Historic Buildings: A Guide to Good Recording Practice*

Giles, K & Giles, M 2007 "The Writing on the Wall: The Concealed Communities of the East Yorkshire Horselads". *International Journal of Historical Archaeology* vol 11, 336-357

Harris, A 1961 *The Rural Landscape of the East Riding of Yorkshire 1700-1850* (reprinted 1968)

Hayfield, C 1987 *An Archaeological Survey of the Parish of Wharram Percy, East Yorkshire: I The Evolution of the Roman Landscape* (British Archaeological Reports British Series 172)

Hayfield, C 1991 "Manure Factories? The Post-enclosure High Barns of the Yorkshire Wolds". *Landscape History* vol 13, 33-45

Hayfield, C 1995 "Farm Servants' Accommodation on the Yorkshire Wolds". *Folk Life* vol 33, 7-28

Hayfield, C & Wagner, P 1998 "The Use of Chalk as a Building Material on the Yorkshire Wolds". *Vernacular Architecture* vol 29, 1-12

Holloway, M 2009 *Wharram Percy Farm Buildings: Bat and Barn Owl Report* (unpublished EINC report for EDAS)

Nellist, G (und.) *The Yorkshire Wolds of Yesteryear*

Pevsner, N & Neave, D 1995 *The Buildings of England: Yorkshire: York and the East Riding*

RCHME 1987 *Houses of the North York Moors*

Richardson, S 2005 "The Farms in the Park". In Dennison, E (ed) *Within the Pale: The Story of Sheriff Hutton Park*, 234-252

Richardson, S & Dennison, E (forthcoming) *Maltings, Main Street, Thorney, West Yorkshire: Architectural and Archaeological Survey* (unpublished EDAS report )

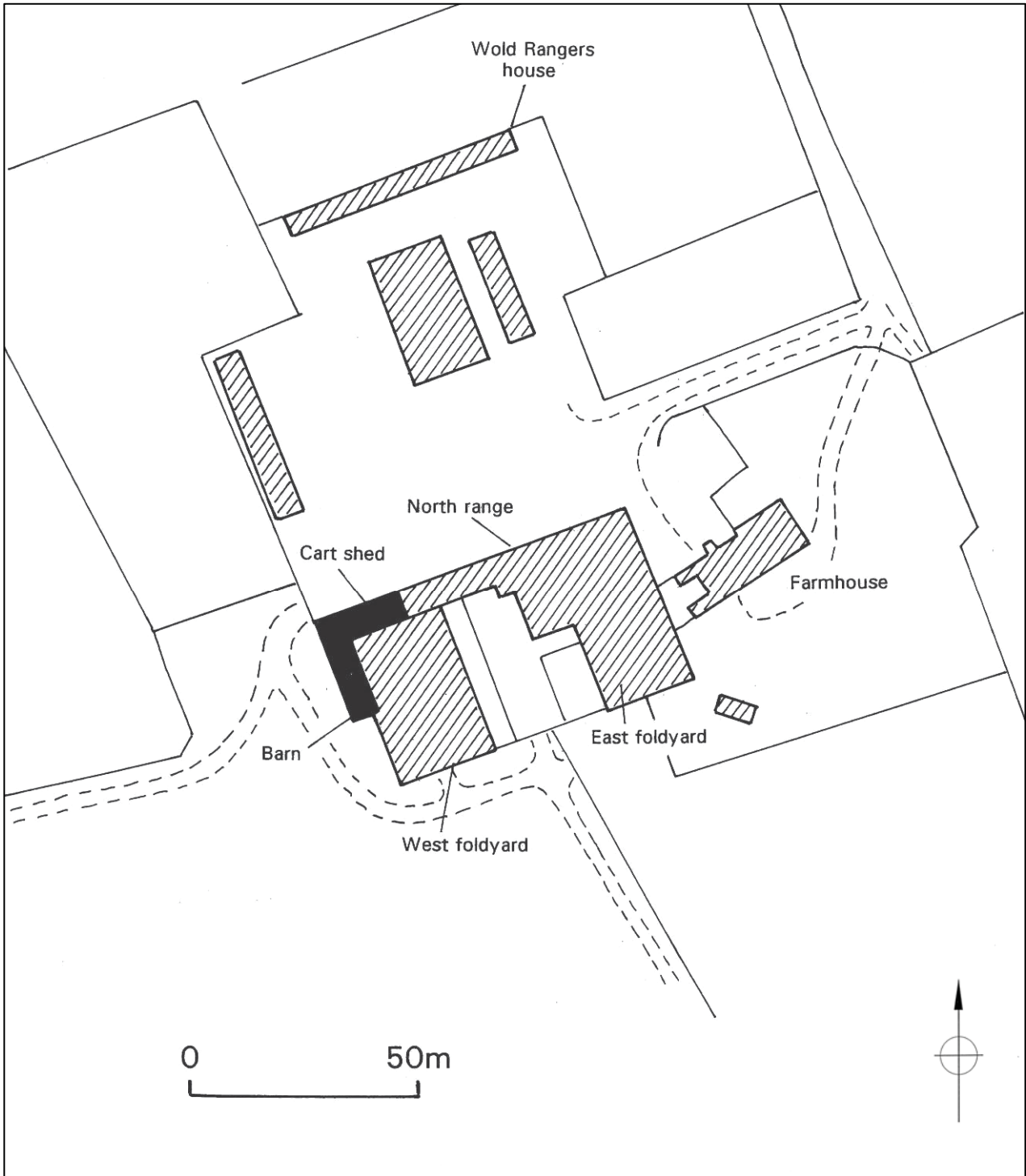
## 8 ACKNOWLEDGEMENTS

- 8.1 The architectural and wildlife survey at Wharram Percy Farm was commissioned by the Birdsall Estates Company Ltd, via the project architect Peter Gaze Pace, and was funded by Natural England. EDAS would like to thank Simon Fairbank, the agent to Birdsall Estates and Dr Margaret Nieke of Natural England for their assistance and co-operation in carrying out the survey work.
- 8.2 The architectural survey was undertaken by Shaun Richardson and Ed Dennison (EDAS) and Richard Lamb; Shaun Richardson produced the site archive and a draft report. The wildlife survey was undertaken by Dr Madeline Holloway of Ecological Information Network Consultants (EINC), and she also produced the stand-alone wildlife report. Thanks are also due to Mr Hoddy the farm manager.
- 8.3 The final report was produced by Ed Dennison of EDAS, with whom the responsibility for any errors remains.



Reproduced from the 1:25,000 scale map by permission of Ordnance Survey® on behalf of The Controller of Her Majesty's Stationery Office. © Crown copyright 2000. All rights reserved. Licence AL100013825

PROJECT	WHARRAM PERCY FARM	
TITLE	GENERAL LOCATION	
SCALE	NTS	DATE MAR 2010
	EDAS	FIGURE 1



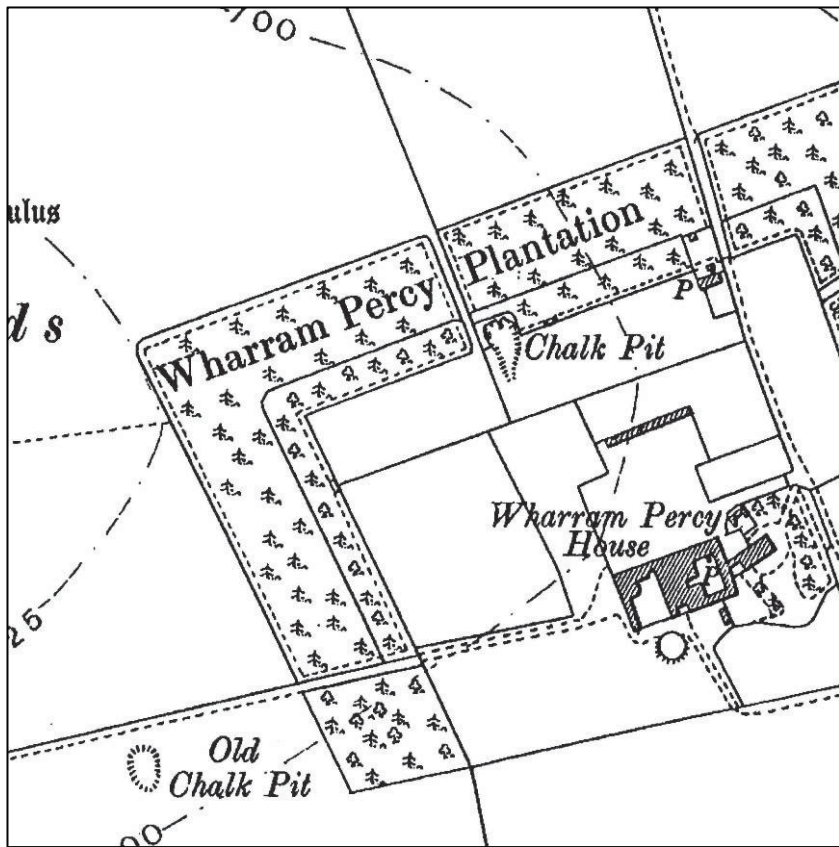
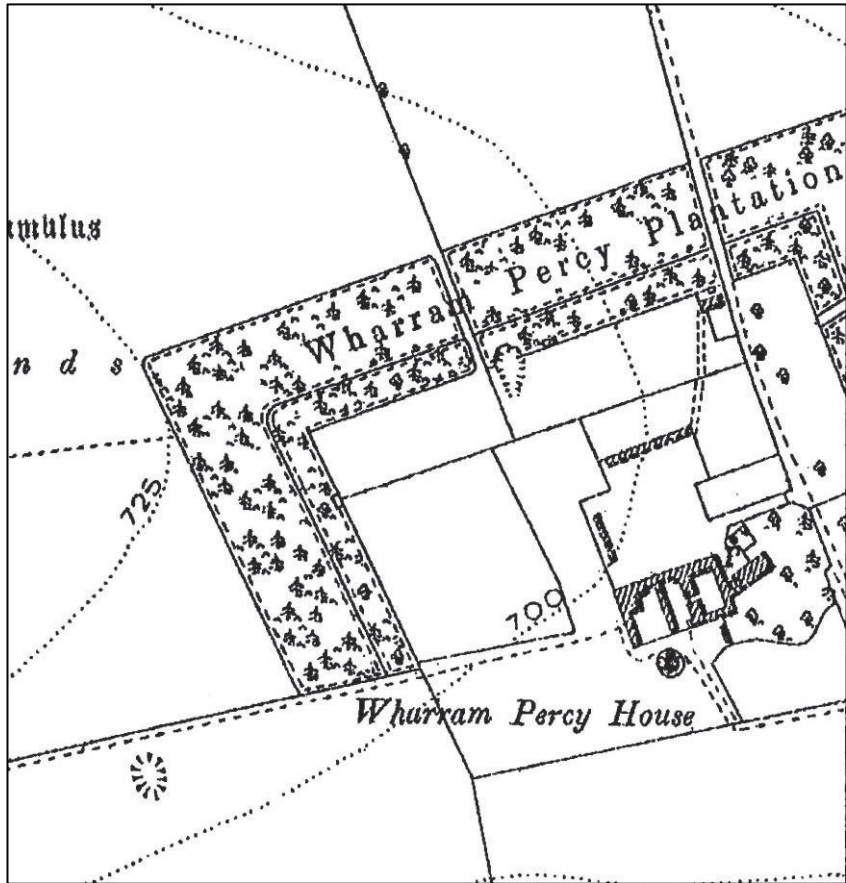
Base plan provided by Birdsall Estates Company Ltd.

PROJECT		WHARRAM PERCY FARM	
TITLE		GENERAL SITE PLAN	
SCALE	AS SHOWN	DATE	MAR 2010
EDAS		FIGURE	2



Source: Ordnance Survey 1855 6" map sheet 142.

