

ARCHAEOLOGICAL AND ARCHITECTURAL SURVEY,  
SHERIFF HUTTON CASTLE, NORTH YORKSHIRE



EDAS

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March 1998

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**SHERIFF HUTTON CASTLE, NORTH YORKSHIRE**  
**AN ARCHAEOLOGICAL AND ARCHITECTURAL SURVEY**

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## EXECUTIVE SUMMARY

Sheriff Hutton castle is located towards the west end of Sheriff Hutton village (at NGR SE653663), some 16km north-east of York, in North Yorkshire. The castle lies in the angle of Main Street and Finkle Street and commands an elevated position above the eastern edge of the Vale of York.

At the instigation of the owner, Dr R Howarth, a programme of non-destructive archaeological and architectural survey was carried out by EDAS with grant aid from English Heritage (HBMC).

This work included some documentary research, a review of previous investigation and repair, and a survey of the surrounding earthworks, but concentrated on an architectural and condition survey of the ruined structure, leading to the provision of detailed drawings and recommendations for consolidation and preservation.

The stone castle was built in the late 14th century for Lord John Nevill of Raby, to replace an earlier castle or manor house located near the church at the east end of the village. The morphological analysis of the village suggests that the new castle was planted on the edge of a recently expanded settlement, and that it resulted in a remodelling of this end of the village. The castle was an important Royal base and was used by the Council of the North in the late 15th and early 16th centuries. However, by the end of the 16th century the building appears to have become derelict, it was alienated by James I in 1618, and stone was subsequently removed for building in the village and elsewhere.

Today four c.30m high ruined rectangular corner towers, a gatehouse and presumed guard room survive in the inner court but the majority of the connecting ranges have collapsed or have been demolished; it is estimated that only 25-35% of the standing structures remain. All the structures date to the late 14th century, apart from the gatehouse which was added in the early years of the 15th century. The towers each appear to have contained two or three upper floors which provided relatively comfortable and well-lit domestic accommodation. Each chamber was served by its own latrine, and it is likely that each was heated. The south-west tower appears to have contained the high status accommodation, apparent from the greater height of the chambers and the number and size of the windows.

A detailed analysis of the architectural and archaeological remains suggest that the castle was built as a high-status, semi-defensive "castle-residence", which was used for important social and political gatherings, and the imprisoning of political enemies, until the 16th century. The various peculiarities of building design, such as the use of decorative machicolations and trefoil-headed windows, an external ground floor doorway in the south range, and a heraldic display on an off-centre, non-defendable gatehouse, all contribute to the theory that defence was not the main objective of the structure. The presence of two linear canals with a raised central walkway along the south side of the site suggest that a formal entrance-way was later added, possibly in the early 16th century, which gave views of the castle and the adjacent deer park. The grandest, most sophisticated and architecturally most impressive tower in the castle was located in the south-west corner, a position which commanded an extensive panorama to and from the surrounding landscape and which provided the most visible sign of the occupier's wealth and status.

Each of the four areas of the ruined castle contain many unstable elements and recommendations are proposed for its conservation, consolidation and stabilisation. A phased approach to the remedial work is outlined, and repairs are prioritised starting with the north-east tower. Recommendations are also made for increased public interpretation and improved management.

# 1 INTRODUCTION

- 1.1 Sheriff Hutton castle is located on the south side of Sheriff Hutton village (at NGR SE653663), some 16km north-east of York, in North Yorkshire (see figure 1). The castle lies in the angle of Main Street and Finkle Street and commands an elevated position above the eastern edge of the Vale of York (see figure 2). Originally, the castle would have been at the west end of the village but subsequent development means that it now lies towards the centre (see plate 1).
- 1.1 The castle was built in the late 14th century for Lord John Nevill of Raby, to replace a Norman castle or manor house located near the church at the east end of the village. As the stone built castle shares many characteristics with Bolton Castle in Swaledale, North Yorkshire, the architecture is traditionally ascribed to the master mason John Lewyn although there is, to date, no direct confirmation of this. The castle was an important Royal base and was used by the Council of the North in the late 15th and early 16th centuries, and Leland commented on the castle as being well-repaired in the 1540s. However, by the end of the 16th century the building appears to have become derelict and it was alienated by James I in 1618. Stone was subsequently removed for building in the village and elsewhere.
- 1.2 Today the four *c.*30m high ruined rectangular corner towers survive in the inner court but the majority of the connecting ranges have collapsed or have been demolished. Castle Farm now occupies the area of the middle ward but there are well preserved earthworks around the north, west and south sides of the castle (see plates 2 to 4). The castle and surrounding earthworks were scheduled as an Ancient Monument in the 1950s and the castle is listed by the Department of Culture, Media and Sport as being of Special Architectural or Historic Interest, Grade II\*.
- 1.3 At the instigation of the owner, Dr R Howarth, a programme of non-destructive archaeological and architectural survey was agreed with English Heritage (HBMC). This study was to include some documentary research, a review of previous investigation and repair, and a survey of the surrounding earthworks, but was to concentrate on an architectural and condition survey of the ruined structure, leading to the provision of detailed drawings and recommendations for consolidation and preservation (BHWPB 1996a; Appendix 1). In April 1996 Barton Howe Warren Blackledge (BHWPB) were commissioned by English Heritage to carry out the work. In July 1996, the archaeological section of BHWPB became an independent organisation, Ed Dennison Archaeological Services (EDAS), and the project was transferred to them.

## 2 HISTORICAL SURVEY

### 2.1 Introduction

- 2.1.1 A certain amount of documentary research has already been carried out for the village and surrounding region, either in relation to the castle (eg. Todd 1824; Colvin, Ransome & Summerson 1975, 293-295; Howarth 1993) or as part of a general history of land ownership in the area (Calthrop 1923); the following account draws heavily on these sources. There is also some original documentary material relating to the 17th century and later occupation and ownership of the castle in the West Yorkshire Archive Service (WYAS) in Leeds, held as part of the Temple Newsam archive (see Appendix 2). A limited amount of documentary research was carried out as part of this project, although it should be noted that this work was generally confined to readily available published information and cartographic sources.

### 2.2 Manorial history

- 2.2.1 At the time of the Domesday survey the land comprising Sheriff Hutton was held jointly by the Crown (four carucates or c.480 acres) and the Count of Mortain (11 carucates or c.1,320 acres), the latter being under the jurisdiction of the manor of Bulmer (Faull & Stinson 1986, 1N 87 & 5N 54). The Count of Mortain's land was held by his chief tenant, Neil Fossard, who had also been wrongfully in possession of the other land, but had been forced to return it to the King by 1086. At a later date however, the Fossard family seem to have regained control, since the overlordship of all Sheriff Hutton, with the exception of a close at Bulfordtofts, descended through their female line to the Mauleys, Lords of Mulgrave. The third Peter de Mauley and his heirs held the overlordship of the manor from 1278 to 1331 when the 5th Peter de Mauley released it to Sir Ralph Nevill, a member of the family who had been the main hereditary tenants of the manor from the late 12th century. Thereafter the overlordship of Sheriff Hutton was held by the Crown.
- 2.2.2 The early connection of Sheriff Hutton with Bulmer and Neil Fossard, and the prefix, which distinguishes the village from all the other Huttons of Yorkshire, suggest that the manor came into the hands of the Lords of Bulmer in the early 12th century; it is presumed that Bertram de Bulmer, Sheriff of Yorkshire, built the motte and bailey castle at the east end of the village in 1139-40 (Illingworth 1938, 130-131; Wheeler 1888, 215). Emma, daughter of Bertram de Bulmer, had married Geoffrey de Nevill before 1176 and in 1190 Geoffrey was described as being Bertram's heir. This started the Nevill association with the village which was to last for over 300 years.
- 2.2.3 The manor passed through several generations of the Nevill family and they gradually improved their standing and fortunes, both locally

and nationally. In the early 1300s Ranulph was created 1st Lord Nevill, and his son Ralph was a steward in the King's household. In 1331 Ralph de Nevill gained the lordship of the manor and in 1334-35 he obtained a licence to extend the existing deer park, re-impark his woods at Sheriff Hutton, and make a deer leap (a device to prevent deer escaping) within it; the new boundary ran along the south side of what was to become the new castle site (Swan, Mackay & Jones 1990, 99).

- 2.2.4 From Ralph de Nevill, Sheriff Hutton descended to his son John Lord Nevill who is traditionally associated with the building of the stone castle at the west end of the village in 1382. He died in 1388 and his son, another Ralph, was created Earl of Westmoreland in 1397, and was lord of Sheriff Hutton in 1401; he probably saw the completion of the castle as the heraldic display on the gatehouse dates to his time (see architectural description, Chapter 5 below). In 1404 Ralph settled the castle and manor on his second wife Joan Beaufort but before her death in 1440 she transferred her rights to her eldest son, Richard Nevill, Earl of Salisbury. The estates then passed to Richard Nevill, Earl of Warwick "the Kingmaker" who used his castles of Sheriff Hutton and Middleham as the bases from which to control his vast northern estates.
- 2.2.5 In 1471, after the Battle of Barnet when the Earl of Warwick was killed, the manor and castle of Sheriff Hutton were seized by the Crown. Edward IV granted it to his brother Richard Duke of Gloucester (later Richard III), who married Anne Nevill, a daughter and co-heiress of the late Earl of Warwick. Some additional safeguards against the representatives of the house of Nevill also seem to have been required, and in 1477 the castle and manor were conveyed to the Duke of Gloucester and his trustees by Sir Ralph Nevill, and in 1480 by Sir John Radcliffe. One of Richard III's titles was Lord of the North and he apparently stayed at Sheriff Hutton on several occasions.
- 2.2.6 Following Richard's death in 1485, Sheriff Hutton reverted to the Crown, with whom it remained until 1525 when Henry VIII granted it to his son Henry Fitzroy, the newly created Duke of Richmond and Somerset. After the Duke's death without heirs eleven years later, it reverted back to his father. No fresh crown grant was made until 1624 when James I settled Sheriff Hutton on trustees for the use of Charles Prince of Wales, who three years later granted it to George Kirke, a gentleman of his bedchamber, at a nominal rent for 80 years. In 1650 he sold his rights to it to Lord Maynard.
- 2.2.7 It is not clear from the public records when the overlordship of the manor finally passed from the Crown. The Ingram family had been associated with the area for some time, since the appointment in 1615 of Sir Thomas Ingram to the office of Ranger and Keeper of the Park. The park itself was granted seven years later to Arthur Ingram, father of Sir Thomas, for life and his elder son another Sir



Arthur Ingram was the Keeper of the Castle and Steward of the honour of Sheriff Hutton from 1627 (Upton 1961, 151). In 1646 Sir Arthur Ingram paid £320 to Ralph Radcliffe for the manor, and in 1666 the manor and castle were granted to the family. In 1685 the manor was the property of Sir Arthur's grandson Edward Ingram Viscount Irvine, whose son Arthur Ingram succeeded to the family estates in 1688. The manor then remained with the Ingram family and their descendants until 1919.

## **2.3 The stone castle**

- 2.3.1 The only contemporary document relating to the construction of Sheriff Hutton castle is the licence granted by Richard II to John Lord Neville of Raby on 26 April 1382: "... to enclose with a wall of stone and lime and crenellate a plot in his own ground at Hire Huton, co. York, and make a castle thereof" (Hislop 1989, 37 quoted in McCavana 1993, 7). Although no actual contract survives, the building has traditionally been credited to John Lewyn, on the basis of the documentary and stylistic evidence, and on the similarities it has with Bolton Castle in Swaledale, North Yorkshire (Harvey 1978, 116).
- 2.3.2 From 1382, there is a gap in the published documentary evidence until 1471 when the castle was seized by the Crown following the defeat of Richard Nevill, Earl of Warwick at the Battle of Barnet. As noted above, it was subsequently held by Richard, Duke of Gloucester, later to become Richard III. This association is highlighted in popular accounts of the castle's history: Richard is reputed to have imprisoned Anthony Woodville Lord Rivers, Elizabeth of York and Edward Earl of Warwick in the castle (Todd 1824; Howarth 1993, 9). Important here is the implication that Sheriff Hutton was chosen because of its defensive capabilities: it is asserted that the King visited the castle to examine its strength and security during his second coronation in 1483 (Todd 1824, 52).
- 2.3.3 Following Richard III's death in 1485, Sheriff Hutton became the property of Henry VII. The newly established Council of the North used the castle as one of its headquarters from c.1489-99 and Thomas Howard, the Earl of Surrey and the first Duke of Norfolk, used the castle in his capacity as deputy warden of the East and Middle Marches. In 1522 Howard invited John Skelton, the poet laureate, to stay and his visit is commemorated in his poem "A Crown of Laurel" (Howarth 1993, 12). The next two wardens were ecclesiastics with houses of their own, but in 1525 the castle again became the seat of provincial government when it was granted by Henry VIII to his son Henry Fitzroy, newly created Duke of Richmond and Warden-General of the Marches (Colvin, Ransome & Summerson 1975, 293). He was educated at the castle and his retinue included 100 servants in addition to the 142 castle staff; in 1525-26 the cost of these servants amounted to £3,800.

- 2.3.4 A survey was made of the castle soon after the Duke's arrival. It noted that there were three courts or wards, an inner, middle, and outer or base court. In the inner ward (ie. the present ruined quadrilateral enclosure) were the hall, the kitchen, and the "stately lodgings for the Lorde with a faire Chapell" while the outer ward contained a brewhouse, horse mills, stables and barns. Extensive repairs were required to the walls of the middle court, a large proportion of which (21 yards long and six yards high; 22.8m by 5.5m) had fallen down "towards the park" ie. on the south side. The north wall was also decayed and needed to be repaired and heightened. Elsewhere the survey noted that "the Corbells, watertables, spouts of stone and other necessities for Masonry and specially the Crests and loupes of the said Castle must be newly sette and amended with lyme and sande". It was also remarked that the timber roofs were generally sound, but that the leads were defective and needed extensive renewal. How much of the recommended repairs were actually carried out is difficult to determine, but the Duke's household accounts for 1525-26 include an expenditure of £321 19s 10d on "reparations on the manor of Sheriff Hutton" (*ibid*, 294).
- 2.3.5 Leland visited the area in about 1534, and commented that the castle was well repaired, and that he saw "no house in the North so like a princely lodgings". He also provides some information on the layout of the courts or wards: "There is a base court with houses of office afore the entering of the castelle. The castelle [it]self in the front is not dichid, but it standeth *in loco utcunque edito*. I markid yn the fore front of the first area of the castelle [it]self three great and high toures, of the which the gate house was in the middle. In the secunde area ther be a 5 or 6 toures, and the stately staire up to the haul is very magnificent, and so is the haul itself, and al the residew of the house" (Smith 1910 vol 1, 65; Todd 1824, 8).
- 2.3.6 The castle was repaired again in 1537, by Thomas Howard 2nd Duke of Norfolk and President of the King's Council in the North. Sir George Lawson, who managed Howard's Yorkshire estates, was instructed by the King and the Duke to put the castle into order; his accounts show that in the first six months of that year he spent £196 2s 8d on a general overhaul of the buildings. This work included the repair of the roofs and broken windows, the mending of the chapel and other structures, and the removal of 54 loads of elder bushes and earth taken out of the inner court and dumped in the adjacent fields (Colvin, Ransome & Summerson 1975, 294).
- 2.3.7 By the mid 16th century the Council of the North had moved to York and, despite them being responsible for the upkeep of the castle, only minor work or maintenance appears to have been carried out for some 30 years. However, the appointment of Henry Earl of Huntington as Lord President in 1572 was followed by a general overhaul. In December of that year a survey was made of the porter's lodge (possibly the present gatehouse) and two adjoining

towers, "one at the Northe end called the Master of the Horse's lodginge, and thother at the Southe ende". Both towers required extensive repairs to their roofs, while the floors, roof and battlements of the two-storey porter's lodge needed almost complete renewal; the total cost was estimated at £69 10s. The rest of the castle was said to be "in some decay every wheare, namely of the leade, which is sore worne with long contyneuance, and so thynne that it muste neded be all newe casten, or the moste parte thereof". Over £700 was spent on repairs between 1573-75 (*ibid*, 294).

- 2.3.8 It seems that this was the last attempt to keep the castle in a reasonable condition, and from then on its history is one of gradual demise. In the later 16th century lead was removed from the roofs of the towers and other buildings and taken to York either to be reused or sold. General accounts agree that the castle was in some disrepair, and there is no evidence to suggest that steps were taken to arrest its decay: in 1609 when the Lord President, Lord Sheffield, appealed to the Treasurer for funds to carry out repairs he met with no response (*ibid*, 295).
- 2.3.9 Possibly the last people to live in the castle were the Clarkes. William Clarke was the keeper of Sheriff Hutton park in 1609-11, and in 1615 he wrote a number of letters to Thomas Lumsden relating to his tenancy of rooms at the castle, the fall of the Constable Tower and other parts, and the continued stealing of the lead (WYAS TN/SH/A4/3). In 1618 the architect Barnard Dinninghof put forward proposals for rebuilding the gatehouse of the castle to make it "convenient for a gentleman to live in" but these were never implemented (WYAS TN/SH/A3/2). Finally, in 1618-19, James I alienated the "ruinous castle of Sheriff Hutton" to Thomas Lumsden, together with the stone, iron, timber, glass and lead etc, and all wastes, spoils and destructions committed since 30 Elizabeth (ie. 1588) (WYAS TN/SH/A1/8A & A1/9).
- 2.3.10 Thereafter, the castle is associated with Sir Arthur Ingram and his descendants, who bought the site in 1621 for £400 (WYAS TN/SH/A1/11) and to whom James I had sold Sheriff Hutton park in 1622 (Upton 1961, 151). Ingram, a powerful financier, built "New Lodge", a large house in the middle of the park to the south of the castle between 1619 and 1624 and, although the main material was brick, there are several accounts of material being taken from the castle to build the outbuildings and stables, including one referring to the demolition of a tower in 1623 (WYAS TN/SH/A4/13).
- 2.3.11 Ingram leased the castle site in 1624, by which time the buildings had fallen into considerable decay (WYAS TN/SH/A4/3). In the same year John Norden found the "case of a stately castle, the inward materialls, transported, and the wall ruyned ... the forms of cerayne decayede fishpondes ... the bowells of theis worthy pile and defesive howse are rent and torne and the naked carcas latelie by his Majesty

alienated" (Colvin, Ransome & Summerson 1975, 295; Beresford & St Joseph 1979, 155). Sir Thomas Ingram continued to plunder the castle for building materials and in 1639 some 940 loads of "squared rubble" were taken for several outbuildings including the stables at the New Lodge (Howarth 1993, 13). The fact that the castle is not mentioned in the 1649 Parliamentary survey suggests that it was so ruinous that demolition was unnecessary. Between 1665-1705 stone was still being been robbed (WYAS TN/SH/A4/12).

- 2.3.12 The castle remained in the hands of the Ingram family and the present Castle farm was built in the middle court around the turn of the 19th century. In 1919 the Ingrams sold the site to Mr Benjamin Green Jagger for £100 and in April 1940 Jagger conveyed it to Wilfred Wagstaff, Chairman of the George Mallinson and Sons Ltd group of textile companies in the West Riding. It was passed to his daughter and son-in-law, Elizabeth and John Knight Howarth in 1952, and the site remained as a farm until 1981. It has been in the hands of the present owner, Dr R Wagstaff Howarth since 1990 (pers comm Dr R Howarth).

### 3 REVIEW OF PREVIOUS WORK

#### 3.1 Introduction

- 3.1.1 Surprisingly, given the scale and importance of the castle remains, relatively little archaeological or architectural work has been done on the site. The following chapter discussed what has been undertaken, and also summarises the available published information.

#### 3.2 Descriptions, plans and illustrations

- 3.2.1 The various 16th and 17th century descriptions of the castle are outlined in Chapter 2 above; the last of these was that by John Norden in 1624 when the castle was largely ruined. The survey made soon after the Duke of Richmond's arrival (ie. soon after 1525) noted that there were three wards, the inner, middle and outer or base courts; the inner court (ie. the present quadrilateral) contained the hall, kitchen, and lodgings with a chapel.
- 3.2.2 In 1534 Leland refers to passing through the base court before entering the castle and it will be shown in Chapter 3 below that this probably corresponds to the area around the east side of the castle. He also mentions "three great and high towers, of which the gatehouse was in the middle" in the "forefront of the first area"; this is taken to mean the middle court. Finally, Leland describes five or six towers in the second area, ie. the present inner court where there are four corner towers and one originally over the gatehouse.
- 3.2.3 The plans of Sheriff Hutton village of 1765 and 1786 (WYAS ADD 318 and ADD 316) provide what is assumed to be a relatively accurate depiction of the remains at that time, namely two courtyards enclosed by towers and curtain walls and surrounded by a large open "Castle Garth" containing some moats. The former plan is reproduced as part of figure 3, and this names the two courts and depicts solid curtain walls with ruined towers in the "Far Wards" (ie. the inner court), and a house, presumably the Court House, in the north-east corner of the "Fore Wards" (ie. the middle court). Other presumably ruined or unroofed structures are also shown but it is noticeable that no buildings are depicted in the outer or base court. The 1786 plan is rather simpler, but essentially shows the same information.
- 3.2.4 The earliest illustration of the castle so far identified is that done by Buck in 1721 of the north side of the inner court (reproduced in Couling 1993, 35). This shows the north curtain wall standing to almost full height (ie. some 22m) for the full distance between the north-west and north-east towers, but to what extent this depiction is conjectural is not known. He shows two off-sets on the north faces of the towers as continuing uninterrupted across the curtain wall, and the arrangement of openings above and below suggest two floors between them. In the centre of the wall is a relatively large



window on each floor; on the lower floor, there is a row of three single lights to the east and a possible external doorway near the west end. On the upper floor there is a row of three single lights to the east, and four to the west. All the visible wall tops are shown as being vegetated.

- 3.2.5 The first detailed account of the ruins is that provided by Todd in 1824. He is of the opinion that the castle was taken down deliberately, rather than being allowed to decay naturally or through the action of warfare; one of the towers in the outer area (ie. the middle court?) was forcibly pulled down within the memory of the tenant of the Court House (Todd 1824, 6). Within the inner court, he describes the south-west tower as being some 100 feet (30m) high, the highest of the four remaining, and containing a large winding stair in the north-west corner. The basement room in the north-east tower was obviously in a good condition, as it was kept locked, and the vaulted ceiling of the room above was in a "perfect state"; this tower was considered to be the strongest of the four. The rooms in the north-west and south-east tower were all demolished. Interestingly, he notes that the Guard Room was being used as a cart shed and implement store, as it is today, and that the walls and towers are generally "encumbered with hay-stacks, pigeon-cots etc". Finally, Todd regrets that none of the towers, or any part of the castle, is covered with ivy, which would have the effect of "embellishing the scene" (*ibid*, 10).
- 3.2.6 The plan published to accompany Todd's text, and dated November 1823. It depicts only the inner court with the four corner towers; no middle court is shown or described in the text, apart from noting the demolition of one of the towers (see above). This might imply that all significant elements had been either totally or almost completely demolished by this date, ie. between 1786 and 1823. Todd's plan also shows the south wall as having an obtuse angled V-shape, and there are foundations to the north of the Guard Room of a similar feature. However, it is difficult to know how precise this plan is; he does not, for example, show that the Guard Room is set at an angle to the east curtain wall. Todd also provides a vignette of the heraldic frieze over the gateway.
- 3.2.7 Cave produced two engravings of the castle in 1824 (published in Todd 1824) and in neither do any remains of the middle court appear to be depicted. One is taken from approximately the same viewpoint as Buck's, but this later version shows nothing of the north curtain wall visible above a row of houses on what was Main Street. The north-west tower is depicted as being much as that which remains today, although some of the presently missing or eroded windows are *in situ*. Another view from the south-east shows the western end of the north curtain wall surviving to parapet height, as well as the east elevation of the north-east tower. The west end of the south range as shown as having three single lights at first floor level

and there appears to be a low wall running along the east side, in front of the gatehouse.

- 3.2.8 The Ordnance Survey 1st edition 6" map (sheet 140), published in 1856 but surveyed in 1851-52, shows the castle, although at this scale it is rather difficult to pick out all the details. However, the plan shows the four corner towers with another in the centre of the east side representing the gatehouse, all within the inner court. The curtain walls are represented by single straight lines linking the towers, although the south wall is shown as having the obtuse angle. A series of farm buildings are shown in the area of the middle court, with a range forming the north and part of the east sides and another building located to the south; this is presumably the farmhouse or Court House. Earthworks around the castle are also depicted, with "Moats" running along the south side of the site.
- 3.2.9 The Ordnance Survey County Series 25" map (sheet 140/4), published in 1911 and surveyed in 1891, depicts the complex in more detail (see figure 3). The two southern towers and the guard house in the inner court are shown in solid, signifying that they are roofed at this time. Once again the curtain walls are shown as straight and the south wall is depicted as having three buttresses; the Guard Room is clearly shown as being mis-aligned with the east wall. Also within the area of the inner court, is a walled enclosure shown on the west side of the south-east tower (it is not clear whether this is shown on the earlier 6" map) together with a small rectangular structure aligned approximately east-west in the centre of the otherwise open court.
- 3.2.10 The main difference in the two Ordnance Survey maps is the extent of the adjoining farm. A long building is shown attached to the east side of the Guard Room and the range in the north-east corner is now largely infilled, signifying the roofing of the farm courtyard. The present house and associated outbuildings with attached gardens to the south have also been built. The earthworks around the castle are shown in more detail, with the two ponds in the south-east quadrant and the two parallel "moats" running along the southern boundary.
- 3.2.11 From 1940 to 1981 Castle Farm was a 314 acre dairy farm and a plan of 1952 and an aerial photograph of 1947 show a considerable number of agricultural buildings in and around the inner court (see figure 4 and plate 2). The aerial photograph also shows that there was a considerable amount of erosion around the castle towers, caused by cattle poaching and trampling.
- 3.2.12 The Victoria County History discusses the castle as part of its survey of Sheriff Hutton parish (Calthrop 1923). A brief account of the history of the site is given, together with an architectural description and a phased plan of the inner court. The latter allows some comparisons to be made with the plan produced by Todd, although it

is accepted that there are some problems with the earlier version (see above). The 1923 plan clearly shows the mis-aligned Guard Room and the increased level of collapse in the north-east tower.

3.2.13 The castle has been mentioned in numerous books and pamphlets dating from the 19th century, such as Grainge (1855, 237-242), Illingworth (1938, 142-43) and Wheater (1888, 213-232), while there are shorter references in more general publications such as Hey (1986, 100), Platt (1982, 136-137) and Beresford and St Joseph (1979, 153-55); the latter two references include 1956 aerial photographs. As noted above, the history of repairs and expenditure is covered by Colvin, Ransome and Summerson (1975, 293-94) while other authors have considered the role of John Lewyn in the design of the castle (eg. Hislop 1989) and Couling has compared Sheriff Hutton with Bolton and Middleham Castles (Couling 1993, 25-33). The present owner of the site has also written an account of the history of the site, drawing together many isolated references (Howarth 1993). More recently, the site has been included in an important national study of greater medieval houses (Emery 1996, 390-393).

