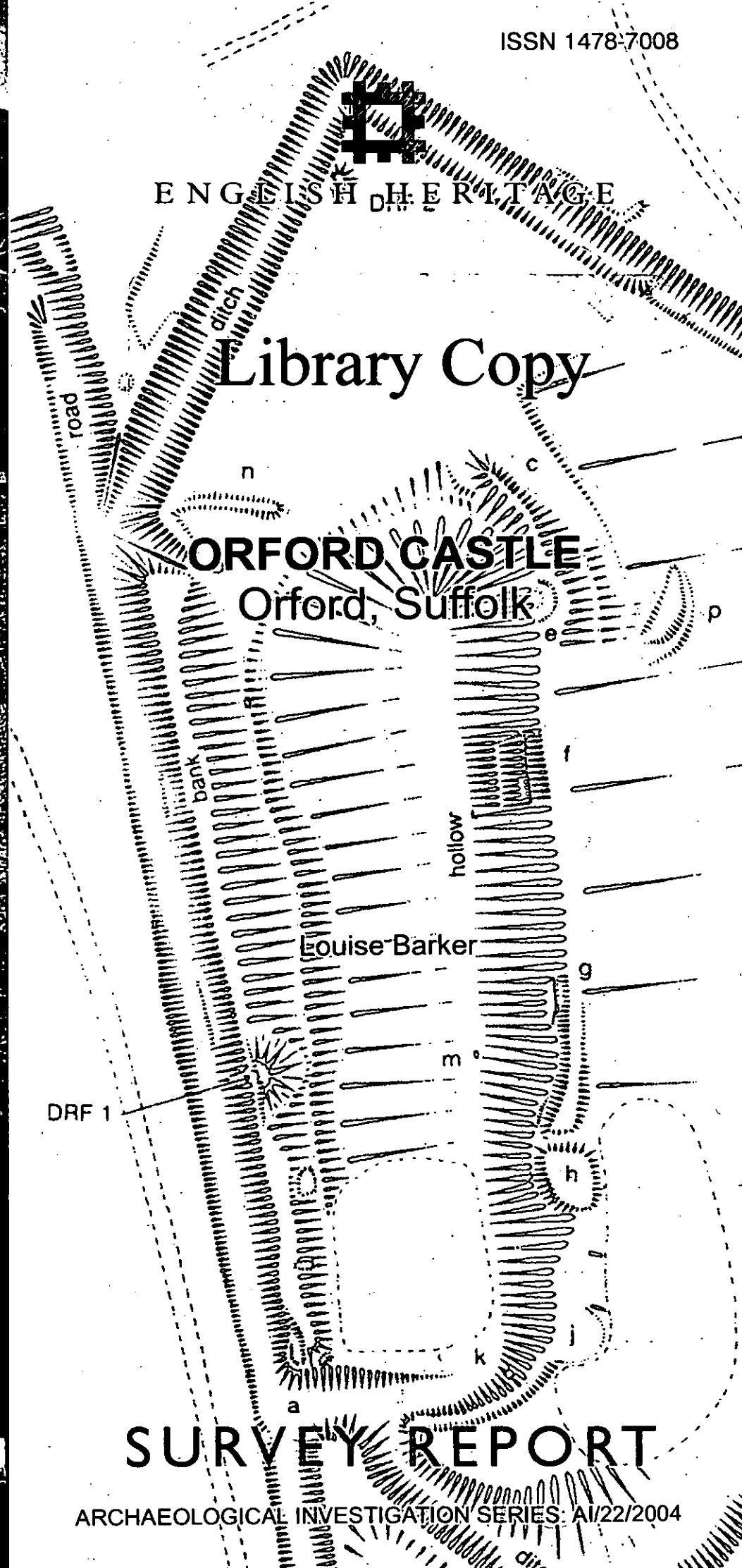


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ORFORD CASTLE  
Orford, Suffolk



SURVEY REPORT



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**ORFORD CASTLE,  
ORFORD, SUFFOLK**