PROJECT		WHARRAM PERCY FARM	
TITLE		1855 ORDNANCE SURVEY MAP	
SCALE	NTS	DATE	MAR 2010
EDAS		FIGURE	3



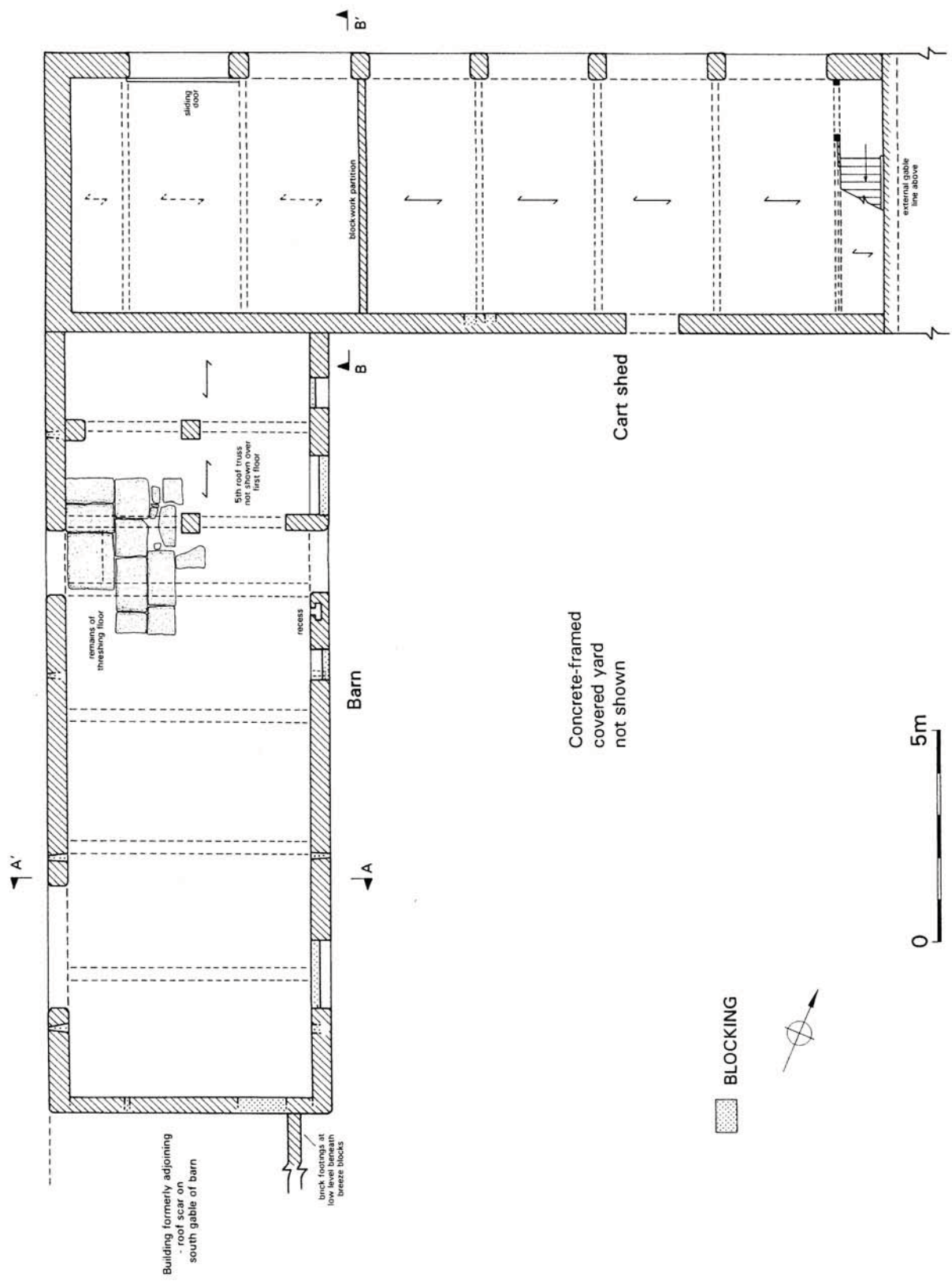
Sources:  
 Top: Ordnance Survey 1893 6" map sheet 142SE.  
 Bottom: Ordnance Survey 1911 6 map sheet 142SE.

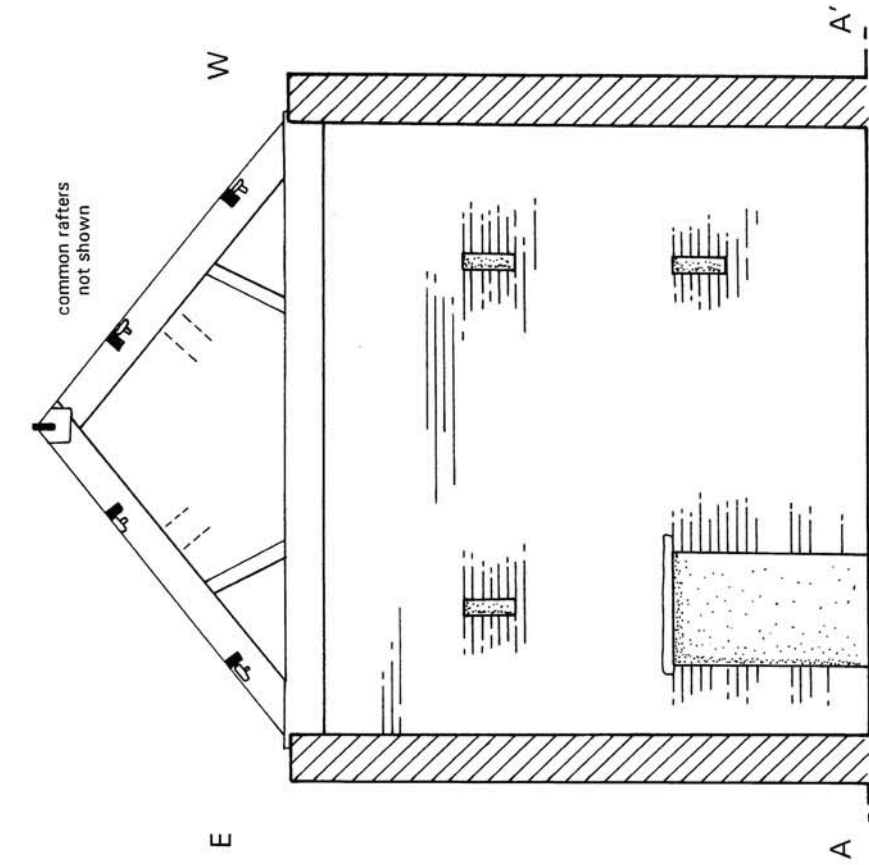


PROJECT		WHARRAM PERCY FARM	
TITLE		HISTORIC MAPS	
SCALE	NTS	DATE	MAR 2010
EDAS		FIGURE	4

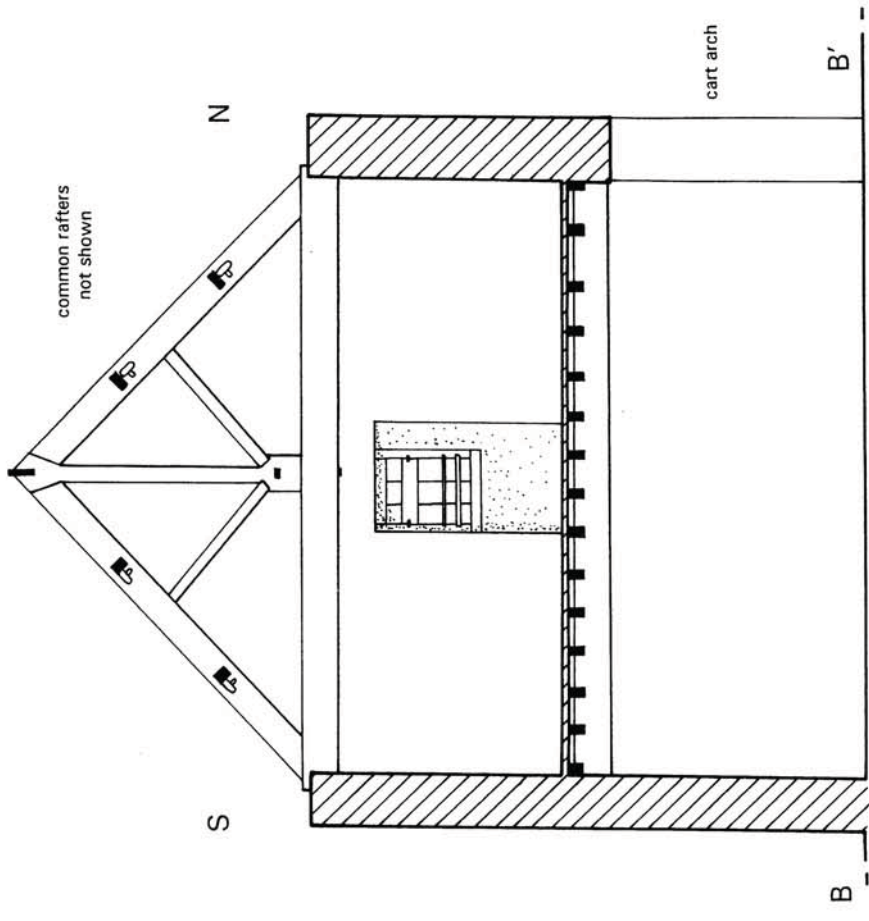


PROJECT	WHARRAM PERCY FARM		
TITLE	CART SHED & BARN: GROUND FLOOR		
SCALE	AS SHOWN	DATE	MAR 2010
	EDAS	FIGURE	5





Section through barn



Section through cart shed



PROJECT	WHARRAM PERCY FARM		
TITLE	CART SHED & BARN: SECTIONS		
SCALE	AS SHOWN	DATE	MAR 2010
	EDAS	FIGURE	6



Plate 1: North elevation of cart shed, looking SW (photo 3/89).



Plate 2: Brick quins and arch detail in north-west corner of cart shed, looking SW (photo 3/92).



Plate 3: Typical roof truss in cart shed, looking W (photo 3/57).



Plate 4: Internal detail of typical window, first floor of cart shed (photo 3/49).



Plate 5: Horse lad sketch graffiti ("Humphrey") on north wall, first floor of cart shed (photo 3/67).



Plate 6: Sketch graffiti of threshing machine and elevator, dated 1925, on north wall, first floor of cart shed (photo 3/64).

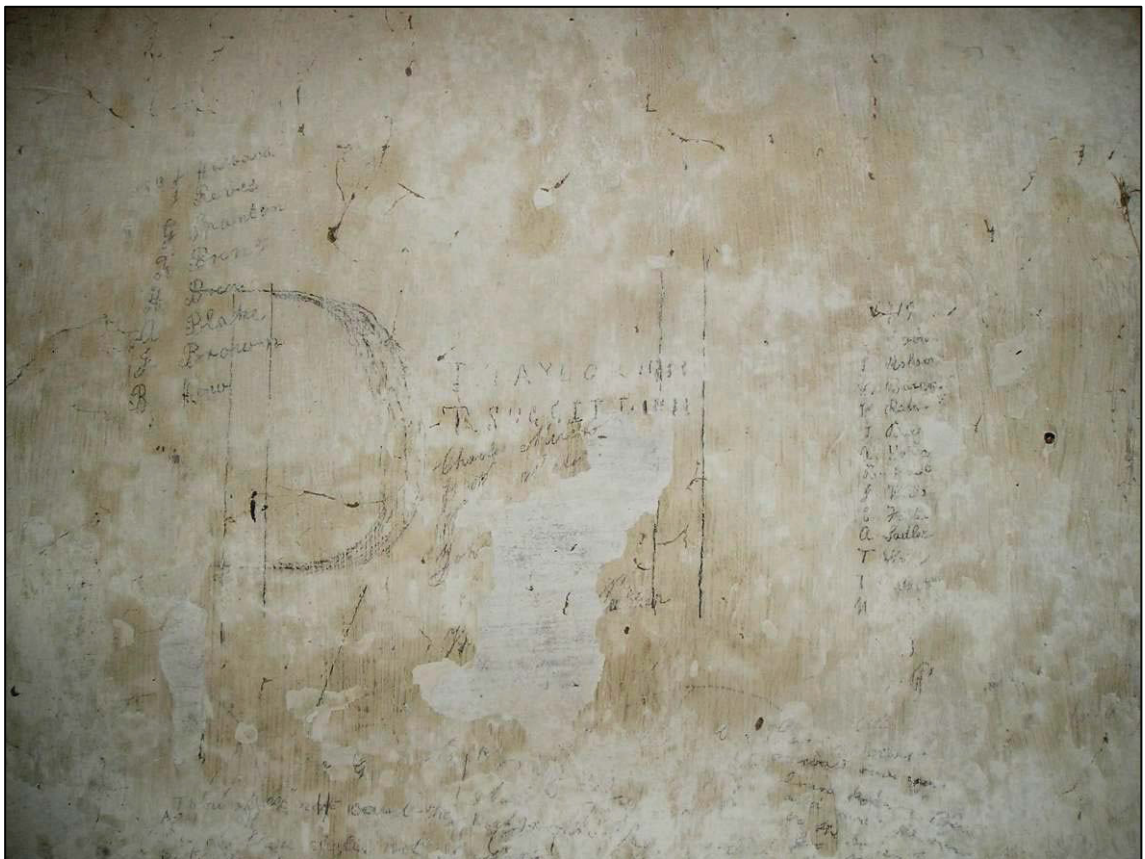


Plate 7: Initialed / named graffiti on south wall, first floor of cart shed (photo 3/75).



Plate 8: South gable and west elevation of barn, looking NE (photo 3/13).



Plate 9: Possible belt drive opening, north end of west elevation of barn, looking E (photo 3/48).



Plate 10: Roof trusses in barn, looking S (photo 3/25).



Plate 11: East part of north range, looking SW (photo 3/98).



Plate 12: Wold Ranger's house (roofed), looking N (photo 3/117).