3.2.14 Finally, Howarth also has in his possession a number of photographs of the castle taken in 1906. Significantly, these show the ruins in much the same condition as at present, although there is considerably more vegetation adhering to the walls.

### **3.3 Repairs, conservation and other works**

3.3.1 Todd refers to a local builder having been employed at the castle in 1819 for three months at a cost of £80 or £90. He took down all the loose stone on the tops of the towers etc, which were refastened and repointed with Roman cement "as they were becoming dangerous to persons passing underneath and to the cattle grazing in the pastures below". He also noted that at the top of the south-west tower there was "good standing room, nearly breast-high within the battlement, and capable of holding six people at least" (Todd 1824, 30).

3.3.2 By 1887 Pritchett notes that the castle was sadly neglected and being used as a fold-yard; the rooms and courts once graced by royalty were "strewn with manure, and roamed over by grunting pigs" (Pritchett 1887, 230). The castle had also been used as a source of stone for the village, and at least three buildings including parts of Castle Farm were built of stone taken from the site. The Society for the Protection of Ancient Buildings were receiving letters from as early as 1893 concerning the dismantling of the castle (McCavana 1993, Appendix 2).

3.3.3 In late 1982, a rectified photographic survey of the majority of the castle's upstanding wall faces was carried out by the then Photogrammetric Unit of the Department of the Environment.

Although this work did not cover all the elevations, particularly the external and internal elevations of the Guard Room and the internal elevations of the basement and first floors of the south-west tower, the resulting plots and photographs provide a useful base-point from which any subsequent collapse or erosion can be measured.

- 3.3.4 A report on the structural integrity and condition of the castle was carried out by English Heritage's Chief Structural Engineer in 1992 (Hume 1992). This outlined some basic consolidation works which were then prioritised according to urgency.
- 3.3.5 The south-west tower and south range was the subject of a post-graduate dissertation carried out in August 1993 (McCavana 1993). This work gives a summary of the available documentation and places the castle into its regional context, and provides basement and ground floor plans and elevations of the south-west tower and south range. The former were produced using traditional tape and offset techniques from a metric grid, while the latter utilised the 1983 rectified photographs and incorporated the use of the "Planet 3" remote sensing computer programme.
- 3.3.6 Following from the report by Hume, a second post-graduate dissertation examined and described the condition of the castle, and considered the possible requirements of a future consolidation programme within the philosophy of conserving stone-built monuments in general (Couling 1993).
- 3.3.7 Some minor improvement works have also been undertaken by the present owner of the castle, Dr R Howarth. These include the clearing of the moats and the cutting down of some vegetation around the site, both to improve the views and prevent further deterioration of the monument. The footpaths which run around the outside of the castle mound and through the two moats have been formalised and fenced. This work, together with the erection of a domestic extension at Castle Farm, was accompanied by an archaeological watching brief; in the event, no significant deposits or features were observed (BHWP 1996b). Finally, in July 1997, Dr Howarth removed a modern agricultural barn from in front of the Guard House which was obscuring the east elevation, and commissioned a survey of the existing farm buildings as part of a proposal for their conversion and re-use.

## 4 EARTHWORK SURVEY

### 4.1 Introduction

- 4.1.1 A detailed topographical survey was carried out of the castle and surrounding earthworks, over an area which roughly equates with the "Castle Garth" shown on the 18th century plans of the village (see figure 3). No previous earthwork survey had been undertaken, although the "moats" along the south side of the site are depicted on the 1765 and 1786 maps of the village (WYAS ADD 318 & ADD 316) and these, together with the central mound and a few other earthworks, are shown in more detail on the modern Ordnance Survey maps, such as the 1979 1:2,500 map (sheet SE6566) (see figure 2).
- 4.1.2 The "moats" are briefly mentioned in several of the early accounts, including those by Grainge (1855) and Todd (1824, 11), the latter noting that there were "...two oblong moats (or double fosse) each about two hundred yards in length and six yards wide, and divided by a plot of ground between, but they do not appear ever to have extended round the Castle. They are several feet in depth, and were formerly used a fishponds. The whole ground, from these ancient moats north about to the Castle well just mentioned, is somewhat strangely diversified with steep dells and hollows, as indeed are most other parts of the village, but whether from nature or art is difficult to determine. Probably the Geologist may find himself equally interested with the Antiquary".
- 4.1.3 It should be noted that the following account is restricted to the earthworks surrounding the castle, whereas the castle and any foundations within or around it are included in the architectural description (Chapter 5 below).

### 4.2 Methodology

- 4.2.1 The earthwork survey was carried out in accordance with the revised project design specification (BHWP 1996a; Appendix 1). The survey was achieved using EDM Nikon Total Station equipment (DTM5) with data logged into DR2 dataloggers. A total of 35 temporary survey stations were established over the survey area (see Appendix 3) and the survey was integrated into the Ordnance Survey national grid by resection to points of known coordinates. The survey was levelled to heights AOD using the bench mark located in New Lane (64.79m AOD at SE6507266419). Sufficient information was also gathered to allow the survey area to be readily located through the use of roads, field boundaries, and other topographical features.
- 4.2.2 The survey recorded the position of all foundations, earthworks, drains, paths and tracks, erosion scars and hollows, stone and rubble scatters, and any other features considered to be of archaeological



or historic interest. The footprints of the surviving buildings were also recorded at ground level to aid the architectural survey. The on-site survey work took place in October and November 1996.

- 4.2.3 The survey data were processed using Civilcad (Version 4.4) software and the resulting information was plotted at 1:500 scale. Two sections with a vertical scale of 1:250 were also plotted through the more significant earthworks. The plots were then re-checked in the field as a separate operation, in February 1997, and amendments and field notes made as necessary. The subsequent plan is presented as interpretative hachure drawing using conventions analogous to those used by the RCHME; figure 6 is a reduced version of the 1:500 survey.

#### 4.3 Development of the village

- 4.3.1 Before describing the earthworks around the castle, it is important to place them into the context of the village, as far as is possible within the confines of the project. The plan forms of many of the settlements in Yorkshire and the Vale of York suggest that they originated as planned villages with streets often set out around a green. To date, there are no firm conclusions as to when these plans originated, but it is generally assumed that they represent the post-Conquest re-ordering of earlier, probably Saxon, settlements, usually by landowners undertaking a deliberate policy of estate re-organisation in the late 11th or 12th century (Sheppard 1974 & 1976).
- 4.3.2 A considerable amount of work has been done on the nearby deserted village of East Lilling (Swan, Mackay & Jones 1990). This originated as an early-mid 12th century (or earlier) small planned village of five tofts and crofts (house sites with rectangular rear properties), probably laid out by one of the de Bulmer family, which was later enlarged over former agricultural land. After some contraction in the early 14th century, the remaining houses were demolished in the mid 15th century when the Sheriff Hutton deer park was enlarged and a park keeper's lodge was built on the site.
- 4.3.3 As can be seen on figure 2 and plate 1, the village of Sheriff Hutton is linear with the stone castle located towards the west end, and the church and an early earthwork castle said to have been built by Bertram de Bulmer in 1139-40 at the east. There is a former market place, now a grass green (Pavement Hill), in the centre of the south side of Main Street. There is a back lane (North Garth Lane) running to the north of and parallel to the Main Street, which is now the through route between Stillington and Bulmer. The other main route between York, Strensall and Hovington runs north-south through the west end of the village (Finkle Street and New Lane). The "Sheriff" prefix stems from the association with the de Bulmer family, Bertram de Bulmer being Sheriff of Yorkshire, while the "Hutton" element means "a farm on the spur of land", stemming from the Old English

*hoh* (projecting piece of land) and *tun* (a farmstead) (Gelling 1984, 167; Smith 1928, 31).

- 4.3.4 An examination of the morphology of the village, allied to the 1765 map (WYAS ADD 318) and the Ordnance Survey 1856 1st edition 6" maps (sheets 140 and 141), which depict the village before modern housing developments, shows it to have a complex history, as originally suggested by Beresford and St Joseph (1979, 154-156). The following hypothesis builds on this work but it should be noted that the suggested sequence of development cannot be tested without further documentary and more particularly archaeological evidence; this is especially true when considering the dates of the various phases.

#### **Phases 1 and 2**

- 4.3.5 The east or Church End part of the village, which contains the church and the motte and bailey castle, appears to be the earliest part of the settlement. This lies just to the east of the Strensall to Bulmer road which ran in a south-west/north-east direction around the north edge of the Foss Marshes; the straight section to the south of Sheriff Hutton was presumably re-aligned at a later date when the deer park was created, by at least 1282-83 (Swan, Mackay & Jones 1990, 99).
- 4.3.6 The motte and bailey earthwork castle lies in the south-east corner of the village, to the south of the church. The Victoria County History notes that the earthworks are curious in form, and possibly indicate that the castle was transitional between the mount and bailey and the keep and bailey types; it is also considered that the castle was built by Bertram de Bulmer in 1139-40 although the documentary evidence for this is not precise (Armitage & Montgomerie 1912, 45-46). The plan of the site as published in the Victoria County History shows a sub-rectangular ditched earthwork with a number of raised platforms within the slightly raised interior, with lower banks extending to the west, while the modern Ordnance Survey 1:2,500 map (sheet SE6566 published in 1979) depicts a substantial U-shaped bank open to the west with adjacent earthworks (see figure 2).
- 4.3.7 An examination of the earthworks suggests that they are more complex than previously thought. The core element is the sub-rectangular enclosure which is surrounded by a deep ditch on the north and south sides, but there are also two baileys attached to the east and west sides respectively. That to the west is larger, almost occupying the same area as the castle itself, and contains some east-west aligned ridges which might be ridge and furrow earthworks or possibly planting mounds for an orchard. The area to the east is approximately half the size, but contains a large platform for a north-south aligned building. Aerial photographs appear to show that ridge and furrow earthworks extend under the castle,

implying that the castle was built on land taken out of agricultural production and therefore post-dated the village (Beresford & St Joseph 1979, 155; see plate 1), but ground inspection shows that the ridge and furrow respect the castle and its attendant baileys.

- 4.3.8 The main earthwork has the appearance of a ringwork and there are notable similarities to other such sites, for example Sulgrave in Northamptonshire (RCHME 1982, 139-140); here the earthwork contained a late 10th century timber hall with a detached stone and timber structure, possibly a kitchen (Davison 1977). It is therefore suggested that the presumed motte and bailey castle at Sheriff Hutton represents the earliest phase in the development of the village, and that it is actually a pre-Conquest ringwork which was associated with a settlement either located within the area of the present village or possibly on elevated land to the south of the church.
- 4.3.9 A new and planned village was subsequently created immediately to the north and west of the ringwork (phase 2 on figure 5), possibly in the early-mid 12th century when the manor became associated with the Lords of Bulmer, possibly Bertram de Bulmer who is recorded as building the motte and bailey between 1139-40 (see above); this reference may in fact relate to the modification of the earlier ringwork to create a defensible castle. It has also been noted above that the Bulmer family also established East Lilling, a much smaller hamlet, at about this or slightly later time.
- 4.3.10 The new village, with its "Sheriff" prefix to reflect the status of the new Lord, comprised two rows of crofts and tofts, established either side of a triangular green. The church, the core of which also dates from this early 12th century period (Pevsner 1966, 338-339; Calthrop 1923, 184), was located in the south-east corner plot and it is possible that the single larger property in the north-east corner represents a complex belonging to the main sub-tenant; it is noticeable that this block of land extends further to the north than the rest of the village. The village would have been surrounded by open fields, represented by the ridge and furrow which characterise medieval and early post-medieval arable land, and it is possible that the two footpaths extending north-east and south-east from the east end of the green may have originated as droveways.
- 4.3.11 Despite some infilling and recent development, some elements of the phase 2 planned village layout remain. The majority of the crofts on the north side of the green (which is still called "Little Green") survive, although the western end has been disturbed. However, the southern row is almost completely gone, some being taken up by the vicarage, and the others lost in the new development of "The Croft" and "Calverts Garth". Nevertheless, the alignment of the rear boundary has been preserved behind the vicarage and through the modern housing development.

### Phase 3

- 4.3.12 At some point after this, a new and substantial settlement was established to the west of the existing small village. This development appears to have taken the classic two row plan type with crofts fronting onto a main street and crofts extending north and south in a regular fashion to two parallel back lanes (see phase 3 on figure 5).
- 4.3.13 The new east-west main street was essentially a re-alignment of the old Strensall-Bulmer road, and it opened out into a new triangular-shaped green which butted up to the edge of the earlier village. A new side road was also possibly added at this time, allowing travellers to rejoin the Bulmer road after having passed down the main street; the 1765 map (WYAS ADD 318) shows that these two lanes are directly aligned. The main street was at least twice as wide than at present, as the 1765 map shows that the houses on both sides were on the street frontage; as can be seen from figure 3, there was a "smith's shop" in the centre of the road to the north of the castle. The northern back lane, now named as North Garth Lane but actually called Back Lane on the 1765 map, extended further west beyond the present New Lane before turning south along what was Martin's Lane. The southern back lane ran west through what was to become the Castle Garth (see below), across the present Finkle Street, and north to meet up with the Main Street.
- 4.3.14 It is possible that one or both of the baileys were added to the motte and bailey castle at the east end of the village at this time, and there was a deer park attached to the complex by at least 1282-83 (Swan, Mackay & Jones 1990, 99). It is presumed that the site was of some size and importance, and it is known that the complex was captured by Alan Earl of Richmond during the first civil war, that Edward II's wife stayed at the castle, and that it was a frequent residence of Edward III (Howarth 1993, 2 & 7). The adjacent church was also enlarged during the 13th and 14th centuries, with wide north and south aisles being added (Calthrop 1923, 184).
- 4.3.15 The process of adding new planned settlements to existing ones is already well known in many parts of the country, for example, in north-west Lincolnshire (eg. Cold Hanworth and Coates) (Everson, Taylor & Dunn 1991, 93-94 & 185-189), and is often attributed to the re-organisation of estates by a dominant landowner. The extension of Sheriff Hutton is likely to be associated with the Nevills, the increasingly powerful tenants and then lords of the manor. This phase of development is therefore tentatively suggested to be around the late 13th-early 14th century, and the new village may be the work of Ranulph who was created the 1st Lord Neville in 1300, or his son Ralph de Nevill who gained the lordship of the manor in 1331 and extended the deer park in 1334-45.

4.3.16 Today, the northern back lane remains together with a considerable number of the property divisions, although many of the plots have been infilled or re-developed. Martin's Lane is represented by an elongated strip shown on the Ordnance Survey 1st edition 6" map, running through and behind (north) Bertram House. The south side of the green can be seen in the alignment of the buildings from Castlegate, the Castle Inn, and Sheriff Hutton Court. Little remains of the southern back lane, although its alignment can be traced through a number of boundaries, particularly that between Westways and The Cottage on the east side of Finkle Street.

#### **Phase 4**

4.3.17 This phase is dominated by the construction of the stone castle towards the west end of the village at the end of a prominent ridge, on land presumably owned by John de Nevill; this occurred in 1382 and so is the only securely datable phase of the sequence. This act had a major effect on the morphology of this end of the village but few houses were actually affected. As can be seen from figure 5, the southern back lane was removed and the south ends of those crofts which ran back from the Main Street were truncated; the houses on the street frontage were not affected, which meant that the number of tenants (and therefore the Nevill's income) would not have been significantly reduced. It is also possible that Finkle Lane (called Forest Lane on the 1765 map) was added to the plan at this stage, resulting in the re-alignment of some of the crofts on the east side (see below).

4.3.18 It is also documented that in 1378 John de Nevill obtained a grant to hold a market in the village on Mondays and a fair on the vigil and feast of the Exaltation of the Holy Cross (Calthrop 1923, 173). It has been suggested that in some parts of England the acquisition of a market grant in the 12th to 14th centuries led to the deliberate creation of market places within or attached to the settlement (Taylor 1982), and it is thought that this occurred at Sheriff Hutton. The south-west part of the new village green was extended south to accommodate the market place, and the place name of "Pavement Hill" might actually refer to the area being paved for stalls (pers comm C Taylor). There had been some properties originally fronting the south side of the green and, as a consequence of expansion, they relocated slightly to the south and extended their crofts south as far as the deer park boundary.

4.3.19 It is noticeable that only four years separate the date of the market grant and the licence for the building of the stone castle. It is therefore suggested that these two events were conceived as part of an overall re-development scheme undertaken by John de Nevill. Both the 1765 plan (see figure 3) and the Ordnance Survey 1st edition 6" maps show that there are relatively few houses on the west side of the new rectangular green, and the possibility that there was an entrance to the castle from this direction cannot be ruled



out; if so, it may be partially represented by the gap between the present Stile House and Stile Cottage, a route which is still marked by a public footpath and gate. This arrangement would allow for a base or outer ward, in addition to the inner and middle wards, and the former was described in a survey of the early 16th century as containing a brewhouse, horse mills, stables and barns (Colvin, Ransome & Summerson 1975, 294).

- 4.3.20 A final phase in the development of the castle complex can be suggested with the creation of long linear canals along the southern boundary of the site, which were to replace the previous incomplete sub-circular ditch. This is discussed further in the section below.

#### **4.4 Earthwork description**

- 4.4.1 The castle mound measures 85m north-south and is some 9m high at the west end. The mound actually represents the west end of a natural ridge, but the banks on the north, west and south sides are likely to have been artificially modified to give create a steeper profile (see plate 4). No stone revetments are visible, although some natural slumping and some minor erosion has occurred.
- 4.4.2 The north-east side of the mound is defined by a large U-shaped depression ("a" on figure 6), 22m wide overall and 2.5m deep on the north side; the south side rises up to 8m high to form the north side of the castle mound (see plate 5). There are also the remains of a brick-lined circular well with a partially dislodged concrete cap on this side of the slope. It is probable that this depression represents part of a defensive ditch or moat which continued further to the south around the edge of the mound (see below). The east end of the ditch ends somewhat abruptly in what appears to be a natural terminal and Leland notes that the moat did not extend around the "front" (ie. east) of the castle (see above). Beyond this are some cattle stalls which were established on this side of the castle complex in the 1940s.
- 4.4.3 The north side of the Castle Garth is separated from the crofts fronting Main Street by a drainage ditch. In places this drain is 1.5m wide and up to 2m deep, and it turns south and then west to run along a former property boundary; it is now culverted under the recently installed footpath and a new drain superseding the earlier alignment can be seen running south-west across an open enclosure ("m") (see below). There is also a gap in the north-south section of the drain on the east side which enables any ponded water in the moat to drain away.
- 4.4.4 Within the angle of the drain are a series of low and rounded earthworks which fall into two plots which have a general east-west alignment. The southern plot ("b") contains the greater number of features. In the centre of the north side is a raised platform 10m wide and at least 15m long, with two 0.5m deep depressions to the

east, one 16m by 11m and one 14m by 5m; the north-east corner of the eastern feature has been disturbed by a modern drinking trough. There are also several linear banks running along the south side of the plot, parallel to the drain. The northern plot ("c") contains slight banks of a central shallow depression and the remains of former boundary.

- 4.4.5 The west side of the castle mound has suffered from slumping, and there are several modern paths breaking up the slope. However, most of these originate from when cattle were allowed to walk around the mound, and some erosion is shown on an aerial photograph taken in 1947 (see plate 2). Within these earthworks, and approximately halfway up the slope, is a small north-south aligned flat terrace measuring 15m by 3m ("d") with a slight depression behind (east) it. On the flatter ground to the south is a faint bank, possibly representing the line of the infilled moat, running around but *c.*10m from the base of the castle mound. There are also sections of a shallow north-south bank ("e") running parallel to the new footpath.
- 4.4.6 Further earthworks are visible in the south-east part of the survey area, in a generally flatter area beyond the castle mound. At the base of the mound is an ovate pond ("f") measuring 3.3m by 1.2m and 1m deep, separated from another linear depression immediately to the north by a 1.3m high bank which spreads out to the south-west. To the east is another well-defined rectangular pond 0.7m deep and 1.3m wide ("g"). This has a kink at the west end with a prominent levelled corner on the north side, while the east end has a probable leat which runs in a wide shallow channel to the south.
- 4.4.7 The steep bank of the castle mound has also slumped in places on the south side, but there are two *c.*1m wide terraced paths running from a slightly raised terrace ("h"), up the slope and towards a flat area in front (south) of the south range. There are also the remnants of a terrace passing at an angle through the southern part of the garden attached to the farmhouse. There is a modern track running from "h" up the slope and into the Castle Farm complex; although clearly in modern use, part of this route may have had earlier origins, as it would have passed around the south-east side of the middle court into the outer court (see figure 3).
- 4.4.8 Further earthworks can be seen to the east of Castle farmhouse, on the east side of the survey area. A slight track or path can be seen running up the steep southern slope of the natural ridge, towards a level area on the crest of the hill ("i"). This area contains a slight east-west linear depression which has been disturbed by a later gas or water pipe here. To the north, a slight bank ("j") runs north-east/south-west representing the alignment of a former public footpath running from the village green towards the castle.

- 4.4.9 The earthworks to the south of the castle are dominated by two 11m wide linear ponds, the northern being 265m long and the southern 355m long. They have U-shaped profiles and are separated for much of their lengths by a wide flat-topped bank ("k"). For most of their lengths, the ponds have been dug out of the natural ground surface but there are retaining banks at the east ends, and at the west end of the south pond, where the ground is naturally low-lying. It is noticeable that the ponds are parallel to each other, and that they both kink slightly north-west towards their west ends. The ponds were partially filled with stagnant water at the time of the survey, and are surrounded by fairly heavy vegetation.
- 4.4.10 The northern pond is between 0.7m and 1.5m deep. Whereas the west end has rounded corners, the east end does not terminate in a definite return. There is an area of erosion towards the east end on the north side caused by cattle drinking, and two further indentations towards the west end ("l") represent the site of a former footbridge for a footpath shown on the Ordnance Survey 1979 1:2,500 map. The southern pond is slightly deeper but also does not have definite ends; a gap in the north side at the west end may be a modern cut for a drain, and there are several other channels entering the east end at field boundaries. The central area ("k"), which is now used as a footpath, is between 7m and 5m wide (see plate 6). It is flat-topped and the presence of a gradient at either end give the impression of a raised walkway or terrace running between the ponds. There are also very impressive views north to the castle, particularly of the looming south-west tower. The south side of the southern pond respects the adjoining areas of ridge and furrow (the central area being in arable cultivation at the time of the survey), and there is a modern track running along the west section from Finkle Street towards barns and sheep shelters.
- 4.4.11 The southern pond drains out from the east end, into a drainage ditch which runs further to the east. Although water would also have entered this pond from the ditches around the field boundaries, there is little further evidence to suggest how the ponds would have originally been supplied with fresh water. It is possible that the drain which ran around the north part of the site entered the southern pond, and there are two possible former leats running across the central bank to connect the two ponds. The fact that the ponds now hold stagnant water shows that the supply and discharge system does not now operate.
- 4.4.12 There is an almost flat area of ground in the south-west corner of the Castle Garth ("m"). This area is trapezoidal in shape, having maximum dimensions of 70m by 60m, and is defined on the north and south sides by a 0.6m high and 5m wide flat-topped bank; the bank to the north, which contains a modern gap, separates the enclosure from the drain while the bank to the south represents the north side of one of the ponds. The east and west sides are less well defined, although bank "e" probably represents the east edge.

There are faint earthworks of ridge and furrow running through this enclosure, with the same approximate north-south alignment as that seen to the south.

## 4.5 Interpretation

- 4.5.1 It is clear that several phases of earthworks are represented within the area of the Castle Garth. Little can be seen of the earlier phase 3 village features, although the alignment of the former back lane can be identified in the east-west boundary on the north side of area "m" and possibly the ridge-top depression to the east of the castle at "i"; considerable amounts of stone, suggestive of a surface, were removed from a hedge bank just to the west of this area in recent years (pers comm K Batton, Stile House). The slight north-south earthwork bank ("e") might represent a former field boundary and/or ditch running south from the south side of the former back lane.
- 4.5.2 As noted above, the castle was inserted into the landscape in the late 14th century and almost certainly resulted in the removal of the south back lane and the truncation of those crofts running south from Main Street (phase 4 of the village development). The earthworks identified in areas "b" and "c" lie at the east end of east-west crofts running back from Finkle Lane and are likely to represent former buildings or yards; it is noticeable that the earthworks are mis-aligned with the present and newer arrangement of property boundaries. A possible building is shown in the area of the platform in area "b" on the Ordnance Survey 1st edition 6" map, but not on the 1765 map, and the north part of area "c" is an orchard. The moat seen in the north-west quadrant ("a") may well have originally encircled the inner court on all sides except the east as noted by Leland, and it is possible that pond "f" represents the continuation of this feature in the south-east corner of the survey area. The creation of the Castle Garth also took in area "m", which the faint ridge and furrow shows was formerly part of the open fields on the south side of the south back lane; the absence of any east-west property boundaries shows that it was never part of the inhabited village.
- 4.5.3 It was also noted above that there might have been an entrance to the castle from the west side of the expanded village green. This would equate with area "n" on figure 6, where a footpath still leaves the castle enclosure, and the slight earthwork bank "j" may represent this former alignment. It is uncertain when the present north entrance to the complex was established. It might have been original to the construction, but this seems unlikely. However, a gap in the houses on Main Street is shown on the 1765 map as well as on all subsequent maps, and the route first appears formalised as a drive on the Ordnance Survey 1911 25" map (see figure 3).
- 4.5.4 The two linear ponds on the south side of the site clearly cut across all the other features. They are traditionally thought to be moats or fishponds but these interpretations are discounted; as moats they

would not properly have defended the castle and they are unnecessarily deep to have originally been constructed as fishponds, although they were undoubtedly have been utilised as such. Their parallel alignment, particularly with the existence of a central raised area ("k"), suggests that they are garden features through which the castle inhabitants could have walked or been driven. It is also noticeable that the southern pond extends along the full length of area "m" and it is suggested that the linear ponds, area "m", and the other ponds in the south-east corner of the survey area all form part of a designed landscape created after the building of castle.