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**District:** Suffolk Coastal  
**Parish:** Orford  
**NGR:** TM 419 498  
**NMR No:** TM 44 NW 1  
**SM/RSM No:** 21408  
**Date of survey:** October 2002  
**Surveyed by:** Louise Barker, Wayne Cocroft and Paul Pattison  
**Report author:** Louise Barker  
**Illustrations by:** Louise Barker  
**Photography by:** Alun Bull

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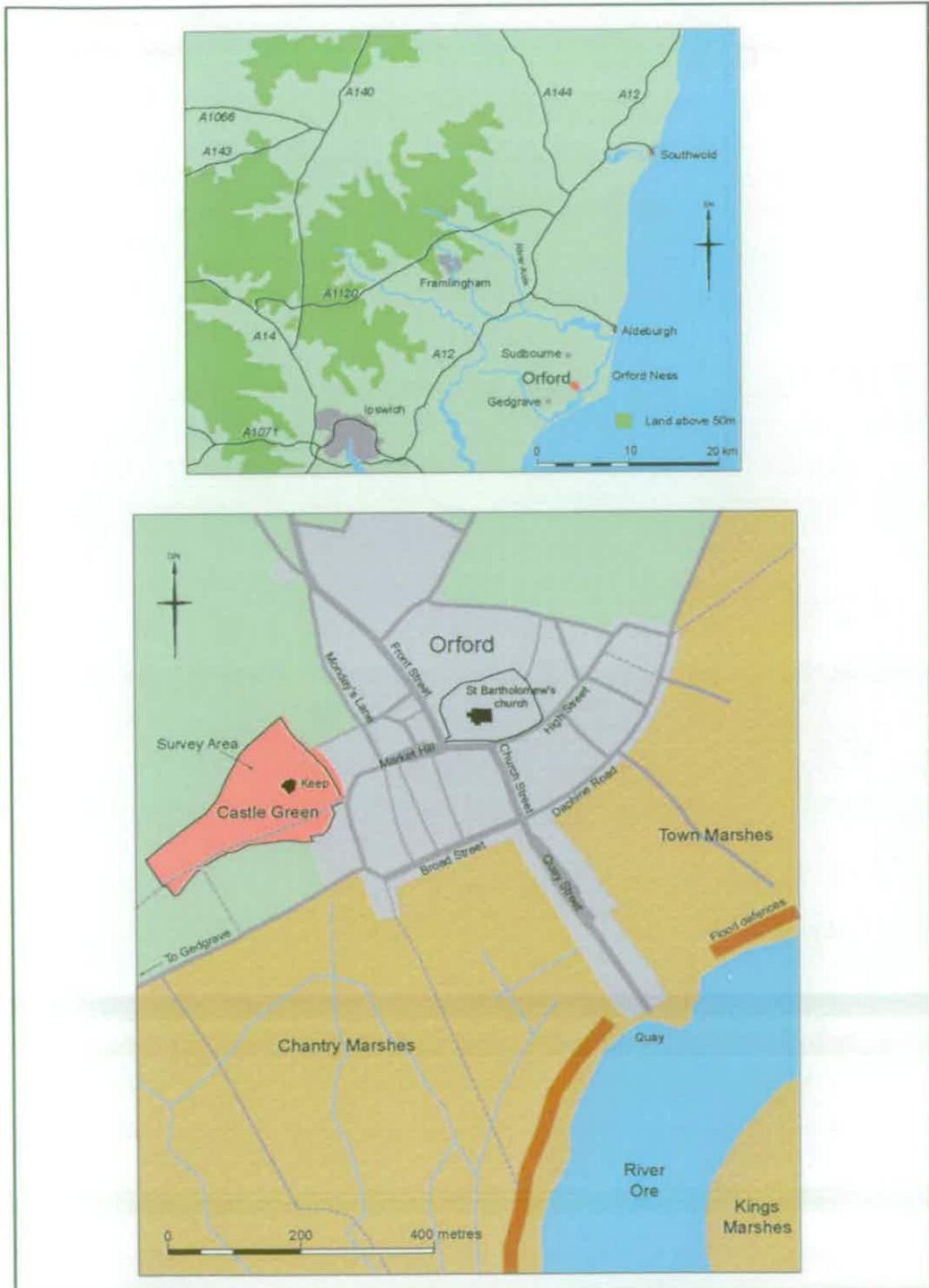
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# 1 INTRODUCTION

In October and December 2002, staff from the Archaeological Investigation Section (Cambridge Office) of English Heritage, carried out survey and analysis of earthworks within the area of the Scheduled Monument (SM 21408) of Orford Castle (TM 419 498). The investigation was requested by John Etté, English Heritage Inspector of Guardianship Monuments, East of England Region, following recommendations made in the draft Conservation Plan, produced by the Oxford Archaeological Unit (OAU 2003).



