

## Northamptonshire Archaeology

### Archaeological building assessment of the Old Smithy, Apethorpe, Northamptonshire



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Joe Prentice Report 11/21 February 2011



#### NORTHAMPTONSHIRE COUNTY COUNCIL NORTHAMPTONSHIRE ARCHAEOLOGY JANUARY 2011

ARCHAEOLOGICAL BUILDING ASSESSMENT OF
THE OLD SMITHY, APETHORPE
NORTHAMPTONSHIRE
FEBRUARY 2011

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#### **QUALITY CONTROL**

	Print name	Signed	Date
Checked by	Pat Chapman		
Verified by	lain Soden		
Approved by	Steve Parry		

#### **OASIS REPORT FORM**

PROJECT DETAILS			
Project name	Apethorpe, The Old Smithy		
Short description	stone and brick but late nineteenth-certs substantially altered being re-roofed rungests that the during the 1930s wheelwright. Almoremains within the was built to functions	nent recorded the remains of a small allding which appeared to be of midnury date. The building has been d and partially demolished, as well as relatively recently. Oral evidence building served as a smithy/forge when it was also used by a cost no evidence of this phase now building and it is not thought that it on as such, but was simply a barn a nearby Manor Farm.	
Project type	Building assessment		
Site status	Structure unlisted		
Previous work	Previous building assessment		
Current Land use	Redundant agricultural barn converted to garages		
Future work	Renovation/conversion to domestic building		
Monument type/ period	Post-medieval		
Significant finds	No		
PROJECT LOCATION	T		
County	Northamptonshire		
Site address	Peterborough, PE8	Bridge Street, Apethorpe, 5DN	
Study area	Barn		
OS Easting & Northing	TL 02490 95785		
Height OD	c 35m above Ordnance Datum		
PROJECT CREATORS	N	A	
Organisation	Northamptonshire /		
Project brief originator	Northamptonshire	t Archaeological Advisor, County Council	
Project Design originator	Joe Prentice (NA)		
Director/Supervisor	Joe Prentice (NA)		
Project Manager	Steve Parry (NA)		
Sponsor or funding body	Mr and Mrs A Forb	es	
PROJECT DATE			
Start date	January 2011		
End date	January 2011		
ARCHIVES	Location (Accession no.)	Content (eg pottery, animal bone etc)	
Physical		None	
Paper			
Digital			
BIBLIOGRAPHY	Journal/monograph, published or forthcoming, or unpublished client report (NA report)		
Title	Archaeological building assessment of The Old Smithy, Apethorpe, Northamptonshire		
Serial title & volume	11/21		
Author(s)	J Prentice		
Page numbers	7 text, 7 figs, 18 plates		
Date	February 2011		
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# ARCHAEOLOGICAL BUILDING ASSESSMENT OF THE OLD SMITHY, APETHOPRE NORTHAMPTONSHIRE JANUARY 2011

#### Abstract

A building assessment recorded the remains of a small stone and brick building which appeared to be of mid-late nineteenth-century date. The building has been substantially altered and partially demolished, as well as being re-roofed relatively recently. Oral evidence suggests that the building served as a smithy/forge during the 1930s when it was also used by a wheelwright. Almost no evidence of this phase now remains within the building and it is not thought that it was built to function as such, but was simply a barn associated with the nearby Manor Farm.

#### 1 INTRODUCTION

- 1.1 The village of Apethorpe lies approximately thirty-five miles (fifty-five kilometres) northeast of Northampton (NGR TL 02490 95785; Fig 1). A barn at the west side of Bridge Street, formerly part of Manor Farm, has permission to be converted to residential use (EN/1001148/FUL) and though permission has been granted and an initial survey made (Lapsley 2010) a request has been made by the Assistant Archaeological Advisor, Northamptonshire County Council that the building should be recorded due to it containing evidence of former use. This record was made by Northamptonshire Archaeology (NA) after being commissioned to do so by the client.
- 1.2 The geology of the area is of Lower Lincolnshire Limestone of the Inferior Oolite Series, of which most of the surrounding properties are built (Geological Survey of Great Britain, Sheet 171, 1974).
- 1.3 A single site visit was made on 12 January 2011 to assess and record the structure of the barn as it survived and to determine, if possible, the date of the various phases of construction. The record conforms broadly to that of Level II of the English Heritage guidelines (EH 2006).