- 4.5.5 Many 12th to 16th century castles or fortified country houses are now being re-assessed and it is becoming apparent from a detailed analysis of the architectural remains and their locations that defence was not the overriding issue. In addition, many of these "castle-residences" are surrounded by a designed landscape incorporating water features, elaborate drives and planting schemes, all designed to impress visitors, friends, and enemies alike; they are, in fact, simply grand status symbols for the rich and powerful lords who built them. The most famous example is that of Bodiam, West Sussex, where a convoluted entrance drive through formal ponds and water gardens was created at the same time as the castle in the 14th century (Everson 1996). Some 30 similar, less sophisticated but still technically complex, examples have now been identified, such as at Somersham in Cambridgeshire (14th century), Kenilworth Castle in Warwickshire (15th century), and Woodstock in Oxfordshire (13-14th century) (Taylor 1989), at Shotwick in Cheshire (14th century), Stow in Lincolnshire (late 12th century), Leeds Castle in Kent, and Whorlton Castle in North Yorkshire (pers comm C Taylor; Everson 1997).
- 4.5.6 At Sheriff Hutton, it is suggested that a new entrance into the complex was created in the south-west corner of the Castle Garth, at the point where the road from York and Strensall turns into Finkle Lane; very impressive views of the castle overlooking the former deer park can be obtained from travelling along this section of this road, and it is even possible that the road (which contains some curious right-angled bends) was deliberately re-aligned for maximum visual effect. A long narrow building is actually shown at this location on the 1765 map (see figure 3), and a similar structure is shown on the Ordnance Survey 1st edition 6" map. Nothing is shown on the Ordnance Survey 1911 25" map, and the site is now occupied by a modern house called "Moatside".
- 4.5.7 Having entered the Castle Garth, visitors would obtain views of area "m" which might have contained an orchard or possibly gardens; the presence of low ridge and furrow suggests that it was never used for a bowling green but the fact that the ridges are so denuded may imply that some landscaping has taken place. While passing along the raised walkway or carriage drive between the ponds ("k"), impressive and changing views of the castle would be gained to the

north, with wide open views of the deer park to the south, with the canals in either foreground. At the east end of the canals, the formal way would turn to the north onto the flat terrace ("h") which runs around further possibly interlinked water features ("f" and "g") and/or gardens; the prominent flat corner on the edge of pond "g" might represent a viewing area. From here, the route would take the graded track through the south-east corner of the present garden enclosure up the slope and into the middle court, turning left to enter the inner quadrilateral through the gatehouse.

- 4.5.8 In addition to this formal entrance into the castle-residence, there appears to be other features to allow residents to enjoy the gardens and landscape. The canals and terrace ("h") in the south-east quadrant can be reached via a door in the south range (see architectural description below) and the graded paths, while there are several flattened areas immediately outside the walls around which to walk. There would, of course, be extremely impressive views from the towers and ranges of the castle itself, particularly from the second or third floors. Finally, the small north-south aligned terrace ("d") on the west side of the castle mound might represent an elevated viewing platform from where the area "m" and all the features within it could be seen; such examples have been noted at Woodstock and Leeds Castle in Kent (Taylor 1989, 222).
- 4.5.9 The creation of this designed landscape at Sheriff Hutton may have taken place in the early 16th century, possibly when Henry VIII granted the castle to his son Henry Fitzroy, the newly created Duke of Richmond and Warden General of the Marches. He was educated at the castle and lived there for some time with his 242 staff, and some £321 was spent on repairing the fabric between 1525-26 (Colvin, Ransome & Summerson 1975, 294).

## 5 ARCHITECTURAL SURVEY

### 5.1 Introduction

- 5.1.1 The standing remains of the castle survive as four discrete stone-built structures, which in this account are described as the south-east, south-west, north-west and north-east areas, and are numbered one to four respectively. These represent approximately the four corners of the inner court, which lies to the west of the outer court of which only two spur walls remain (see figure 6).
- 5.1.2 Although irregular in plan, the inner court is effectively quadrangular; originally all four sides were defined by curtain walls, some of them incorporating buildings, but none of these walls survive complete. As such, it bears close similarities to other castles of the late 14th century, in particular Bolton Castle, also in North Yorkshire; Pevsner actually says that Sheriff Hutton "is almost a copy of Bolton Castle" (Pevsner 1966, 339). Bolton Castle was started in 1379 and took approximately 17 years to complete, but only comprises a single quadrilateral court (Trueman & Niel 1992, 6-11). Couling (1993, 25-33) provides a comparison with Bolton and Middleham Castles, and there are similarities with Wressle Castle in the East Riding, which was also started in 1380 (Neave 1984).
- 5.1.3 In the following sections, the standing elements of the castle are described in detail, beginning with the south-east area (Area 1) and proceeding in an anti-clockwise direction around the quadrangle. The inner court is aligned approximately east-north-east by west-south-west but for ease of description it is considered to be aligned east-west.
- 5.1.4 To support the descriptions, reference should be made to the plans and elevation drawings produced as figures 9 to 16. In the text and on the drawings, certain features have been allocated unique numbers to allow cross-referencing, eg. C3/2 or W2/10. In this system, the letter refers to the type of feature (C = latrine chute; D = doorway; L = latrine; W = window) while the first number indicates the area of the castle, and the second number is the feature number within the area. Thus C3/2 is a latrine chute within Area 3 (the north-west area), and W2/10 is a window in Area 2 (the north-east area). Only features which have been positively identified as one of these types are given numbers; where the interpretation is ambiguous, for example where no dressings survive around an opening, no number is allocated. Exposed core work is shown on the elevation drawings as dotted areas.

### 5.2 Methodology

- 5.2.1 The methodology used for the architectural survey was in accordance with the revised project design specification (BHWPB 1996a; Appendix 1), and was carried out using a combination of

photographic, machine, and hand-based techniques; where at all possible, existing survey information was used to minimise costs.

- 5.2.2 Problems over access provided a major constraint to the detailed architectural recording. Access to the upper parts of the monument was not either practical or safe without full scaffolding and, given that there was no commitment to any future programme of consolidation works, it was obvious that full scaffolding was not cost-effective for recording purposes alone. In addition, some parts of the elevations were obscured by vegetation, particularly ivy, at the time of the survey. As a consequence, some additional recording work may be required just prior to and/or during any subsequent consolidation programme, utilising the scaffolding provided and the vegetation clearance undertaken for such work.
- 5.2.3 Plans of the various structural elements, produced at 1:50 scale, were based on survey plots generated by the EDM topographical survey. The survey plots were subsequently checked on site as a separate operation in September 1996, and were enhanced with hand measurement where required. Where appropriate and feasible, plans were produced of both basement and ground floor levels; higher level plans could not be drawn due to access difficulties. As required, the plans show all significant details such as inserted, blocked or unblocked openings. The site plans were then reduced to 1:100 scale for ease of presentation, and figures 7 and 8 are reduced versions of these.
- 5.2.4 The elevation drawings were produced at 1:50 scale from a combination of existing and new rectified photographs, and hand measurement. A rectified photographic survey of the majority of the castle's upstanding wall faces had been carried out between September and December 1982 by the then Photogrammetric Unit of the Department of the Environment. Copies of the mosaics produced from this survey were supplied to BHWB/EDAS and were utilised during this survey.
- 5.2.5 In addition, new rectified photographs were commissioned to cover those areas previously omitted, where significant changes were observed, or where existing quality was inadequate; this new coverage was generally confined to the external and internal elevations of the Guard Room, and the internal elevations of the basement and first floors of the south-west tower. This new work was carried out in July 1996, and was supplemented by further photographic recording in August 1997 following the removal of a modern Dutch barn which formerly obscured the east elevation of the Guard Room. All additional rectified photographs were corrected for parallax and accurately scaled to 1:50, and control points were surveyed to the nearest 5mm using a combination of traditional photographic targets, or points of detail (eg. on window dressings) surveyed by theodolite intersection.



- 5.2.6 The combination of the existing and additional scaled photographs was used to produce internal and external elevation drawings by hand, at a scale of 1:50. After initial tracing, the drawings were re-checked in the field in July and September 1996 as separate operations, and amendments and field notes made as necessary. Areas of vegetation were also checked against the original rectified photographs and new information added as appropriate. Given the characteristics of the fabric, it had been determined that full stone-by-stone drawings were not required, but that all significant features, such as dressings, openings, blocked openings, corework, and areas of repair or other interventions, etc. would be shown (*ibid*, 6). It should also be noted that the extensive coverage achieved by the rectified photography would allow the preparation of detailed consolidation specifications from these photographs at a later stage. Figures 9 to 16 are reduced versions of the 1:50 elevation drawings while full size figures are appended to the back of the report.
- 5.2.7 Some problems were encountered in utilising and combining data from the two different surveys. One major limitation was caused by the highly complex nature of the walls, many of which retain little facework, resulting in very uneven surfaces with several vertical planes which are impossible to scale consistently. Additionally, the 1982 survey had not been levelled in to Ordnance Datum and, although attempts were made to tie these mosaics in by levelling in points of detail, significant discrepancies between the different elevations and surveys were encountered, in the worst cases up to 1m vertical height differences. As there is no straightforward way of correcting these discrepancies, the heights given on the elevation drawings must therefore be considered to be approximate.
- 5.2.8 In addition to the 1:50 scale drawings described above, a number of features were recorded in greater detail by hand or by rectified photography. These included the heraldic frieze on the gatehouse, and various representative mouldings and profiles.
- 5.2.9 In addition to the detailed architectural survey, a general photographic survey of the site for recording and illustrative purposes was carried out, together with detailed photography of significant features, using a 35mm camera. Coverage is in black and white, with some colour slide views for presentation purposes.

### 5.3 General comments

- 5.3.1 The outer sides of the inner court quadrangle, formed by the surviving parts of the castle, measure between 52.2m (along the north side) and 66.0m (the west side) in length. These two sides are the most regular, each being formed by the respective outer walls of the south-west, north-west and north-east towers, which are precisely aligned (see figure 7). In contrast, the south and east sides of the quadrangle are more irregular, the former incorporating a change of angle approximately half-way along its length and the

surviving remains of the latter laid out on a more irregular alignment with the Guard House set slightly skew. The ruins stand to a variety of heights, with some parts, such as the south wall, being visible to just above ground level while others, such as the south-west tower, stand up to c.26m above ground level.

- 5.3.2 The standing elements of the castle are built predominantly from rubble, with ashlar dressings mostly limited to features such as quoins, fireplaces, window and doorway openings, and corbelling; Emery suggests that the use of rubble implies that speed of construction was an important consideration (Emery 1996, 390). The stone is reported to have been quarried at Terrington, approximately two miles to the north (Todd 1824, 33). It is derived from the Middle Jurassic formation, and comprises a range of mudstones, siltstones, and sandstones, which generally display irregular bedding characteristics; most of the stone is relatively soft and there has been considerable loss of detail in some areas, although some is clearly more durable. Both the walling rubble and dressings appear to be of the same broad lithology. Brick and tile are also used to a small extent, particularly as a lining in fireplaces, and small amounts have been incorporated into the fabric, apparently both in the original construction and in later repairs and alterations.
- 5.3.3 Although a number of construction and repair phases can be identified within the fabric of the castle, it appears that the general form of the quadrangle was laid out as part of the initial construction. There is evidence for significant secondary medieval construction at the gatehouse, but otherwise no further major building work appears to have taken place within the quadrangle until the 18th or 19th century.

#### **5.4 Area 1: the south-east area**

- 5.4.1 The south-east corner of the quadrangle consists of a number of discernible units, including the south-east tower, the remains of the south-east spur wall, a gatehouse which housed the main or sole original entrance into the inner court of the castle, and to the north of this, a vaulted structure standing to a single storey's height (see figure 7). This last structure is referred to as the Guard Room (Todd 1824; Calthrop 1923, 175) or the gate tower (Emery 1996, 391); the former term is adopted here for convenience, rather than any positive reference to the building's function. A short line of footings is also evident to the north of the Guard Room with a second line to the west of the south-east tower.
- 5.4.2 There is a significant difference in ground level across this area, which appears to be due to the deposition of a substantial amount of material in and around the gatehouse and the Guard Room. This build-up of material has obscured a number of significant features, and means that the full height of the gateway is not known.

**The south-east tower** (elevations 1.1-1.2 and 1.8-1.9 on figures 9 and 10)

- 5.4.3 Only the east and south outer walls of the south-east tower survive above ground level, and the dimensions of the original structure are not clear. The standing remains of the south wall measure 8.5m in length, although if the east buttress is included, this can be extended to 9.6m. It stands to 22.1m in height, but continues to the west as a wall face now of a single course, representing a wall which would have formed the south side of the south range. As there is no surviving return to define the west end of the tower, the original length of the tower is unknown; there are some footings to the west (see below). The south wall is 1.6m thick at ground level (considerably thinner than is found at the other towers, and which may account for the presence of the buttress), but diminishes at a chamfered off-set some 10.0m above ground level (see below). The tower contained three floors but it appears that there was also a roof-top walkway at the south side, and possibly on the east side.
- 5.4.4 The east wall of the tower is here defined as being 14.9m long (including the south buttress), and it extends to the south side of the gatehouse, where there is a former return to the west, represented by a vertical line of ashlar blocks (elevation 1.2). The thickness of this wall varies between 0.5m and 1.5m, a difference caused principally by the fact that the central section of the wall has been rebuilt. The maximum height of this wall is c.22m above ground level.
- 5.4.5 The exterior of the south side of the tower bears several features (elevation 1.1). A buttress supports its eastern end, rising to a height of 15.7m, and containing six sloped off-sets; these off-sets and the quoins of the buttress are of ashlar. As the masonry of the buttress is keyed into the main wall it appears to be original. In addition to this surviving buttress, a scar 2.2m high at the west end of the standing wall indicates the former presence of a probable second buttress, or alternatively an adjoining wall, although there are no footings evident at ground level.
- 5.4.6 At ground level, and extending approximately 1m up the wall face, is an area of masonry of which the pointing appears to be more recent or to have survived better; this may be the result of repair or possibly be the effect of a former structure adjoining this wall.
- 5.4.7 There are three openings in the approximate centre of the south wall, each representing a floor level. The ground floor opening (W1/1), which is blocked with rubble masonry, is square-headed and measures 0.6m wide and 1.2m high. Its form has been altered and its original appearance is now unclear, but its dimensions suggest that it was a single light window, or possibly a narrow doorway. Above this are two two-light windows, of which the upper, at second floor level (W1/3), has trefoil heads with sunken spandrels,

and the jambs and mullion are plain chamfered with horizontal bar holes; this form of window is found elsewhere in the castle. Much of the first floor window (W1/2) has been removed, but it would appear that this was of the same form originally.

- 5.4.8 A group of eight square voids, each approximately 0.15m in height and width, pass through the thickness of the wall in a clear pattern of three rows at *c.*2.0m, 3.5m and 4.5m above ground level in this wall face. These presumably held structural timbers, and were possibly putlog holes, although the fact that they pass through the thickness of the wall is unusual; it is considered more likely that they were inserted during a later phase, perhaps associated with the construction of an animal shed in the interior of the tower (see below). Alternatively they may have held timbers associated with a building on the exterior, but there is no roof shadow or scar on this wall, or any indications on the ground, which would support this possibility, although the area of different pointing noted above may relate to this.
- 5.4.9 At *c.*1.7m above ground level is the base of the only surviving set of machicolations at the castle, which represent one of the few defensive details found at Sheriff Hutton. These consist of six pairs of corbels, which carry the wall face above out from the main face by some 0.5m, with the five spaces between allowing material to be dropped through. The machicolations have a horizontal band approximately half-way up their face, which gives them a decorative appearance (see plate 7).
- 5.4.10 The east wall of this tower (elevation 1.2) is also supported at the south end by a buttress of the same form as that seen against the south face; the two lowest stages have been extensively repaired. Close to the north of this, a short (*c.*0.4m) length of chamfered plinth is visible, adjacent to a hole which passes through the wall thickness. Above this, in the angle with the buttress, are the remains of a blocked window (W1/4), which would have lit an intra-mural latrine (L1/1). At 2.5m to the north of the buttress the south-east spur wall adjoins the tower, and results in a rise in ground level of some 1.5m.
- 5.4.11 Approximately 2m north of the spur wall face, there is a clear change of wall fabric although there is no precise line of the joint; to the north the wall is constructed with smaller stones, containing a large proportion of rounded cobbles, probably field clearance stones, which stand out from the quarried stone found elsewhere in the castle. This stretch of walling extends for *c.*5.0m to the north and contains two small openings; it appears to have been built as infill between the surviving parts of the castle as part of the construction of a cattle shed in this area in the 19th century. To the north, the main castle fabric begins again. The face of the south-east tower is considered to terminate at a vertical line of dressed blocks, 4.8m high (to 73.8m AOD), which appears to represent the original north-

east corner of the tower. To the north of here is the gatehouse, which is of later date (see below). Significantly, above the dressed blocks, the masonry of the two structures is keyed-in, suggesting that a certain amount of rebuilding of the north part of the tower took place when the gatehouse was constructed.

- 5.4.12 Above ground floor level on the east elevation of the south-east tower there are a number of features. A group of five square voids on three levels can be seen, similar to those noted on the south elevation, and also presumably having a role in supporting a secondary roof structure. At first floor level is a single light window with trefoil head (W1/5), and close to the right (north) of this, half of another window opening (W1/6) (obscured by vegetation on the external elevation at the time of the survey). There is a similar half of a window above this at second floor level (W1/7), but not aligned over either of the two openings below. At the north end of the tower, adjacent to the gatehouse, there is the right half of a window (W1/8), located at a level between the first and second floors of the main part of the tower. The base of the window is level with the horizontal off-set over the gateway.
- 5.4.13 Above second floor level, the south-east corner of the tower rises a further c.5m in what was evidently a corner of the parapet, forming a turret. This has quoins to the south-east, north-east and north-west corners, but not to the south-west, suggesting that it joined with the machicolations to form a continuous parapet on the south side, while on the east it would have terminated.
- 5.4.14 The internal arrangements of the south-east tower are only partially evident, but at ground level it appears to have been divided into two unequally sized units (north and south), a division which may have been present at higher levels also. This is clear from the relative heights of various features visible on the interior walls, but this evidence is insufficient to allow a detailed reconstruction of the layout. This interpretation accords with that recorded by the Victoria County History (Calthrop 1923, 175).
- 5.4.15 The south part of the tower evidently contained a barrel-vaulted room at ground floor level, and a single-celled room or chamber to the first and second floors. Above the roof would have been an access to the parapet area. Although there is less evidence for the forms of the rooms in the northern part, it is clear that their floor levels did not correspond with those in the south part. This may reflect the changing ground level in this area, or it may result from the nature of the construction of the two parts, with vaulting used only in the southern part. Alternatively, and probably more likely, it may have been a consequence of the rebuilding associated with the construction of the gatehouse.
- 5.4.16 In the south part of the tower, the form of the ground floor vault is apparent from the scars evident on both east and south walls

(elevations 1.8 and 1.9 respectively). It was aligned east-west and measured approximately 3.5m in width, and 4.3m in height. It would probably have been lit from the window opening in the south wall (W1/1), but the original form of this opening, now blocked, is not clear; very few dressings survive around it on the interior face, but there is a relieving arch of narrow voussoirs set within the wall above it.

- 5.4.17 Leading from the ground floor room are the remains of a passage in the east wall leading to a latrine (L1/1) in the south-east corner of the tower, the passage having a barrel vaulted roof, unlike the majority of the other latrine passages at the castle which are roofed with corbelled slabs. Part of the side of the passage has been repaired with mortared rubble which closely resembles the castle's original fabric. It was evidently lit by a small (0.35m high by 0.2m wide) opening in the east wall (W1/4), now blocked. No chute outfall was identified on the exterior of the tower, and it may be that it is now buried, or possibly obscured by one of the two buttresses, suggesting that their construction was not anticipated when the latrine was incorporated.
- 5.4.18 The south part of the ground floor contains several areas of repair and probable insertions, some of the work incorporating brick. In particular there is an area of brickwork at the west end, finished with a rounded corner of rubbed bricks, which appears to have formed the south-west corner of an open-fronted shed. Also in this wall are a number of voids which are probably associated with the roof structure of this shed.
- 5.4.19 The interior wall faces of the southern unit at first floor level contain a total of three window openings, one in the centre of the south wall (W1/2), and two in the east wall (W1/5, W1/6), partly described above. That in the south wall (W1/2) has a slightly splayed embrasure, with dressings surviving on the west side only; it would probably have had the same rear dimensions as the opening above (W1/3), ie. 1.6m wide and 3.6m high. There is a relieving arch over the rear arch of the embrasure. Of the two windows in the east wall, that to the south (W1/5) survives mostly intact; noticeably it has a square head to its rear arch, unlike that in the south wall, which has a round arch; this difference is probably because the former is a one-light window and the latter of two lights. The remains of the second window in the east wall (W1/6) closely resemble the adjacent opening, so it would appear that this room would have been lit by a pair of windows in the east wall and a single window in the south wall, in addition to any facing into the courtyard.
- 5.4.20 At the west end of the south wall is the side of a newel stairwell now running from first floor level to above roof level; it is not clear whether this once extended to the ground floor. No whole steps survive within it. There was access into the first floor room from

these stairs, as the rebated jamb of a doorway (D1/1) within the wall fabric indicates.

- 5.4.21 The means of support for the second floor in the south part of the tower are partly evident from two corbels in the south wall and from a socket at the south end of the east wall. Clearly these would have supported a beam running east-west against the south wall, which would have supported floor boards, probably with intermediate joists. The spacing of the beams is not clear, but there are no further sockets within the 2m of the east wall which survive at this height. The position of these features suggest that the first floor chamber had a height of *c.*5.2m.
- 5.4.22 The second floor chamber would have been lit by at least two windows, one in the south wall (W1/3) and one in the east (W1/7). That in the south wall is of identical form to that seen at the first floor level (W1/2), but is much better preserved, suggesting that a certain amount of demolition had taken place prior to the robbing of decorated masonry from the castle, preventing access to this height. Of the window in the east wall (W1/7), only the south side of the embrasure remains, but the size of this would suggest that the window was of two lights, of similar appearance to that in the south wall. There was presumably access into this room from the stairs at the south-west corner, but there is no evidence of a doorway remaining.
- 5.4.23 Above second floor level the probable form of the roof is apparent in the south wall. Here a socket *c.*0.4m wide by *c.*0.3m high near the east wall may have held a purlin aligned north-south, and directly above this the masonry courses have a distinct pitch of approximately 15 degrees, matched to the west by a similar pattern in the stonework. The foot of this pitch and the socket correspond with a set-back of *c.*0.2m in the east wall. No features are apparent on the interior faces of the tower above this probable roof line, other than the quoins of the turret mentioned above. Judging from the sockets and step however, the height of the second floor chamber appears to have been *c.*6.3m.
- 5.4.24 The evidence for the north part of the tower is confined to a short stretch of surviving wall, which has been altered by the apparent addition of the gatehouse at its north side. However, the height of the quoins on the external face (to 73.8m AOD), and the absence of any vertical straight joint above them, both suggest that above this level the north part of the tower was rebuilt when the gatehouse was incorporated. Because of this and the discontinuous nature of the tower's east wall, the number of floor levels and their relationships with the south part of the tower are not clear.
- 5.4.25 There is little evidence for the form of the ground floor room of the northern part of the tower, and it is not known whether it too was vaulted, but its extent can be conjectured. At the north end of the

tower, there is a short return to the west evident within the core, but there is no clear facework remaining. Assuming that the ground floor room would have extended along the full length of the tower, and would have adjoined the south vault, the likely width of this room would have been *c.*4m. There is no evidence for the height of this room, nor any evidence for ground floor openings into it.

- 5.4.26 The first floor level of the northern part of the tower, *c.*2.7m above the first floor of the south part, can be surmised from the height of a fireplace (FP1/1) which faces south, adjacent to the east wall. Only its right hand side survives, along with the flue, and its original form is unclear. This feature is however set within the south wall of the gatehouse rather than the north wall of the tower and can therefore be assumed to be an inserted feature. This room would have been lit by the adjacent window in the east wall (W1/8), which appears to have been set within a slight embrasure; there is no evidence for further features in this room. It is not known whether there were any rooms above this, as the masonry continues for only some 3.5m above the base of the fireplace. However, it is likely that the tower was of the same height throughout.
- 5.4.27 The length of wall connecting the north-east and south-east corners of the tower is, as noted above, of a distinctly different character from the original castle fabric. Although its east, outer face is flush with adjacent masonry, on the west side it is set back by up to 1.0m because it is considerably thinner (0.6m thick); some brick has been used in this face. In addition to the two openings close to ground level, there are two probable beam sockets at the top of the west face, one at the north end and one in the approximate centre, again associated with the roof of the later cattle shed positioned in this corner.
- 5.4.28 A revetment wall, *c.*0.6m high, runs west from the north-east corner of the tower. It is of brick, laid in an irregular bond, for the initial 4.1m, where it returns to the left for a short distance (0.7m); this terminates in a rounded corner, and appears to have formed the north-west corner of the shelter shed here, as it is on the same alignment as the area of brickwork in the south wall of the tower. Butting up to this end of the brick wall is a revetment of stone, 4.0m long and 0.5m thick; it is likely that this post-dates the brick building. The brick used in these structures is machine cut and is laid in an irregular bond.

**The gatehouse** (elevations 1.2 and 1.8 on figures 9 and 10)

- 5.4.29 The remains of the gatehouse survive as a single wall up to 14.6m high, joining the south-east tower and the Guard Room. Its fabric is relatively complex however and, as noted above, its relationships with the adjacent tower and the Guard Room are not clear. The gatehouse is believed to have been built during the early 15th century as an addition to the castle; there is evidence for this in both



the content of the heraldic frieze over the gateway, and in the structural relationships between the three elements.

- 5.4.30 On the east, external elevation (elevation 1.2), the south side of the gatehouse is defined by the vertical line of ashlar blocks 4.8m high within the wall fabric, interpreted as being the original north-east quoins of the south-east tower (see plate 8). Significantly, the wall face immediately to the north of these is not on the same alignment as the tower's east face, with a change of direction of some 8 degrees to the east.
- 5.4.31 At ground level, immediately to the north of these ashlar blocks, is an area of repair or infill containing bricks, limewashed on its northern face, where there are also three round sockets. It appears that this masonry was added to hold the side of a fence across the gateway in modern times.
- 5.4.32 The modern infill clearly overlies the south side of the gateway, which emerges at the top of the infill to spring into a pointed arch, of which only two voussoirs remain, the rest having fallen along with a quantity of walling stone from above the arch; as a result, the gateway's present height of 3.5m is largely arbitrary. The right (north) side of the gateway survives in better condition; the stones comprising the gateway are badly weathered but their original moulding is discernible (see figure 17), giving a width of the gateway of between 3.0 and 3.5m. These stones appear to be overlain by the south wall of the Guard Room, suggesting that they pre-date that structure, although this is believed to be deceptive, for reasons explained below. Above the gateway is a relieving arch with prominent triangular keystone.
- 5.4.33 There is a small window opening (W1/9), with sides and lintel missing on the exterior, 2.5m above the centre of the gateway. Above this, a horizontal chamfered off-set of c.0.1m runs across the width of the gatehouse, and immediately above this, is the heraldic frieze enclosed within a hood mould. The remains of the window to the left of this (W1/8) are within the fabric of the south-east tower and have been described above. The only other surviving feature in this external elevation is the sill of a window (W1/10) at the top of the wall face, which rises a maximum of 14.8m above ground level.
- 5.4.34 The frieze contains four shields, each 0.35m-0.40m high, and each exhibiting the Neville arms, ie. a Saltire or St Andrew's Cross (see figure 17). On the third shield the Neville arms are quartered with the Royal Arms (three Lions passant) and three Fleur de Lys on the right side (the shield's left or sinister side); these latter derive from the fact that Ralph Neville married Joan Beaufort, a daughter of John of Gaunt, who was the third son of Edward III. The first and second shields are set within garters, while the third and fourth are set within wreaths. The fact that Ralph Neville did not receive the garter until 1402 strongly suggests that the gatehouse was added

after that date, although the possibility must remain that the frieze was added to an earlier building.