**Figure 1**  
Location maps  
showing Orford and  
the survey area

The historic town of Orford is situated in east Suffolk on the estuary of the River Alde, which rises near Framlingham and flows to Aldeburgh, some 7km to the north east of the town. Here it is deflected southwards by the long and continuously growing shingle spit known as Orford Ness, and becomes the River Ore (Renn 1992, 32). The Scheduled Monument encompasses an area known as Castle Green and lies on the western edge of the town, at the south-eastern end of a natural sand ridge. It includes 'Orford Castle with adjoining quarry and remains of 20<sup>th</sup> century look-out post' (SM 21408) and lies within the Orford Conservation Area, an Area of Outstanding Natural Beauty, and the Heritage Coast. In the western half of the Scheduled Monument area, part of the quarry has also been designated as a Site of Special Scientific Interest (SSSI) (Figs 1 and 19).

Orford is the earliest castle in England for which documentary evidence of its building survives. The Pipe Rolls, or annual accounts of the Exchequer, record its construction by King Henry II between 1165 and 1173 to a total cost of £1413 9s 2d. This was a considerable sum of money in a period when the total basic revenue of the crown has been estimated at less than £10,000 a year, and with the exception of Dover was the largest amount spent by Henry on any castle works (Allen Brown 1964, 3). Orford was a symbol of the king's power, strategically placed both to uphold royal authority in a region thickly planted with castles of powerful lords, and to guard the coast against invasion. It has a number of special claims of interest which include the unique design of its polygonal keep and the fact that it is one of the earliest in the country to use mural or flanking towers along the curtain wall.



**Figure 2**  
Orford Castle keep  
and surrounding  
earthworks  
(© English Heritage.  
NMR TM4249/19)

A grade 1 listed building, the keep is the only standing structure to survive and has therefore been the main focus for study (Fig 2). This has left significant gaps in our understanding of the rest of the castle, particularly the nature and position of the other castle defences. This

is understandable given the lack of surviving fabric and the complexity of the earthworks surrounding the keep:

Looking at the site today it is very hard to make out the exact configuration of the various earthworks around the castle....clearly there is much to be learnt about the castle walls and earthworks which will be revealed only by detailed survey and excavation (Potter et al 2002, 49)

In an attempt to address this problem, a series of archaeological investigations including earthwork survey, geophysical survey and excavation were undertaken during 2002-2003. The combined results of this work have greatly increased our understanding of the castle and have contributed to a new guidebook (Rhodes 2003), and a reconstruction painting by Frank Gardiner (Fig 47).



## 2 HISTORICAL BACKGROUND

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### 2.1 Prehistoric and Roman Activity

The earliest evidence for settlement in the area lies 500m to the south-west of the castle in the parish of Gedgrave (TM 4148 4931), where a series of cropmarks have been interpreted as a ditched linear settlement or field system of prehistoric or Roman date (Cain Hegarty, pers comm; NMR: RAF 58/877 5189-91). Within Orford there is only limited evidence for settlement prior to the 12<sup>th</sup> century, although a series of finds indicate activity here from at least the Mesolithic period and include a flake of honey-coloured flint found in the bailey of the castle (Owles 1970, 101). On High Street, excavations revealed a ditch containing pottery of the 1<sup>st</sup> and 2<sup>nd</sup>-century AD and two Romano-British cremation urns, tentatively suggest the possibility of a settlement during the Roman period (Balkwill and Martin 1979, 216; Martin *et al* 1999, 380;). This may have been connected with the salt industry, with finds of briquetage (crude clay pottery associated with salt production) and a possible salt pan found on Quay Street (Potter *et al* 2002, 42; OAU 2003, 63).