#### 2 OBJECTIVES AND METHODOLOGY

- 2.1 The general objectives of the recording were:
  - To establish an accurate archaeological record of the building to English Heritage Level 2 (EH 2006, section 5), by means of annotated phase plans and sections illustrating vertical relationships through the building. Drawings were made at an appropriate scale, of no less than 1:100.
  - To undertake a comprehensive photographic survey of the building in its present condition using digital colour and black and white negative film.

- To undertake detailed recording of significant structural features, including any architectural detailing and decoration, timber framing, graffiti, ritual marks or carpenter marks.
- 2.2 The drawn record was based upon the architect's plans as produced for the planning application. The accuracy of the plans was checked and they were annotated and amended to produce an accurate archaeological building record.
- 2.3 All works was conducted in accordance with the English Heritage procedural document, The Management of Research Projects on the Historic Environment (EH 2006b, revised 2009) and the Institute for Archaeologists Standard and Guidance for the archaeological investigation and recording of standing buildings or structures (IfA revised 2008).

A desk-based assessment was not specifically requested, but a brief search has been undertaken at the Northamptonshire Record Office (NRO) and using digital versions of the 1810, 1880 and 1850 Ordnance Survey maps held by NA.

#### 3 DESK-BASED ASSESSMENT

- 3.1 No particularly early maps have been assessed for this project though the 1810 Ordnance Survey Preparatory Map held in digital format by NA was referred to (Fig 2). This shows little detail but is sufficiently clear to show that the present barn, along with the demolished eastern range, is not shown. The Ordnance Survey map of 1880 shows the village in more detail, and a building on the site of the present barn is clearly indicated (Fig 3). This shows the L-shaped range with the western arm, now demolished, in place. There is no indication that it was used at the time as a smithy; generally these are indicated as such. The complete L-shaped range is present on the 1950 Ordnance Survey map (not reproduced here).
- 3.2 A search of the NRO record cards for Apethorpe revealed a high number of entries for the village, though unsurprisingly, most relate to the Hall. No record cards specifically related to the Old Smithy. The previous report on the building (Lapsley 2010) contained a quote from the present owner which detailed oral history of the building from a village resident or residents. This contained the names of the blacksmith and wheelwright. A search of the Kelly's Directories for Northamptonshire found that the name Quincy, given as the name of the latter was present, though an earlier wheelwright was also recorded. From at least 1854 William Chapman is listed as farmer and wheelwright in the village, though no address is given in any of the entries. In 1894 Joseph and Robert Chapman are listed as wheelwrights and smiths, but by 1906 James Edward Quincy is recorded as the same. The Chapmans moved from Apethorpe to Kingscliffe in 1896 where they set up another wheelwrights shop (NRO ZB 149 291-294). James Quincy was still listed in 1928, but by 1940 the entry changes to 'Fred Quincy, wheelwright, attends Tues and Thurs' indicating that by this date demand for his services had fallen. No record was found of the Charlie Dicks mentioned in the previous report.

It is probable that after the Second World War there was no wheelwright at all in the village, or indeed in almost any other villages, since by this date increasing mechanisation in both farming and domestic vehicles had removed the need for such skill, with cars and other vehicles having rubber tyre wheels. The previous report records that the adjacent Manor Farm and its barns were converted to domestic

residences in 1974 and it is thought that the smithy was made into garages at the same time, though with later alterations in c1990 when Leonard Brassey remodelled the village.

#### 4 BUILDING ASSESSMENT

4.1 The building is a simple L-shaped structure with the long range parallel to Bridge Street and the short range angled away from it to the west (Fig 1). The latter was originally longer but has been demolished although the stubs of the walls can be seen flush with the present yard surface and much of the internal floor surface remains *in situ*. For ease of reference the long range will be described as being aligned north-south, the truncated west range, east-west. There is a further, enclosed room at the north-east corner which appears to have always been separate and has most recently been used as a garage.