- 5.4.35 At ground level within the gateway, which is 2.4m thick, is the top of a buried wall which once blocked the entrance; this was intact in late 1982 when the initial rectified photographic survey was undertaken, and on the photograph from that survey it is shown as reaching the full height of the gateway.
- 5.4.36 The interior face of the gateway (elevation 1.8) is bounded on the south side by a set of ashlar quoins, the lowest of which are buried; no quoins survive on the left (north) side, which is badly eroded and survives only as corework. All dressings from the rear arch have fallen, possibly because of the removal of the blocking wall, but the rubble relieving arch above this is intact.
- 5.4.37 At the north end of the gatehouse the side of a newel stairwell runs from first floor level to the top of the surviving wall; no steps remain within it and there are no indications of associated windows or doorways.
- 5.4.38 There was clearly a room above the gateway, as the presence of the small window (W1/9) indicates. Most of the dressings have been removed from the window. This room was evidently accessible from the south-east tower, as the side of a doorway (D1/2) survives within the wall fabric. This doorway is evident only as five dressed, angled blocks, rebated on their south sides. There is also likely to have been a doorway from this room into the stairs to the north, although no evidence of one now remains.
- 5.4.39 Above window W1/9 the masonry of the interior face of the gatehouse's east wall extends upwards for 5.0m, where there is a set-back in the wall face of c.0.2m, and directly above this are the fragmentary remains of a second window (W1/10). To the left of this is a recess c.0.5m wide, reddened at the base, which may have been a small fireplace; its appearance cannot be ascertained from ground level.

**The Guard Room** (elevations 1.4 to 1.7 and 1.10 to 1.13 on figures 9 and 10)

- 5.4.40 Immediately to the north of the gatehouse is a single storey vaulted structure measuring 11.0m by 9.5m in plan, and standing to approximately 5.5m in height; this structure is known as the Guard Room (Calthrop 1923, 175). Significant external facework only survives on the east side face of this, but the interior elevations are mostly intact, although apparently buried to some extent. It is noticeable that the Guard Room has a different alignment to the rest of this side of the inner court, although the 1765 plan (see figure 3) and that published by Todd (1824) depict a straight wall.

- 5.4.41 That part of the Guard Room's south elevation outside (ie. east of) the gateway (not recorded in elevation), measures 1.4m long and 4.0m high, and contains no openings or other features, with much of its facework having been removed. It appears that the south-east corner of the Guard Room has been built over the moulded arch of the gateway, suggesting that the gatehouse is earlier, although this is considered to be unlikely. Possibly this side was rebuilt to accommodate the new gatehouse.
- 5.4.42 The building's east elevation (elevation 1.2), which stands up to 5.5m in height, runs on a different alignment to both the gatehouse and the south-east tower (16 degrees east of the latter), and projects out from the face of the gatehouse by 1.5m. This elevation contains two partly blocked window openings (W1/11 and W1/12), their sills set 1.4m above present ground level (see plate 8). Both are narrow single light openings, 1.3m high and 0.4m wide, with the remains of trefoil heads and chamfered sides, similar in form to the surviving single light window seen in the east elevation of the south-east tower (W1/5). They have been partly blocked with machine-cut bricks. Above these windows, the wall face continues up for 2.0m, terminating in a chamfered string course of which four blocks remain *in situ*, having a total length of 3.1m. It is not known to what height the structure once stood, but it may have been of the same height as the gatehouse or even the south-east tower; the fact that the ground floor is vaulted suggests that it was intended to support a considerable load, similar to the lower floors of the castle's four corner towers.
- 5.4.43 There is no facework on the present north side of this building (elevation 1.4). There appears to have been a doorway into the vault at the east end of this side, represented by two rounded blocks, possibly the remains of a door jamb, with a total height of 0.8m. The present entrance is 2.5m wide. One feature is evident within the corework at the north-east corner of the building, namely a chute extending upwards from ground level for some 3.5m. This is of ambiguous form, but it may be a latrine chute.
- 5.4.44 The west side of the Guard Room (elevation 1.5) was largely obscured by a dense cover of vegetation at the time of the survey. A small area of wall facing, up to 3.0m long and 1.5m high, survives at ground level and above this, within the core, are the remains of a blocked window (W1/13).
- 5.4.45 At the south-west corner is a former doorway into the vault (D1/3; elevation 1.6), blocked with stone rubble to a height of 1.4m, with machine cut brick above to the remains of the apex (c.2.2m). The west jamb of this doorway is badly weathered but it retains a chamfer, and the overall impression is that it would have given access into the Guard Room from a vaulted passage from the west. The dressings of the doorway are best preserved on the interior (see below).

- 5.4.46 The south side of the Guard Room which lies within the gateway (elevation 1.7) is relatively complex, and appears to have been heavily eroded, meaning that the top part of the vault is visible in section. The majority of the surviving wall face below this appears to have been repaired, as it is recessed behind an area of thicker wall at the west end, the two thicknesses being 0.6m and 0.9m respectively. The difference may have resulted from alterations to the Guard Room to allow the later construction of the gatehouse.
- 5.4.47 The interior of the Guard Room is essentially weatherproof, and was in use as a farm equipment store at the time of the survey. Its east and west walls (which survive to their original thickness) measure 2.1m thick, on average, and the internal dimensions are 4.3m (east-west) by 6.5m; the vaulting is now 3.5m high, but the depth of deposits within the vault here is unknown. The Guard Room is now entered through the north wall (elevation 1.10), where an opening *c.*2.5m wide, has been created by the partial removal of the wall. There are two windows in the east wall (W1/11 and W1/12) which survive largely intact (elevation 1.11); their embrasures measure 1.2m and 0.8m wide respectively, and 3.3m high. Within the embrasures, eroded steps lead up to the openings.
- 5.4.48 The internal side of the blocked doorway at the south-west corner (D1/3; elevations 1.12 and 1.13) is also evident in the interior, where it is 0.9m wide. The west jamb is shouldered, but the east jamb is corbelled and implies that the former adjoining passage initially ran straight to the west. In the west wall (elevation 1.13) is the top part of a fireplace (FP1/2), measuring 0.8m wide. Up to 0.5m of this is visible above ground level: compared with the ground floor fireplace in the south-west tower (FP4/1), which is 1.6m high, suggests there is a depth of at least 0.8m of deposits within the Guard Room. The soffit of the fireplace is eroded, but the relieving arch over it, is intact. This differs from all other relieving arches at the castle in that it is of thick sandstone blocks, rather than thin rubble. There is a recess in the right side of the fireplace, *c.*0.5m wide, which may have served as an oven. A third window (W1/13), of similar form and dimensions to the south window in the east wall (W1/11), is also situated in the west wall, north of centre.

**The south-east spur wall (elevation 1.3 on figure 9)**

- 5.4.49 The fourth structural element of the south-east area is a spur wall, running for over 46m to the east from the east wall of the south-east tower. This acts as a revetment wall, and carries a face only on its south side (elevation 1.3); it has a maximum height of 2.3m, but in no place can a distinct wall top be identified, so its original height is not known.
- 5.4.50 At its west end, the wall face is largely collapsed, but it appears to have been built up against the east wall of the tower, suggesting it is of later construction; this end is shown by the Victoria County

History as having three buttresses on the south side (Calthrop 1923, 175). The surviving masonry at this end is of coursed ashlar, which extends for 18.6m, and is in contrast to all other wall faces at the castle which are of rubble. The reason for this is not known but the fact that the 1765 plan shows a return (see figure 3) might be significant.

- 5.4.51 An area of core within the wall, between 6.4m and 7.5m from the west end, appears to be the scar of a former buttress. To the east of this, the wall is again of coursed ashlar, at the foot of which is a chamfered plinth, which may continue to the west, beneath present ground level. A second probable buttress scar is situated between 12.3m and 13.4m from the west end, the plinth resuming to the east of this. There is a third scar, between 18.6m and 20.1m from the west end.
- 5.4.52 To the east of the third scar, the wall continues for a further 6.7m, but here it is composed of thin random rubble and has no plinth. Whether the change of masonry is original to the wall face, or results from rebuilding, or is an extension to the spur wall, is not known. To the east of here, to a distance of 46.5m from the south-east tower, the base of the wall was in the process of being rebuilt at the time of this survey.

### Footings

- 5.4.53 There is a line of footings visible in plan only some 6.0m to the north of the Guard Room, which appear to once have formed the base of a wall, possibly the east curtain wall between the Guard Room and the north-east tower (see figure 7). The footings measure *c.*3.8m long and 1.3m wide, and are of sandstone; there are clear faces on the sides but no returns are evident. Although broadly aligned with the Guard Room, they are not precisely in line, thus adding complexity to the plan of this side of the castle.
- 5.4.54 There is also a second line of footings 16m to the west of the east side of the south-east tower (see figure 7). These are aligned approximately north-south with the east wall of the tower, and are 8.0m long and a maximum of 0.5m wide; they are only just visible at ground level, and are marked by a line of longer grass and two small trees. Rather than representing the west side of the south-west tower, they are in fact related to a later enclosure associated with the agricultural use of the inner court; the wall is shown as being *c.*1m high on a 1956 aerial photograph (Platt 1982, 136), and is depicted with a return running east from the north end on the Ordnance Survey 1911 25" map (see figure 3).

## 5.5 Area 2: the north-east area

- 5.5.1 The north-east area includes both the north-east tower, and a spur wall running to the north and then east from this (see figure 7). The

tower lies *c.*24m north of the Guard Room and, although no standing wall links the two structures, traces of a wall are visible at ground level between the two (see above).

- 5.5.2 The north-east tower, which comprises a vaulted basement and ground floor, and three upper floors, appears to stand close to its original height in places, and now measures some 24.5m on the north elevation. However, only the west, north and east ground floor walls survive to any degree; above this level, only the north-west corner of the tower remains. At ground level, the maximum external dimensions of the tower are 15.7m (north-south) by 11.2m (east-west). Adjoining the north side of the tower is an L-shaped spur wall, with a total length of 26.5m.
- 5.5.3 The tower and spur wall are built of similar material to that used elsewhere, ie. rubble of varying sizes and lithology, with dressed quoins to the surviving (ie. north-east and north-west) corners of the towers. Some brick and tile has been used however in the tower's north elevation, some of it in repairs, and concrete breeze blocks have been used in more recent repairs to the spur wall. At basement and ground floor levels, the north and east walls measure 2.4m thick, a thickness which decreases with off-sets and interior steps further up the tower.

**The north-east tower** (elevations 2.1-2.3 and 2.6-2.8 on figures 11 and 12)

- 5.5.4 The east elevation of the north-east tower (elevation 2.1) stands only to the top of the ground floor, ie. to 7.0m above ground level although it is shown as standing to presumed full height in one of Cave's drawings (Todd 1824). It is also possible that ground level has been raised here since the castle's construction.
- 5.5.5 Within the east elevation are three large apertures. The north one is a narrow window opening (W2/1), measuring *c.*3.5m high and *c.*1.0m wide, the exterior of which is mostly collapsed, with only two dressed stones *in situ*. To the left (south) of this is a hole which has been knocked through from the back of a fireplace (F2/1; see below), while the south aperture has been knocked through from the side wall of a passage. The south end of this elevation is formed by core work, with no firm evidence for a return to the west, so it is not possible to ascertain the original length of the tower. However, the present length of 15.7m suggests that the tower may have been of the same size as the south-west tower (the most intact), ie. *c.*17m.
- 5.5.6 The basement of the tower is best represented on the north elevation (elevation 2.2), to the west of the north-east spur wall. A window opening (W2/2), central to the elevation, and much collapsed, now runs from ground level and merges with the ground floor window above (W2/3). The lower window appears to have

been at least 3.1m high, but its width is not apparent. Very few of the window dressings survive, but the external form of the window would appear to be similar to that found at basement and ground floor levels on the north-west tower (W3/11 and W3/12), ie. a narrow opening with plain chamfered dressings, rather than the more ornate trefoil headed windows found at higher levels. The lowest 1.0m of the window opening has been blocked with coursed rubble masonry, probably in modern times. Apart from an area of collapse in the vaulted roof of the basement, this opening is now the only access into the basement.

- 5.5.7 Also at basement level, close to the west end of the north elevation is a single latrine chute opening (C2/1), which appears to have served a latrine on the second floor. The chute itself measures 0.4m by 0.35m in horizontal section, and emerges as an opening 0.5m high, from beneath a lintel some 0.2m thick; there is a slope at the base as the chute passes out from the wall core to the exterior. The position of this chute in relation to ground level suggests that external ground level has not changed significantly since the castle's construction.
- 5.5.8 At 2.5m above ground level in the north elevation is a distinct change of masonry type, as large rubble blocks (up to 0.5m long) give way to much thinner rubble containing some tile and brick, where the pointing is considerably more pronounced. It is not clear to what extent this difference is due to repair, and it is possible that it represents an original construction break.
- 5.5.9 Above this masonry change the north elevation contains the remains of the ground floor window (W2/3), of the same form as that at basement level (W2/2), and aligned with it. Again there are few external dressings remaining, and the opening was partially obscured by vegetation at the time of the survey. To the west of the north-east spur wall, an area of decayed limewash remains up to 3.0m above ground level, suggesting that this face may have been incorporated into a farm building at one time.
- 5.5.10 The top of the ground floor is represented by a chamfered off-set of some 0.2m width; above this, only the west half of the north elevation survives. The left side of this surviving wall face is marked at first, second and third floor levels by the west sides of formerly central windows (W2/4, W2/5 and W2/6), each with intact dressings. Those on the first and third floors (W2/4 and W2/6) have the remains of trefoil heads, and they would appear to have been of two lights, as seen on the south elevation of the south-east tower (eg. W1/3). A fourth opening, measuring 0.8m wide and 1.0m high, without dressings, is present at second floor level, and appears to be an much enlarged latrine window, although without access this cannot be ascertained.

- 5.5.11 A second chamfered off-set lies c.19.2m above ground level on the north elevation, and above this is a horizontal chamfered band in the centre of the wall, of which 2.9m survives; this turns to run vertically upwards for 1.5m to the present wall top, some 2.2m from the north-west corner.
- 5.5.12 Only a small part of the west side of the north-east tower survives above ground level (elevation 2.3). However, sufficient remains to indicate the position of the castle's north curtain wall, 3.1m from the tower's north-west corner. Although nothing of the wall itself survives, features evident in the tower indicate that this curtain wall also formed the north side of a range of buildings, for at least part of its length.
- 5.5.13 At basement level, two adjacent latrine chutes at the north end of the elevation emerge from an area of collapsed face (C2/2 and C2/3). The southern of these (C2/3) served a latrine immediately above, ie. at ground floor level (L2/1), while the north one appears to have served one on the first floor. To the south of these chutes, there is a length of core, together with the outer face of the basement vaulting: there has evidently been considerable collapse or robbing of masonry here and a brick buttress, thought to have been constructed in the 1800s (pers comm Dr R Howarth), supports some of the surviving structure.
- 5.5.14 At ground floor level, the elevation contains a small (0.2m wide by 0.4m high) window opening (W2/7), of which the right side was clearly situated within the angle of the north curtain wall. Its surround is chamfered, but otherwise it is plain in form. It lights a latrine within the wall (L2/1), reached from a passage 3.6m long and 0.7m wide, with a roof of corbelled stone slabs. This passage runs north-south, and turns to the west, ie. into the former north range; there is no doorway surviving. To the south of this passage only corework is visible in the west elevation, and the presence of considerable ivy growth obscures much of the walling.
- 5.5.15 The badly weathered remains of an off-set are present at first floor level, continuous with that on the north elevation; approximately 1.0m above this, the masonry courses are particularly uneven, and may indicate a building break at this level. A second off-set runs at 10.5m above the lower; 1.0m below this second off-set, in the angle with the north curtain wall, a narrow opening approximately 0.4m high and 0.2m wide with a projecting sill, appears to be a water spout, and probably would have drained water from the parapet of the north curtain wall.
- 5.5.16 Above the second off-set is another small window opening (W2/8), similar to that on the ground floor (W2/7), apparently lighting a latrine here; the opening has been used to hold a wall-tie plate, probably dating to the 19th century repairs. The elevation continues



for a maximum height of 4.9m above the off-set, where it appears to have formed a corner turret, the south-west corner of it evident as ashlar quoins, running up for 2.9m above the top of the scar of the curtain wall. The width of this turret would be 3.2m from north to south.

- 5.5.17 There is some evidence for the form of the castle's north range at this higher level. The tower's west elevation is set back by 1.1m to the south of the curtain wall at second floor level, and 2.5m above this is the top of the north curtain wall. The left side of an opening with chamfered side and trefoil head, which was probably a doorway (D2/1) (see below), appears to have given access from the second floor of the tower to the top of the north range, set some 0.5m above the tower's second floor. This shows the parapet to have been up to 2.0m high. Although fragments of the west wall of the tower south of the curtain wall survive below this level, there is no further indication of access to or floor levels within the north range, beyond the passage to the ground floor latrine (L2/1) described above.
- 5.5.18 The interior of the north-east tower appears to have been occupied by a single cell on each floor level. The basement contains a considerable depth of rubble and building debris, up to the beginning of the vaulted roof in places, and safe access into the vault was not possible at the time of the survey. There is a window in the north side of the basement (W2/2), with its right side intact; it is a relatively narrow (up to 1.1m wide) embrasure, but its height is unclear. It can be seen from this opening that the basement is of a single barrel vault, aligned north-south, measuring 5.4m in width; its length and height were not measured due to access difficulties. The original access to this vault is not now apparent, but it was presumably at the south end of the tower. The plan published in the Victoria County History shows a stairwell in the south-east corner of the tower (Calthrop 1923, 175), which may have descended to this level, and this would conform with the arrangement in the south-west tower.
- 5.5.19 The ground floor vault is of very similar dimensions to those recorded for the basement, although its original length cannot be ascertained either; the vaulting stands to 5.4m height in the centre. There are no features in the west wall (elevation 2.6). The embrasure of the window in the north wall (W2/3) runs from 1.5m above floor level to the top of this wall, and has a maximum width of 1.6m; the dressings on the interior of the embrasure are mostly intact, but the steps which appear to have led up to the opening have largely collapsed (elevation 2.7). Little remains of the details of the opening itself.
- 5.5.20 In the east wall (elevation 2.8), a similar window (W2/1) lit this room, but it too has collapsed and its original form is not clear. Its embrasure appears to have been of a similar height, with its upper

parts opening from the vaulting itself. There are also the remains of steps within it, leading up to the window opening. Adjacent to the window is a fireplace (FP2/1), measuring 2.0m in width, 2.9m high, and up to 0.7m deep. The base of the back of the fireplace is lined with bricks, laid in alternate layers of headers and stretchers, giving a herringbone effect, as is found in the north-west and south-west towers.

- 5.5.21 To the south of the fireplace is one surviving side of a former passage leading into the wall thickness, which turns through 90 degrees to the south and runs for 4.3m, before ending at a wall face; the remains of a corbelled roof can be seen in places. It is not clear to where this passage led or what it served as and, although it resembles latrine passages elsewhere in the castle, there is no evidence for a latrine and it is possible that it provided access into the vault itself, perhaps from stairs or from another passage running parallel within the south wall of the tower. At the north-east corner of the passage, there is a suggestion of a former window in the core, but the form of this opening is not clear.
- 5.5.22 The first floor of this tower, formed by the vault over the ground floor, is now overlain by a substantial (up to 3m) depth of rubble and vegetation; no access is possible up to this level. No features can be seen in the west wall of this room, of which only 2m to 3m survives, and in the north wall the only identifiable feature is the central window (W2/4), of which only the west side remains, along with part of a trefoil head, and the end of a relieving arch over. There is no evidence for any heating within this room, and it is most likely that any fireplace would have been situated in the east wall, where the ground floor fireplace (FP2/1) survives.
- 5.5.23 The level of the second floor is evident from a set-back of approximately 0.2m, but too little survives of the west wall here for there to be sign of other supporting elements. This gives the first floor chamber an approximate height of 5.0m.
- 5.5.24 The second floor room was also lit by a northern window (W2/5) of the same form as that on the first floor; although the left side of its embrasure (rising from floor level) survives intact, together with part of the relieving arch, the form of the opening itself is no clearer than that below.
- 5.5.25 There appears to be a latrine serving this second floor, within the north-west corner of the tower. It was entered from a passage within the thickness of the west wall, but no doorway into the passage remains, and it is possible that this latrine served the north curtain wall, as is the situation with the latrine at ground floor level (L2/1). The latrine appears to have been lit by a window in the north wall, the opening of which is now enlarged; it is probably connected to the chute visible on the north elevation (C2/1). As on the floor below, there is no evidence for any heating at this level.

- 5.5.26 A row of three closely spaced sockets in the north wall (each approximately 0.2m square) marks the level of the third floor, which was probably supported on timbers aligned north-south, and it seems that these closely spaced beams or joists were sufficient to support the floor without intermediate timbers, unlike the method used in the south-east tower where corbels appear to have held a beam supporting the top floor. The height of the second floor would have been approximately 4.2m.
- 5.5.27 There is another central window in the north wall of this room (W2/6), of the same form as that seen on the first and second floors (W2/4 and W2/5) and surviving to a similar extent. There is a shouldered doorway (D2/2) in the left (west) side of the embrasure, 0.6m wide and 1.7m high, which probably gives access to a latrine in the north-west corner, linked to chute C2/2 in the west elevation. The small window opening in the west elevation (W2/8) appears to light this intra-mural latrine.
- 5.5.28 In the west wall of the second floor, a second opening (D2/1), of which only half survives, has ostensibly the same form as the window (W2/6) in the north wall, but in fact there is a square-headed rebate on the inside face of the trefoil, in contrast to the curved rebates in the north windows, which suggests that this may have been a doorway; if so, it would have given access to the top of the north range, perhaps to a parapet walkway. The opening measures 2.3m high, and its interior dressings on the north side remain intact, along with part of a relieving arch.
- 5.5.29 The form of the roof over the north-east tower can be partly ascertained from the pitch of masonry courses in the north wall, which run at 15 degrees, indicating that the roof was aligned north-south, as appears to have been the case in the south-east tower; within the pitched masonry a probable purlin socket can also be identified. The base of these pitched courses corresponds with a set-back of approximately 0.3m in the west wall, which would have held the feet of the rafters, and possibly provided a roof-top walkway. Although the original wall tops of the tower do not survive, the remaining walls indicate that there would have been a parapet of at least 1.5m height to the north-west corner of the tower.

#### **North-east spur wall (elevations 2.4-2.5 on figure 11)**

- 5.5.30 A spur wall, L-shaped in plan, runs north from the north elevation of the north-east tower for 14.2m, before turning to the east and running for a further 12.3m, where it terminates at a farm gateway. For the majority of its length, the wall acts as a retaining wall, with only its west and north faces visible. The wall's maximum height is found approximately half-way along the north-south length (elevation 2.5), where up to 4.0m survives; at the east end, at the gateway, the wall is only 1.3m high (elevation 2.4).

- 5.5.31 For the most part the wall is faced with sandstone rubble of similar form to that seen elsewhere in the castle, and this fabric appears to be medieval. In addition, there are elements of the wall which are clearly modern. Its south end appears to butt up to the tower, as is the case with the south-east spur wall (described above), indicating that it was constructed later. There is no evidence on the tower's north wall to suggest that the spur wall was significantly higher than it is at present.
- 5.5.32 Parts of the facework of the north-south length of the spur wall have collapsed, particularly near the south end, where a 1.5m high modern brick wall has been built on the higher ground to the east. There was also established vegetation in this area at the time of the survey. At the north end of this wall, an area of concrete breeze block walling 1.1m long has been constructed, the full height of the wall, presumably in a response to the collapse of the corner.
- 5.5.33 Close to the north end of this part of the wall is a feature which may have had a defensive or decorative function. It consists of an area of shallow, rounded corbelling 2.7m long and 0.9m high, projecting 0.2m from the top of the wall face. It appears likely that this feature continued upwards, but its original form is however unclear, as is its function. Below this is a void within the facework which may result from collapse, or was possibly a latrine chute opening, although this is considered unlikely.
- 5.5.34 The east-west length of the spur wall also contains an area of breeze blocks at its west end, 2.1m long. Adjacent to this is a group of apparently randomly placed dressed blocks, possibly rejected dressings. At 2.9m from the west end of this length, the wall's height drops abruptly by 1.3m, and continues with the appearance of a drystone field wall, 0.6m thick and up to 1.7m high, with triangular coping stones placed along its top, before terminating at a gatepost. It is believed that little of this wall is medieval, and it has in fact been substantially rebuilt in recent years.

## **5.6 Area 3: the north-west area**

- 5.6.1 In this area the only significant standing remains are those of the north-west tower, of which only the north and west walls survive to any significant extent, but of these, the basement, ground, first, second and third floor levels survive (see plate 9). In plan the tower has a maximum width of 14.9m east-west (probably close to its original full width), by 10.0m north-south (the full length of the wall) at basement level (see figure 8). This gives it an overall east-west alignment, which contrasts with the three other corner towers, which are aligned north-south. The maximum height of the tower is at the north-west corner, where it rises to 24.5m above ground level. A short length of the outer wall of the west range projects from the south side of the tower for approximately 1.7m, and there is also a detached line of footings to the south-west.

- 5.6.2 The construction materials in this area are similar to those used in the other parts of the castle, and as elsewhere, the rubble making up the majority of the fabric varies considerably in size. There is also a noticeable difference in the surviving finish on the tower's quoins, which is probably attributable to different qualities of the stone, rather than to repair or replacement.