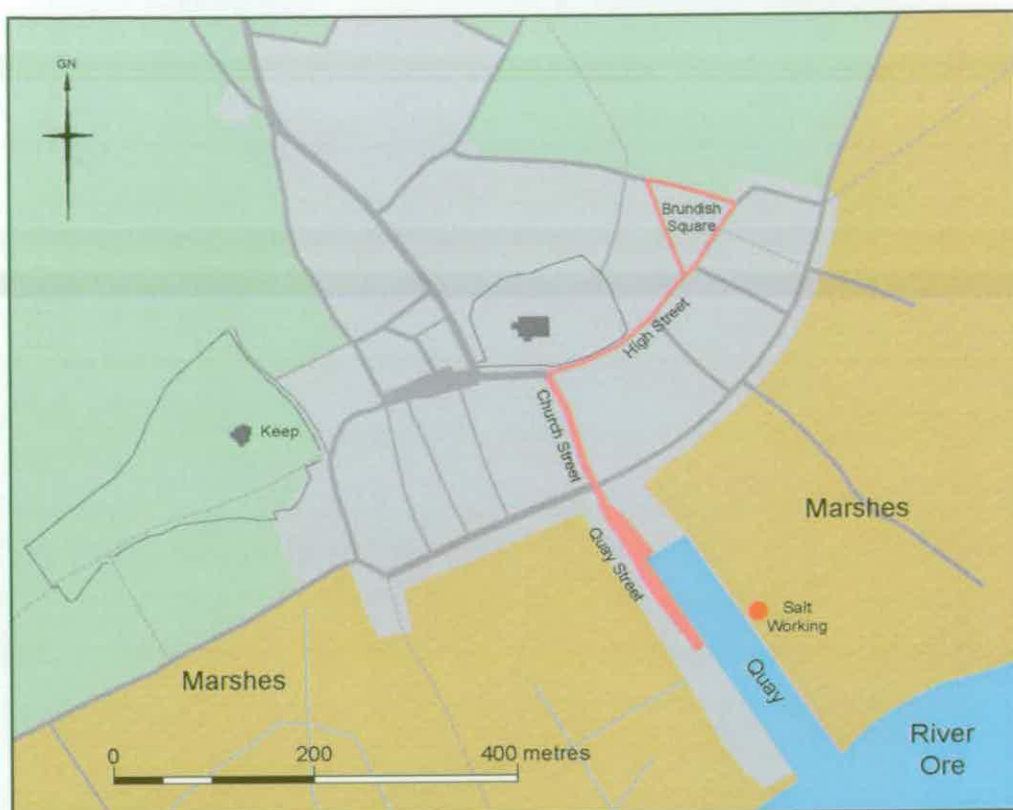
### 2.2 Medieval Orford Prior to the Castle

Orford lay within the Manor of Sudbourne, which was granted by King Edgar to Bishop Æthelwold of Winchester sometime between 959 and 975AD and which in turn had been granted to the Benedictine Monastery at Ely and the Honour of Eye in Suffolk. At the time of the Domesday Survey, Robert Malet, one of William the Conqueror's principal barons, and the Monastery at Ely held land in the Manor (Redstone 1900, 206-07; Heslop 1991, 39-41; Potter *et al* 2002, 44). Malet's portion appears to have included Orford and it may be that the salt house mentioned in a list of his holdings relates to medieval salt-working deposits uncovered during monitoring of groundwork on Quay Street (Fig 3; Gaimster & Bradley 2001, 326).

The first recorded instance of Orford named as a distinct entity from Sudbourne dates between 1071 and 1101, when Robert Malet granted the market and tolls of Orford to the priory he had founded at Eye. It seems likely that the Domesday Survey would have mentioned the existence of a market or settlement here and infers that the establishment of the market town occurred after the survey, most likely as a result of the growth in the fishing industry with the establishment of a quay and port. Following the disgrace of Malet in 1101, the Honour of Eye reverted back to the crown (Henry I). However, a charter of confirmation from the reign of King Stephen in 1138 restored Malet's earlier grant (Potter *et al* 2002, 44).