The east side of the building is externally of coursed limestone, entirely so in the northern section and of Fletton brick internally with a brick skin on the southern section. A clear join is visible in the east external face with large quoins marking the former south-east corner, partially obscured by a plastic downpipe (Plate 1). The north external face (north hipped end) was not observed since it lies within the garden of an adjacent property, the south gable is limestone externally with a Fletton inner skin. This gable end previously contained a narrow doorway which has subsequently been blocked (Plate 2).

The west side of the long arm of the building is currently faced with what appear to be plywood sheets, presumably fixed to timber posts set on top of a dwarf Fletton brick wall which is topped by a timber sole plate (Plate 3). The south side of the west range, now substantially reduced contains a stable door comprising two separate leafs, each with two hinges and drop latches (Plate 4).

The remainder, as has previously been noted, has been demolished although the footprint is discernable from the truncated Fletton walls and the presence of formerly internal flooring comprising Staffordshire blue paviers. The roof of the present building has recently been re-covered with Bradstone type artificial stone slates. It is hipped at the north-east corner and at the south end where there are louvred gablets (Plate 5). In the centre of the main range parallel to the street is a central louvred vent above the ridge. The gable of the west arm is plain brickwork and appears to have originally been an internal wall exposed now due to the demolition of the western part of that range.

#### 4.2 The West range.

This demolished section is present on the 1880 First Edition Ordnance Survey map but no detail is present to determine how, or if, it was subdivided. The north wall is of coursed limestone and appears to have been an existing wall. The Staffordshire blue paviers do not suggest that there was any internal division but there is an indication that there was a central doorway in the south wall (Plate 6). The south wall was constructed of frogged Fletton brick, and it is assumed that this was only a dwarf wall like that which survives in the eastern arm of the building, though this cannot be certain. On either side of the former doorway stone blocks indicate the position of uprights which were presumably timber, the centre of each stone has a small hole in it, perhaps to take a dowel fixed into the base of the post. A line of standard blue bricks is laid on their sides across the opening to form a sill and externally the same bricks are laid flat to form a path to the doorway.

Internally the floor contains later sumps lined with Fletton brick and cement set into them (Plate 7). The purpose of these sumps is unclear but most likely relates to the later phase of the building since they are both clearly later additions and not well made. Though not large or deep enough for inspection pits such as are found in garages they might have acted as sumps for draining oils from engines. They also do not easily relate to activities associated with a wheelwright and so their purpose remains unclear, but they are obviously secondary.

The remainder of the floor is entirely blue paviers, probably Musgrave's Stable-Flooring Bricks which are composed of individual brick paviers with scored upper surfaces to provide grip rather like a bar of chocolate (Fig 6, Burn 1870). The paviers are of two sizes, one is 230mm x 80mm with three raised square portions, the other is 230mm x 110mm with six raised portions (Plate 8). Since the paviers were fixed *in situ* their thickness was not observed. The former west gable end of the west range was crudely bonded into the existing, stone, north wall and remnants of the Fletton brick can still be seen (Plate 9). The north wall had been roughly plastered and limewashed, and whilst some remains most has weathered off.

#### 4.3 The room at the north-east corner.

This appears to have always been a separate room accessed by the stable door close to the re-entrant angle of the L-shape (Fig 4, Plate 4). The present west gable wall of this room appears to be original, and is limewashed on both sides; the north and east walls are stone internally, the south wall is of Fletton brick. It has had a modern up-and-over metal garage door inserted in the west gable wall within a wide opening fitted with timber jambs and lintel. The floor of the garage is of concrete which has been scored whilst wet with a criss-cross pattern to provide grip. In the north wall is a blocked window, no indication of the frame or glazing remains.

The ceiling is plastered over sawn, not split, laths and limewashed, sloping on the lower half following the line of the roof to collar level where it is flat (Plate 10). A tie beam at eaves level crosses the room towards the western end with a vertical post rising through the flat section of plaster ceiling. Its purpose is not entirely clear, and as it seems integral to the original phase does not seem to represent an addition at a later date such as might be expected if the other roofing timbers had failed. In the south brick wall was formerly a small internal opening, presumably a window, though no frame remains and the opening has been filled with later Fletton brick, though here it remains unpainted whilst the remainder of the rooms walls are limewashed (Plate 10). There are two iron tethering rings in the east wall indicating that livestock was housed here.