**APPENDIX 1**  
**PHOTOGRAPHIC RECORD**



## FULL PHOTOGRAPHIC CATALOGUE

Films 1 and 2: 35mm colour photographs taken 23rd July 2009

Film 3: Colour digital photographs taken 25th August 2009

Film	Frame	Subject	Scale
1	2	W part of GF cart shed used as poison store, looking S	1m
1	3	W part of GF cart shed used as poison store, looking SE	1m
1	4	W part of GF cart shed used as poison store, looking E	1m
1	16	Former footings of building to S of barn, looking NW	1m
1	17	Blocked doorway, E elevation of barn, looking W	1m
1	18	Doorway at N end of E elevation of barn and former gable line, looking W	1m
1	19	Blocked window, E elevation of barn, looking W	1m
1	20	Blocked window and former gable line at N end of E elevation of barn, looking W	1m
1	21	Doorway, S elevation of cart shed, looking N	1m
1	22	Typical brick and chalk walling, S elevation of cart shed, looking N	1m
1	23	Doorway in S elevation of building to E of cart shed, looking N	-
1	24	Doorway in S elevation of building to E of cart shed, looking NW	-
1	25	E elevation of barn, looking W	1m
2	5	S boundary wall of W foldyard, looking SW	-
2	6	Interior of shed over W foldyard, looking NW	-
3	12	S gable of barn showing shadow of building, looking N	1m
3	13	S gable and W elevation of barn, looking NE	1m
3	14	S gable of barn showing shadow of building, looking N	1m
3	15	Interior S wall of barn, looking S	1m
3	16	Interior of barn, looking N	1m
3	17	Roof trusses, interior of barn, looking N	-
3	18	Interior E wall of barn, looking NE	1m
3	19	Interior E wall of barn, looking NE	1m
3	20	Doorway, interior E wall of barn, looking E	1m
3	21	Threshing floor, interior of barn, looking E	1m
3	22	Threshing floor, interior of barn, looking E	1m
3	23	N interior wall of barn, looking N	1m
3	24	Blocked window at north end of E wall of barn, looking E	1m
3	25	Roof trusses, interior of barn, looking S	-
3	26	Roof trusses, interior of barn, looking S	-
3	27	W interior wall of barn, looking NW	1m
3	28	W interior wall of barn, blocking / rebuild over sliding door, looking W	-
3	29	W interior wall of barn, blocking / rebuild over sliding door, looking W	1m
3	30	Doorway in S elevation of building to E of cart shed, looking NW	1m
3	31	S elevation of central part of N range and dividing wall of fold yards, looking N	-
3	32	W elevation of dividing wall of fold yards, looking NE	-
3	33	Interior of central part of N range, looking W	1m
3	34	Interior of central part of N range, looking E	1m
3	35	S elevation of N range at meeting point of central and E parts, looking NE	1m
3	36	S elevation of N range at meeting point of central and E parts, looking NE	1m
3	37	Shelter shed, E foldyard, looking NE	1m
3	38	E elevation of dividing wall of fold yards, looking NW	1m
3	39	E elevation of dividing wall of fold yards, looking SW	1m
3	40	S boundary wall of E fold yard, looking S	-
3	41	S boundary wall of E fold yard, looking SE	-
3	42	S boundary wall of E fold yard, S elevation, looking N	1m
3	43	S boundary wall of W fold yard, looking NW	1m
3	44	Former dew pond, looking SW	1m
3	45	W elevation of barn, looking E	1m
3	46	W elevation of barn (S end), looking E	1m
3	47	W elevation of barn (N end), looking E	1m
3	48	Possible belt drive opening, W elevation of barn, looking E	-
3	49	Typical window (internal), 1F cart shed, looking N	0.30m
3	50	1F cart shed, W interior wall and corner truss, looking W	1m

3	51	1F cart shed, corner truss, looking W	-
3	52	1F cart shed, corner truss, looking NW	-
3	53	Incised timber mark, 1F cart shed, 3rd truss from W end, E face, looking W	-
3	54	Pencilled timber mark, 1F cart shed, 3rd truss from W end, W face, looking E	-
3	55	Pencilled timber mark, 1F cart shed, 2nd truss from W end, W face, looking E	-
3	56	1F cart shed, typical roof truss, looking SE	-
3	57	1F cart shed, typical roof truss, looking W	-
3	58	1F cart shed, doorway to N interior wall, looking N	1m
3	59	1F cart shed, looking NW	1m
3	60	1F cart shed, looking SE	1m
3	61	1F cart shed, looking E towards stairs	1m
3	62	1F cart shed, looking N down stairs	1m
3	63	1F cart shed, looking N down stairs	1m
3	64	1F cart shed, threshing sketch graffiti N wall, looking N	0.30m
3	65	1F cart shed, threshing sketch graffiti N wall, looking N	0.30m
3	66	1F cart shed, horse lad sketch graffiti N wall, looking N	0.30m
3	67	1F cart shed, horse lad sketch graffiti N wall, looking N	0.30m
3	68	1F cart shed, barley tally graffiti N wall, looking N	0.30m
3	69	1F cart shed, pint and wagon sketch graffiti N wall, looking N	0.30m
3	70	1F cart shed, pint and wagon sketch graffiti N wall, looking N	0.30m
3	71	1F cart shed, pint and wagon sketch graffiti N wall, looking N	-
3	72	1F cart shed, wagon sketch graffiti N wall, looking N	0.30m
3	73	1F cart shed, bottle / jug sketch graffiti S wall, looking S	0.30m
3	74	1F cart shed, initialled graffiti S wall, looking S	0.30m
3	75	1F cart shed, initialled / named graffiti S wall, looking S	-
3	76	1F cart shed, initialled / named graffiti S wall, looking S	-
3	78	1F cart shed, head sketch graffiti S wall, looking S	0.30m
3	79	1F cart shed, head sketch graffiti S wall, looking S	0.30m
3	80	Incised timber marks, interior N end of barn, looking E	-
3	81	Incised timber marks, interior N end of barn, looking N	-
3	82	Incised timber marks, interior N end of barn, looking N	-
3	83	Elevated walkway, NE corner of barn interior, looking NE	-
3	84	Joists, N end of barn interior, looking NW	-
3	85	GF cart shed, looking E	1m
3	86	GF cart shed, SE corner showing contrasting walling, looking E	1m
3	87	GF cart shed, looking SE	1m
3	88	N elevation of cart shed, looking S	1m
3	89	N elevation of cart shed, looking SW	1m
3	90	Typical arch, N elevation of cart shed, looking S	1m
3	91	Brick quoins at NW corner, N elevation of cart shed, looking SW	1m
3	92	Brick quoins at NW corner, N elevation of cart shed, looking SW	1m
3	93	N range of farm, N elevation, looking SE	-
3	94	N elevation of cart shed and central part of N range, looking SW	-
3	95	Central part of N range of farm, N elevation, looking S	-
3	96	E part of N range of farm, N elevation, looking SE	-
3	97	E part of N range of farm, N elevation, looking SW	-
3	98	E part of N range of farm, N elevation, looking SW	-
3	99	Farmhouse, looking S	-
3	100	W elevation of N range of farm, looking W	-
3	101	Prize certificates, W wall of tack room, E range of farm, looking W	-
3	102	Tack pegs and storage, S wall of tack room, E range of farm, looking S	-
3	103	Tack pegs and storage, S wall of tack room, E range of farm, looking S	-
3	104	Fireplace and cabinet, tack room, E range of farm, looking S	-
3	105	Stall partition and manger, E range of farm, looking W	-
3	106	Former E boundary wall of E stock yard, looking SE	-
3	107	Farmhouse, looking N	-
3	108	General view of modern sheds from S, looking NW	-
3	109	N elevation of cart shed, looking S	-
3	110	Interior of Wold Ranger house, looking NE	-
3	111	Interior of Wold Ranger house, looking NE	-
3	112	Interior of Wold Ranger house, looking S	-
3	113	Interior of Wold Ranger house, looking SE	-
3	114	Interior of Wold Ranger house, doorway, looking E	-
3	115	Interior of Wold Ranger house, looking N	-

3	116	Wold Ranger house, looking NE	-
3	117	Wold Ranger house, looking N	-

## CART SHED AND BARN PHOTOGRAPHIC CATALOGUE

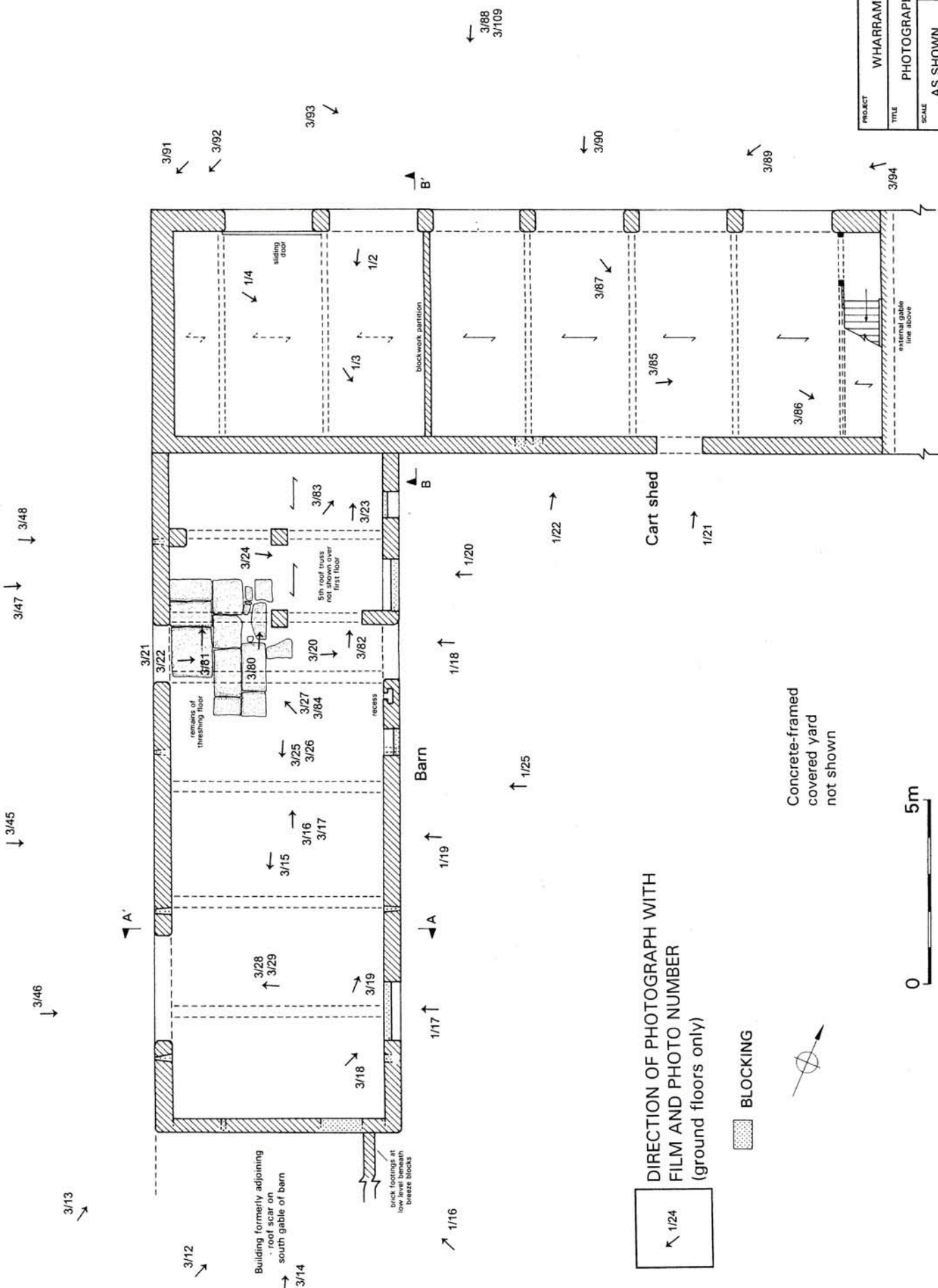
Films 1 and 2: 35mm colour photographs taken 23rd July 2009