It has been suggested that this early settlement at Orford lay to the east of the church and Quay Street (Potter *et al* 2002, 52). In this area some of the oldest town buildings survive and the High Street widens out into Brundish Square, which might have been the site of the original market place (Fig 3). Until the end of the 19<sup>th</sup> century there were some 35 cottages around this square making it the most populated part of the village, despite its distance from the later market place. With the construction of the castle and its associated planned

town, the focus of the settlement shifted to the west of Quay Street, most likely into a previously undeveloped area.



**Figure 3**  
Location plan showing the suggested focus of the early settlement at Orford (in red) prior to the construction of the castle and planned town

## 2.3 The Construction of Orford castle

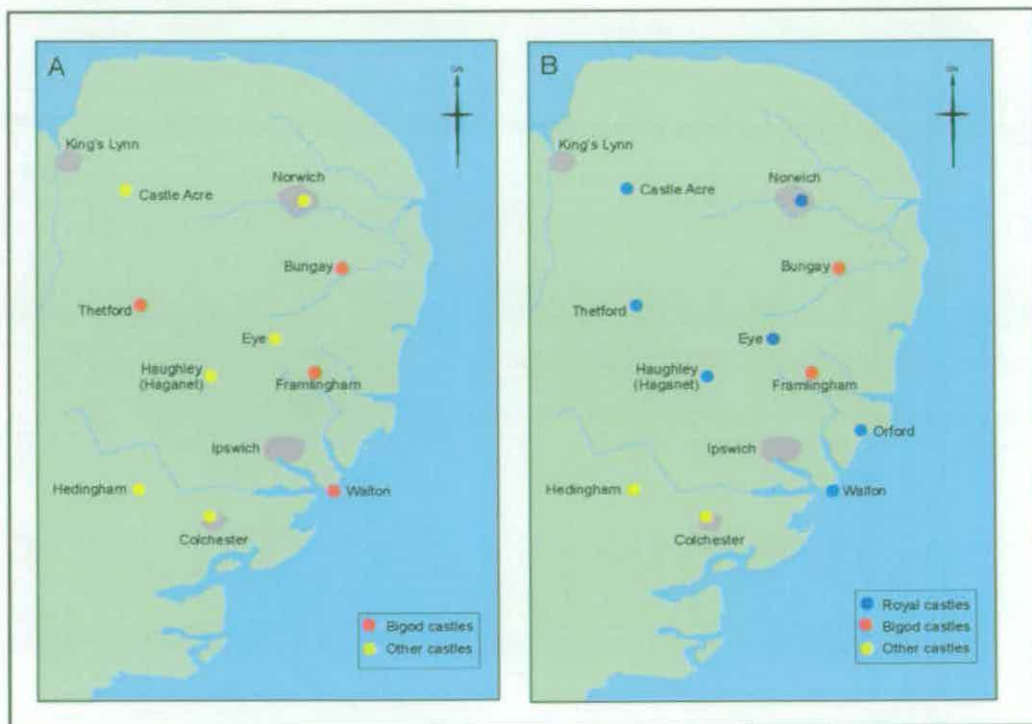
### *The Political Situation*

To understand the reasons behind the construction of Orford Castle, it is necessary to look at the period prior to Henry II's accession. Between 1135 and 1154 the Empress Matilda contested her father's decision to place his nephew Stephen on the throne. This period of upheaval - the Anarchy - witnessed the greater independence of England's powerful lords, many of whom built castles without royal permission. As a result, when Matilda's son Henry II ascended the throne in 1154, there were no royal castles in East Anglia. By contrast, the region was dominated by lordly strongholds, held notably by Hugh Bigod, Earl of Norfolk, who had castles at Bungay, Framlingham, Walton and Thetford. Furthermore, since his earldom equated with the old Earldom of the East Angles, he had claims upon the castle of Norwich, its ancient capital. The castles at Norwich, Eye and Castle Acre had been granted to King Stephen's son William as one of the conditions whereby Henry's claim to the Kingdom had been recognised. (Fig 4a; Allen Brown 1964, 5; Rhodes 2003, 20-21).