**The north-west tower** (elevations 3.1 to 3.5 on figures 13 and 14)

- 5.6.3 The north elevation of the tower (elevation 3.1) is divided into three planes, defined by two chamfered off-sets, at *c.*8.3m and *c.*19.0m above ground level, or *c.*75.0m and 86.0m AOD, ie. at the same heights as those on the north-east tower (see plate 9). Below the lower offset is a small 0.3m by 0.1m plain, chamfered window opening (W3/1) lighting a latrine (L3/1), and slightly above and to the right of this, is another plain, chamfered single light window opening 1.2m by 0.3m (W3/2), which would have lit the main ground floor room (see below). At the base of the wall below these is a pair of latrine chute openings (C3/1 and C3/2), the facework around them having collapsed. A second pair of chute openings (C3/3 and C3/4) is situated at ground level between 2.5m and 5.0m from the north-west corner; it would therefore appear that ground level has not changed significantly in this area. The wall thickness can be measured here, and at 2.4m thick it is similar to that seen in the north-east and south-west towers.
- 5.6.4 Above the first off-set, at the east end of this elevation, the remains of a window opening can be seen (W3/3), comprising five or six dressed blocks, on which no details appear to survive. This window, which is approximately at first floor level, would have lit a stairwell within the wall thickness here (see below). Also at this level are the much enlarged remains of a second window (W3/4), of which no dressings survive on the exterior. This opening now measures 1.6m wide and 3.3m high. A third enlarged opening, 2.8m high and 2.4m wide, to the right (west) of this, represents a former window in the north-west corner (W3/5), probably lighting a latrine, with a single dressed block surviving to indicate its western jamb.
- 5.6.5 A distinct area of wall fabric, extending from *c.*1.5m above the lower off-set to almost the wall top, runs between the two last-described openings (see plate 9). The perimeter of this area is clearly marked, as the masonry within it contains a paler mortar than the surrounding fabric. Several pairs of sockets, possibly putlog holes, are also evident within and around it. This appears to be the most substantial area of repointing or repair to the castle fabric, and probably dates to the 19th century works.
- 5.6.6 The remains of a second stair window (W3/6), similar to those of the window below (W3/3), are found between first and second floor levels at the west end of this elevation. At second floor level proper, the presence of a latrine chute serving the third floor (C3/2)

can be recognized where the wall face has fallen away. To the right of this, the remains of another window survive (W3/7), aligned slightly to the west of that on the first floor. On the external elevation the opening measures 3.1m high and 1.5m wide, with the remains comprising the left jamb, trefoil head and sunken spandrel, as found in two-light windows throughout the castle. To the west of here, is the west side of a probable latrine window (W3/8), enlarged to an opening up to 1.5m high and 1.3m wide by collapse, so that it now also passes through to the rear of a fireplace (see below).

- 5.6.7 The two openings at third floor level lie above the second chamfered offset on this wall face, and both are intact, suggesting that the robbing of window dressings at lower levels took place after a certain amount of demolition had taken place, preventing access to this height. The left window (W3/9), which is smaller (0.3m high by 0.1m wide) and plainer, lights a latrine, while the right window (W3/10), aligned directly over the similar window on the floor below, is of two lights, with trefoil heads and sunken spandrels. Above these windows are the remains of a chamfered band, which runs horizontally before returning vertically upwards 1.6m from the north-west corner; this is similar to that found on the north elevation of the north-east tower and on the west side of the south-west tower. Three holes, irregularly spaced along this band, appear to be spout holes to discharge rainwater, as the band beneath each is worn as though by water action. The wall top itself is irregular in profile and does not appear to survive to the original height at any point.
- 5.6.8 The full width of the north-west tower's west elevation survives for most of its height (elevation 3.2). As elsewhere, the corners are defined by ashlar quoins, and it is also divided by chamfered offsets, which continue from the north elevation at the same heights. The openings within this elevation are, with one exception, centrally aligned although only one, at third floor level, survives intact.
- 5.6.9 A plain, narrow window opening at ground level, 0.4m wide and 1.1m high, lights the basement (W3/11). Above this, at ground floor level, is a heavily enlarged window opening of which no dressings survive (W3/12); this was probably of similar form to that below. At first floor level, marked by the lower of the two chamfered off-sets, is another enlarged opening (W3/13), probably a two-light window, of a form found throughout the castle.
- 5.6.10 Just below the top of this opening is a probable building break, extending across the elevation, and noticeable as the difference between the thin rubble below (of which the courses are typically 0.15m high) and a thicker rubble above (the courses of which are some 0.25m high). This break is not apparent on the north elevation.

- 5.6.11 Midway between first and second floor levels, a small window (W3/14) survives partially intact, its left side missing. The opening now measures 1.1m high and 0.5m wide. It appears to have lit an embrasure (probably not a latrine) in the corner of the tower, separate from the main chambers in the tower. At second floor level proper is another former two-light window (W3/15), the mullion and central springer missing; above this, at third floor level, another window (W3/16) survives immediately above the off-set, the best preserved in this elevation. All the external dressings of this window survive *in situ*, although they are considerably weathered.
- 5.6.12 The top of this west elevation is marked by a chamfered band within the central part of the wall, returning upwards 1.6m from each corner, similar to the arrangement in the north elevation. Little wall face survives above this.
- 5.6.13 Only a small part of the south elevation of the north-west tower survives, much obscured by vegetation (elevation 3.3). The little that does remain falls outside the west curtain wall, the outside face of which lies 2.9m from the tower's south-west corner.
- 5.6.14 At ground floor level is an enlarged window opening (W3/17), in the angle of the curtain wall and south wall of the tower. This would have lit an alcove off the tower's ground floor chamber (described below).
- 5.6.15 The chamfered off-set at first floor level on the north and west elevations of the tower continues onto the south elevation, although it was mostly hidden by ivy at the time of the survey. Above this, the evidence for the west curtain wall peters out at 11.0m above ground level, where the tower's south wall narrows; it is unlikely however that this represents the top of the curtain wall, which probably extended to the second off-set or above (see below). At 13.0m above ground level, in the south wall, is the centre of a probable former window, which on the rectified photograph of 1982 appears as a hole 1.5m high and 1.1m wide; the time of this survey the east side of the opening had collapsed, and it now appears as an indentation in the east end of the surviving wall. There are no dressings. It appears that this former window lit a small alcove between first and second floors, also lit from the west (by W3/14), and which may have been accessible from the west curtain wall, rather than from the main rooms of the north-west tower.
- 5.6.16 Above this feature, the tower's second off-set is visible, running for 2.6m across the width of the surviving wall. At the top of the wall a corner turret can be identified. This is achieved by the main wall face being recessed by c.0.4m to the east, behind a set of quoins, leaving a strip of wall face flush with the main face below, 1.8m wide and 4.0m high, defined by ashlar quoins on its south-west and south-east corners. The recess in the face to the east of this is formed by a gradual slope, rather than a definite step.

- 5.6.17 As in the south-east and north-east towers, the original internal arrangements of the north-west tower are evident to a large extent from the surviving walls (elevations 3.4 and 3.5) (see plate 10). The tower was divided into five floors, all apparently accessible from stairs in the north-east corner. With the exception of the basement, each floor was heated, and served by a latrine.
- 5.6.18 The basement comprised a barrel vault, aligned east-west, with the scar of the vaulting evident in the west wall. In plan it measures 5.5m wide, and up to 11.8m long, although the original length is not known due to the fragmentary nature of the east end of the tower. The interpolated centre of the vault scar is now at 3m above ground level which, when compared with the intact basement in the south-west tower (which is 4.8m high), suggests there is up to 2m of deposited material in this area. The basement was lit by a window high up in the west wall (W3/11), the top of it 0.8m above the top of the vaulting. The window's embrasure has undergone considerable robbing or collapse, with only one or two dressings surviving on the interior face.
- 5.6.19 Further collapse has taken place 3m from the east end of the north wall, where the presence of two latrine chutes (C3/1 and C3/2) within the wall appear to have weakened it, to the extent that there is now an opening through the wall thickness. It is unlikely that there was an original opening here.
- 5.6.20 Access to the basement would have been from stairs in the tower's north-east corner, remaining as one third to one half of a circular stairwell running up to the base of first floor level. There is no remaining evidence for a doorway at basement level however. The stairs appear to have been lit by a window between basement and ground floor levels, of which only two dressings of the internal face survive (W3/18).
- 5.6.21 Considerably more evidence survives for the tower's ground floor chamber. This was also vaulted on an east-west alignment, and a length of the vaulting (up to 6.0m) survives, across the width of the chamber at the west end. The entrance into the chamber appears to have been from the stairwell in the north-east corner, although as at basement level, nothing of the doorway remains.
- 5.6.22 The chamber's length and width are the same as those of the basement vault, and it is 4.6m high. The floor area is supplemented by a small alcove in the south-west corner and a latrine in the north-east corner. The alcove measures 1.6m north-south and 1.3m east-west, and appears intended to be an embrasure for a window in the angle of the tower (W3/17), which would have had a view along the external length of the west curtain wall. Very little facework survives within it (although some corbelling supports its roof), and its original form has been much altered by the loss of stonework.



- 5.6.23 The ground floor chamber was lit by a window in the centre of the west wall (W3/12), again set within an embrasure and beneath a rear arch, and although a considerable amount of stonework has been lost from within the recess, it is possible to discern former steps leading up to the window opening. The embrasure runs for the full height of the vault and measures 1.6m wide. To the south of the recess, in the west wall, is an area where the wall face is recessed by up to 0.3m from the main face, being sloped at the top, but incorporating a step at the bottom. Rather than an intentional feature, this area is interpreted as the result of the loss of original facework, with the core behind having a rough face as well.
- 5.6.24 There is an area of reddening in the north-west corner of this room, between 0.2m and 1.3m above floor level, which appears to be the result of burning, and presumably dates from a post-occupation phase. There is a true fireplace as well, in the north side of the chamber, now measuring 1.9m wide, and much collapsed (FP3/1). Only the west side remains intact, consisting of four ashlar blocks, the topmost of which is the springer for the arch. The fireplace appears to have been 1.8m high. The back of the fireplace is lined with six courses of brick at its base, laid alternately as headers and stretchers; above the brickwork the facing is of stone.
- 5.6.25 To the east of the fireplace is a narrow window (W3/2), of which no dressings survive on the internal face, although the facework within the splay is intact, and the remains of up to four steps can be seen. To the east of the window is a latrine (L3/1) set within the wall thickness, the south side of which has collapsed. The latrine was evidently reached by a short passage from the east, 1.5m long and 1.9m high, which probably would have been entered from the east end of the ground floor chamber. The roof of the passage and of the latrine is formed from corbelled, chamfered ashlar, as is the case in the surviving ground floor latrines in the north-east and south-west towers. An intact, narrow slit window (W3/1) lights the latrine.
- 5.6.26 The tower's first floor was also evidently reached from stairs in the north-east corner. This upper stairwell is situated some 2m to the west of that giving access to the basement and ground floors, possibly for structural reasons, and was evidently lit by windows at first floor level (W3/3) and between first and second floors (W3/6). There is a small area of angled facework at floor level, 2.8m high, adjacent to the stairwell, which would have formed the side of the chamber, and is similar to the layout of the ground floor chamber seen in the south-west tower. There is however no indication of the means of access into the chamber.
- 5.6.27 The surviving part of the vaulting supporting the first floor at the west end of the tower is now overlain by a considerable deposit of rubble and vegetation, approximately 1.5m in depth, which to some extent obscures the lower parts of the first floor chamber. However,

several features are visible from ground level. The height of the first floor chamber can be estimated as *c.*6.0m.

- 5.6.28 In the west wall, a central window (W3/13) retains few of its dressings around the rear arch and splay, with considerable areas of core visible. Although the original dimensions of the opening into the room are not known, it appears to measure 2.0m wide and 4.5m high. To the north of this window, the internal face of the wall has been demolished or has collapsed, revealing an intra-mural passage; it is not clear whether this was entered from within the window splay, or from a separate doorway directly into the room. The roof of the passage is of corbelled ashlar, as elsewhere, and the end of the passage is lit by the window in the north elevation (W3/5). The presence of a chute beneath this window (C3/4) suggests that a latrine is located here.
- 5.6.29 In the north wall, a second fireplace (FP3/2) has been much robbed out, and has no surviving dressings. The present opening measures 2.3m wide and 3.5m high, and is situated slightly to the west of the fireplace below (FP3/1). Above it, a poorly defined area of masonry containing a number of randomly placed ashlar blocks may be an area of repair, but again without detailed inspection it is not possible to determine this. To the east of the fireplace is a window (W3/4), also much robbed or collapsed, with dressings remaining only in the rear arch.
- 5.6.30 Between the first and second floors, an embrasure within the thickness of the tower's south wall is visible, entered from the east, and presumably from the west curtain wall. The alcove gives access to a window in the west wall (W3/14), and formerly the south wall. It has a pointed vaulted roof.
- 5.6.31 The level of the second floor is evident from a step of *c.*0.2m width in both the north and west walls, and the chamber thus created would have had a height of *c.*4.0m. The west side of the tower's second floor chamber contains a central window (W3/15) with the chamfered rear arch and embrasure intact, but the tracery removed. The opening into the room measures 2.0m wide and up to 3.3m high, which is notably shorter than that on the floor below (W3/13). There are three possible hinge holes visible in the south jamb.
- 5.6.32 A doorway (D3/1) at the west end of the north wall of the chamber leads into an L-shaped passage within the thickness of the north wall. Its west jamb is intact, as is its head which appears to have had a trefoil profile; the opening measures 0.5m wide and 1.9m high. The passage was lit by a window in the north wall (W3/8), now enlarged. Again, this almost certainly houses a latrine, as it is aligned over chute C3/3.

- 5.6.33 Beyond the doorway to the passage is a fireplace (FP3/3), centred slightly to the west of that on the first floor (FP3/2). This is slightly more intact than the lower fireplaces, with the east jamb still *in situ*, and a relieving arch over it. Nevertheless, it has undergone considerable collapse and/or robbing, including the removal of the back of the fireplace, within which can now be seen the flue from the fireplace below. To the east of the fireplace is a window (W3/7), of the same dimensions as that in the west wall (W3/15) and also largely intact, but without surviving tracery.
- 5.6.34 Part of the entrance into this chamber from the north-eastern stairs (D3/2) remains in the form of a 2.0m high door jamb in the north wall, consisting of rebated ashlar blocks.
- 5.6.35 The position of the third floor is marked by the bases of the upper openings in north and west walls, and also by two beam sockets in the former. In addition, a slight step (c.0.05m wide) appears to run across the west wall, but its presence cannot be confirmed from ground level inspection. The beam sockets measure c.0.4m square, and are situated over the second floor fireplace (FP3/3), their centres 2.8m and 5.5m from the west wall. A step of c.0.5m in the interior face of the north wall indicates the probable height of the roof over the chamber, giving its height as 4.2m.
- 5.6.36 The north-east corner of the tower is more extensively collapsed than at first and second floor levels, meaning that the remains of the stairwell do not survive to this height, and there is no indication of the form of any doorway from the stairs into the chamber.
- 5.6.37 At third floor level, the two windows in the west and north walls (W3/16 and W3/10 respectively) are of the same form and dimensions as those on the second floor (W3/15 and W3/7), and are aligned directly over them. Both have their rear arches, embrasures and tracery intact, again suggesting that robbing of dressings took place after some collapse of internal floors.
- 5.6.38 The third floor chamber was heated by a fireplace in the north wall (FP3/4), which, like the windows, is largely intact. Its back is entirely brick-lined, and it has ashlar sides and arch, with a rubble relieving arch over. The opening measures 1.7m square.
- 5.6.39 This floor was apparently served by a latrine in the north wall, accessible via a doorway (D3/3) with four chamfered ashlar jambs *in situ*, indicating that it was entered from the chamber itself, rather than directly from the adjacent stairs. The passage has a corbelled roof, and is lit by an intact slit window (W3/9). As on the first and second floors, the presence of a latrine within it may be inferred from the presence of a latrine chute directly below, in this case C3/2.

- 5.6.40 A step of c.0.5m in the interior face of the north wall indicates the probable height of the base of the roof. No features are visible in the 1.3m of parapet wall face above this step, but the step itself may have been used as a walkway behind it. In the west wall, which rises to the same approximate level as the north wall, vegetation obscured the form of the wall's interior face at the time of the survey, but it does not appear to contain a step; insufficient height appears to have survived for there to be a roof-line, as is the case with the castle's three other towers.

#### **The west curtain wall**

- 5.6.41 The remains of the west curtain wall extend for only 1.7m from the south wall of the north-west tower, with the maximum being at ground floor level, where it is 2.4m thick. This elevation was not recorded by rectified photography and has not been drawn, as the majority of it was obscured by vegetation at the time of the survey.
- 5.6.42 The only feature within this length of wall is a latrine chute opening at ground level in the west face, 0.5m from the return with the tower's south wall (C3/5). Above this the vegetation obscured all details of the wall's west face, although it appears that there are no openings or other major features within it. The east face is similarly obscured to a large extent, but at ground level the scar of the tower's south wall is visible, apparently 1.9m thick. Nothing of the wall itself survives however.

#### **Footings**

- 5.6.43 A line of sandstone footings is evident to the south-west of the north-west tower, on a slight platform above the slope of the castle mound, to the west of the hedge which now runs between the two western towers (see figure 7). They measure 12.6m long and 1.2m wide, and a right-angled return towards the east is visible at the north end. The footings are on a different alignment from all standing parts of the castle, and are not shown on any of the early published plans. Their relationship to the other remains is unclear, although it is possible that they form a structure associated with the former west range, perhaps with a turret; it is noticeable that there is a similarity of alignment with the south wall of the south range (see below).

### **5.7 Area 4: the south-west area**

- 5.7.1 The south-west tower is the most substantial element of the standing remains at Sheriff Hutton and, together with those surviving parts of the south range, is the most extensive area of the four parts of the castle. Of the tower, both the basement and ground floor vaults survive as roofed and enclosed spaces but above these, only the west wall remains to any significant extent, although elements of the south and north walls run to roof and first floor

levels respectively. Of the south range, only the south curtain wall survives, and much of this has been robbed; the lower parts of the internal face of this wall appear to have been buried.

- 5.7.2 In plan the tower measures a maximum of 16.9m north-south by 10.7m east-west. The highest point is at the south-west corner where it rises to 26.5m above ground level. This is the highest of any of the castle's walls, and is partly a result of the steep fall-off in ground level at the south-west corner of the castle, with ground level at a low point of 63.2m AOD.
- 5.7.3 This area was the subject of a post-graduate dissertation carried out in 1993 (McCavana 1993), which provides a useful basis for the following description.

**The south-west tower** (elevations 4.1-4.3 and 4.6-4.10 on figures 15 and 16)

- 5.7.4 The external elevations of the tower are divided by two continuous chamfered off-sets, as on the two northern towers. Similarly, the lower of these off-sets is at *c.*75m AOD, but the upper is at approximately 82m AOD, some 4m lower than the upper off-sets on the northern towers; the overall appearance of the south-west tower is therefore significantly different. The north elevation of the tower (elevation 4.1) is also divided vertically, by the scar of the west curtain wall, with that part within the curtain wall having served as an internal wall. The thickness of the curtain wall is not evident here, but it is likely to have been of the same thickness as at the point where it adjoins the north-west tower, ie. 2.4m thick. The scar of the west curtain wall is visible to 8.3m above ground level, ie. 76.0m AOD, but it is likely that the wall continued upwards to at least the level visible on the north-west tower, ie. 79.8m AOD.
- 5.7.5 To the west of the curtain wall scar the remaining 2.8m of the elevation was external to the castle. This external north elevation contains three small window openings (W4/1, W4/2 and W4/3), largely intact although weathered. These lit the stairwell in the north-west corner of the tower. Each window measures *c.*0.6m high and *c.*0.2m wide, and has a chamfered surround. They are situated at 0.5m, 6.8m and 19.5m above ground level, heights which do not correspond with floor levels within the tower.
- 5.7.6 Between 13.5m and 16.5m an indentation in the profile of the north elevation is considered to be an area of collapse, and not to have been an original opening, as it lacks dressings, although its west side is vertically straight. If it was originally a window, it would have lit an intra-mural passage leading to the second floor chamber (see below), and would also have provided a sight line along the west curtain wall, as was the case in the north-west tower. The top of this elevation occurs at 18.5m above ground level, but no further features are visible.

- 5.7.7 The west elevation of the south-west tower (elevation 4.2) is the most extensive wall face surviving at the castle, with its full width standing to second floor level, and much of the south-west turret surviving. The elevation's maximum height is 26.1m.
- 5.7.8 The ground slopes down to the south across this elevation, and the presence of three latrine chute openings at ground level indicate that ground level has probably not changed. One pair of latrine chutes is centred 5.4m from the north end of the wall, while the third is located 3.0m from the south end. Of the pair, the northern one (C4/1) is largely intact, with its sides and lintel in place, but the southern one (C4/2) has lost its lintel. These represent the only evidence for latrines in this part of the west wall: none can be identified or inferred from ground level, but it is possible that one was at roof level (now collapsed), and one exists within the passage at second floor level (see below). However, it is also possible that these indicate a change of design in the tower which took place after construction began, or they may have been intended to give the impression that the castle was well served and luxurious. The southernmost chute (C4/3) appears to serve a latrine at second floor level.
- 5.7.9 There is also a single light window at basement level (W4/4), the opening of which now measures 0.5m high and 0.2m wide, but which has been partly blocked during repairs. The area of repair is particularly visible as it consists of small rubble set within much mortar. The dressings from the lower right side of the window, together with its sill, have been replaced by the repair.
- 5.7.10 Further repair work is clearly visible at the south-west corner of the tower where the ashlar quoins have been replaced by a similar mix of rubble and mortar from ground level to a height of 1.5m. It is also worth noting that this elevation probably has the most extensive graffiti at the castle, with many 19th century inscriptions.
- 5.7.11 Close below ground floor level there is a stair window with chamfered surround at the north end of the elevation (W4/5), which at 0.7m height is slightly taller than those seen in the north elevation. Two windows at ground floor level proper (W4/6 and W4/7) light the ground floor vault. These measure approximately 1.3m high and 0.4m wide and are much weathered trefoil headed single lights, with chamfered surrounds. They are set 4.3m apart, slightly to the south of the centre of the elevation. A fourth window (W4/8), is a small 0.1m by 0.2m opening lighting a latrine at ground floor level (L4/1).
- 5.7.12 The lower off-set on this elevation survives across the full width of the wall face, and appears to define the approximate level of the first floor. There are three much enlarged window openings (W4/9, W4/10 and W4/11) above it, set closely together, and again centred slightly to the south of the elevation's centre. They now measure up

to 1.7m wide and 4.1m high, but appear originally to have been two-light trefoil headed windows, as found on the other three towers. This is suggested particularly by the few surviving dressings at the top right corner of the southernmost one (W4/11).

- 5.7.13 To the south of these windows is a third area of repair, measuring 3.1m high and up to 1.7m across, and replacing a number of the south-west quoins. Part of the left side of this repair is vertical and may represent a former window, but this cannot be substantiated at present, as the internal arrangements here are not visible from ground level.
- 5.7.14 The second off-set on this elevation occurs at approximately second floor level, but it is discontinuous as parts have been lost during the robbing of the three (or possibly four) second floor windows.
- 5.7.15 The northernmost opening at this level measures up to 2.4m wide and 2.1m high, but is irregular in shape and lacks dressings. It is not known if it is a former window, like the adjoining indentation in the north elevation, which also now lights an intra-mural passage in this corner; no opening is shown on Cave's drawing (north-west view) (Todd 1824).
- 5.7.16 To the south of this opening, centred 7.7m from the north-west quoin, is a pair of former windows (W4/12 and W4/13), also originally of two lights with trefoil heads. These are however much enlarged, and only a few upper dressings remain; two significant pieces recorded by the 1982 rectified photographic survey had fallen by 1996 (see Condition survey below). With their maximum dimensions of 3.2m high by 2.6m wide, these are notably smaller than the first floor openings, and it is likely that this difference was present when the windows were intact, as the first floor chamber is higher than the second floor one (see below).
- 5.7.17 There is a fourth opening at this level, 1.4m wide by 1.7m high, with no dressings *in situ*. It is possible that this is a former window lighting a latrine here, but without inspection of these upper floor levels this remains conjectural; no opening is shown on Cave's drawing (north-west view) (Todd 1824). Above this is another opening (W4/14) which retains its internal lintel and part of its sides, thus indicating that it is a former window. It measures 0.8m by 1.1m high, and lights an intra-mural stair running from the second floor to parapet level.
- 5.7.18 Little of the wall face remains above this level. No features are visible for the northernmost 12.0m, but at the south end, the remains of a chamfered band are visible, running horizontally and returning upwards 2.2m from the south-west quoin. To the south of this, part of the south-west turret remains with its north-west quoins *in situ*, standing 1.3m above the top of the band, the latter presumably representing the top of the parapet.

- 5.7.19 The tower's south elevation stands to its full width up to first floor level, above which only the western half remains (elevation 4.3). However, at this end it does rise to a similar height as the west elevation. The overall appearance of this elevation bears a close resemblance to the west elevation of the north-west tower and the north elevation of the north-east tower.
- 5.7.20 At basement level, the repairs to the south-west quoin continue across the south elevation, as on the west, for 0.6m. To the east of this is a small area of repair, 1.1m above ground level, which appears to be an infilled latrine chute opening, probably that for the chute from the ground floor latrine (L4/1).
- 5.7.21 There is a central former window opening in this elevation (W4/15), of which the base has been robbed out, allowing access into the basement from outside. The opening now measures up to 3.7m high and 2.3m wide, and retains only the chamfered flat lintel and a few upper dressings from the original surround. It is likely that originally it shared the same form as that surviving in the west elevation, and on the west elevation of the north-west tower. To the east of this opening is a latrine chute opening (C4/4), its lintel and sides intact but weathered. This serves a latrine (L4/2) at ground floor level directly above, but it is accessible from the south range rather than the interior of the tower. The fact that this chute is now c.0.8m above ground level may indicate a reduction in ground level, although this is considered unlikely.
- 5.7.22 At the south-east corner of the tower the absence of quoin dressings, together with a distinct scar on the south face, c.1.1m wide and 10.8m high, strongly suggests that there was a buttress here, as on the south face of the south-east tower. This would appear to have been an original feature; it is not known to what height it originally rose. It is rather unusual that only one buttress was used, rather than two, especially as it would appear that the south-west corner of this tower would be the more vulnerable.
- 5.7.23 At ground floor level is a central single light window, mostly intact, with a chamfered trefoil head, the opening measuring 1.7m high by 0.5m wide (W4/16). The lower chamfered off-set occurs 3.0m above the top of this window, and peters out 1.7m from the south-east corner of the tower. Above here, the width of the surviving wall face is approximately only 4.0m, roughly half of the presumed original width. The second area of repair to the south-west quoin noted on the west elevation is visible, extending onto the south elevation for 0.3m.
- 5.7.24 Between 0.4m and 1.8m above the off-set are two probable building breaks, evident as changes in the rubble used for the facework, with a roughly horizontal strip of masonry made up of relatively large blocks, eg. 0.4m wide and 0.2m high, which contrast with the small rubble used above and below, in which the stones are less than half



this size, especially above. McCavana identified six such breaks on this face, but only one of these can be recognised positively, the other five being rather dubious. It is not possible to determine whether this break represents an annual break, or is a result of other factors, such as a variation in the building stone supplied to the site.