Film 3: Colour digital photographs taken 25th August 2009

Film	Frame	Subject	Scale
1	2	W part of GF cart shed used as poison store, looking S	1m
1	3	W part of GF cart shed used as poison store, looking SE	1m
1	4	W part of GF cart shed used as poison store, looking E	1m
1	17	Blocked doorway, E elevation of barn, looking W	1m
1	18	Doorway at N end of E elevation of barn and former gable line, looking W	1m
1	19	Blocked window, E elevation of barn, looking W	1m
1	20	Blocked window and former gable line at N end of E elevation of barn, looking W	1m
1	21	Doorway, S elevation of cart shed, looking N	1m
1	22	Typical brick and chalk walling, S elevation of cart shed, looking N	1m
1	24	Doorway in S elevation of building to E of cart shed, looking NW	-
1	25	E elevation of barn, looking W	1m
3	12	S gable of barn showing shadow of building, looking N	1m
3	13	S gable and W elevation of barn, looking NE	1m
3	14	S gable of barn showing shadow of building, looking N	1m
3	15	Interior S wall of barn, looking S	1m
3	16	Interior of barn, looking N	1m
3	17	Roof trusses, interior of barn, looking N	-
3	18	Interior E wall of barn, looking NE	1m
3	19	Interior E wall of barn, looking NE	1m
3	20	Doorway, interior E wall of barn, looking E	1m
3	21	Threshing floor, interior of barn, looking E	1m
3	22	Threshing floor, interior of barn, looking E	1m
3	23	N interior wall of barn, looking N	1m
3	24	Blocked window at north end of E wall of barn, looking E	1m
3	25	Roof trusses, interior of barn, looking S	-
3	26	Roof trusses, interior of barn, looking S	-
3	27	W interior wall of barn, looking NW	1m
3	28	W interior wall of barn, blocking / rebuild over sliding door, looking W	-
3	29	W interior wall of barn, blocking / rebuild over sliding door, looking W	1m
3	45	W elevation of barn, looking E	1m
3	46	W elevation of barn (S end), looking E	1m
3	47	W elevation of barn (N end), looking E	1m
3	48	Possible belt drive opening, W elevation of barn, looking E	-
3	49	Typical window (internal), 1F cart shed, looking N	0.30m
3	50	1F cart shed, W interior wall and corner truss, looking W	1m
3	51	1F cart shed, corner truss, looking W	-
3	52	1F cart shed, corner truss, looking NW	-
3	53	Incised timber mark, 1F cart shed, 3rd truss from W end, E face, looking W	-
3	54	Pencilled timber mark, 1F cart shed, 3rd truss from W end, W face, looking E	-
3	55	Pencilled timber mark, 1F cart shed, 2nd truss from W end, W face, looking E	-
3	56	1F cart shed, typical roof truss, looking SE	-
3	57	1F cart shed, typical roof truss, looking W	-
3	58	1F cart shed, doorway to N interior wall, looking N	1m
3	59	1F cart shed, looking NW	1m
3	60	1F cart shed, looking SE	1m
3	61	1F cart shed, looking E towards stairs	1m
3	62	1F cart shed, looking N down stairs	1m
3	63	1F cart shed, looking N down stairs	1m
3	64	1F cart shed, threshing sketch graffiti N wall, looking N	0.30m
3	65	1F cart shed, threshing sketch graffiti N wall, looking N	0.30m
3	66	1F cart shed, horse lad sketch graffiti N wall, looking N	0.30m
3	67	1F cart shed, horse lad sketch graffiti N wall, looking N	0.30m
3	68	1F cart shed, barley tally graffiti N wall, looking N	0.30m
3	69	1F cart shed, pint and wagon sketch graffiti N wall, looking N	0.30m
3	70	1F cart shed, pint and wagon sketch graffiti N wall, looking N	0.30m

3	71	1F cart shed, pint and wagon sketch graffiti N wall, looking N	-
3	72	1F cart shed, wagon sketch graffiti N wall, looking N	0.30m
3	73	1F cart shed, bottle / jug sketch graffiti S wall, looking S	0.30m
3	74	1F cart shed, initialled graffiti S wall, looking S	0.30m
3	75	1F cart shed, initialled / named graffiti S wall, looking S	-
3	76	1F cart shed, initialled / named graffiti S wall, looking S	-
3	78	1F cart shed, head sketch graffiti S wall, looking S	0.30m
3	79	1F cart shed, head sketch graffiti S wall, looking S	0.30m
3	80	Incised timber marks, interior N end of barn, looking E	-
3	81	Incised timber marks, interior N end of barn, looking N	-
3	82	Incised timber marks, interior N end of barn, looking N	-
3	83	Elevated walkway, NE corner of barn interior, looking NE	-
3	84	Joists, N end of barn interior, looking NW	-
3	85	GF cart shed, looking E	1m
3	86	GF cart shed, SE corner showing contrasting walling, looking E	1m
3	87	GF cart shed, looking SE	1m
3	88	N elevation of cart shed, looking S	1m
3	89	N elevation of cart shed, looking SW	1m
3	90	Typical arch, N elevation of cart shed, looking S	1m
3	91	Brick quoins at NW corner, N elevation of cart shed, looking SW	1m
3	92	Brick quoins at NW corner, N elevation of cart shed, looking SW	1m
3	93	N range of farm, N elevation, looking SE	-
3	94	N elevation of cart shed and central part of N range, looking SW	-
3	109	N elevation of cart shed, looking S	-

PROJECT	WHARRAM PERCY FARM		
TITLE	PHOTOGRAPHIC LOCATIONS		
SCALE	AS SHOWN	DATE	MAR 2010
	EDAS	FIGURE	AP1/1



DIRECTION OF PHOTOGRAPH WITH  
FILM AND PHOTO NUMBER  
(ground floors only)

BLOCKING



Concrete-framed  
covered yard  
not shown





1-002.jpg



1-003.jpg



1-004.jpg



1-016.jpg



1-017.jpg



1-018.jpg



1-019.jpg



1-020.jpg



1-021.jpg



1-022.jpg



1-023.jpg



1-024.jpg



1-025.jpg



2-005.jpg



2-006.jpg



3-012.JPG



3-013.JPG



3-014.JPG



3-015.JPG



3-016.JPG



3-017.JPG



3-018.JPG



3-019.JPG



3-020.JPG



3-021.JPG



3-022.JPG



3-023.JPG



3-024.JPG



3-025.JPG



3-026.JPG





3-027.JPG



3-028.JPG



3-029.JPG



3-030.JPG



3-031.JPG



3-032.JPG



3-033.JPG



3-034.JPG



3-035.JPG



3-036.JPG



3-037.JPG



3-038.JPG



3-039.JPG



3-040.JPG



3-041.JPG



3-042.JPG



3-043.JPG



3-044.JPG



3-045.JPG



3-046.JPG



3-047.JPG



3-048.JPG



3-049.JPG



3-050.JPG



3-051.JPG



3-052.JPG



3-053.JPG



3-054.JPG



3-055.JPG



3-056.JPG



3-057.JPG



3-058.JPG



3-059.JPG



3-060.JPG



3-061.JPG



3-062.JPG



3-063.JPG



3-064.JPG



3-065.JPG



3-066.JPG



3-067.JPG



3-068.JPG



3-069.JPG



3-070.JPG



3-071.JPG



3-072.JPG



3-073.JPG



3-074.JPG



3-075.JPG



3-076.JPG



3-078.JPG



3-079.JPG



3-080.JPG



3-081.JPG



3-082.JPG



3-083.JPG



3-084.JPG



3-085.JPG



3-086.JPG



3-087.JPG



3-088.JPG



3-089.JPG



3-090.JPG



3-091.JPG



3-092.JPG



3-093.JPG



3-094.JPG



3-095.JPG



3-096.JPG



3-097.JPG



3-098.JPG



3-099.JPG



3-100.JPG



3-101.JPG



3-102.JPG



3-103.JPG



3-104.JPG



3-105.JPG



3-106.JPG



3-107.JPG



3-108.JPG



3-109.JPG



3-110.JPG



3-111.JPG



3-112.JPG



3-113.JPG



3-114.JPG



3-115.JPG



3-116.JPG



3-117.JPG

**APPENDIX 2**  
**BAT AND BARN OWL REPORT**



---

**WHARRAM PERCY FARM BUILDINGS**

**Bat and Barn Owl Report**

**October 2009**

---





# BAT AND BARN OWL REPORT

## Wharram Percy Farm Buildings

<b>1</b>	<b>INTRODUCTION.....</b>	<b>1</b>
1.1	BACKGROUND TO ACTIVITY .....	1
1.2	LEGISLATION .....	1
<b>2</b>	<b>SURVEY AND RESULTS .....</b>	<b>2</b>
2.1	STATUS OF BAT SPECIES AND BARN OWLS IN THE LOCAL/REGIONAL AREA .....	2
2.2	SURVEY AREA .....	3
2.3	HABITAT DESCRIPTION .....	3
2.4	FIELD SURVEY.....	4
2.5	SURVEY RESULTS .....	5
2.6	INTERPRETATION/EVALUATION OF SURVEY RESULTS .....	9
<b>3</b>	<b>IMPACT ASSESSMENT IN ABSENCE OF MITIGATION .....</b>	<b>10</b>
3.1	SHORT-TERM IMPACTS: DISTURBANCE .....	10
3.2	LONG-TERM IMPACTS: ROOST MODIFICATION AND/OR LOSS .....	10
3.3	PREDICTED SCALE OF IMPACT.....	10
<b>4</b>	<b>RECOMMENDED MITIGATION MEASURES .....</b>	<b>11</b>
4.1	MITIGATION STRATEGY.....	11
<b>6</b>	<b>REFERENCES.....</b>	<b>13</b>

### FIGURES

FIGURE 1	AERIAL PHOTO AND LOCATION OF WHARRAM PERCY FARM BUILDINGS (WHARRAM BARNS)
FIGURE 2	HABITAT SURVEY OF IMMEDIATE LAND SURROUNDING WHARRAM PERCY FARM BUILDINGS
FIGURE 3	SKETCH PLAN OF BARN A AND BARN B

### PLATES

PLATE 1	WHARRAM PERCY FARM BUILDINGS – BARN A (NORTHERN ELEVATION)
PLATE 2	CREVICES FOR BAT ENTRY INTO POTENTIAL BAT ROOSTS WITHIN THE STONE WALL OF BARN A (NORTHERN ELEVATION)
PLATE 3	POTENTIAL BAT ROOST BETWEEN THE ROOF MEMBRANE, STRINGCOURSE AND WALL OF BARN A (NORTHERN ELEVATION)
PLATE 4	LOCATION OF A COMMON PIPISTRELLE BAT ROOST WITHIN THE FIRST FLOOR OF BARN A
PLATE 5	CLOSE-UP OF THE BAT ROOST – WITH BAT DROPPINGS VISIBLE JUST BELOW THE CORRUGATED SHEET ROOF
PLATE 6	MAIN BAT ROOST ENTRANCE WITHIN THE FIRST FLOOR OF BARN A

## **1 INTRODUCTION**

### **1.1 Background to activity**

1.1.1 At the request of Ed Dennison Archaeological Services (EDAS), EINC was commissioned in July 2009 to undertake a summer bat and barn owl survey of two barns at Wharram Percy Farm, Birdsall Estate, North Yorkshire. The L-shaped barn buildings considered for repair (known as Barn A and Barn B in this report), are one of a number of historic farmsteads on the Birdsall Estate still in agricultural use. The work required to bring the buildings back to good repair has not yet been fully identified but is likely to include both roof and wall renovations.

1.1.2 The objectives of the surveys were to provide the information required for an evaluation of bat species and barn owls within the barns and immediate vicinity. This was to be used to help identify and assess the nature conservation interest of the buildings and inform the likely impact(s) of any proposed barn repair works.

### **1.2 Legislation**

#### *Bats*

1.2.1 All species of bats are protected under The Wildlife and Countryside Act 1981 and the Conservation (Natural Habitats, &c.) Regulations 1994. Under this legislation it is an offence for any person to intentionally kill, injure or take any wild bat; to intentionally disturb any wild bat while it is occupying a structure or place that it uses for shelter or protection; to intentionally damage, destroy or obstruct access to any place that a wild bat uses for shelter or protection; to be in possession or control of any live or dead wild bat, or any part of, or anything derived from a wild bat; or to sell, offer or expose for sale, or possess or transport for the purpose of sale, any live or dead wild bat, or any part of, or anything derived from a wild bat.

1.2.2 The Countryside and Rights of Way Act 2000 amends the Wildlife and Countryside Act to also make it an offence to intentionally or recklessly damage, destroy or obstruct a place that bats use for shelter or protection.

#### *Barn owls*

1.2.3 Within the Wildlife and Countryside Act 1981 (as amended), barn owls are listed on Schedule 1. Under this legislation it is an offence for any person to intentionally kill, injure or take any wild barn owl; intentionally take, damage or destroy any wild barn owl nest whilst in use or being 'built'; intentionally take or destroy a wild barn owl egg; have in one's possession or control a wild barn owl (dead or alive), or egg, (unless one can show that it was obtained legally); intentionally or recklessly disturb any wild barn owl whilst 'building' a nest or whilst in, on, or near a nest containing eggs or young; and intentionally or recklessly disturb any dependent young of wild barn owls

1.2.4 Anyone found guilty of an offence is liable to a fine of up to £5000 or to imprisonment for a term not exceeding six months, or both. The species is relatively abundant within some areas of Yorkshire. On a national scale it is

listed on the RSPB's amber list, classed as a species that has undergone a moderate (25-49%) contraction of UK breeding range over the last 25 years and a species with unfavourable conservation status in Europe.