Henry was determined to bring this situation under control and re-impose order and authority throughout his vast kingdom, which stretched from Scotland to the south of France. As castles were a symbol of power and authority Henry demanded the return of those that had once been royal and the destruction of those that had been built illegally. He also began a building programme and spending on castles was to become the biggest expenditure during

his reign, with some ninety castles mentioned in the Pipe Rolls. In the majority of cases, these refer only to minor repairs, but expenditure on a few was very considerable, mainly because they were being built in stone. Six castles - Dover, Newcastle-upon-Tyne, Nottingham, Windsor, Winchester and Orford exceeded total expenditure of £1000 (Potter *et al* 2002, 5).

In East Anglia, despite the fact that Hugh Bigod had been instrumental in helping Henry II to the throne, the two men became involved in a power struggle. In 1157, in an attempt to quash an uprising, Henry confiscated all of Bigod's possessions together with castles belonging to other Lords at Haughley (Haganet), Eye, Castle Acre and Norwich (Colvin 1963, 69; Rhodes 2003, 21). This situation remained until 1165 when Bigod received back two of his castles - Framlingham and Bungay - in return for a heavy fine of £1000, but Walton and Thetford were retained by the king. Thereafter Henry began work on a new castle at Orford (Fig 4b).



**Figure 4**

The distribution of East Anglian castles.  
 A: following Henry II's accession to the throne in 1154  
 B: in 1165 with the start of construction at Orford

### Why Orford?

Orford became available to the King at just the right time. Until 1164 the town, as part of the Honour of Eye, belonged to Henry's chancellor and archbishop of Canterbury, Thomas Becket. In 1164, a bitter quarrel between the two men concerning the jurisdiction of the royal courts over the clergy, led to Becket being convicted of treason, following which he fled to France. The Honour of Eye reverted to the crown and provided the opportunity for Henry to build there. Indeed, exploiting Orford may well have been one aspect of Henry's revenge (Rhodes 2003, 22).

The coastal location of Orford was strategically important in the defence of the coast against invasion. The town lay directly between Framlingham and the sea, making it harder for