The ledged and braced stable door comprises the standard two-leaf configuration, the upper leaf being slightly shorter than the lower (Plate 11). Made of vertical planks externally which have simple chamfered edges, each leaf is hung on two strap hinges fitted to pintles set in the frame. Each leaf has simple drop latches with a circular finger hole to allow them to be opened from the interior. The frame on which the doors are hung has rounded corners on all of the internal edges, a deliberate measure intended to reduce the likelihood of livestock (presumably horses) damaging themselves on sharp corners.

#### 4.4 The east range.

A single, long room though this section has been extended southwards, doubling its original length (Figs 4 and 5). As has previously been described, the northern section is the earliest and built entirely of stone, the southern is brick internally with a stone skin. The west side is of timber panels (modern ply sheets?) set above a dwarf Fletton brick wall topped by a timber sole plate in which three up-and-over modern garage doors have been inserted (Plate 12). In the centre of the west side is a timber gable above the

central garage door. The south gable end has a louvred vent at the ridge (Plate 5). Internally the ceiling was partially obscured by sheets which had been hung by the owner to prevent loose ceiling plaster falling onto cars parked there. The owner allowed some of this to be removed so that the ceiling could be seen.

Internally the space accessed by the three garage doors is a single room, all of the walls are heavily limewashed, the northern end of the east wall is of stone, the remainder of the east side and the south gable is Fletton internally. All walls extend only to eaves level above which the ceiling is plastered at an angle to the height of the collar where it becomes flat (Plate 13).

The ceiling construction is the same as in the room at the north-east corner, i.e. limewashed plaster over sawn laths. Four iron tie rods comprising raking struts with a vertical post from the apex additionally strengthen the roof (Plates 13 and 14). They appear to be original as the plaster ceiling is clearly fitted around them. An almost identical roof section is illustrated in Newlands book of 1880 which is a book of contemporary architectural drawings including farm buildings (Fig 7, Newlands 1880). Along the centre of the flat section are five square vents, each edged with fillets of timber and the squares fitted with a pierced sheet of either galvanised metal or zinc (Plate 15). This would have allowed air to circulate up from the room into the enclosed space above the plastered ceiling and below the roof to vent through the louvres at either end and the central raised four sided louvre at ridge height.

On the west side of the sloping section of plaster ceiling, towards the northern end is a metal sheet fixed over the plaster with a hole in the centre (Plate 16). This plate appears to have been added as protection from heat and seems to indicate the position of a hearth beneath, presumable with a square flue, though nothing remains of the hearth or flue now. It does not appear to have been an original feature since if this was the case it would be expected to have included an integral chimney, and probably a fixed hearth. The floor beneath is simply covered with Staffordshire blue paviers suggesting that any hearth was a raised and possibly moveable structure.

In the south gable wall at the south-west corner are indications of a blocked doorway. The lintel of the door is formed by two rows of bricks laid on edge to form a segmental arch (Plate 17). The blocking of the doorway is also of Fletton brick painted white. The east wall retains three tethering rings approximately 1.4m above floor level in the southern part only. They lie south of empty sockets in the wall which align with a change in the floor surface, and perhaps indicate the position of a former partition. To the south of this point the floor of the eastern part of the room is formed of timber blocks of end-grain pine (Plate 18). To the west of the blocks, and also running the entire length of the room is a 'passage' of blue paviers.

There is a simple wooden bench in the north-east corner of the room though it does not appear to be of any great age, and might have been added when the space was used as garages.

A galvanised metal pipe, probably for water, at the very south-west corner of the room is clearly a later insertion as it is positioned through the blue paviers and in front of the blocked doorway.