## 2 SURVEY AND RESULTS

### 2.1 Status of bat species and barn owls in the local/regional area

2.2.1 The barns at Wharram Percy Farm are within the natural range of species of bats listed in Table 1.

**Table 1** Bat species within 100km of the barns at Wharram Percy Farm

Species	National status
Common pipistrelle <i>Pipistrellus pipistrellus</i>	Widespread and common
Soprano pipistrelle <i>Pipistrellus pygmaeus</i>	Widespread and common
Noctule <i>Nyctalus noctula</i>	Widespread but uncommon
Leisler's bat <i>Nyctalus leisleri</i>	Widespread but rare
Brown long-eared bats <i>Plecotus auritus</i>	Widespread and common
Natterer's bat <i>Myotis nattereri</i>	Widespread but frequent
Daubenton's bats <i>Myotis daubentonii</i>	Widespread and common
Whiskered bats <i>Myotis mystacinus</i>	Widespread but scarce
Brandt's bats <i>Myotis brandtii</i>	Widespread but scarce

2.2.2 Records received from the North Yorkshire Bat Group are summarised in Table 2.

**Table 2** Bat species records received from North Yorkshire Bat Group within 2km radius of the barns at Wharram Percy Farm

Species	Site	Grid ref.	Date	Comment
Pipistrelle species	1 Salents Cottage, Birdsall	SE820652	12 Oct 2004	Summer Roost
Pipistrelle species	Wharram Percy church	SE858642	1997	
Brown Long-eared Bat	Burdale Tunnel	SE862644	1996	
Daubenton's Bat	Burdale Tunnel	SE862644	1996	
Whiskered Bat	Burdale Tunnel (Wharram section)	SE862645	17 Jan 1999	Hibenaculum
Daubenton's Bat	Burdale Tunnel (Wharram section)	SE862645	06 Jan 2008	Not recorded
Brown Long-eared Bat	Burdale Tunnel (Wharram section)	SE862645	07 Jan 2007	Hibenaculum
Natterer's Bat	Burdale Tunnel (Wharram section)	SE862645	07 Jan 2007	Hibenaculum

**BAT REPORT**  
**Wharram Percy Farm Buildings, Birdsall Estate**

Brown Long-eared Bat	Burdale Tunnel (Wharram section)	SE862645	09 Jan 2005	Hibernaculum
Brandt's Bat	Burdale Tunnel (Wharram section)	SE862645	16 Jan 2000	Hibernaculum
Brandt's Bat	Burdale Tunnel (Wharram section)	SE862645	17 Jan 1999	Hibernaculum
Brown Long-eared Bat	Burdale Tunnel (Wharram section)	SE862645	16 Jan 2000	Hibernaculum
Brown Long-eared Bat	Burdale Tunnel (Wharram section)	SE862645	20 Jan 2002	Hibernaculum
Brown Long-eared Bat	Burdale Tunnel (Wharram section)	SE862645	19 Jan 2003	Hibernaculum
Brown Long-eared Bat	Burdale Tunnel (Wharram section)	SE862645	08 Jan 2006	Hibernaculum
Brown Long-eared Bat	Burdale Tunnel (Wharram section)	SE862645	17 Jan 1999	Hibernaculum
Brown Long-eared Bat	Burdale Tunnel (Wharram section)	SE862645	06 Jan 2008	Hibernaculum
Whiskered / Brandt's Bat	Burdale Tunnel (Wharram section)	SE862645	08 Jan 2006	Hibernaculum
Whiskered / Brandt's Bat	Burdale Tunnel (Wharram section)	SE862645	06 Jan 2008	Hibernaculum
Pipistrelle species	The Bungalow, Wharram le Street	SE8665	23 Dec 1986	Bats in residence all year

2.2.3 Table 2 mostly provides records of a winter hibernaculum bat roost at Burdale Tunnel for brown long-eared bats *Plecotus auritus*, whiskered bats *Myotis mystacinus*, Brandt's bats *Myotis brandtii*, whiskered/brandt's bats *Myotis mystacinus / brandtii*, daubenton's bats *Myotis daubentonii* and natterer's bats *Myotis nattereri*. Otherwise, only pipistrelle bats *Pipistrellus spp.* have been recorded within a 2km radius of the site.

2.2.4 At the time of writing the report specific data on bats and barn owls within a 2km radius of the site is awaited from the North and East Yorkshire Ecological Data Centre (NEYEDC).

## 2.2 Survey area

2.2.1 The location of Barns A and B at Wharram Percy Farm, Birdsall Estate, North Yorkshire, are shown in the aerial photograph of Figure 1 and they occur at Grid Reference SE 846 636. As noted in paragraph 1.1.1, for descriptive purposes the barns are labelled Barn A and Barn B, as illustrated in Figures 2 and 3.

## 2.3 Habitat description

2.3.1 The Wharram Percy Farm buildings surround a stone yard, to the west of Wharram Percy House, which is a Grade 11 listed and early-mid 19<sup>th</sup> C building (Figure 2). A brief walk-over survey undertaken on 8<sup>th</sup> August 2009 recorded hawthorn *Crataegus monogyna* hedges along some of the species-poor, cattle-grazed, pastures that border the buildings. Occasional mature

sycamore *Acer pseudoplatanus* and ash *Fraxinus excelsior* also occurred either within the hedges and/or within the pastures.

2.3.2 The relatively small, cattle-grazed pastures were surrounded by blocks of high-forest woodland plantations approximately 150m to the north, west and east of the buildings. The even-aged plantations were dominated by mature beech *Fagus sylvatica* with more occasional ash *Fraxinus excelsior*, larch *Larix decidua*, cherry *Prunus spp.* and elder *Sambucus nigra*. The woodland to the west of Wharram Percy House had frequent additional trees and shrubs, including sycamore *Acer pseudoplatanus* and holly *Ilex aquifolium*. The buildings otherwise sat within a sea of large arable fields which had little ecological value, as shown in the aerial photo of Figure 1. Nevertheless, the woodland blocks, individual mature trees and hawthorn hedges are host to numerous insects and are therefore an important food source for bats.

## **2.4 Field Survey**

### *Bats Methodology – daytime inspection*

2.4.1 A daytime external and internal inspection for bats at Barns A and B (Figures 2 and 3), was undertaken on the 6<sup>th</sup> and 7<sup>th</sup> August 2009. In August bats are likely to be using their summer roosts and evidence of their presence therefore includes:

- Presence of bats – bats may be recorded roosting in small cracks within the external or internal brick/stone walls of the buildings and/or retaining wall(s), at the junction of wall(s) with ceiling(s), window and/or door lintels and adjacent brickwork/stonework.
- Staining – where sites are used heavily by bats the brick/stone around the roost entrance may become stained with oil from the bats fur. Scratches on the brick/stone worn smooth by the passage of bodies would also be used as evidence where this was attributable to bats rather than roosting or nesting birds.
- Droppings – bat droppings in crevices, stuck to walls below suitable crevices, and on the ground below suitable crevices. However, droppings may have been washed away by rain and bad weather, which occurred prior to the survey.

2.4.2 Each part of Barns A and B were systematically searched for bats, bat droppings and any other signs beneath potential bat roost sites. Accessible cracks for bats were examined with the use of a Clulite Lamp (1,000,000 candle power). Ladders were used to access the various crevices between the walls as well as parts of the pitched roofs.

### *Bats Methodology - dusk emergence survey*

2.4.3 A dusk emergence survey was undertaken on the 6<sup>th</sup> August 2009 by three surveyors. The first surveyor was located within the first floor of Barn A, the second surveyor located to the north of Barn A and the third surveyor located to the south of Barn B. The third surveyor was positioned so that they also had a good view of the western elevations of Barns A and B respectively.

Unfortunately, however, the very close proximity of the barns to a large cattle shed precluded any useful external views of the elevations on the southern and eastern elevations of Barns A and B respectively.

- 2.4.4 Batbox Duet detectors were used to aid bat identification. The advantage of the Batbox Duet is that bat calls at different frequencies can all be picked up at the same time. For further identification, the surveyors also recorded the echo-locations of bats that were picked up by the Batbox Duets into Edirol R-09HR players, and these were then saved in a series of 3 minute wave files for the duration of the survey. The dusk emergence survey was undertaken between 30 minutes before sunset until approximately 1.5 hours after sunset although, in this case (as noted in paragraph 2.4.4) the survey was foreshortened by heavy rain. The primary aim was to observe whether any bats emerged from any part of the barns.
- 2.4.5 The aim of the detectors was also to record the foraging activity of all species of bats in the vicinity of the barns. These are generally the common pipistrelle *Pipistrellus pipistrellus*, soprano pipistrelle *P. pygmaeus*, *Myotis* spp. (these include Daubenton's bat, *Myotis daubentonii*, Natterer's bat *Myotis nattereri*, Whiskered bat *Myotis mystacinus*, Brandt's bat *Myotis brandtii*, and Bechstein's bat *Myotis bechsteini*), Noctule bat *Nyctalus noctula*, Leisler's bat *N. leslerii* and Brown long-eared bat *Plecotus auritus*.
- 2.4.6 All the survey work was supervised by Dr. Madeline Holloway (Licence No. 20091763). The weather on the evening of 6<sup>th</sup> August was overcast with very light rain. Nevertheless it was relatively warm (15<sup>o</sup>C), there was little wind and sunset was at 20.51. Unfortunately, however, heavy rain set in at approximately one hour after sunset and the survey had to be curtailed at this time (21.51).

#### *Barn Owls Methodology*

- 2.4.7 The buildings were searched for barn owls, barn owl droppings, pellets, feathers and/or nest debris as evidence of day-time roosts and/or nesting sites.

#### *Working procedures*

- 2.4.8 Each surveyor had a fully charged mobile phone and a torch. Access to the site was along a road and all the surveyors were expected to wear strong shoes. A first aid kit was available on-site.

## **2.5 Survey results**

### **Bats**

#### ***Daytime inspections***

- 2.5.1 For an aerial photo and site location plan refer to Figure 1. For descriptive purposes the two barns proposed for repair were labelled Barns A and B respectively, as shown in Figures 2 and 3. The following description outlines each different aspect of the barns and whether there were any signs of bats:

Barn A

*External - northern elevation*

- 2.5.2 Six, large, open brick arches occurred on the northern elevation of the ground floor and the internal area was mostly used for farm storage, including farm machinery (Plate 1). All the windows of this building were blocked-up with wood. Much of the pointing between the stonework above the arches had fallen out giving rise to several crevices which were suitable for bat entry into potential bat roosts. An example of such a crevice is shown in Plate 2, located to the east of the first floor wooden door. However, closer inspection of this crevice, as well as several others, revealed white bird droppings (indicative of bird usage) and no signs of bats were recorded.
- 2.5.3 Nevertheless, 14 old bat droppings were scattered on the stone wall beneath the guttering, between the first floor wooden door and adjacent, blocked-in window to the west (Plate 1). Just above this location a black roof membrane was visible, jutting out from under the red pantiles, but was broken in several places just above the guttering as illustrated in Plate 3. On closer inspection a small triangular space was recorded between where the black membrane overlapped the stone stringcourse (to which the adjacent gutter was fixed) and the adjacent stone wall immediately beneath the red pantiles. The indication is that this area could be used as a bat roost. However, no fresh bat droppings were recorded in any of these spaces.
- 2.5.4 Red pantiles formed the north-facing pitched roof, underlain by a partially broken black membrane over the roof-rafters. Uninsulated, corrugated sheeting formed the south-facing pitched roof.

*External – western elevation*

- 2.5.5 The narrow, brick, foundation wall of this elevation was overtopped by a rough stone wall thinly covered by a concrete render which had partially fallen off in places. No signs of bats were recorded.

*External – eastern elevation*

- 2.5.6 Barn A was slightly taller than the adjacent barn that occurred at this elevation, and the gable end was partially visible above the latter building as illustrated in Plate 1. The gable end was too high for a comprehensive bat inspection, although it appeared to be well pointed and no bat signs were visible from the top of a ladder.

*External – southern elevation*

- 2.5.7 A large cattle shed shared the middle and eastern sections of the south elevation stone wall and no signs of bats were recorded within the stonework. However, a fascia board occurred along the top of the wall, to which a gutter was attached, with gaps suitable for bat entry into potential roosts between the stone wall and the board. Nevertheless, no signs of bats were recorded. The western section of this elevation was occupied by the adjacent barn (Barn B).

*Internal – ground floor*

2.5.8 As noted in paragraph 2.5.2 the internal ground floor area was mostly used for storage, including farm machinery (Plate 1). A swallow nest was recorded tucked into the roof rafters but no signs of bats were recorded. Sliding wooden doors occurred on the eastern elevation, towards the northern end of the building and these led into a 'sealed' room with an asbestos ceiling and a concrete floor. Crevices suitable for bat entry into potential bat roosts occurred at the junction between the ceiling and internal stone walls but the room was lit by florescent lighting and therefore unsuitable for roosting bats. This room was used to store farm chemicals and no signs of bats were recorded.