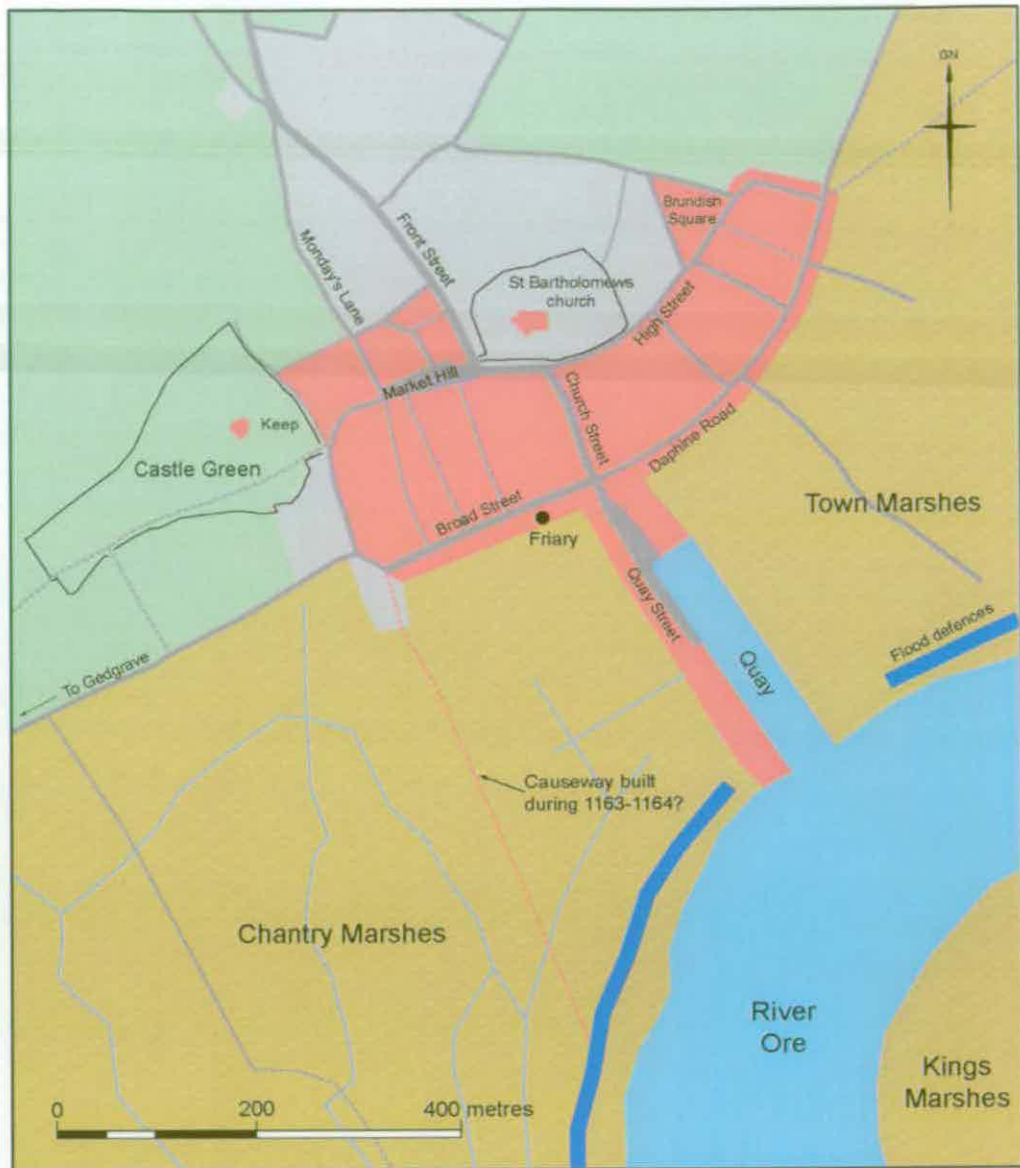
Bigod to land detachments of foreign mercenaries (Evans 1912, 299; Rhodes 2003, 22). Aside from such defensive objectives, the sea formed an easier way to furnish a new castle with building materials and subsequently with men and provisions. Henry was also conscious of the need to maintain good communications along the east coast. Orford, together with the royal harbours and castles at Scarborough and Newcastle-upon-Tyne, could be utilised as staging posts by the king or members of the royal household (Heslop 1991, 39-41; Rhodes 2003, 21).

The general view is that the threat from Bigod led to Henry building a castle at Orford. With hindsight it can be said the rebellion of 1173-74 justified the King's decision, in 1165-66 however, relations between the two men were relatively cordial; Henry had returned to Bigod the castles at Framlingham and Bungay which Bigod then actively rebuilt with the Kings consent (Potter *et al* 2002, 38-39). Orford Castle was therefore more than just a counter to Bigod, it represented a wider symbol of royal power. The sophistication and splendour of its design made a significant and highly visible statement, particularly to those approaching by sea, as was the case with Henry's larger and more expensive castle at Dover, which faced across the Straits to the lands of the Count of Flanders (Coad 1995, 23).

#### ***The Construction of the Castle and Town***

Orford was intended as more than a military stronghold and administrative centre for the Sheriff of Norfolk and Suffolk. Henry also wanted a flourishing market town to increase his income from rents and dues. To this end a new town was planned in association with the castle, which superseded the earlier market and settlement. The planned town formed an irregular rectilinear grid pattern with the castle and newly built parish church of St Bartholomew's forming the main axis (Fig 5). A large part of this street plan can still be seen, while archaeology has recovered evidence of occupation and activity from the 12<sup>th</sup> century (Martin *et al* 1999, 380; Gainster & Bradley 2001, 326; NMR Activity Report: Nos 1223337 & 1353459). Subsequent developments such as 'closing off the marsh at Orford for increasing the revenue of the same town £15', carried out in 1170-1171 make it clear that economic opportunities figured prominently in royal thinking, if only as a way of making good farmland for supplying the new castle with provisions (Heslop 1991, 39-41; Potter *et al* 2002, 21; Rhodes 2003, 22).