- 5.7.25 Close to the west end of this elevation at first floor level is an irregular area of masonry measuring 1.1m by 1.2m, made up of brick of 19th century character, with three stone slabs used as ledges projecting *c.*0.1m; there are a total of five voids above the ledges. This feature appears to be an inserted pigeon cote, possibly occupying a former window opening. As the internal arrangements of this part of the tower could not be inspected from ground level, the nature of the intra-mural passage here is not known; it is considered unlikely to be a latrine as the only possible chute opening, at the south end of the west elevation, is believed to serve a latrine on the second floor.
- 5.7.26 To the east of this feature is the west side of a former window (W4/17), of whose dressings only half of a trefoil head remains. This window was almost certainly a two-light opening of the same form as those largely intact in the west elevation of the north-west tower. At 2m above this is the upper of the two off-sets on the elevation, of which 4.0m remains; this marks the level of the second floor.
- 5.7.27 There are the remains of two windows at second floor level. One (W4/19) is of similar appearance to that directly below (W4/17), but appears to be slightly shorter. The window to the west (W4/18) appears to light a passage (possibly leading to a latrine), and measures 0.3m wide and 0.6m high. It has a trefoil head with sunken spandrels, and as such is the only minor window with this form recorded at the castle, all the other trefoil headed windows lighting main rooms rather than passages.
- 5.7.28 Above these windows the remains of the chamfered band at the tower top are confined to the horizontal part only, which is 2.2m long. The upwards return appears to have fallen from the face, as a gap is evident, *c.*0.3m wide, between the adjoining areas of facework; that to the east shows a distinct lean to the north, indicating that the two elements are not bonded together.
- 5.7.29 Only a short section of the surviving east wall of the south-west tower was originally external to the tower, the majority having been enclosed within the south range (elevation 4.6). The outside face of the south wall of the south range lies 2.4m from the tower's present south-east corner. The top of the south range wall rises 5.3m above ground level here, but its original height is not known. Although the tower's masonry directly above the present top appears to be intact facework, it is considered likely that the south range wall continued higher than its present level.

- 5.7.30 Due to the complete loss of the tower's east wall above ground floor level, this external part of the east wall is only 10.8m high. The only feature within this wall face is a two light window opening (W4/20), the openings measuring 0.4m high, and 0.2m and 0.4m wide. The window is of simple form, having straight sides, mullion and lintels, the surrounds being badly weathered. It lights the passage leading to a latrine in the tower's south wall (L4/2), but would also have provided a sight line along the external side of south range.
- 5.7.31 Before considering the interior of the tower, the remaining part of the tower's north wall requires description (elevation 4.1). To the east of the west curtain wall, what now forms the external face was clearly once enclosed within adjoining structures, possibly a west range, although with the exception of the mis-aligned footings noted above, there is no further standing evidence for there having been more than the curtain wall along this side of the castle.
- 5.7.32 At ground floor level the facework of the north elevation was clearly part of a vaulted passage, as it rises for approximately 3.2 m before the horizontal base of a scar is evident as corework, extending for a further 0.7m upwards. At least three doorways led from this passage, one (D4/1) to the south range, one into the ground floor vault (D4/2), and one to the newel stair in the tower's north-west corner (D4/3).
- 5.7.33 The doorway to the south range (D4/1) is evident only as six ashlar blocks, rebated on their south sides, at the tower's north-east corner. The original height and width of this opening are not known. The second doorway, (D4/2), which is nearly intact, has a pointed arch and gives access to a short vaulted passage before leading into the ground floor vault proper. The opening is now 1.1m wide and 2.4m high, although it appears to have gained approximately 0.4m in height due to the removal of masonry from its base. The north side of the doorway is stop-chamfered, and there is a rebate on the south side, in which are two former hinge holes. The third doorway (D4/3) is set within a short angled passage leading to the newel stair. Only its east jamb survives, which is also stop-chamfered on the north side and rebated on the south; the doorway appears to have been of approximately the same dimensions as that to the east (D4/2). As well as the west jamb and head, some 0.3m of the base of the passage leading to the stair has been robbed out.
- 5.7.34 Above ground floor level there is an area of facework, 4.6m long and 2.2m high, which terminates abruptly at the west end at the scar of the west curtain wall. There appears to be a slight concave curve to the top part of this, suggesting that it formed a second passage along the north side of the tower.
- 5.7.35 The interior of the south-west tower is divided into four floor levels, all of which were accessible, directly or indirectly, from the newel stair in the north-west corner, which has an average diameter of

2.3m. No steps remain within the stair, but the curved wall faces are for the most part intact.

- 5.7.36 The basement is barrel-vaulted, aligned north-south, and measures 6.0m by 12.0m in plan, with its west and south walls 2.3m thick. It was unheated. It has a maximum internal height of 4.5m, but the depth of accumulated deposits is not known; it was in use as a cattle shelter at the time of the survey. There is a row of four voids or sockets in the east wall (elevation 4.9), 1.3m above floor level, each approximately 0.15m square, which may have been associated with the construction of the vaulting. The presence of an area of facework repair at ground level means that a probable fifth such void has been removed.
- 5.7.37 The basement is now only accessible through the enlarged window (W4/15) in the south wall (elevation 4.10), but was formerly entered from the foot of the stairs via a short L-shaped corbelled passage, and a four-pointed doorway (D4/4) in its north-west angled corner (elevation 4.8). This doorway measures 1.8m wide, and a rebate on the south side of the west jamb appears to indicate the position of the door. There are no dressings on the east jamb, which is formed by the north wall of the vault. There is a rubble relieving arch over the doorway. McCavana (1993) recorded a blocked doorway in the wall face to the west of this doorway, ie. leading into the thickness of the wall, but it is believed that this is a result of misinterpreting the corbelled roof.
- 5.7.38 The basement was lit by windows in the west and south walls (W4/4 and W4/15 respectively). The embrasure of the former (elevation 4.7), which is 1.6m wide, has a corbelled ashlar roof, with an unusual profile at the apex and, although much of the basal stone and side dressings have been robbed, it appears that the bottom of the embrasure was stepped up towards the window opening. The internal face of the repairs and infilling to this opening are in brick. The south window is also set within an embrasure, of similar width, but considerably higher, as it extends to the apex of the vaulting, and its original height must have been at least 3.4m. The lintel of the opening itself is *in situ* and has a hole in it, probably for an iron bar or stanchion.
- 5.7.39 The name "Sounding Hall" has been given to the basement vault and is depicted as such on the Ordnance Survey 1st edition 6" map (sheet 140). Todd attributes the name to the noise made by striking the floor, which sounded as though there was a further room below while Howarth suggests that the Sounding Hall is the ground floor vault, and is so called because the noise made by guards patrolling within would be heard by the family above, who could assume that all was well (Todd 1824, 7; Howarth 1993, 6).

- 5.7.40 The ground floor of the tower is occupied by another barrel vault of the same length and width as the basement, but entered from the north via the doorway described above (D4/2); this means that the angle in the north-west corner by the stairs is a blind wall face (elevation 4.8). The ground floor vault is effectively higher than the basement, at 5.9m in the centre, but to what extent this is due to accumulated deposits in the basement is not known. The floor of the ground floor room is of beaten earth, but probably obscures an original floor surface of stone.
- 5.7.41 The ground floor room was heated by a fireplace in the east wall (FP4/1), measuring 1.9m wide and up to 1.6m high (elevation 4.9). Its ashlar surrounds are mostly intact, although the lintel is of irregular outline, probably due to fracturing. There is a relieving arch over it, and the base of the back of the fireplace is lined with six courses of bricks.
- 5.7.42 The ground floor vault is lit by three windows, one in the south wall (W4/16), and two in the west wall (W4/6 and W4/7). The former is set within an embrasure with angled sides, the base of which has been disturbed, but was clearly 0.8m above floor level; there is no indication of any masonry steps up into the embrasure from floor level. The dressings around its chamfered rear arch are intact. A doorway in the west side of the embrasure (D4/5) leads to an intra-mural passage to a latrine in the tower's south-west corner (L4/1). The doorway measures 0.5m wide and 1.6m high, and is stop-chamfered on the outside and rebated on the passage side. The passage is 0.6m wide and 1.7m high, and 2.5m long, with a short, chamfered stone baffle at the side of the latrine, which is lit by a small window in the west wall (W4/8).
- 5.7.43 The two windows in the west wall (W4/6 and W4/7) are shorter than that in the south wall, their embrasures measuring 2.3m high in the centre, and 2.2m wide (elevation 4.7). The bases of the embrasures, which are 1.1m above floor level, are not defined by dressed stone sills and have the appearance of infill, although there is no clear joint to support this theory. The sides of the embrasures have sockets at the middle and base, c.0.1m square, which may have been used for horizontal bars. The embrasures have chamfered rear arches and rubble relieving arches.
- 5.7.44 There are extensive areas of plaster surviving on the walls of this vault and the latrine passage, and within the embrasure to window W4/6, a small fragment of plaster bearing a red stripe was identified in 1993 (McCavana 1993, 24). This was still *in situ* during the present survey.
- 5.7.45 The first floor could not be inspected in detail due to its inaccessibility and the presence of extensive vegetation at the time of the survey (see plate 11), but the photographs taken using a hoist allow parts of the west wall to be viewed. There is no rectified

photographic coverage of the internal face of the south wall above ground floor level, because of its small area and difficulty in viewing, and for this reason no elevation drawings have been produced. Nothing of the east or north walls survives.

- 5.7.46 The interior of the first floor would appear to have had a similar height and width as the ground floor vault, but the height of the chamber is difficult to determine from the surviving evidence. The level of the second floor is visible as a row of four beam sockets in the south wall, each *c.*0.3m square, at the same level as the presumed base of the second floor windows. If it is assumed that the vaulting over the ground floor has a similar thickness to that over the basement, then this suggests the first floor level was around 74.4m AOD, giving a room height of *c.*6.0m.
- 5.7.47 Access into the first floor chamber was achieved via an entrance directly from the newel stair, set at an angle to the room, as in the basement. No details of the entrance were visible due to vegetation cover. There is no evidence for heating of this chamber, but it is probable that there was a fireplace in the east wall, which contains a fireplace at ground floor level (FP4/1).
- 5.7.48 The room was lit by four windows, three in the west wall (W4/9, W4/10 and W4/11), and one in the south wall (W4/17); there may have been others in the east and north walls. The three in the west wall (elevation 4.7) have been much robbed, with only parts of the chamfered semicircular rear arches remaining on the outer two, while that of the central window is completely lost. Nothing of the interior of the window in the south wall remains. However, a passage, partly visible within the core of the south wall, appears to have been entered from the embrasure of this window, and presumably leads to a latrine. This may be connected to the chute outfall at the south end of the west elevation (C4/3), but as there is also a possible latrine directly above this, it is not possible to determine this. It is possible that the chutes converge to exit via a single opening (McCavana 1993, 26), but this would be the only such example in the castle, and until further evidence is forthcoming this problem must remain unanswered. The secondary pigeon-cote visible on the external face of the south wall appears to have been inserted in a former window lighting this passage, which may also have been lit from the west, by a window removed or infilled during repairs.
- 5.7.49 The evidence for the tower's layout at second floor level is similarly fragmentary and inconclusive. The chamber would have been of similar dimensions, although slightly less high (*c.*5.0m). It may have been heated, most probably by a fireplace in the east wall. Access into it would have been from the newel stairs and an intra-mural passage with corbelled roof, 3m-4m long in the west wall, apparently leading into the embrasure of the northern window

(W4/12). The passage may have been independently lit by a window in the west wall.

5.7.50 The chamber was lit by two windows in the west wall (W4/12 and W4/13), and one in the south wall (W4/19), of the same form as those seen on the first floor. However, slightly more of the first two survive (elevation 4.7), with the rear arches being complete and many of the dressings to their sides *in situ*. Another passage, c.0.8m wide, leads out of the chamber from the embrasure of the southern window in the west wall (W4/13). This runs up relatively steep steps within the west wall and appears to have given access to roof level; it is lit by a window in the west wall (W4/14). The fact that the upper south-west corner of this room is angled suggests that this passage rises via a winding stair to re-emerge in the west wall, but again it is not possible to determine this without detailed inspection.

5.7.51 There is also a passage visible in the south wall which, like that on the first floor, was probably entered via the embrasure of the south window (W4/19). The end of the passage has been blocked to about two-thirds its height with dry rubble. Presumably this leads to a latrine in the south-west corner but, as noted above, there is a discrepancy between the numbers of possible latrines and identified chute outfalls. The passage is lit by one window in the south wall (W4/18), remarkable for its trefoil head, and possibly by a second in the west wall.

5.7.52 There is relatively good evidence for the roof and roof-top arrangements in the surviving parts of the south-west tower. As on the south-east and north-east towers, angled courses of masonry running for approximately 1.0m in the end wall (here the south wall), indicate the roof-line, and a probable corbel at the foot of this may have held a purlin. As this corresponds in height with the top of the internal face of the west wall, it would appear that the outer edge of the roof rested on the wall top here.

5.7.53 The passage from the second floor emerges onto the top of the west wall at its south end, where a short length of parapet remains, c.1.9m high and 1.5m wide (elevation 4.7). The whole length of the west wall presumably served as a walkway. The south wall at roof-top level, which extends approximately 3m above the level of the walkway, is falling away from the remains of the south-west turret, which rises a further 1m or so.

**The south range** (elevations 4.4 and 4.5 on figures 15 and 16)

5.7.54 Although the south curtain wall runs above ground for the entire distance between the south-west and south-east towers, only the western 23m, between the south-west tower and the change in the wall's alignment, which contains significant remains. It is noticeable

that this south wall is at an angle to the main towers, unlike all the (presumed) other curtain walls.

- 5.7.55 It is clear from the features within this wall and from the appearance of the east wall of the tower that this part at least was occupied by rooms and thus formed a range. However, the structural evidence for the internal arrangements is fragmentary and is almost completely confined to ground floor level; the absence of any openings at basement level in the wall (with the exception of a single doorway at its west end; D4/6) suggests that there were no rooms at this lower level. The presence of a first floor is suggested only by several latrine chutes (eg. C4/6 and C4/7) apparently descending from an upper level. The present difference in ground level between the inside and outside of this range (the inside being c.1.8m higher than the outside; elevation 4.6) may be original therefore, again with the exception of the area by the west doorway.
- 5.7.56 The south elevation of the south curtain wall (elevation 4.4) is constructed of rubble in a similar manner to that seen elsewhere in the castle, but there are two noticeable groups of squared blocks incorporated, possibly rejected dressings. The wall face stands to a maximum height of 10.7m, with its top, which is uneven in profile, approximating to the level of the bottom of the row of windows along it.
- 5.7.57 There is a blocked doorway at the west end of the wall (D4/6), with no surviving dressings. It measures 2.7m high and up to 1.1m wide, with a square head and tapering sides. It appears to be an original feature, and would be unusual in providing a second entrance into the castle; it was noted in the earthwork description above that there are two paths running down the side of the castle mound to the presumed gardens and ponds. They may also have been similar doorways in the north and west curtain walls, contributing to the theory that defence was not of over-riding importance at Sheriff Hutton.
- 5.7.58 Also at the foot of the wall is a latrine chute opening (C4/5), centred 4.4m from the east wall of the south-west tower. The inside face of this chute lies 1.2m back from the wall's outside face, and suggests that it served a latrine above ground floor level; nothing remains of the latrine itself however. The opening is largely intact and measures 0.3m square. To the east of this is an irregular area of repair to the wall face, and two further chutes can be seen where the wall face has collapsed, 9.5m (C4/6) and 12.7m (C4/7) from the south-west tower. The openings of these chutes and a third identified from the internal face of the wall (C4/8), are presumably buried, indicating that ground level has slightly risen in this area, by at least 0.3m or so.

- 5.7.59 At ground floor level, the south face of this wall contains one complete window (W4/25) and the partial remains of five more (W4/21, W4/22, W4/23, W4/24 and W4/26). No dressings remain on the outside face of the westernmost one (W4/21), which measures 0.6m wide and is centred 0.9m from the west end of the wall. There are more extensive remains of the second window (W4/22), with its sill and two stones of its west jamb *in situ*. It measures c.0.5m wide. The remains of the third window (W4/23) are confined to a sill 0.6m wide, centred 6.0m from the west end of the wall. The fourth window (W4/24) is centred 10.0m from the wall end, and its opening is also 0.5m wide. The sill and parts of both jambs remain in situ. The fifth window (W4/25), which lit a latrine, is a simple opening 0.4m high and 0.1m wide, formed from four chamfered dressings. Finally, the easternmost window (W4/26), centred 16.8m from the east end of the wall, has no external dressings *in situ*. The fragmentary nature of all but one of these windows means their original form is not clear, beyond the observation that they were each of a single light.
- 5.7.60 The internal elevation of this wall (elevation 4.5) retains very little facework, and what little there is found in recesses or passages, meaning that the precise thickness of the wall cannot be determined. Indeed some, which is of very thin pieces of rubble, may not be true facework, resulting rather from the manner of construction or possibly from repairs. However, the scar on the east wall of the tower indicates that it was at least 2.4m thick, a measurement which closely matches the thickness of the outer walls of the south-west tower at basement and ground floor level. The thickness of the wall itself exceeds this by up to 0.2m in two places and suggests that these are the locations of cross-walls dividing the south range along its length.
- 5.7.61 The internal arrangements of the south range are also partly evident from the form of the east wall of the south-west tower (elevation 4.6). Although this rises to the first floor level of the tower, only the lowest 4m or so are of facework, with rubble core above, meaning that only a ground floor of the south range can be determined. There is thus no direct evidence for an upper floor within the range, but the form of the north wall of the tower at its eastern end, where a possible passage was identified (see above), suggests that there was one originally.
- 5.7.62 The head of the doorway in the south wall (D4/6) is discernible within the corework here, approximately 0.4m above ground level, indicating that there is probably some 2.3m of overburden here. It is not clear to what this doorway gave access; the adjoining east wall of the tower does have a face at its foot, running north for 1.5m before stepping westwards by 1.0m and then continuing as facework for a further 4.7m. Thereafter, the base of the tower's east wall consists of corework, and is suggestive of vaulting, possibly over a passage. The north wall of the south range appears



to be represented by a short length of projecting corework at the north-east corner of the tower, c.2m thick; ground level rises to obscure the north side of this however. It is therefore possible that there was a passage at basement level along the west end of the south range, and possibly a larger space, perhaps vaulted. The absence of windows to the east of doorway D4/6 indicates however that the remainder of this part of the south wall was almost certainly a revetment wall only.

- 5.7.63 At ground floor level there is much better evidence for the internal arrangements of the south range. At the west end, there was clearly a chamber measuring approximately 5.0m north-south, apparently accessible from a passage 6.0m long, entered from the north via doorway D4/1 described above. Only the west side of this passage survives, as a wall face 2.6m high; two ashlar blocks at the top of its south end may be the springers of a former arch into the passage.
- 5.7.64 This chamber was probably lit by windows W4/21 and W4/22, and possibly by W4/23, but as the eastern end of the chamber cannot be determined this is unclear. These windows survive only partially, as noted above; they appear to have been set within embrasures, and to have had chamfered sides and sills. The chamber is unlikely to extended as far as window W4/24, as this lights a latrine passage. This chamber was heated by a fireplace in the east wall of the tower (FP4/2; elevation 4.6). The fireplace measures 1.4m wide and up to 2.8m high, and its dressings and lining have been removed; its flue can be seen in section rising a further 3m or so.
- 5.7.65 This chamber was also served by a latrine in the south wall of the south-west tower (L4/2). This is reached by a passage which is L-shaped in plan, entered through the angled doorway D4/7. The doorway has lost its east jamb, but its west jamb is stop-chamfered on the outside and rebated on the south side. It has a pointed arch, and its base has been robbed out by up to 0.4m. The passage is lit by a two-light window W4/20, and runs 2.9m to the west; the internal corner is also stop-chamfered, as is a neatly finished and well preserved baffle by the side of the latrine itself.
- 5.7.66 Although there is no firm evidence of a dividing wall, the south wall of the south range displays evidence for a probable second chamber as windows W4/24 and W4/25, which light the entrance to a latrine passage and the latrine itself (L4/3). The former is set within an embrasure immediately to the east of what appears to be a latrine chute descending from above (C4/6). Immediately east of the window is a door jamb (D4/8), which consists of six dressed blocks, rebated to the east, and with two large holes in the rebate, probably from hinges. This gives access to a passage 2.0m long, containing latrine L4/3. Only the south side of the passage survives, with part of the corbelling to its roof. The latrine is lit by window W4/25.

- 5.7.67 East of here the up to 2.5m thickness of the south wall suggests that there was a return to the north, creating a second dividing wall and a third cell to the ground floor of the south range. The east side of this thicker wall section is defined by facework adjoining window W4/26, and this may represent the west side of this third cell or, less likely, the west side of the window embrasure. This window and the adjacent one (W4/27) appear to be laid out in a similar fashion to W4/24 and W4/25 above, ie. to light a passage and latrine. Three chamfered dressings with a probable hinge hole are interpreted as a doorway into a passage (D4/9) This may have led to a latrine, recognizable by a chute occupied by an elderberry bush (C4/8), but this chute appears rather to descend from above. However, the indistinct character of the masonry in this area means this interpretation is inconclusive.
- 5.7.68 There also appears to have been a fireplace backing onto the south wall of this cell (FP4/3), with no dressings *in situ*. Again, the nature of the stonework is so vague that it is not possible to determine the original form of this feature. East of this feature, the wall core peters out and the south wall continues at ground level only.

## 6 IDENTIFICATION SURVEY OF NEARBY BUILDINGS

### 6.1 Introduction

- 6.1.1 In addition to the detailed survey of the castle's standing structures, an extensive survey of Castle Farm and Sheriff Hutton village was carried out in an attempt to identify any surviving or re-used medieval masonry associated with the castle. It was hoped that this would provide additional information concerning the layout of the castle's outer wards, and would indicate the extent to which stonework robbed from the castle had been used to construct domestic or other buildings in the vicinity.
- 6.1.2 The identification survey was carried out by means of a visual inspection of those structures immediately visible from public rights of way, with more intensive searches being carried out within the Castle Farm complex, where each building was viewed internally and externally. A total of 17 sites which possibly incorporate medieval masonry were identified; these are shown on figure 18 and listed in Appendix 4.

### 6.2 Castle Farm

- 6.2.1 Within the Castle Farm complex, most of the buildings are of brick and of 19th century appearance. However, a number of significant structures were identified, the most important of which is a barn known as the "Court House" (Site 2), which local tradition believes to have been built partly on the original walls of the middle court, later becoming a farmhouse, and thereafter an agricultural building (Howarth 1993, 7). The structure survives as a barn approximately 15m long and 5m wide, aligned east-west. It is built of sandstone rubble with a pantile roof, and there are no dressings visible in its fabric, although a few squared blocks have been incorporated into its east gable wall. The interior wall faces are limewashed for the most part. The history of the building's fabric appears to be complex and cannot be ascertained with a cursory inspection, but it does appear possible that the building contains fragmentary but *in situ* medieval elements.
- 6.2.2 In addition to the barn or the "Court House", there are within the farm complex two other structures which contain sandstone rubble and may therefore have been built using re-used masonry derived from the Castle or its associated outer courts. These walls include the piers supporting the open cart-shed on the south side of the barn described above (Site 4). None of these structures appear to be medieval in origin, but it is highly likely that they were built using masonry from the castle.

## **6.3 Sheriff Hutton village**

- 6.3.1 The village extends for 1km east-west, with Main Street forming its linear core (see figure 2). During the identification survey, a number of structures were found which incorporate possible re-used sandstone masonry from the castle. However, no firm examples of this were identified, as in the vast majority of cases the masonry was rubble, with only a few squared blocks, which may represent more significant material, being found. No obvious dressings or carved stonework were seen during the cursory inspection.
- 6.3.2 The dates of the structures identified include probable early 18th century houses and agricultural buildings (eg. Site 6, Rose Dene) and Site 10, a shed on the east side of Coble Lane, and later buildings, including Site 11, an un-named house of 19th century character. In many of the buildings, stone was used for the house frontage, with brick used to the sides (eg. Site 9, Thatched Cottage); in other cases, the frontage is of brick, with the sides being of sandstone (eg. Site 12, No. 1 Orchard Cottage).
- 6.3.3 The parish church of St Helen and the Holy Cross (Site 17) is built to a large extent of sandstone masonry. It has Norman origins but has a complex fabric (Pevsner 1966, 238-239). It is possible that some phases incorporate re-used sandstone masonry, in particular later repairs, but it is not possible to identify any masonry from the castle without a detailed inspection and architectural analysis.

## **6.4 Conclusions**

- 6.4.1 The identification survey revealed no positive identification of re-used masonry from the castle. It is documented that a considerable amount of masonry was removed from the village for the construction of outbuildings at Sheriff Hutton Park in the 17th century (Pevsner 1966, 240; see Chapter 2 above). However, the destination of the considerable quantity of dressed masonry, including window details, is not apparent.
- 6.4.2 The building within Castle Farm known as the "Court House" (Site 2) may incorporate medieval elements remaining from the castle's middle court, but no firm conclusions can be reached concerning the history or origins of this building on the basis of this survey. In any case, the building has been heavily altered, and the extent of the medieval fabric is not considered to be great.