*Internal – first floor*

2.5.9 A central ridge beam, together with a partially broken black membrane was visible over the roof-rafters on the north-facing half of the pitched roof, which had red pantiles. In contrast, the south-facing half of the pitched roof was uninsulated and composed of corrugated sheeting, resting on an off-centre timber ridge beam, as shown in Plates 4 and 5. A small crevice, with fresh bat droppings at its entrance, was recorded towards the top of the third king post (looking in a westerly direction from the stairwell), at the junction between the king post and slightly off-centre ridge beam (Figure 3, Plates 5 and 6). In addition, over 100 bat droppings were recorded on the adjacent principal rafter at this location, just below the off-centre ridge beam, immediately beneath the corrugated sheet roof as shown in Plate 5. The evidence indicated the presence of a bat roost between the main roof rafter at this location and the corrugated sheet roof.

2.5.10 One bat dropping was also recorded above the eastern edge of the third, blocked-up, first floor window (looking in a westerly direction from the stairwell) of the southern elevation. Several gaps suitable for bat access were also noted above the other boarded up windows along the first floor of the southern elevation, although no further bat droppings were recorded here. A further four droppings were recorded on the floor below the entrance to the bat roost described in paragraph 2.5.9. Further bat droppings may have occurred but pigeon droppings and general debris made it difficult to positively identify bat droppings on the first floor.

2.5.11 Pigeons and substantial piles of pigeon droppings were strewn along the ground, under the ridge beams at the centre of the first floor. Two swallow nests were recorded in the roof rafters at the western edge of the first floor.

Barn B

*External – western elevation*

2.5.12 The wall consisted of a brick foundation layer over-topped by rough stone. Occasional crevices in the stonework appeared to be suitable for bat entry into potential bat roosts but no signs of bats were recorded. Indeed, white bird droppings and nest material were noted in some of the crevices which were indicative of bird usage. No signs of bats were recorded.

*External – southern elevation*



**BAT REPORT**  
**Wharram Percy Farm Buildings, Birdsall Estate**

---

2.5.13 The walls of gable end of this barn had been rendered. No signs of bats were noted either here or within the coping stones that lined the gable edge.

*External – eastern elevation*

2.5.14 A large cattle shed shared the eastern elevation stone wall of this barn, making it difficult to comprehensively inspect. Nevertheless, no signs of bats were recorded.

*External – northern elevation*

2.5.15 Barn A formed the northern elevation of this barn.

*Internal*

2.5.16 Approximately one quarter of this barn was occupied by a first floor, which occurred along the northern section. However, the floor was unsafe to walk on and could not, therefore, be inspected comprehensively for signs of bats. The rest of this tall barn was partially lit by florescent lighting, although several dark and damp areas still occurred. The black felt insulation of the pitched, red pantile roof was in bad repair and several broken tiles were visible within the roof. Pigeons were audible in the upper reaches of the barn and pigeon droppings were recorded across the damp floor. The damp patches on the ground made searching for bat droppings here a difficult task. Internal crevices within the window lintels and overlapping purlins were all inspected and all the roof timbers that could be viewed were covered in dust and debris.

2.5.17 No signs of bats were recorded in any part of the internal space of this barn.

***Nocturnal survey***

2.5.18 The results of the nocturnal survey are given in Table 3.

**Table 3** Dusk emergence results for 6<sup>th</sup> August 2009 (sunset 20.51)

Time	Recorder A (located within the first floor of Barn A)		Recorder B (located outside Barn A on the northern elevation)		Recorder C (located outside Barn B on the southern elevation)	
	Species	Activity	Species	Activity	Species	Activity
20.53	Com. Pip	1 bat (or possibly 2 bats) seen flying within the first floor of the barn. The echolocations were heard for at least one minute before one bat was seen to exit from the top of the third window (a bat dropping was located here – refer to paragraph 2.5.10)				
21.09			Com. Pip	One passing call		
21.10			Com. Pip	Two passing calls		
21.13			Com. Pip	Four passing calls		

**BAT REPORT**  
**Wharram Percy Farm Buildings, Birdsall Estate**

			Noctule	One passing call		
21.19			Com. Pip	Two passing calls		
21.26			Com. Pip	Three passing calls; one bat seen flying from west to east across the building		
21.29			Com. Pip	Two passing calls		
21.35			Com. Pip	Foraging activity for about 30 seconds		
21.38			Myotis spp.	Two passing calls		
21.42			Com. Pip	One passing call		
21.45			Com. Pip	One passing call		

Com. Pip = Common pipistrelle bat *Pipistrellus pipistrellus*  
noctule *Nyctalus noctula*

2.5.19 A maximum of two common pipistrelle *Pipistrellus pipistrellus* bats emerged from the roost located between the principal roof rafter and corrugated sheet roof of Barn A (Figure 3, Plates 4 – 6). These bats emerged only two minutes after sunset and, after foraging briefly within the first floor, quickly left the barn via small gaps that occurred just above the blocked-up, third (looking in a westerly direction from the stairwell), first floor window of the southern elevation. No other bat activity was recorded within the first floor of Barn A for the duration of the survey.

2.5.20 The first common pipistrelle *Pipistrellus pipistrellus* bats to be recorded flying in the vicinity of the northern elevation of the building occurred at 21.09, 18 minutes after sunset. Common pipistrelle *Pipistrellus pipistrellus* bats were then recorded sporadically flying and foraging along the northern elevation of Barn A from 21.09 until the end of the survey at 21.51. A passing noctule *Nyctalus noctula* bat was recorded at this location at 21.13, approximately 22 minutes after sunset, and the echo-locations of *Myotis spp.* bats were heard at 21.38, approximately 47 minutes after sunset.

2.5.21 No bats were either seen or heard echo-locating by the third surveyor, positioned outside Barn B, along the southern elevation.

### **Barn Owls**

2.5.22 No signs of barn owls were recorded in either Barn A or Barn B.

## **2.6 Interpretation/evaluation of survey results**

### *Presence/absence*

2.6.1 A small common pipistrelle *Pipistrellus pipistrellus* summer roost was recorded within the roof rafters of Barn A.

### *Population size class assessment*

2.6.2 The survey results indicate that, during the summer months, common pipistrelle *Pipistrellus pipistrellus* bats regularly roost in Barn A. The results also indicate that the surrounding habitat is used for foraging purposes by

common pipistrelle *Pipistrellus pipistrellus*, noctule *Nyctalus noctula* and *Myotis spp.* bats.

*Site status assessment*

- 2.6.3 The results illustrate that common pipistrelle *Pipistrellus pipistrellus* bats use Barn A as a non-breeding summer roost. It remains unknown whether this barn is also used as a small winter hibernation roost, although this is a possibility. This assessment takes into account the reasonable feeding habitat in the immediate vicinity and in the surrounding area, the condition of the barns and the results of the inspections together with the bat potential present.

*Constraints*

- 2.6.4 One of the main constraints of the survey results was that parts of the buildings were inaccessible. This included the first floor of Barn B, which occurred along the northern section and which was unsafe to walk on. In addition, the roofs of each barn were too high for a thorough inspection, as were the gable ends, and the spaces between the red pantiles and underlying black membrane were generally inaccessible. Also, the adjacent, large, cattle shed prevented a full inspection of the southern elevation of Barn A and the eastern elevation of Barn B. Finally, the dusk emergence survey was foreshortened by heavy rain.

### **3 IMPACT ASSESSMENT IN ABSENCE OF MITIGATION**

#### **3.1 Short-term impacts: disturbance**

- 3.1.1 Short-term disturbance to the small summer bat roost within Barn A would occur from scaffolding the roofs and walls in order to undertake repair works. In addition, the extra noise, vibration and dust that would occur from the presence of site operatives and machinery may also cause some disturbance.

#### **3.2 Long-term impacts: roost modification and/or loss**

- 3.2.1 The proposed repair works would permanently remove the small summer bat roost in Barn A. In addition, this would include the removal of the openings above the blocked-up, first floor, windows on the southern elevation of Barn A. This would permanently prevent bats from being able to access the first floor of Barn A and, hence, their current roosting site within the roof rafters.

#### **3.3 Predicted scale of impact**

- 3.3.1 The proposed repair works to Wharram Barns would have a long term, negative, impact on the small summer bat roost within the roof rafters of Barn A. This may have a small adverse impact on the population of common pipistrelle *Pipistrellus pipistrellus* at the local level.

## **4 RECOMMENDED MITIGATION MEASURES**

### **4.1 Mitigation Strategy**

4.1.1 As noted in paragraph 2.5.22 no signs of barn owls were recorded and therefore no mitigation strategy is required for this protected bird. The proposed repair works would, however, result in the destruction of a common pipistrelle *Pipistrellus pipistrellus* bat roost and there is therefore a legal requirement to apply for a Bat Licence from Natural England to cover the said work. The Licence would require a mitigation strategy aimed at ensuring that no net loss of the existing bat roost capacity in Wharram Barns occurred as a result of the proposed repair works. Although details of the exact repair works are unavailable at the time of writing this report such a strategy would be likely to include the following key elements:

1. The placement of at least six Schwegler 1FF bat boxes in some of the mature trees in the nearby vicinity. All six boxes should remain on site once the works are complete and their extremely durable material (made of light-concrete) would ensure that they would last for many decades. In addition, all the recommended boxes are self-cleaning and thus maintenance-free.
2. An assurance that the works would take into account the clear seasonal changes in behaviour and roost selection shown by bats, and be undertaken when they are at their least vulnerable. The aim would therefore be to commence works when bats have either finished hibernating and are able to feed at night, but have not yet started breeding (April), or when they have finished breeding but have not yet started to hibernate (September/October).
3. An assurance that the contractor is made aware of the possibility of bats roosting in the crevice between the corrugated sheet roof and principle roof rafter within Barn A (Figure 3, Plates 4 – 6). It is essential that the contractor is also aware of what action to take should roosting bats be found i.e. that a Licensed Bat Worker should be immediately notified and all work stopped. However, if works are timed to take place when bats are at their least vulnerable (refer to No. 2) then any bats temporarily roosting within the roof rafters of Barn A (if any) should be able to disperse 'naturally' without any interference. If this is not the case, the torpid bats should be carefully transferred, by the Licensed Bat Worker, from the roost into one of the Schwegler bat boxes in the nearby vicinity.
4. An assurance that the new roof membrane should be Tyvek breathable roofing felt. BCT (Bat Conservation Trust) are currently liaising with DuPont (the manufacturers and distributors of Tyvek) to try and ensure that it is suitable for roosting bats ([www.bats.org.uk](http://www.bats.org.uk)). Nevertheless, it is possible that the surface of the current membranes available from Tyvek would be too smooth for bats to grip. Thus, a Netlon-type windbreak material with 7mm round holes should also be securely fixed both over and under the entire new roof membranes to ensure that its surfaces are suitable for bats to grip.
5. Ideally the existing bat roost should be kept *in situ*. Unfortunately, the

likelihood of this is low, since the corrugated sheet roof of Barn A would be replaced by an insulated red pantile roof. Therefore an assurance would be required to re-create a space with similar dimensions to the existing bat roost as follows:

- First of all, the existing bat roost entrance, as described in paragraph 2.5.9 and illustrated in Plates 4 – 6, should be retained *in situ*. A replacement one would otherwise be needed.
  - Secondly, the bat roost entrance should lead to a replacement cavity that is suitable for roosting bats, and this may entail cutting out a small 'channel' at the top of the principal rafter to allow bats to access such a replacement cavity.
  - Thirdly, the replacement cavity should replicate the dimensions of the existing bat roost cavity, which currently consists of the space between the principal roof rafter and the top of at least one of the folded 'tubes' of the corrugated sheet roof. The approximate dimensions of the latter are: length c.70cm, height c.3cm and width of c.5cm. An example of such a replacement roost cavity could be provided by fixing another large timber (within which a suitable cavity space had been drilled out), between the off-centre ridge beam and first purlin, beside the principal rafter at this location.
  - Fourthly, the existing bat access routes into the first floor of Barn A (which were identified as above the windows along the southern elevation of the first floor) should preferably be retained *in situ*. Replacement ones would otherwise need to be provided.
  - Finally, a detailed sketch of the replacement bat roost would need to be specifically included within the Bat Licence Application documents.
6. An assurance that a minimum of three additional suitable crevices and cavity spaces for roosting bats are created within the roof rafters of the repaired Barn A. Dimensions for bat access 'horizontal holes' should be 20mm width by 40 - 100mm length and these should lead to small cavities with minimum volumes of 80mm x 25mm x 100mm. The cavities should be created at the junctions between the principal rafters and purlins/king posts and/or within overlapping roof timbers. Once again, a detailed sketch of these provisions would need to be specifically included within the Bat Licence Application documents.
7. An assurance that at least 5 bat access routes with minimum dimensions of (40mm x 25mm) would be provided at eaves level along the north elevation of Barn A. The aim would be to allow bats to access the potential roost cavities that would be created between the stringcourse, wall and membrane at this level (Plate 3). The approximate locations of each access point should be shown on drawings submitted within the Bat Licence Application documents.
8. An assurance that at least ten access gaps for bats into potential roosting spaces under the ridge tiles of the repaired roofs would be installed by leaving gaps (20mm x 50mm) in the mortar under the ridge tiles. The approximate locations of each access point should be shown on drawings submitted within the Bat Licence Application documents.
9. Finally, a monitoring plan should be put in place to assess whether the bat

population has responded well to the mitigation measures outlined above and to inform ongoing roost management. This should consist of a pre-emergence examination of the new potential roost spaces and counting the number of bats leaving the roost on emergence in June/July. At the same time the bat boxes should also be examined.