#### 5 CONCLUSIONS

5.1 The Old Smithy currently comprises three distinct parts; the demolished western range, the room at the north-east corner and the east range. It is uncertain when the building

was constructed, for although it does not appear at all on the 1810 Ordnance Survey map, it is present, in its un-extended form on the 1880 map. It must, therefore, have been built between those two dates, but stylistically a date nearer 1880 than 1810 seems more likely. The east range had been extended southwards at some date, perhaps during the very latter years of the nineteenth-century or the early part of the twentieth since on the Ordnance Survey map of 1880 this extension does not appear. Certainly Fletton bricks were not produced until after 1877 at the earliest, and not really in any quantities until the early years of the twentieth century (Hillier 1981). However, the 1950 Ordnance Survey map does not appear to show the extension either, but this may simply reflect the fact that sometimes maps were simply re-printed rather than being re-surveyed, and certainly the extension does not appear to be this late.

- 5.2 No documents have been found to establish when, or if, the building really was a smithy or wheelwright's shop for though craftsmen plying those trades are listed in the village, no address is given. However, since it appears that residents remember it as such, and it is called the Old Smithy, this must be considered. There is no surviving evidence within the building to confirm this, if it were a smithy it would have certainly needed a hearth, probably a permanent brick or stone structure with a chimney. None survives, nor is there evidence for one in the existing structure. On the other hand, a wheelwright's shop may not have had a hearth as the main heating exercise would have been undertaken outside. This involved heating the metal tyre in a simple open fire before it was fitted onto the outer wooden rim (felloe) of the wheel (Seymour 1990). This operation was carried out on a tyring platform, a large, flat disc of iron with a hole in the centre where the hub (or nave) was positioned. As soon as the heated metal tyre was fitted onto the felloe it was cooled by pouring water onto the iron hoop to cause it to contract and bind the wooden components of the wheel, locking them together. No tyring platform is present outside, though it is likely that this would have been scrapped.
- 5.3 The demolished section retains no features which can be attributed uses, nor does the north-east room apart from the stable door and tethering rings which does imply that it may have been used as a stable, since these doors are generally used specifically where livestock is housed and the rings indicate the restraining of animals.
- 5.4 The eastern range retains almost nothing in the way of fixtures or fittings. The exceptions are the tethering rings which imply livestock, and the different types of flooring which indicate the same. The west wall retains no visible original features and it is uncertain how it was originally constructed. A blocked doorway in the south wall indicates a pedestrian doorway, it not being wide enough to have been used by animals.
- 5.5 The flooring throughout indicates the housing of livestock. Blacksmiths shops often had earthen floors, even into the nineteenth century, since during shoeing horses feet were more vulnerable, though the timber section could have accommodated this by providing a softer surface. The lack of a hearth and chimney is also curious if it were a smithy shop since a very hot fire is essential if smithing was to take place. The metal plate fitted to the ceiling does indicate that there was some type of fire internally, but not apparently as part of the original design.
- 5.6 The vents in the plaster ceiling and the louvred vents could be equally appropriate for either livestock, especially in a nineteenth-century building when animal husbandry recommended good ventilation, or smithing and wheelwrighting where the room would have been hot and probably smokey.
- 5.7 In summary, whilst some evidence (mainly oral history and the name) points to the building being used as a smithy and wheelwright's shop, the building itself indicates nothing more than livestock shelter, and it has to be said that if the oral history was not

#### THE OLD SMITHY, APETHORPE

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known, it is unlikely that this former use would have been suggested. The last entry in the Kelly's directory indicates that if wheelwrighting was carried out, it was certainly by the 1940's a part-time operation, and given the size of the village this may have always been the case. No elements of either craft survive in the building today.