## 7 CONDITION SURVEY AND RECOMMENDATIONS FOR CONSOLIDATION

### 7.1 Introduction

- 7.1.1 It is clear from the architectural survey that most of the surviving parts of the ruined castle are suffering from decay and neglect resulting from a previous history of robbing and subsequent erosion. Given the regional and national importance of the site, a series of recommendations are put forward as a guide for its consolidation and future management. It should be noted, however, that these recommendations are only a guide, and that any proposed works should be considered and assessed by appropriately qualified professionals, including architects, structural engineers, and archaeologists, and will need to be subject to a detailed specification. This applies to all areas of the castle, but particularly to those areas which were inaccessible for the 1996 survey.
- 7.1.2 In line with current practice, the following recommendations aim only to consolidate the monument with a view to reducing current erosion and fabric deterioration, ie. "consolidate as found". Any further rebuilding, re-use or conversion of the site or parts of it have not been considered; this would require an alternative set of guidelines and a detailed structural analysis, both of which are beyond the scope of this report.
- 7.1.3 Where possible, all previous interventions to the fabric are considered to constitute part of the historic structure, and are subject to the same archaeological considerations and recommendations as other parts of the monument. However, exceptions could be made where such interventions can be shown to be detrimental to the fabric, for example where the removal of load-bearing elements has weakened parts of the structure.
- 7.1.4 An inspection of the site was carried out in September 1992 by English Heritage's Chief Structural and Civil Engineer and a short report was produced (Hume 1992). In addition, a post-graduate dissertation by a student of the University of York's Institute of Advanced Architectural Studies examined the condition of the castle in June 1993, and considered the possible requirements of a future consolidation programme (Couling 1993). Both these sources have been consulted during the production of this report, and a comparison of the 1982 photographs, the 1993 and the current survey information has allowed the rate of erosion in some areas to be measured.
- 7.1.5 Given that the castle and its surroundings are protected as a Scheduled Ancient Monument under the Ancient Monuments and Archaeological Areas Act 1979, scheduled monument consent (SMC) will need to be obtained from the Secretary of State for Culture, Media and Sport before any consolidation and/or repair work is commenced. The castle is also a Grade II\* listed building, but any

listed building legislation is overridden by the SMC requirement. There should also be consultation with English Nature, as bats were observed in a number of parts of the castle, and any works may have implications for vegetation or lichens.

## **7.2 Present condition of the castle**

### **General comments**

- 7.2.1 Following the completion of the architectural survey, the castle was inspected with a view to assessing its current condition, and the site drawings were annotated with notes as appropriate; this work was carried out in October 1996 with a subsequent visit in August 1997.
- 7.2.2 The surviving elements of the castle are in a variable condition with regard to their structural stability, but there are extensive areas which appear to be in imminent danger of further collapse. The problems appear to arise from three main sources: the destruction of significant elements of the castle and the resulting lack of structural integrity, the decay of stonework and mortar, and plant growth.
- 7.2.3 The demolition and collapse of large parts of the castle structure in historic times, including many of the external walls of the four corner towers, has left the surviving elements vulnerable through lack of support. In places, for example in the west wall of the north-east tower, the effect is clear (see plate 11), but there are several other less outstanding cases throughout the castle.
- 7.2.4 The castle is constructed of local sandstones and mudstones, and much of the masonry is relatively soft and has suffered severe weathering. The variable character of the stonework is so extreme that adjacent quoins have weathered to remarkably different degrees, for example at the north-west corner of the south-west tower. The position of the castle on a ridge above the extensive plain to the south and west also means that most of it is very exposed to the weather, and only the most sheltered parts and the interior faces appear to have escaped the worst effects, as can be illustrated by the quality of ashlar within the latrine passages, compared to the quoins of the south-west tower for example.
- 7.2.5 The rubble which comprises the majority of wall faces is also suffering general decay, with wholesale spalling taking place in some areas, for example in the west elevation of the north-east spur wall; once again, the interior elevations are generally in a better condition. As well as the loss of architectural details and fittings from many dressings, weathering has led to the loss of mortar from between the joints.
- 7.2.6 Plant growth also presents a serious problem. There are established trees of some size on the south-west tower (see plate 12), but vegetation has taken a hold in many other places, particularly on the

tops of vaults and walls, where roots are no doubt contributing to the structural decay of the underlying structure. Although plant growth is often considered to be detrimental to structures such as this, there are situations where vegetation proves beneficial, and growth, particularly of smaller plants and grasses, can be encouraged (Thompson 1995); the pros and cons should be carefully considered before any firm decisions are taken regarding its removal.

- 7.2.7 With this in mind, soft-capping of wall tops may be an appropriate technique to adopt in some parts of the castle. This involves establishing grass and other low growing plants along the tops of the walls to provide a durable insulating layer, to modify temperature extremes and the effects of frost, and to help shed water from the wall faces. Several methods are used to establish soft wall capping but the simplest is to hollow out a section of corework and add topsoil and turf to form a protective layer. Such measures have been used to good effect on other stone-built monuments such as Jervaulx Abbey (North Yorkshire), Bolingbroke Castle (Lincolnshire) and Tintagel (Cornwall) (Wimble & Thompson 1993).
- 7.2.8 Figures 19 to 26 provide some information on the present condition of the castle, and show the main recommendations for repair and consolidation. The latter are discussed and prioritised in detail in section 7.5 below.

#### **Area 1: South-east area (see figures 19 and 20)**

- 7.2.9 The south-east tower itself is one of the most stable elements of the castle, and supports very little vegetation, partly because it contains few horizontal surfaces. Some repairs appear to have been carried out in the past, for example in the interior near the entrance to the latrine (L1/1) passage and around the base of the supporting buttress, and there have been extensive interventions involved with the construction of the 18th or 19th century farm buildings, which contribute to the complexity of this area (see figure 4 and plate 2).
- 7.2.10 The condition of the south elevation is generally good, although two of the corbels supporting the machicolations require attention (see plate 7), as well as a small number of quoins on the buttress and an area of collapsed facework at ground level at the base of blocked window W1/1. The east elevation is similarly in a fair condition, with only a small number of openings and areas of collapse. Hume's view that part of this tower around window W1/7 is in a highly unstable condition (Hume 1992) seems unduly pessimistic (it has remained stable for 15 years), although some consolidation work is clearly necessary here.
- 7.2.11 The exterior of the gatehouse also carries little vegetation, but there are significant areas of unstable masonry, principally the underside of the gateway arch from where an inserted and supporting brick wall was removed between 1982 and 1993 (see plate 8). In

addition, weathering has reduced the details of the heraldic frieze, and attempts should be made to reduce further damage to this detailed area of carving. However, the damage is not yet considered to be extensive enough to warrant replacement of any part.

- 7.2.12 Within the interior of the south-east tower and gatehouse, the elevations are generally sound and, with the exception of the gateway noted above, only minor areas are in need of attention.
- 7.2.13 The east elevation of the Guard Room is generally sound, although vegetation at the upper corners should be removed and the corework consolidated. The north, west and south elevations are in need of repointing and some limited rebuilding of facework. The upper parts of this structure require greater intervention, and there is a considerable amount of vegetation on the top. Internally, very little damage or erosion has occurred, although there are some localised areas of exposed corework. Bats were also observed within this vaulting.
- 7.2.14 The south-east spur wall is generally in good condition, and some hawthorn and other shrubs have recently been cut and removed from its top. Some of the exposed corework appears fragile and the spur wall appeared to have collapsed to the east, and was in the process of being rebuilt at the time of the survey.

#### **Area 2: North-east area** (see figures 21 and 22)

- 7.2.15 The north-east tower is probably the most unstable part of the castle. This is evident in the fracturing and flattening of the ground floor vaulting (see plate 14), and the movement of the north-west corner above first floor level, where a distinct leaning southwards and eastwards of the north elevation can be seen. The nature and severity of these problems suggest that considerable and major intervention will be necessary to reduce the risk of significant loss of masonry.
- 7.2.16 The stonework of the east elevation has weathered badly and some replacement should be considered. Some of the openings are in need to support and some cracks are noticeable; the southernmost opening has suffered some collapse between 1982 and 1993 and more seems inevitable and immediate. A major crack has developed behind this elevation (see plate 14) which, if unchecked, could result in the majority of the wall falling. A photograph of 1906 shows a similar crack, but it is clear that there has been more recent movement and some masonry has fallen since 1982.
- 7.2.17 The north elevation of the tower has similar problems, with repairs obviously required to enlarged openings, particularly to the now continuous opening which extends from basement level to the top of the ground floor vaulting (W2/2 and W2/3). The quoins at the north-west corner are splitting badly (see plate 13), and three stainless



steel counters have been placed at ground floor level here in the past, presumably to measure the degree of movement. It is unclear who has undertaken this work, and it would be appropriate to find out, so that past records of any movement can be assessed.

- 7.2.18 The west side of the tower is also very unstable, due no doubt to the removal of the majority of this wall and the adjacent curtain wall. Particular attention needs to be paid to the area of collapse around the latrine chutes (C2/2 and C2/3), the brick buttress which was added in the 1800s (pers comm Dr R Howarth) and which now contains some cracks, and the various overhangs at the south end of the upper levels. Considerable vegetation removal at the south lower end of the elevation, and extensive consolidation to the underlying core is likely to be required, and this work may reveal additional problems. There is also a failed and corroding iron tie emerging through window W2/8 at third floor level.
- 7.2.19 Within the tower, consideration should be given to clearing out the modern debris from the basement vault and making it secure from access. It is likely that additional consolidation and repair works will be identified following the removal of this debris.
- 7.2.20 The ground floor vaulting itself is inherently unstable, with a distinct flattening of the arch and fracture adjacent to the east wall evident noted above. It is not easy to see a solution to these problems without a major degree of intervention. Otherwise, with the exception of a crack in the west wall, the wall faces themselves appear generally sound. Any action that is taken here should be aimed at minimising damage to the remnants of the plastering at the top of the vaulting.
- 7.2.21 At higher levels, there is a considerable depth of debris and associated vegetation over the vaulting (see plate 14), and its removal should be considered. General consolidation and repointing work would be required to certain areas of core and facework; however, there is little point in carrying out this work if the major problems of overhanging masonry and lack of support described above are not addressed.
- 7.2.22 The low height and simple form of the north-east spur wall means that its condition is relatively easy to assess. On the west face, the chief problems are vegetation growth and the collapse of facework, particularly that close to the north-east tower. A large ash tree has recently been cut, but some plant growth remains.

### **Area 3: North-west area (see figures 23 and 24)**

- 7.2.23 The remains of the north-west tower and adjoining length of the west curtain wall appear generally sound from a structural point of view and, although some cracks are evident in the external

elevations, these do not appear to be a threat to the integrity of the tower.

- 7.2.24 The north elevation is in a fair condition, with the main areas of concern being the collapse around latrine chutes C3/1 and C3/2, and other enlarged openings which appear vulnerable. The central area from first floor level to the wall top has clearly been repaired previously, and the perimeter of this area is defined by continuous cracks which, although apparently not yet severe, may become so. A group of quoins at the north-west corner also appear to be delaminating.
- 7.2.25 The west elevation appears generally stable, although there are a number of large cracks associated with the central windows W3/12 and W3/13. The clearance of an extensive area of ivy on the south elevation of the tower and adjoining length of the west curtain wall is required (see plate 10), which may reveal further problems. An area of collapse between first and second floor level, probably around a former opening, appears to have increased since 1993, and is probably still unstable. The archway certainly needs supporting.
- 7.2.26 On the interior of this tower, the most obvious cause for concern is the ground floor vault, which is unsupported on its east side. Elsewhere, general pointing and resetting of masonry will be necessary, particularly around openings, many of which have been left unstable by the removal of dressings. In this respect, considerably more work is required in the north wall, where the apparent removal of masonry from around fireplaces and window openings has left many unsupported areas (see plate 10).

#### **Area 4: South-west area** (see figures 25 and 26)

- 7.2.27 The most substantial structural remains of the castle survive in this quarter. Although demolition and collapse has not been so extensive here, there are nevertheless some serious structural problems, chiefly at the upper levels.
- 7.2.28 The north elevation is generally sound, and the removal of vegetation from the upper parts appears to be the main priority, with subsequent general consolidation and repointing of facework and corework. The main problem in the west elevation appears to be the removal of dressings from openings and the consequent further loss of stonework; two stones are known to have fallen from one window (W4/13) between 1982 and 1993. Additionally there is a zone above and below the lower off-set where the pointing has receded considerably, and extensive spalling is taking place. The remains of the turret at the top of the tower's south-east corner also appear unstable, with the face bowing and leaning.
- 7.2.29 The apparent removal of the buttress from the east end of the south elevation does not appear to have had a detrimental effect on the

surviving masonry here, although the resulting scar would benefit from some consolidation. There are cracks above and below the ground floor window (W4/16). As on the north elevation, vegetation removal from the first floor level is required, along with repointing and consolidation. The south-east turret noted above also displays a distinct lean, and a crack below it should be monitored and perhaps repaired. The vertical split in the masonry above this, caused by the loss of the chamfered band, shows a lack of integrity.

7.2.30 The east wall of the tower is generally sound, although vegetation removal, and subsequent consolidation and repointing, is required. Much of the face to the south of the south range has deteriorated, including the unusual window W4/20.

7.2.31 The interior of the tower at basement and ground floor levels is generally in a sound condition, although notable areas of collapse (and former repairs) exist in the east wall of the basement.

7.2.32 The extensive vegetation which has become established on top of the ground floor vault represents a major threat to this tower with some large woody plant growth evident (see plate 12). The remains of the walls above appear to be generally sound, with the openings to the various windows and passages probably requiring the greatest degree of intervention. Some repairs to the remains of the south wall will also be necessary; there are clearly unstable elements along the east edge of this wall. The problems evident at the top of the tower have been mentioned above.

7.2.33 The remains of the south range are in relatively good condition in that there is little unsupported masonry. Here the priority must be the continued removal of vegetation from the wall, and the resetting of loose masonry, particularly along the top of the wall and at the east end.

### **7.3 Principles of repair and management**

7.3.1 When considering the conservation and management of the castle and its immediate surroundings, a number of general principles need to be considered and applied.

#### **Archaeological or architectural recording**

7.3.2 In all cases, and irrespective of the amount of work being carried out, a programme of archaeological recording needs to be undertaken before, during, and occasionally after any conservation or management work. The justification for this recording is two-fold. Firstly, a pre-intervention survey is often the only record of the existing structure, feature or complex to be conserved or managed; the identification of small details such as variations in original build, the blocking of openings, or the recognition of the presence of original internal features such as stairs or floors, will help in the

detailed understanding of the history, development and workings of the monument. Secondly, a pre-intervention survey will provide a valuable base line of information from which all subsequent conservation and management works can be measured and identified.

- 7.3.3 The archaeological and architectural surveys described above, together with the rectified photographs taken in 1982 and 1996, will constitute the majority of the pre-intervention recording work, but some additional detailed work may be required, particularly at the higher elevations which were inaccessible at the time of the survey, or those elevations which were covered by vegetation. The extent of this additional recording will vary according to the scale and nature of the proposed works but it may, for example, involve additional photographs and/or drawings, or amending the existing survey data.

### **Erosion control**

- 7.3.4 A common management issue encountered at many archaeological sites within pasture or grazing land involves the erosion caused by the resident animal population. Damage may be linked to the type of archaeological site, or it may be solely due to the prevailing soil conditions and/or stocking regimes. Problems may be increased by pressure points arising from the inappropriate location of gateways or feeding troughs, or the use of trees and other natural features for shade, shelter or rubbing posts.
- 7.3.5 The problems of, and possible solutions to, erosion on archaeological sites are well documented (eg. Streeten 1994; Thackray 1994). Over-stocking can be effectively remedied by reducing the numbers of stock within a given area. However, in some cases this is not easily or readily done, and it is important that the requirements and wishes of the landowner or tenant are considered. It is usually possible to reduce what is often a localised erosion problem by adopting a few simple solutions, such as the regular movement of feeders around a given area, and keeping feeders and drinking troughs outside the most sensitive parts of an archaeological site.
- 7.3.6 Animals, particularly sheep and cattle, can cause localised erosion problems by trampling (poaching), lying or sheltering against earthworks or structures ("lying in holes"), or maintaining a common path through a site; these usually result in the turf cover being worn away to form erosion scars. The repair of these scars is a relatively simple matter, and can be achieved by restoring the original profile with soil and either re-seeding, spreading cut hay or grass to seed the bare soil naturally ("Green Hay" method), or turfing; the choice of operation is usually determined on a site by site basis, and will be influenced by the type and character of the adjacent grass sward.

## **Trees and vegetation**

- 7.3.7 Trees and vegetation are also a common management issue and their presence on or around an archaeological site can cause damage to the structure and integrity of the monument. Trees roots are particularly damaging to stonework, especially when the roots extend into or over a structure of loose or drystone construction.
- 7.3.8 The removal of trees or scrub needs to be done with care to prevent damage, both during the felling and removal stages; usually the trunk or stem is cut near to ground level, treated, and allowed to decay. Ivy and other creepers often have to be removed from walls, and this is achieved by selective cutting and allowing the growth to die; it is important not to pull the ivy away from what is often an unconsolidated surface. However, it is also important to note that standing ruins will often have a significant nature conservation interest (Thompson 1995) and a balance needs to be achieved.

## **Stabilisation of structures, use of materials, and finishes**

- 7.3.9 These matters have been the subject of considerable debate over recent years, but several general guidelines have now been established for historic structures and are in common use. These are summarised below but fuller explanations can be found in the appropriate literature (eg. Ashurst & Ashurst 1988; Bereton 1991).
- 7.3.10 In all cases, and irrespective of the amount of remedial or conservation work that is to be undertaken, the standard and accepted principle of "consolidate as found" should be followed, the aim being to undertake the minimum amount of work necessary to produce a stabilised ruin. However, it is accepted that in some cases, limited rebuilding, restoration, or even demolition may be necessary to either ensure the long-term stability of the structure, to meet other specific (eg. interpretative) objectives, or to satisfy Health and Safety requirements; in some cases a structural survey or analysis of the building may be required. It is often only necessary to take down and reset the upper courses of a wall, both to conserve to wall tops and to prevent water ingress, but it may occasionally be necessary to buttress, truss, underpin or reinforce structures; in all cases, such interventions should be kept to a minimum to maintain the integrity of the structure. Rough racking, that is the stabilisation of exposed core material, is also likely to be required.
- 7.3.11 For all archaeological conservation work, sympathetic materials and mortars to match the existing should be used. Materials should, wherever possible, be recovered from the site, particularly stonework. For buildings with semi-permeable, flexible, wall core materials, the mortar mix needs to be water resistant but still allow bedding materials to breathe; it should adhere to stone faces, should

not exhibit excessive drying shrinkage, and should be flexible to allow for thermal and other stresses. From a conservation point of view, it should have a texture and appearance which closely matches the original, ie. contain the types and quantities of aggregate or inclusions used in the original mix, whilst its colour and finish should be appropriate to the age, condition and quality of the structure. Mortar mixes incorporating cement, lime and sand in a ratio of 1:2:7 are often used, but each individual site will have its own particular requirements. It should be noted that the chemical composition of the existing mortar may be important for plant (eg. lichen) growth on and adjacent to the structures.

7.3.12 Attention also needs to be paid to the final appearance of the mortar. New mortar should be tamped in and finished with a stipple brush or fine spray technique to highlight the aggregate in the mortar mix; no trowel marks, brush marks or cementaceous staining should show. Mortar on originally pointed walls should be flush or slightly set in, and not left upstanding from the wall face. If mortar is to be used to stabilise walls of drystone construction, it should be kept well back from any faces and hidden as much as possible. In some cases, it will be necessary to leave some joints open to act as weep holes, particularly on those walls which act as retaining features. Experience has shown that it is rarely necessary to repoint the whole of a structure or wall face, and the use of unmortared sections within otherwise pointed walls can be visually attractive and can be used to emphasise blocked features or other structural differences.

7.3.13 As there is no exposed timberwork or very little ironwork at Sheriff Hutton, the conservation of this material is not considered here. However, if ironwork is uncovered, it should be treated or painted, and there might be a case for carefully removing it if it is shown that it is causing damage to the surrounding fabric.

#### **Site conditions**

7.3.14 In addition to ensuring that all repairs and other work is done in keeping and as found, the varied soil chemistry and physical make-up of the site should also not be altered, to ensure that conditions favour and enhance further development of new plants. Ideally, no new materials should be brought onto the site from outside, such as gravels, soils or fertilisers, and the movement of material within the site should be minimised. The storage and dumping of imported materials should also be avoided. Any lateral movement of existing substrates should be avoided wherever possible, eg. for path creation or repair, and water should only be diverted or channelled along routes which were historically designed for that purpose.

7.3.15 The presence of bats was identified in a number of structures, eg. in the vaults of the south-west tower and Guard Room. It is important that they are not disturbed during any building or repair works, and it would be appropriate to leave some holes

unconsolidated for nesting boxes; this has been successfully done at other sites, for example at Carew Castle and Fountains Abbey (Hutson 1995).

### **Management plans and specifications**

- 7.3.16 The numerous environmental interests which exist on and within an archaeological site will be varied and interconnected, and sometimes competing in terms of management issues. Many of these have been alluded to above, and it is important that all interests are considered when making and carrying out recommendations for conservation and management. This is often achieved through an integrated management plan, which can give equal weight to the various interests, set clear objectives which can be achieved through the implementation of prescriptions, and provide a framework for monitoring and review.
- 7.3.17 All conservation and management work should ideally be preceded by a specification of works. The size and content of specifications will vary according to the site and the type of work being undertaken, but their use will ensure adherence to the general principles, objectives and guidelines established for the site, and may allow the use of non-specialised labour under appropriate supervision. Specifications should also enable costs and progress to be measured against quantifiable scales.

## **7.4 Phasing of repairs**

- 7.4.1 Within each of the priorities for consolidation (see below), a similar sequence of operations should be carried out which will allow the preparation of the site for scaffolding, the removal of vegetation, and the repair of masonry together with any further interventions necessitated by the particular problems of the area concerned, which are summarised below.
- 7.4.2 Any programme of consolidation works should include the provision of an archaeological watching brief while the works are in progress, and to carry out further recording work facilitated by scaffolding to the upper levels of the towers, which will allow the detailed inspection of features hitherto only visible from ground level. It should also be noted that the watching brief may lead to the modification of the proposed consolidation programme.
- 7.4.3 Within each priority area, the works should be divided into three main phases.

### **Phase 1**

This would involve the initial cleaning and site preparation work with a view to assessing in detail those works that are required for the main phase of consolidation. Vegetation both on and in the vicinity

of the monument at ground level should be cleared as necessary, and loose debris, including fallen stonework, should be cleared and set on one side, to be used for consolidation where appropriate. No excavation should take place however. Stonework should be examined for architectural details, and where significant pieces are found, should be recorded, marked, and kept in storage; ultimately these could be stored in the locked ground floor vault of the south-west tower.

## **Phase 2**

- 7.4.4 Scaffolding should then be erected to provide working access to all parts of the priority area. This will need to be done with care, both to provide a level working platform and to prevent unnecessary damage to the ground surface; in some cases it might be more appropriate to utilise a mobile platform or 'cherry-picker'. If scaffolding is used, the ends of the poles should be capped to prevent unnecessary damage to the existing fabric. Access should be given to the architect, engineer and archaeologist and other parties in advance of works, to carry out further survey work and agree on the precise sequence and nature of clearance and consolidation.

## **Phase 3**

- 7.4.5 Beginning at the topmost parts of the structure, the clearance of vegetation and debris should be carried out. All areas of substantial vegetation, including established ivy and trees, should be cut down and treated to prevent further re-growth. They should not be dug or pulled out as this will undoubtedly damage the underlying fabric. Where this activity reveals previously unrecorded information, architectural recording should be carried out as appropriate. Remedial works to the fabric should then be undertaken, to include stone renovation, replacement, resetting and repointing as appropriate, as outlined in section 7.5 below and using the guidelines set out on figures 19 to 26.
- 7.4.6 All the loose, defective and decayed mortar, including any such modern pointing, should be raked out and the stonework cleaned using water only; hard, well packed and preserved mortar of any age should be retained. Repointing is considered to be required where the mortar has receded a minimum of 50mm from the wall face; only substantial areas where this is the case are identified below, and throughout the elevations, selective repointing would be necessary, with the exception of vaulted areas. Hume estimated that about 90% of the castle would require re-pointing, but in 1993 a more realistic figure of less than 50% was given (Couling 1993, 35). Where appropriate, areas should be repointed using a 1:2:7 (or softer) cement, lime, and sand mortar mix. Any large cracks and fractures should be infilled with a similar well packed mortar mix, although more substantial cracks may require pinning or tying.



- 7.4.7 Any loose face or core work should be reset. It is doubtful that widespread replacement of stonework would be considered worthwhile or desirable, but in the event, stonework should only be replaced with local stone or re-used fallen stone. Consideration should be given to treating the existing fabric with an appropriate waterproof stone strengthener. If window sills are not be replaced, and this should only take place if they are dislodged rather than missing, it is important that the surface beneath is properly consolidated to prevent water egress into the core work.
- 7.4.8 All the surviving wall tops should all be dismantled, cleaned out and rebuilt or reset to an average depth of 1.0m; Couling estimated a length of 173m was involved. A limited depth of core should be cleaned out and soft capping applied along the full lengths of the walls.

## **7.5 Priorities for repair**

- 7.5.1 The most significant threats to the castle have been identified as being a lack of structural integrity, weathering and natural erosion, and plant growth. While measures can be taken to reduce these effects, they can be only partially mitigated against. Some degree of compromise will have to be made, regarding not only financial constraints but also the problems of intervention into the historic fabric. To make safe certain parts of the structure, substantial quantities of additional masonry will need to be introduced, or alternative materials (such as stainless steel) will have to be used. However, any programme of repairs must address all three aspects: there would be little point in undertaking extensive repointing without taking action to reduce the possibility of major collapses of masonry.
- 7.5.2 While each of the four areas contain many unstable elements that would each appear to benefit from priority treatment, it is believed that a prioritised approach to the overall works should be adopted. This would treat each of the four areas of the castle in turn as a separate entity, will have the considerable advantage of spreading the repair and maintenance costs over a longer period, and will also allow techniques to be assessed and modified as the works progress, if necessary. Within each of the priority areas, it would be appropriate to undertake on-site works in a phased programme, as outlined above.
- 7.5.3 In addition to these general comments, specific problems are noted and recommendations made below.

### **Priority 1: Area 2 (north-east)**

- 7.5.4 The north-east tower is probably the most unstable part of the castle. This is evident in the fracturing and flattening of the ground

floor vaulting, and the movement of the north-west corner above first floor level, where a distinct southwards and eastwards leaning of the north elevation can be seen. The nature and severity of these problems suggest that considerable and urgent intervention will be necessary to reduce the risk of major loss of masonry. An indication of the desirability and extent of the remedial works for this area are shown on figures 21 and 22.