## 6 REFERENCES

Bat Conservation Trust (2007) *Bat Surveys – Good Practice Guidelines* Bat Conservation Trust.

English Nature (2004) *Bat mitigation guidelines*. English Nature, Peterborough.

Joint Nature Conservation Committee (2004) *Bat Workers' Manual* Joint Nature Conservation Committee ISBN 1 86107 558 8.










Russ, J. (1999) *The Bats of Britain and Ireland* Alana Books ISBN 0 9536049 0 X

Walsh, A. L., and Harris, S (1996) *Foraging habitat preferences of vespertilionid bats in Britain*. Journal of Applied Ecology 33: 325-344.



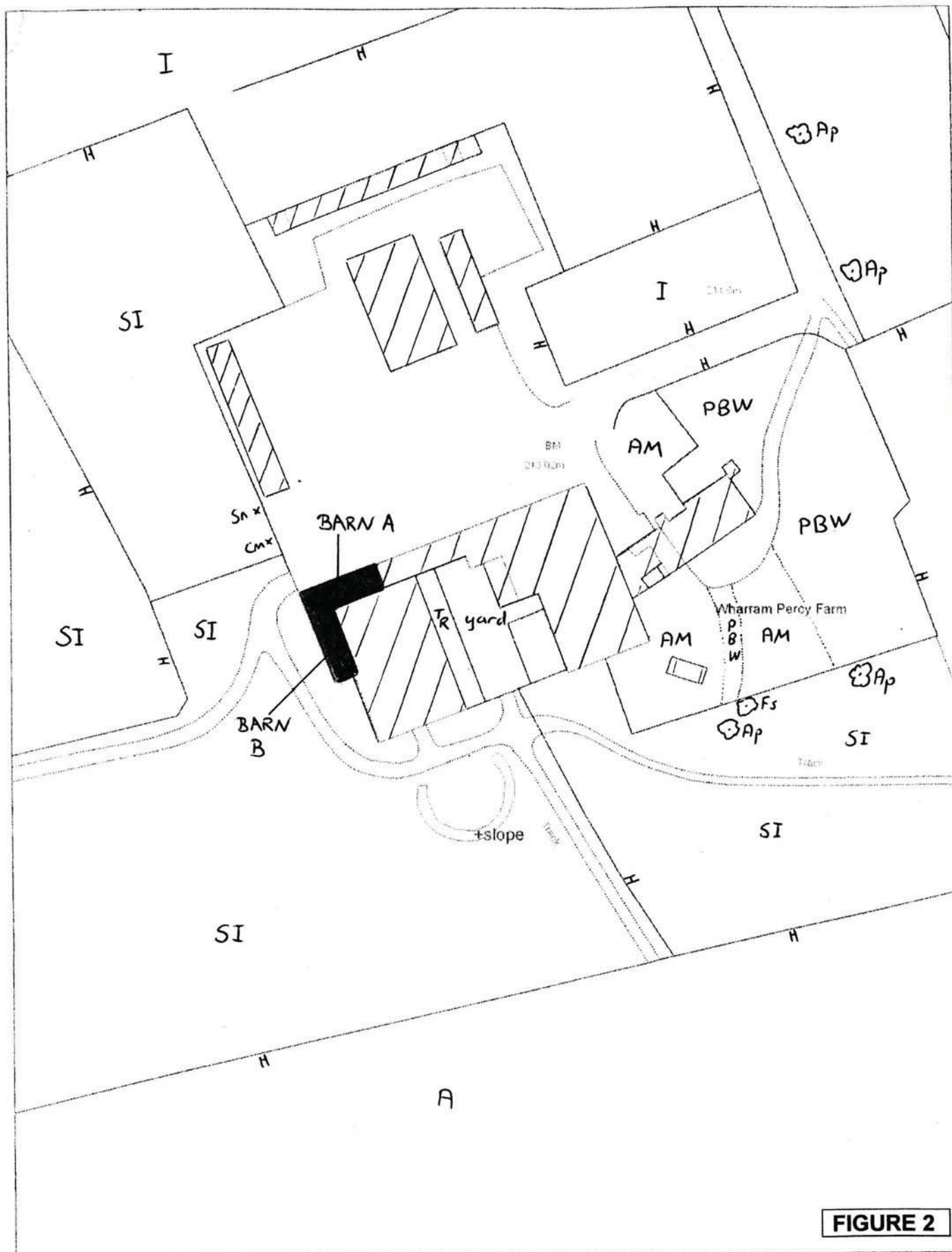
PROJECT	<b>Wharram Percy Farm Buildings (Wharram Barns)</b>	
TITLE	<b>AERIAL PHOTO (LOCATION)</b>	
SCALE	DATE	<b>October 2009</b>
<b>EINC</b>	FIGURE	<b>1</b>

## Key to Habitat Survey of Wharram Percy Farm Buildings (Figure 2)

	Broadleaved plantation with frequent beech, sycamore, ash and holly
	Individual mature tree
	Hawthorn <i>Crataegus monogyna</i> hedge
	Occasional shrub
	Tall ruderals e.g. bramble <i>Rubus fruticosus</i> and nettle <i>Urtica dioica</i>
	Cattle-grazed, species-poor pasture
	Improved grassland
	Arable
	Amenity grassland

Ah	horse chestnut <i>Aesculus hippocastanum</i>
Ap	sycamore <i>Acer pseudoplatanus</i>
Cm	hawthorn <i>Crataegus monogyna</i>
Fs	beech <i>Fagus sylvatica</i>
Sn	elder <i>Sambucus nigra</i>





**FIGURE 2**

Birdsall Estates Company Limited Wharrem Percy Farm Buildings

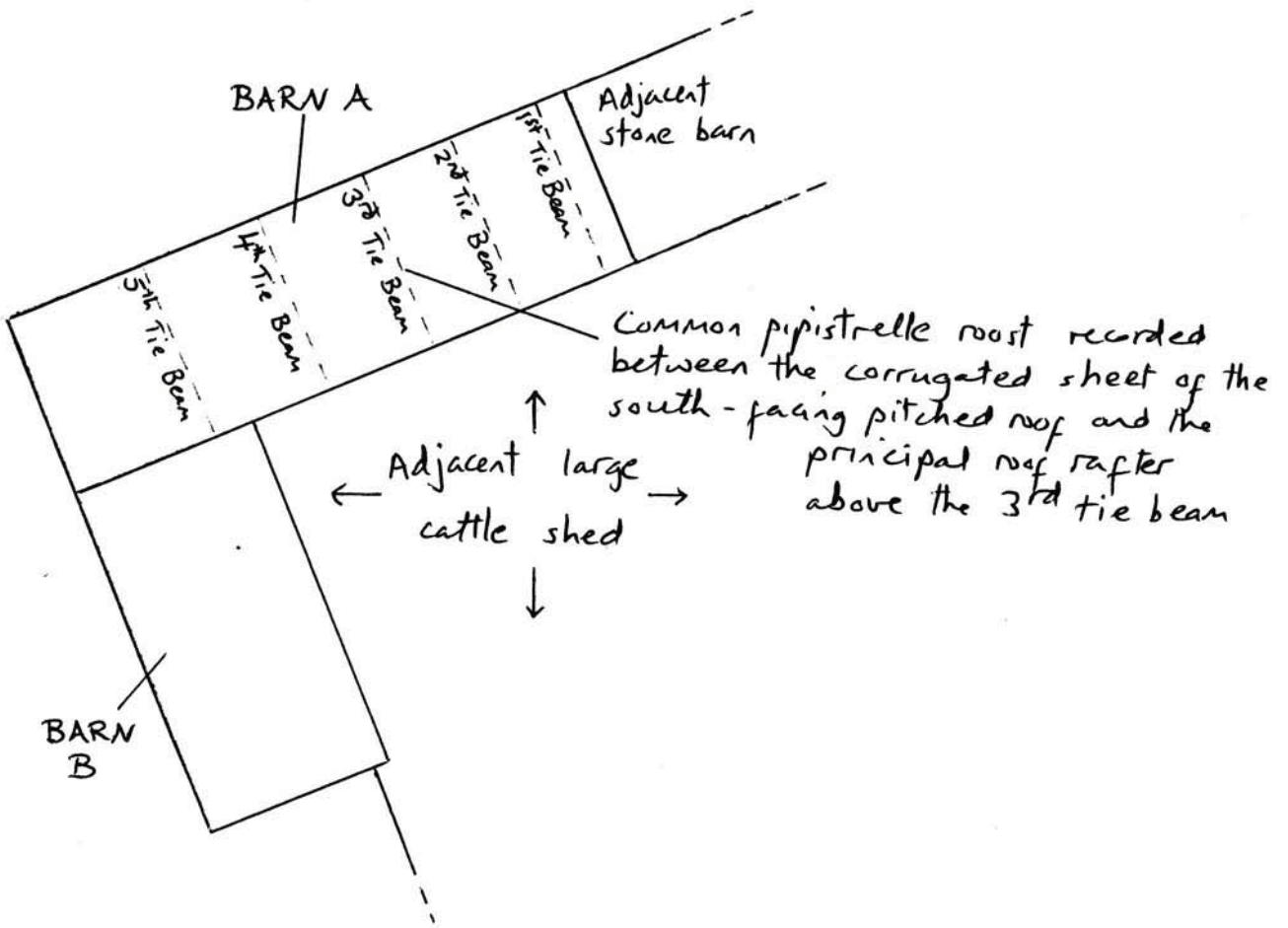
Farmplan  
A-MAP

The Birdsall

Scale: 1:1250

Printed: 30 April 2009

Using Ordnance Survey digital data with permission of the controller of HMSO, Crown Copyright



PROJECT	<b>Wharram Percy Farm Buildings (Wharram Barns)</b>	
TITLE	<b>SKETCH PLAN OF THE BARN A AND BARN B</b>	
SCALE	<b>Not to scale</b>	DATE <b>October 2009</b>
<b>EINC</b>	FIGURE	<b>3</b>

**Plate 1** Barn A - north elevation



A summer bat roost was located within the first floor roof

Scattering of 14 old bat droppings on the stone wall

**Plate 2** Crevices for bat access into a potential bat roosts within the stone wall of Barn A (northern elevation)



Potential bat roost occupied by birds

**Plate 3** Potential bat roost between the roof membrane, stringcourse and wall of Barn A (northern elevation)



Black roof membrane intact in places

Potential bat roost in the space between the wall, stringcourse and membrane

Stringcourse

Wall

**Plate 4** Location of bat roost within the first floor of Barn A (looking towards the third king post and principal rafter, from the stairwell)



Location of a summer, common pipistrelle, bat roost

**Plate 5** Close-up of the bat roost – with bat droppings visible just below the corrugated sheet roof



Ridge beam

Off-centre timber beam

Entrance to the bat roost

Many bat droppings visible just below the corrugated sheet roof, on the principal roof rafter.

**Plate 6** Main bat roost entrance within the first floor of Barn A



Bat roost entrance

**APPENDIX 3**  
**LISTED BUILDING DESCRIPTION**

## FARMHOUSE LISTED BUILDING DESCRIPTION

IoE Number: 328831

Location: WHARRAM PERCY HOUSE, BIRDSALL TO WHARRAM ROAD (south off)  
WHARRAM, RYEDALE, NORTH YORKSHIRE

Date listed: 11 February 1987

Date of last amendment: 11 February 1987

Grade II

WHARRAM BIRDSALL TO WHARRAM ROAD SE 86 SW (south side, off) 7/128 Wharram  
Percy House Grade II

House. Early-mid C19. Brick in English bond, Welsh slate roof. Central-hallway entry. 2 storeys, 5 bays; 1-3-1, divided by flat buttresses with recessed bands. 6-panel double door with fanlight recessed in round-headed porch flanked by sashes with glazing bars. Outer bays: tripartite sashes with triglyphs to dividing jambs. First-floor band to central bays. First floor: sashes with glazing bars. Flat brick arches throughout. Wide eaves and overhanging hipped roof with stacks breaking through pitch of roof. Interior: egg and dart and floral cornices to main reception rooms. Original close-string straight staircase. Square-section columns with simple capitals form gallery at landing level.