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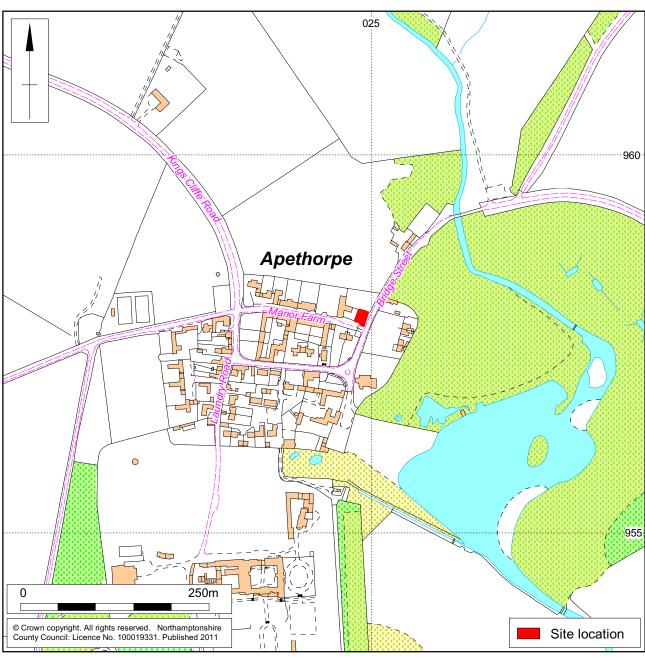
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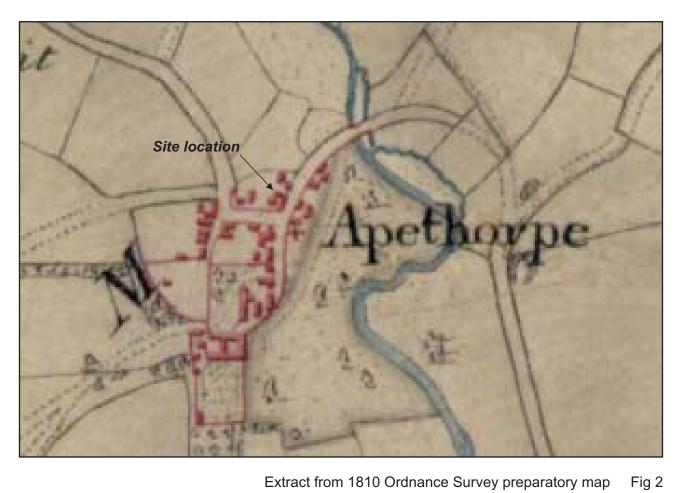
1 February 2011