- 7.5.5 The remains of the east external elevation of the tower requires almost total repointing, apart from a small area towards the north end (elevation 2.1). The stonework itself has also weathered badly and some replacement should be considered. Further remedial works should include the supporting of the various openings in this wall, the southernmost one which has already experienced recent collapse being the most urgent. A major crack which has developed behind this face will require major work, possibly pinning and/or limited rebuilding; the removal of the vegetation will reveal and possibly exacerbate the extent of the problem.
- 7.5.6 The north elevation of the tower requires the consolidation of the enlarged openings, particularly to the now continuous opening from basement level to the top of the ground floor vaulting (W2/2-W2/3), which may require stitching (elevation 2.2). Repointing is required throughout the upper third, as well as the eastern section. The splitting quoins at the north-west corner should be replaced and it may be necessary to consider buttressing this area; if possible, any measurements previously taken using the three counters in this corner should be obtained and the extent of any movement assessed. A small void at the base of the east corner should be infilled with appropriate stonework.
- 7.5.7 The west side of the tower is particularly unstable, due no doubt to the removal of the majority of this wall and the adjacent curtain wall (elevation 2.3). The overhangs on the south side, around the high level door (D2/1), need support, the repointing of almost all this elevation is required, and some stonework may need replacing around the lower offset. Particular attention needs to be paid to the area of collapse around the latrine chutes C2/2 and C2/3; these need consolidating and possibly supporting from the inside. The stability of the supporting brick buttress also needs to be assessed. Considerable vegetation removal at the south end of the elevation, and extensive consolidation to the underlying core would be required; this work may reveal additional problems. The failed and corroding iron tie and plate at third floor level should be removed, ensuring no damage is done to the adjacent fabric.
- 7.5.8 Within the tower, consideration should be given to clearing out the modern debris from the basement vault; in any case the entrance into it from the north wall (W2/2) should be made secure to prevent access (both human and animal) into it. A number of steel bars across the hole might be appropriate for this. Repairs to the

basement vault are also desirable but the extent of these would only become evident following removal of debris.

- 7.5.9 As noted above, the ground floor vaulting itself is inherently unstable, with a distinct flattening of the arch and fracture evident adjacent to the east wall (elevation 2.7). It is not easy to see a solution to these problems without a major degree of intervention which may involve the taking down, pinning and rebuilding of some sections of wall and roof, and more specialist advice should be sought as a matter of urgency. Otherwise, with the exception of a crack in the west wall, the internal wall faces themselves appear generally sound and should not require repointing. Any action here should be aimed so as to minimise damage to the remnants of the plastering at the top of the vaulting.
- 7.5.10 At higher levels, the considerable depth of debris and associated vegetation over this vaulting should be removed. On closer examination, it might for example be more appropriate to leave a thin covering of soil and vegetation in order to protect the underlying surfaces and structures. General consolidation and repointing work would be required to certain areas of core and facework; there is little point in carrying out this work if the major problems of overhanging masonry and lack of support described above are not addressed however.
- 7.5.11 For the north-east spur wall, any remaining vegetation should be removed from the wall top, and facework repointed and exposed corework consolidated (elevation 2.5). It may also be appropriate to replace some of the badly spalled facework. No action is recommended for the north face of the wall, which appears stable, and of which relatively little is believed to be medieval.

#### **Priority 2: Area 4 (south-west)**

- 7.5.12 It is considered that the south-west area is next area of priority, due to the amount of apparently insecure stonework and the relatively serious threat posed by vegetation growth, which may lead to the rapid deterioration of the fabric, in contrast to the other areas. An indication of the desirability and extent of the remedial works for this area are shown on figures 25 and 26.
- 7.5.13 The removal of the vegetation in the upper levels is the main priority; some architectural deposits or features may actually survive within this depth of material (elevations 4.1 and 4.7). On closer examination, it might be more appropriate to leave a thin covering of soil and vegetation in order to protect the underlying surfaces and structures. It is important the openings in the west elevation are consolidated, particularly the arches of the upper windows (W4/12 and W4/13), and some of the stonework needs to be replaced above and below the lower offset in the external elevation where spalling is active; this also applies to some of the offset stones themselves

(elevation 4.2). Attempts should also be made to secure the leaning south-east corner turret, possibly by rebuilding some sections and incorporating steel ties; the extent of this problem will only become apparent once a close inspection has been made, and complete removal might be the only long-term solution. In the south elevation, the cracks above and below the central window (W4/16) should be repaired and the opening below (W4/15) should be consolidated, as should the scar of the removed east buttress.

7.5.14 The extensive vegetation on the top of the ground floor vault also represents a serious problem, and all woody plant growth should be removed. However, it is important that this is done carefully, as removal might reveal additional structural problems, and it is important that water is not allowed to enter the lower floors. Once again, it might be appropriate to leave a shallow covering of soil and vegetation for protection.

7.5.15 It is not anticipated that consolidation works will be necessary in the ground floor vault, although minor repairs to the bases of the embrasures to all three windows (W4/6, W4/7 and W4/17) might be considered. If any work is carried out, care should be taken to prevent damage to the plaster remaining on many of the wall surfaces (elevation 4.7). It is also believed that bats are resident within these vaults, and therefore English Nature should be consulted before any work is carried out.

7.5.16 The tops of the walls of the south range should be cleared of vegetation, and the loose masonry reset, particularly along the top of the wall and at the east end. The blocking of the door in the south elevation (D4/6) should be consolidated, but it would be appropriate to recess the mortar from the face so as to maintain the impression of the later blocking (elevation 4.4).

### **Priority 3: Area 3 (north-west)**

7.5.17 The remains of the north-west tower and adjoining length of the west curtain wall appear generally sound from a structural point of view, and although some long cracks are evident in the external elevations, these do not appear to be a threat to the integrity of the tower. There are however unsupported areas of vaulting and considerable amounts of loose masonry and vegetation in this area. An indication of the desirability and extent of the remedial works for this area are shown on figures 23 and 24.

7.5.18 The north external elevation contains some collapse around the latrine chutes C3/1 and C3/2, and other enlarged openings which appear vulnerable (elevation 3.1). These should all be consolidated, and the latrine chutes supported, perhaps with the insertion of a stainless steel pole. The cracks around the previously repaired central area should be repaired, and the adjacent areas repointed. The split quoins in the centre of the north-west corner should also be

replaced. The wall tops should be consolidated, and an area of loose masonry above window W3/10 should be taken down and reset. Internally, some consolidation and repointing is required around fireplaces FP3/2 and FP3/3, and the east side of doorway D3/1 needs to be secured (elevation 3.5).

- 7.5.19 The west elevation appears generally stable, although the cracks associated with the central windows should be monitored and repaired if necessary (elevation 3.2). The upper levels require repointing and the wall tops resetting, as does the south elevation. The extensive and apparently increasing ivy growth should be cleared on the south elevation, and may reveal further problems (elevation 3.3). An area of collapse between first and second floor level, probably around a former opening, is still unstable and needs supporting, again possibly using a stainless steel pole.
- 7.5.20 A considerable amount of work is required in the ground floor vault, which is unsupported on its east side. This will require careful pinning back, to prevent progressive loss of masonry from the outer edge. Elsewhere, general pointing and resetting of masonry will be necessary across much of the north and west walls, particularly around openings, many of which have been left unstable by the removal of dressings. In this respect, considerably more work is required in the north wall, where the apparent removal of masonry from around fireplaces and window openings has left many unsupported areas.

#### **Priority 4: Area 1 (south-east)**

- 7.5.21 The south-east area can be considered as the least urgent, as vegetation levels are relatively low, and, with a few exceptions, the masonry is generally sound in appearance and there are few cracks. An indication of the desirability and extent of the remedial works for this area are shown on figures 19 and 20).
- 7.5.22 On the south elevation, repairs are required to two of the corbels supporting the machicolations, and the wall tops should be reset and consolidated (elevation 1.1). A number of quoins on the buttress should be replaced, and an area of collapsed facework at ground level below window W1/1 should be infilled with appropriate stonework. The upper and lower areas of this elevation also need repointing but areas of previous repair should be left to allow for differentiation.
- 7.5.23 More repointing is required on the east elevation, and there are a small number of openings and areas of collapse to consolidate such as the embrasure of window W1/9 and around windows W1/8 and W1/17 (elevation 1.2). Wall tops should also be taken down and reset, as well as the area around window W1/10. The underside of the gateway contains a significant amount of unstable masonry, and pinning or other means of support is now required to prevent

collapse following the removal of the blocking wall (elevation 1.8). It may also be appropriate to replace the sides of the gateway and remove some of the modern cement which is causing some damage to the original fabric. Consideration should also be given to preventing further erosion on the frieze, perhaps through the application of a waterproofing stone strengthener; the stability of the panels should also be checked. Vegetation at the upper corners of the east elevation of the Guard Room should be removed and corework consolidated.

- 7.5.24 The north, west and south elevations of the Guard Room are in need of repointing and some limited rebuilding of facework. The upper parts of this structure require a greater degree of intervention though, and the vegetation on top of this structure may require clearance to establish the precise condition of the vaulting, which appears sound from beneath. Within the Guard Room, work is only required to repair parts of the south wall. Bats were observed within this vaulting and work which would disturb them should not be carried out without the advice of English Nature; if possible, habitat holes should be left for them.
- 7.5.25 The removal of vegetation from the top of the south-east spur wall should be completed. Repointing of the ashlar section and rebuilding of corework should be carried out where appropriate; the rubble section beyond should be considered for repointing too. The rebuilding of the low spur wall should be completed, if only to stabilise the slope behind.

#### **Other site management works**

- 7.5.26 In addition to the above, there are a number of other management issues which could be considered. Although in themselves they are relatively minor, their adoption could be significant in improving both the setting and presentation of the castle. However, it should also be accepted that the site is still used by a small number of cattle, and any of the suggested improvements outlined below would need to conform with the landowner's current and future requirements.
- 7.5.27 Although some of the building rubble identified by the survey on the inside of the south-east tower and gatehouse has been largely removed, other material still remains. This should be carefully taken away and deposited off-site, without causing damage to the underlying ground surface and the surviving remains of the revetment walls and brick facing.
- 7.5.28 Cattle currently use the basement of the south-west tower for shelter and access it through the larger opening at the base of the south elevation (window W4/15). At present, this use does not appear to be detrimental to the structure, although there is some cattle poaching on the south side of the castle mound as the cattle move up the slope. However, it is noted and accepted that the

retention of some stock on the site is generally beneficial in keeping vegetation and scrub down, and the amount of erosion has been significantly reduced from that shown in 1947 when larger numbers of stock were involved (see plate 2). No areas of erosion likely to cause concern were identified during the earthwork survey.

- 7.5.29 The use of other parts of the castle for the storage of agricultural equipment, such as inside the guardhouse, is not causing any damage to the fabric, and it is noted that the removal of the numerous barns and hay-stacks from the inner court, and the recent demolition of the barn from the east side of the guardhouse (see plate 2) represents a major and significant improvement in both the setting and visual amenity of the monument.
- 7.5.30 The existing fence and gate across the gateway (see plate 8) could be removed, thus opening up the original entrance into the inner court. The presence of a gate at the north-west corner of the south-west tower is also causing some localised erosion to the ground surface. However, the layout and removal of any fences should be considered in detail in conjunction with any public access proposals.
- 7.5.31 Finally, the removal of vegetation and other debris from the surviving structures has already been covered above. In addition to this however, it would be appropriate to cut some of the vegetation from the deep depression along the north side of the inner court, which represents the connecting range between the north-east and north-west towers. Other vegetation around the site has recently been cut, leading to the better appreciation of the monument. It might, at some future point, be beneficial to undertake some limited clearance of the linear ponds along the south side of the site.

## **7.6 Post-consolidation maintenance and monitoring**

- 7.6.1 Following the completion of site works to consolidate the structure, an on-going maintenance programme should be initiated to monitor and remedy subsequent problems.
- 7.6.2 The site needs to be periodically monitored over time to ensure that the existing, conserved and/or managed archaeological resource is maintained, and that the condition of the site and/or features within it do not deteriorate. Checks should be made for both structural damage or weaknesses, and to ensure that any completed conservation works remain in good condition; it is common for some areas of repointing or consolidation to fail after a period of time. It is also likely that some day-to-day maintenance of the site or its components will be required as a result of problems identified by the monitoring programme.
- 7.6.3 The encroachment of vegetation needs to be checked, to ensure that new growth does not cause damage to the site. Areas of previously cut and cleared vegetation undertaken need to be monitored for re-

growth. The success and/or condition of any erosion repairs should be checked for progress, and areas of new erosion need to be identified and any damage reported.

## **7.7 Interpretation**

- 7.7.1 It would be appropriate to consider some degree of site interpretation for the monument. The castle is privately owned and is not directly accessible by public footpath but, while people using nearby rights of way which cross the surrounding earthworks are prevented from casually visiting the monument by fences and gates, access to the interior is possible by prior arrangement. Although public access to the monument would be desirable, the health and safety requirements necessitated by this would be significant. Without careful arrangements, public access may also be detrimental to the fabric. Funding for consolidation may however be conditional on allowing some degree of public access.
- 7.7.2 There is no interpretation on the site at present. As an interim measure it may be appropriate to consider some form of low-key static interpretation on the nearby rights of way which, as well as giving a few details of the castle and surrounding earthworks, could also inform potential visitors of the condition of the remains, and the reasons why it is not open to the public.
- 7.7.3 If a greater level of on-site interpretation is considered desirable, a new notice board or group of boards could be designed and erected, utilising information contained within this report. These boards could include a summary of the history of the site, plans, and a simplified earthwork plan. An artist's reconstruction of the castle would also be useful. Warnings about possible falling masonry and the danger of entering the monument should also be included. The information should be displayed on acetate sheets or other media which can be easily renewed in the event of damage or vandalism.



## 8 DISCUSSION AND CONCLUSIONS

### 8.1 Introduction

- 8.1.1 The survey of the castle and surrounding earthworks has raised a number of issues regarding its construction, the phases of subsequent interventions, its layout and function, and various other matters.

### 8.2 Layout of the castle complex

- 8.2.1 It is known that the stone castle was constructed at the west end of the village in 1382, and that it replaced an earlier castle/manor house situated near the church to the east. The morphological analysis of the village suggests that the castle was planted on the edge of a new expanded settlement, and that it resulted in an alteration in the layout of the west end of the village.
- 8.2.2 The various descriptions and cartographic evidence outlined in Chapters 2 and 3 above suggest that the castle complex comprised three courts or wards. The outer court was located on the east side of the Castle Garth as shown on the 1765 map (WYAS ADD 318; see figure 3) and a survey of c.1526 notes that it contained "houses of office" such as a brewhouse, horse mills, stables and barns (Colvin, Ransome & Summerson 1975, 294). This outer court, which may have comprised the whole of the Castle Garth, may have been entered via a gatehouse on the west side of the market place.
- 8.2.3 The two other courts, the inner and middle, are depicted on the 1765 map, and are named as "Far Wards" and "Fore Wards" respectively. In 1534 Leland describes three "great and high" towers with a central gatehouse in the middle court (Todd 1824, 8); if the main entrance was to the west, this gatehouse would be likely to be on the east side. Unfortunately, the 1765 plan depicts only a general quadrilateral, although there is a house shown in the north-east corner.
- 8.2.4 Castle Farm now occupies the area of the middle court, and the stone identification survey did not find any conclusive evidence for medieval masonry in the surviving farm buildings. Any remains must therefore be below the surface of the ground, but their extent and survival is open to question. It has always been assumed that the recorded removal of stone "from the castle" by, amongst others, the Ingram family in the early 17th century to build their lodge in the adjacent park, was from the inner court, but it seems more logical to have taken material from the outlying middle court. There are two separate references to the demolition of towers, in 1615 and 1623, which presumably relate to structures in the middle court as the towers in the inner court are still largely standing, and in 1615 William Clarke refers to stone being removed while he was in residence, presumably in the inner court.

- 8.2.5 It is possible that the castle was originally surrounded by a moat which encircled it on the north, west and south sides; there was no defensive ditch on the east side. In addition, there are two long linear ponds or canals which run along the south side of the Castle Garth and cut across the former course of the moat. Their parallel alignment, together with a central raised terrace from where impressive views of the castle to the north and the deer park to the south can be obtained, suggest that they are the main elements of a formal entrance-way, possibly conceived in the early 16th century when Henry Fitzroy, Duke of Richmond and Warden General of the Marches, was in residence. Such an arrangement is now well known elsewhere in England, and was a device used to impress friends, visitors and enemies alike; many incorporate views of the main house and water features.

### 8.3 The inner court

- 8.3.1 The major problem regarding the interpretation of the remaining inner court is the fragmentary nature of the ruins. It is estimated that between only 25-35% of the structures survive above ground, and although good proportions of the towers remain, the curtain walls and associated ranges are very poorly represented. Nevertheless, some attempt can be made at suggesting the layout and functions of the various parts of this area of the castle.
- 8.3.2 The basic quadrangular layout of the inner court, in which corner towers are linked by domestic ranges, is paralleled in other castles of the late 14th century, for example Bolton Castle in Wensleydale, North Yorkshire (whose licence to crenellate was issued in 1378) and Lumley Castle in County Durham (1389). These two also have angular towers, in contrast to other quadrangular castles which had round towers, such as Bodiam Castle in Sussex (1386); the roots of this plan may be seen in Edward I's Welsh strongholds of the late 13th century, such as Harlech.
- 8.3.3 The quadrangular plan allowed the provision of substantial domestic accommodation within a secure area, and as such could be planned to provide comparatively luxurious housing. This was made possible by the relatively settled conditions of the time, which allowed the domestic elements of castle design to take an increasing role at the expense of defensive considerations; as a consequence, many of these buildings are called "castle-residences" although Emery prefers the term "palace-residences" (Emery 1996, 282).
- 8.3.4 The lowest rooms of the four corner towers (including both basements and ground floors in all but the south-east tower) were vaulted and relatively poorly lit. None of the three basement vaults was heated, nor do they contain latrines; the most likely function for these is as storage areas. Each is lit by at least one window, making them relatively insecure, and so it is unlikely that they were intended to store things other than everyday provisions and articles (ie. they

were probably not intended as dungeons). The only one whose means of access remains clear, in the south-west tower, has a doorway (D4/4) which does not display any features indicative of extra security.

- 8.3.5 There are fireplaces in the ground floor vaults of all but the south-east tower, and in this case it is likely that there was a fireplace in one of the demolished walls. It is possible that these served as "reception rooms", or places where the principal occupants held office. Alternatively, they may have served as kitchens. However, the absence of any one room or range of rooms containing a number of fireplaces, which is normally taken to indicate the presence of a main kitchen, suggests that there may not have been such a feature in the inner court, although one was described by the c.1526 survey.
- 8.3.6 Instead, the ground floor vaults may have provided service accommodation, perhaps for guards, as the tradition of the south-west tower's "Sounding Hall" would imply. The origin of this term is obscure, and conflicting accounts are given of its location: Howarth (1993, 6) suggests that it is the ground floor vault and is so called because the noise made by guards patrolling within would be heard by the family above, who could assume that all was well, but Todd (1824, 7) refers to the basement, and attributes the name to the noise made by striking the floor, which sounded as though there was a further room below.
- 8.3.7 It is significant that the internal arrangements of the towers appear to have allowed direct access into each floor from the stairs set in the corners. This would have meant that each room had a similar degree of privacy, as it was not necessary to pass through one room to reach another; this represents a relatively sophisticated circulation system, as might be expected for a structure of such importance. However, this does make the interpretation of the rooms harder.
- 8.3.8 The four corner towers each appears to have contained two or three upper floors which provided relatively comfortable and well-lit domestic accommodation. It appears that each chamber was served by its own latrine, and it is likely that each was heated. The ornate nature of the trefoil headed windows indicates that these rooms were intended to impress and to provide well-lit accommodation for the convenience and comfort of the inhabitants, and that the defence of the castle was not over-riding. The poor survival of the upper floors means however that identifying differences between the upper floor chambers is not easy.
- 8.3.9 The south-west tower seems to have contained relatively high status accommodation, in comparison with the other three towers. This is apparent from the greater height of the two chambers within it, which occupy the same approximate height between them as three floors in the two northern towers. The first floor chamber, in

particular, is lit by three full-size windows in its long outer west wall (windows W4/9, W4/10 and W4/11), whereas the other upper chambers (eg. in the north-west tower) are lit by two windows (W4/12 and W4/13). The height of this room may indicate that it was a hall, rather than a sleeping chamber. The use of a trefoil headed window (W4/18) in the probable latrine passage at second floor level in the south wall, in contrast with other latrine passages which have plain openings, also suggests that the south-west tower was of relatively high status. This tower was therefore probably the location of the Nevill's own apartments, whereas the others would have been guest towers.

8.3.10 The side ranges would have provided additional accommodation, but the fact that only the south range survives to any significant extent means that the layout of the north and west ranges is not known. At least four individual lodgings can be identified in the remains of the south range, each lit by a single light window and served by a latrine. The westernmost of these units was perhaps of greatest size, and is the only one known to have been heated (although there is a probable fireplace at the east end of the range, FP4/3); it may therefore have been intended for someone with relatively high status. Faulkner has estimated that Bolton Castle contained twelve individual lodgings, as well as eight self-contained household suites (Faulkner 1963, 227). Further analogy with Bolton Castle suggests that the chapel may also have been located within the south range, although Emery is of the opinion that it is in the north range which is aligned approximately east-west (Emery 1996, 392).

8.3.11 The location of the great hall within the castle is not now known. In 1534 Leland noted that there was one, and remarked that the stairs to it were "very magnificent", along with the hall itself and "the residew of the house" (quoted in Colvin, Ransome and Summerson 1975, 293). Pevsner (1966, 339) believes that the south range contained the great hall, and Todd (1824) places it nearby, but the nature of the arrangements evident within the south range suggests otherwise (see above). In other similar castles such as Raby and Bodiam, it is usual to find the great hall opposite the main entrance, which would suggest that at Sheriff Hutton the hall was in the west range. This location is strongly suggested by Emery (1996, 392), who considers that the stairs might have been housed in a central stair tower. McCavana, on the other hand, believes that the great hall was in the north range.

8.3.12 The gatehouse was clearly the main entrance into the inner court, and there are similarities with its off-centre position in the east wall with Bolton Castle. There is good evidence in the heraldic display, the form of the masonry between the gatehouse and south-east tower, and the mis-alignment with the east curtain wall, to suggest that the present form of the gatehouse dates to the early years of the 15th century, post-dating the majority of the castle by some 20 years. As such, it appears to be the only significant part of the

castle which is not of the original phase. It is however likely that the present building replaced an earlier gatehouse.

- 8.3.13 The relatively grand nature of the surviving gatehouse bears similarities to that seen at Raby Castle, which appears to have been intended as a vehicle for heraldic display (Platt 1982, 133). A similar case can be made for the later gatehouse at Sheriff Hutton and it may have been built to commemorate the awarding of the garter to Ralph Neville in 1402. There would not appear to be any defensive reasons for the construction of the gateway, as there is no apparent facility for a portcullis, and the presence of the small doorway in the south range (D4/6) would have provided a point of weakness elsewhere.
- 8.3.14 The function of the structure referred to in the architectural description as the Guard Room just to the north of the gatehouse is not known, but it may have had served such a purpose and the doorway at its south-west corner (D1/3) may have given access into the rear of the gatehouse. Alternatively this vault could have served as a small kitchen or store room, possibly associated with the accommodation housed in the tower above.
- 8.3.15 The functions of the demolished parts of the castle can only be conjectured. It can be assumed however, that space would have been provided for stabling, storage, and servant accommodation, in addition to the main chambers, halls, chapel and lodgings mentioned above. The presence of such elements was noted in the early 16th century, when a hall, kitchen, and "stately lodgings for the Lorde with a faire Chapell" were recorded in a survey (noted in Colvin, Ransome & Summerson 1975, 293). These may have been contained within the demolished ranges or in the middle court, but little of the form of these can be established at present.
- 8.3.16 Buck's illustration of the north side of the castle in 1721 (reproduced in Couling 1993, 35) shows the north curtain wall standing to a height of some 22m for the full distance between the north-west and north-east towers, but to what extent this depiction is conjectural is not known. He shows the two off-sets on the north faces of the towers as continuing uninterrupted across the curtain wall, and the arrangement of the openings above and below suggests two floors between them. In the centre of the wall is a relatively large window on each floor; on the lower floor, there is a row of three single lights to the east and a possible external doorway near the west end. On the upper floor there is a row of three single lights to the east, and four to the west. Cave's drawing of 1824 from the same viewpoint shows nothing of the north curtain wall, but his view from the south-east does appear to show the western end of the wall to parapet height (published in Todd 1824).

8.3.17 The gatehouse represents the only identified part of the castle which post-dates the main period of construction and which pre-dates its abandonment. Although repairs are documented on at least three occasions in the 16th century (Colvin, Ransome & Summerson 1975, 294), it is not possible at this time to distinguish any of these from the majority of the repairs evident within the fabric and attributed to the c.1820s (Todd 1824, 30), and which are discussed below.

#### 8.4 Post-occupation interventions

8.4.1 The most striking post-occupation intervention to the castle has been the demolition of large parts of it, believed to have begun in the early 17th century and to have continued at intervals to the late 19th century. Cave's depictions of the castle in the early 19th century indicate that extensive demolition had been carried out by the 1820s, and that there was little more standing than remains today.

8.4.2 Although there were evidently strong pressures towards the continued demolition of the castle, these had been reversed by the early 19th century, when Todd records that a builder from York, Mr Plows junior, was employed for nearly three months, at a cost of £80 or £90, in consolidating the ruins. The precise extent of the repairs are not recorded, but all the tops of the towers are supposed to have been reset and repointed, with scaffolding erected to achieve this.

8.4.3 The most obvious visible repairs to the castle are the substantial areas of repointing on the north elevations of the two northern towers, where some brick and tile has been incorporated into the fabric, particularly in the north-west tower where a large area of repair runs from above the lower off-set to the wall top. These are believed to date from the 1820s. In addition, there are repairs to the south-east tower, and the south-west corner of the south-west tower at various levels, which include the partial blocking of the western basement window (W4/4), again attributable to this phase. The insertion of the iron tie through the north wall of the north-west tower may also date to this phase. It is noticeable that some 1906 photographs appear to show little modern collapse or disturbance to the towers.

8.4.4 The use of the inner court as a former farmyard also resulted in some interventions to the fabric. Todd describes the site as "encumbered with hay-stacks, pigeon-cots &c." (1824, 29) and it is possible that some secondary structures had been erected by this date. A plan of 1952 (see figure 4) and aerial photographs taken in 1947 (see plate 2) and c.1956 (Platt 1982, 136) all show barns, sections of wall and haystacks in this area but, apart for the brick wall on the north-east spur wall and some footings, there is generally little above-ground evidence for these structures.

- 8.4.5 Subsequent demolition of the majority of these structures has greatly improved the setting and visual appearance of the castle, particularly the removal of a large barn from in front of the Guard Room by the present owner, Dr R Howarth, in July 1997. The surviving secondary structures are now confined to an area of infilling between the south-west tower and the gatehouse, and the top of the north-east spur wall. Further planned development work at the site by Dr Howarth, involving the sympathetic conversion of the remaining farm buildings and the removal of some of the concrete hardstandings associated with former cattle stalls on the north side of the middle court, can only be beneficial to the long-term conservation and appreciation of the castle.

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- 10.4 Despite all the above, any errors or inconsistencies in the report remain the responsibility of Ed Dennison of EDAS. The copyright of this report and site archive has now passed to English Heritage as a condition of grant aid.