Source: Images of England website ([www.imagesofengland.org.uk](http://www.imagesofengland.org.uk))

**APPENDIX 4**  
**NATURAL ENGLAND PROJECT BRIEF**

## NATURAL ENGLAND PROJECT BRIEF

Brief for a Management Plan for a Building Restoration Project,  
Wharram Percy Farm Buildings, North Yorkshire



Prepared for:

March 2009

The Birdsall Estates Company Limited  
Estate Office  
Birdsall  
Malton  
North Yorkshire  
YO17 9NU  
01944-768206/768249

By:

Dr. Margaret Nieke  
Yorkshire and the Humber Historic Environment Adviser ( HEA)  
Natural England  
Genesis 1  
University Road  
Heslington  
York YO10 5ZQ

Tel: 0300-060-1898

Email: [margaret.nieke@naturalengland.org.uk](mailto:margaret.nieke@naturalengland.org.uk)

**National Grid Reference:** SE 86 SW

### **Introduction**

It is proposed to consider restoration of a large combined cart shed and barn at Wharram Percy Farm as part of a Higher Level Stewardship Scheme Agreement (AG00161602). Grant aid is available from Natural England for drawing up a management plan, which is required in the first instance, both to identify the works



required to bring the building back to good repair, and to provide a full specification and fully costed schedule for repair.

Wharram Percy Farm is one of a number of historic farmsteads on the Birdsall Estate still in agricultural use. It lies within the curtilage and is immediately associated with Wharram Percy House which is Grade II listed and early-mid 19<sup>th</sup> C in date.

The building to be considered for repair is L-shaped with a 6-bay open cart shed in the NW range; this remains open and has a grain loft above. The western range is a large barn. Built of local stone and brick with a pantile roof. Many original roof timbers survive and the buildings also has original swing hatches, internal stairway, pitching door and machinery drive door. There is some evidence that the barn had a stationary threshing machine within it.

The pantile roof is currently beginning to fail and requires repair. Rainwater goods need replacement. The walls require previous repair to be investigated and, where they are likely to be causing damage, unpicked and replaced. Pointing needs to be investigated and replaced throughout as appropriate.

The range is currently in agricultural use and, once repaired, will remain in such use.

### **Objectives of this Brief & Submission of Quotes**

- This brief should be used by the applicant to obtain three itemised quotes for the preparation and production of the management plan. Quotations should be based on the requirements set out in each section of this brief and each item of work costed separately.
- The submission should also include:
  - A method statement demonstrating how the work will be undertaken,
  - Identification of who will undertake the work and an outline of their professional expertise in building conservation and buildings of this type.
- This brief and the resulting Management Plan should be used to facilitate full liaison with Natural England concerning the technical details of any subsequent application for grant aided work to restore the building.

**Appendix One, 'Guidance Notes on the Restoration of Historic Buildings under Agri-Environment Schemes'**, explains in more in detail the principals of funding under agri-environment schemes, and should be referred to in conjunction with this brief.

## **Content of the Management Plan**

### **1. Summary**

A short concise summary identifying:

- Site Location
- Site Description, including a site plan to an appropriate scale
- The aims of the restoration
- Current condition of the building and the threats and issues it faces

### **2. Summary of the Historical Development and Statement of Significance**

A brief summary of the historical development of the building; where appropriate illustrative photographs of the building from key viewpoints should be included and cross-referenced to a scaled plan. Some limited archive work will be required to try and date the original complex more accurately and link it to local land ownerships. A statement of the significance of the building should be included, assessing the structure from both a local and regional perspective, and commenting on the contribution of the building to the local landscape character, public amenity and biodiversity.

It is understood that the Wharram Percy Research Group has undertaken research and recording on these buildings. Contact must be made with the Group, via the Birdsall Estates, to determine what work has been done and how it can be used to support this project.

### **3. Analysis and Recording**

Undertake a site survey of the building looking at its form, use of materials and methods of construction, past function, style of architecture and changes/adaptations over time and the reasons for the changes. This should be cross-referenced with the information gathered in 2 and 3 above.

A record of the building as it presently exists, and analysis of the fabric likely to be affected by repair should be made using appropriately scaled plans, drawings and photographs, equivalent to Level 2 of English Heritage's '*Understanding Historic Buildings: A Guide to Good Recording Practice*' (available at [www.helm.gov.uk](http://www.helm.gov.uk) under Guidance Library). Level 2 is a visual and descriptive record. A brief to guide the building recording based on the English Heritage guidance is attached (Appendix Two). Depending on the nature and level of necessary repair identified within the management plan, appropriate recording may also be required during repair works and after their completion.

### **4. Wildlife Survey**

Identify the location of any wildlife species which use the building either seasonally or throughout the year and consider their requirements and mitigation, and the legal obligations under the relevant wildlife legislation, when compiling the plan and scheduling of works. The buildings are regularly used by Barn Owls.

If protected species are found, a licence may be needed before work can take place. Certain species using a building may be protected under the UK Wildlife & Countryside Act (1981) and/or European wildlife legislation. Species lists can be found at:

<http://www.naturalengland.org.uk/conservation/wildlife-management-licensing/habsregs.htm>

or by contacting your local Natural England office.

## **5. Condition Survey**

Using floor plans and elevations as a baseline, prepare a comprehensive, photographically illustrated condition survey of the building. Comments should be made on the feasibility of repair, highlighting good points as well as looking at defects and the remedies required. The survey should prioritise work into areas into immediate (1-2 years), necessary (2-5 years) and desirable (10 -20 years). The key concern of the project will be to make the roof fully watertight.

Further detailed survey of particular problem areas may be required, However all commentary, photographs or additional survey work must be tied into a scaled plan.

Discussion with the Natural England HEA will be essential at this stage to discuss approaches to building repair. These must focus on conservation of the building 'as found' but there will be scope for discussion on the most appropriate remedies, and approaches to conservation and future management of the various wall openings, including the main doorways.

## **6. Building Repairs and Alterations**

Using information from 1 to 5 above, identify the repair work required and prepare a full specification for materials and work methods, together with a schedule of works in order for comparable quotations from building contractors to be obtained.

**At this stage the consultant should provide a draft copy of the Management Plan to both the owner and the Natural England HEA which covers the above points of the brief. This will enable Natural England to comment further prior to proceeding with an invitation to building contractors to tender for the building work.**

## **7. Tender and Tender Reporting**

Using the agreed specifications and schedules of work, obtain three competitive quotes from building contractors with demonstrable experience of working on building conservation projects and buildings of this type. Evaluate and make an assessment of the tenders and provide a written and justified recommendation to Natural England and the owner as to which offers the best value. At this stage the consultant should also provide a quote for the costs of managing the project through to completion.

## **8. Reporting Requirements**

Natural England will require 2 copies of the final Management Plan in a bound A4 printed format. Where appropriate to guide the repair work A3 annotated drawings folded to A4 should be included.

An additional copy should be submitted to the Historic Environment Record at the North Yorkshire County Council for the attention of:

Nick Boldrini,  
Heritage Section,  
Planning and Countryside Unit,  
County Hall,  
Northallerton,  
DL7 8AH

Tel: 01609-780780

## **Appendix One**

Higher Level Stewardship: the Repair and Restoration of Historic Buildings  
Applicants' Guide

A guide to help applicants understand which types of buildings and what restoration works are eligible for grant aid under Higher Level Stewardship (HLS)

## **Appendix Two**

### **Brief for Building Recording**

#### **Introduction**

This brief outlines the necessary level of building recording. It should be used to inform the production of the Management Plan.

#### **Level of Recording**

The building recording should be undertaken to Level 2 of 'Understanding Historic Buildings: A Guide to Good Recording Practice' as referenced in section 4 above. This guidance should be referred to in conjunction with this brief.

Both the exterior and interior of the building will be photographed and a plan made. The examination of the building will produce an analysis of its development and use and the record will include the conclusions reached.

A level 2 record will typically include:

#### **Written Record**

1. The precise location of the building.
2. The date of the record and the name(s) of the recorders.
3. A summary statement describing the buildings type or purpose, materials and possible date(s).
4. A short account of the buildings plan, form, age and development sequence, where known. There should also be a note of building's setting and contribution to the local landscape.

### **Drawn Record**

1. A site plan drawn to an appropriate scale.
2. A floor plan to scale which should show the form and location of any structural features of historical significance (e.g. blocked doorways and windows, former openings, masonry joints, changes in internal levels).
3. Drawings (to scale or fully dimensioned) recording the form and location of other significant structural detail (e.g. timber framing, roof construction, internal features relating to use such as troughs, fittings etc).

### **Photography**

Photography should be undertaken before and after works. Should the situation warrant it (for example a high level of repair to historically significant fabric) then photos should be taken during works. The record should consist of:

1. Views of the exterior of the building, including details of any structural features of historical significance
2. Views of the interior of the building, including details of any structural features of historical significance.

The photographs should be tied in with the block plan.

### **Deposition of Record**

The results of the building recording are to be included within the Management Plan.

One copy of the building recording, as described in Section 9 above, should also be submitted to Historic Environment Record at the County Council.

**APPENDIX 5**  
**EDAS METHODS STATEMENT**

## **EDAS METHODS STATEMENT**

### **MANAGEMENT PLAN FOR BUILDING RESTORATION PROJECT, WHARRAM PERCY FARM BUILDINGS, NORTH YORKSHIRE**

*Summary of the Historical Development and Statement of Significance (item 2 of NE brief).*

A brief summary of the historical development of the building will be produced, based on observations made during the site survey (see 2 below) and information obtained from liaison with the Wharram Percy Research Group. The latter will try and date the original complex more accurately and link it to local land ownerships. No visits to local libraries or Record Offices etc are proposed at this stage. The historical development will be linked to appropriate illustrative photographs of the building from key viewpoints and cross-referenced to a scaled plan.

The Statement of Significance will assess the structure from both a local and regional perspective, and comment on the contribution of the building to the local landscape character, public amenity and biodiversity.

*Analysis and Recording (item 3 of NE brief).*

A survey of the building complex will be undertaken, looking at its form, use of materials and methods of construction, past function, style of architecture and changes/adaptations over time and the reasons for the changes.

A record of the complex as it presently exists will be made, comprising an appropriately scaled ground floor plan, internal/external photographs and detailed description, equivalent to Level 2 of English Heritage's "Understanding Historic Buildings: A Guide to Good Recording Practice"; Level 2 is a visual and descriptive record. The fabric likely to be affected by future repair will also be analysed and commented on. Depending on the nature and level of necessary repair identified within the management plan, appropriate recording may also be carried out during and after repair works.

*Wildlife Survey (item 4 of NE brief).*

A desktop study will be undertaken, to gather and collate information from specialist consultees such as the North and East Yorkshire Ecological Data Centre, the North Yorkshire Bat Group, the Barn Owl Trust, RSPB and local barn owl conservation group.

All species of bats are fully protected under current legislation and so a systematic daytime inspection for bats roosting in the combined cart shed and barn will be undertaken between May and August. This is the time when bats are at their most active and hence most likely to be detected (sub-optimal times for such a survey occur the rest of the year, from September to April). The survey would search for droppings beneath and/or within potential bat roost sites, such as any small holes/crevices within the walls, roof space(s) and timber support structures. At least one nocturnal exit survey and/or dawn survey would also be undertaken by a Bat Licence Holder at this time.

It is recommended that the results of the bat survey be available in a full report at least three months prior to the commencement of any restoration work. This is to ensure that, should bats be recorded within the buildings, there is enough time available to apply for, and be granted, a Bat Licence from Natural England before the commencement of any works. The aims would be to ensure that an approved mitigation statement is available for the continued welfare of the existing local bat population, and that any unnecessary and costly delays to the possible commencement date(s) of the proposed restoration works are avoided.

Information indicates that the buildings are regularly used by Barn Owls, and these birds are listed on Schedule 1 of the 1981 Wildlife and Countryside Act. As a result, active barn owl nests are afforded protection against disturbance, as are breeding adults and dependent young whilst at or near the nest. "Near" a nest is open to interpretation but it normally approximates to within the same building or just outside.

The buildings will therefore be searched for barn owl droppings, pellets, feathers and/or nest debris as evidence of day-time roosts and/or nesting sites. The commencement of restoration works would be timed to avoid the main nesting season (March to August) and would require the provision for the owls to be completed by the end of the following January. Barn owls, however, have the longest breeding season of any owl species and active nests have been found in every month of the year, so an extra cautionary approach is called for. Thus, should breeding barn owls be recorded, then a nest inspection would be carried out by a Barn Owl Licence Holder before any work commenced.

The wildlife survey would evaluate the buildings for roosting bats and owls according to their national, regional, district, parish and/or local ecological value. The survey would also summarise relevant information from UK and Local Biodiversity Action Plans on priority habitats and species. The wildlife section of the report would be written in the format of a Method Statement, sufficient in detail to submit as part of an application for a Licence from Natural England in Respect of Bats and/or Barn Owls, and also sufficient in detail to satisfy the local authority. It would include sections on the type of surveys undertaken (including a habitat description and an interpretation/evaluation of the results), an impact assessment (including long-term impacts etc.) and a section on mitigation and compensation.

### *Report*

A stand-alone EDAS report would be produced, collating the results of the above, for inclusion as an appendix in the larger management plan and/or summary extraction as necessary.

Ed Dennison  
EDAS  
23 May 2009