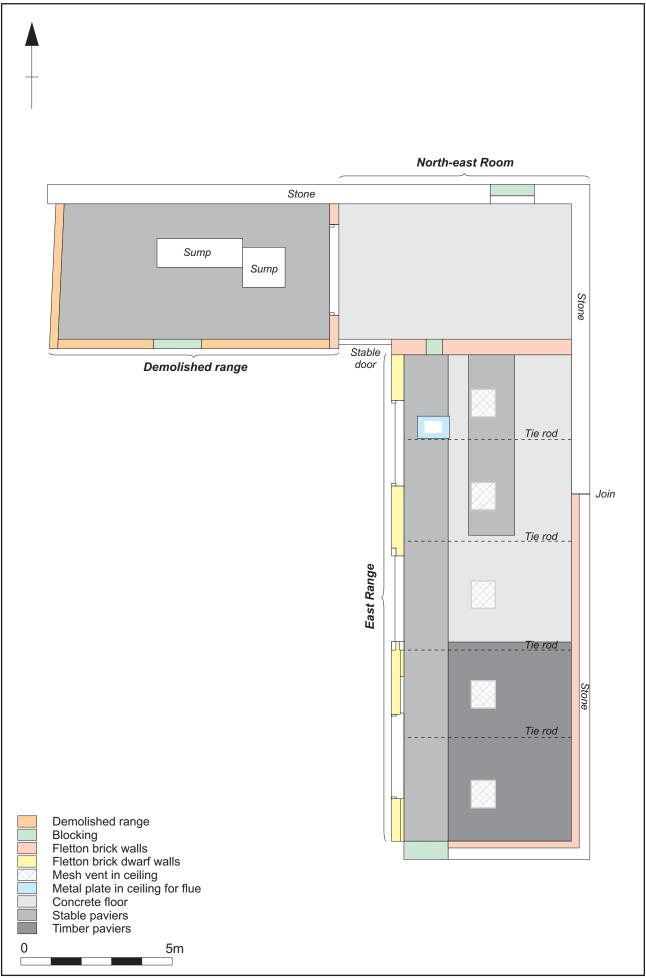
Scale 1:5000 Site location Fig 1

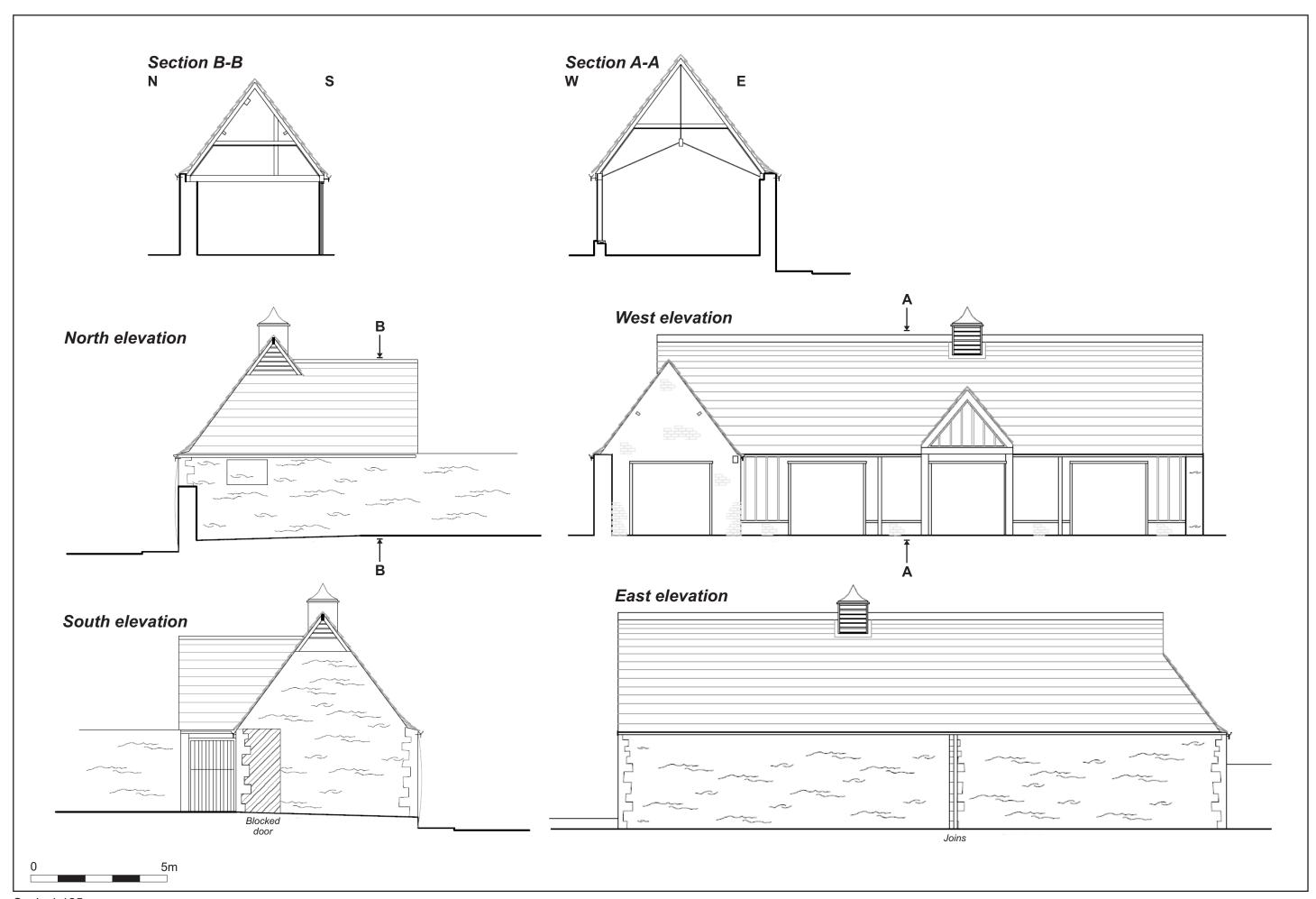


Extract from 1810 Ordnance Survey preparatory map



Extract from 1880 first edition Ordnance Survey map





The desiderata for a stable floor are well met in Musgrave's Stable-Flooring Bricks, as illustrated in fig. 33. An excellent

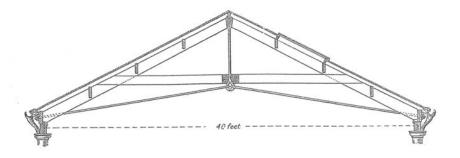
Fig. 33.



Flooring-Brick for Stables.

form of stable floor is that introduced by Mr. Forbes, and nanufactured by Clayton of the Atlas Works, London;

Musgraves flooring bricks for stables from Burn, 1870 Fig 6



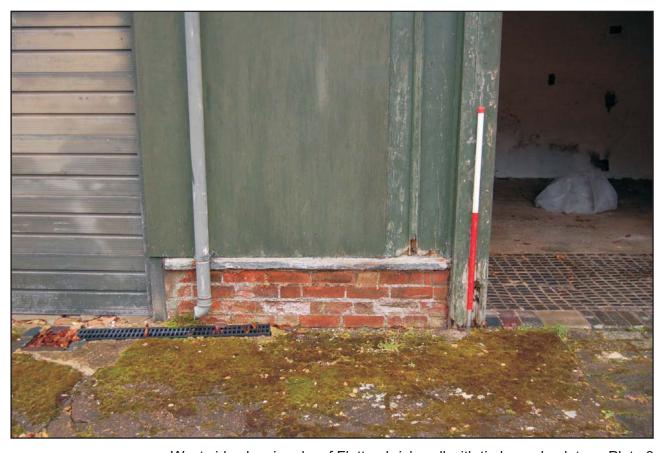
Roof detail with iron tie rod from Newlands, 1880 Fig 7



Plate 1 Join in east wall exterior; original section to the right (north), extended section to the left (south)



Plate 2 Blocked doorway in the south gable and exterior, looking north



West side showing dwarf Fletton brick wall with timber sole plate



Stable door exterior, looking north Plate 4



Louvred gablet in south gable wall

Plate 5



Former doorway in west range, looking south Plate 6



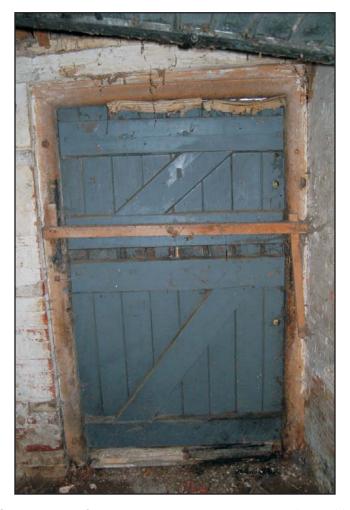
Brick and cement sumps in floor of demolished range, looking east



Staffordshire blue paviers; three section bricks to the left, six section bricks to the right Plate 8



Plate 9 Plate 10 Scar of west wall of the demolished range where it was bonded to the north stone wall



Stable door of the north-east room, interior Plate 11



The west side of the Old Smithy looking north-east showing garage doors

Plate 12



The ceiling of the eastern range, looking south



Detail of iron tie rods Plate 14



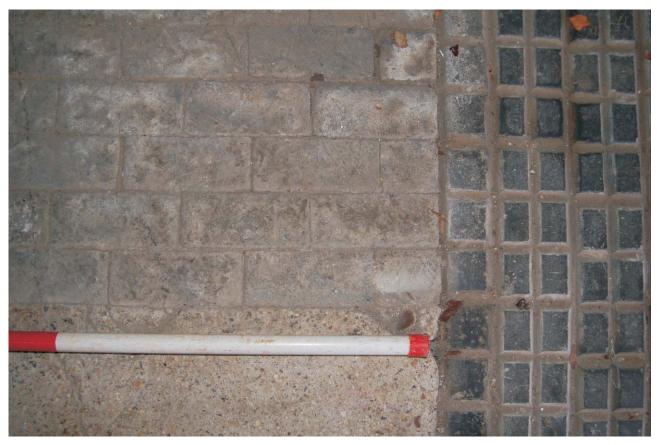
Mesh filled ceiling vent Plate 15



Metal sheet fixed over plaster around former flue Plate 16



Segmental arch over blocked doorway in the south gable wall Plate 17



Wood block flooring in southern part of the eastern range

Plate 18



Northamptonshire County Council

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