The costs of construction are recorded in the Pipe Rolls, which were compiled twice a year by clerks of the Exchequer. At Easter and Michaelmas sheriffs of every county were summoned to the court of the Exchequer to account for the revenues they collected on the King's behalf. Funding for Orford would have come from the various royal manors or 'farms' in Norfolk and Suffolk, as well as from the lucrative shipping tolls of the area. Due to the high cost of Orford, it is likely that the King would also have authorised expenditure to be set against revenue of a later date (Potter *et al* 2002, xiv & 6). Due to the complexity of the castle design it has been suggested that the highly skilled Alnoth 'Ingeniator' (engineer), overseer of the King's buildings and for thirty years Keeper of the Palace of Westminster, was the likely designer (Rhodes 2003, 24).



**Figure 5**

Location plan showing the suggested focus of the medieval planned town (in red)

The Pipe Rolls give few details concerning the nature of the building work, a typical entry being: 'and on building the Castle at Orford £8 10s by the King's writ as viewed by Robert de Valeins and two Normans from Ipswich' (Potter *et al* 2002, 22). The function of the viewers was to check the sheriff's expenditure and to clarify at the Exchequer that he had spent the amount claimed and in the manner in which he asserted. Those who acted as viewers of the works at Orford were usually Bartholomew de Glanville and Robert de Valoines, both local landowners of substance, together with Wimar the chaplain, who was to become perpetual vicar of the church of Orford (Potter *et al* 2002, 6). Despite the lack of detail, the Pipe Rolls do offer some useful information and make it clear that the work pressed on at considerable speed to a total recorded cost of £1413 9s 2d. The first references to building work date to the year 1163-1164 with the construction of a causeway and mill - two essential structures that needed to be in place prior to building work proper (Potter *et al* 2002, 13). Whilst Orford would already have had some form of infrastructure, the scale of the new development would have required much greater provisioning. The causeway would have

been constructed to transport building materials to site from a landing point on the river, it may be that the present footpath from the river to the corner of Broad Street follows this line (Fig 5). The mill would have been a necessary provision for feeding the extra mouths of the workforce, as well as a source of extra revenue (Potter *et al* 2002, 44).

The first direct reference to the building of the castle is made during the year 1165–1166, when over £663 was spent. This was by far the largest sum spent in one year, and had increased to nearly £1000 by the end of 1167. This would probably be related to the construction of the keep, which seems to have been near completion during 1166–1167 when a payment of 38s 4d was made for the '*munitio*' (supplies) of the castle and £13 6s 8d was paid to Bartholomew de Glanville as its first constable (Potter *et al* 2002, 16). It is with de Glanville that the tale of the Orford Merman is associated. It was first told by the chronicler Ralph of Coggeshall in his *Chronicon Anglicanum* and relates to a wild man caught by fisherman in the sea off Orford, who was taken to the castle and tortured by de Glanville (Allen Brown 1964, 20; Potter *et al* 2002, 50).

The only building materials mentioned in the Pipe Rolls is the surplus wood (beams and planks) brought in 1168–1169 from the completed Scarborough Castle, at a cost of £50 4d. From analysis of the standing keep the main material used was local septaria, a sandy coloured mudstone dredged from the surrounding river estuaries, together with a more robust oolitic limestone from Northamptonshire. Internally a second local stone, corraline crag was also employed, as well as Caen stone from Normandy for the finer detail (Potter *et al* 2002, 46).

The final and most informative entry relating to the castle's construction dates to 1172–1173:

And on building a great ditch round the Castle at Orford together with *hericia* [a revolving bar with spikes] and a *bretaschia* [palisade or brattice] and for building a stone bridge from this same castle £58 2s 8d by the writ of Richard de Lucy and as viewed by Robert de Valens and the two Normans from Ipswich. And for provisioning the Castle at Orford for 200 seams of grain in accordance with the measure at Ipswich £21 13s 4d by the Kings writ. And for 200 sides of bacon £10 by the same writ. And for 500 cheese £4 3s 4d by the same writ. And for iron 40 shillings by the same writ. And for salt 25 shillings by the same writ. And for three loads of Tallow 21 shillings by the same writ. And for cables and smaller ropes 20 shillings by the same writ. And for three hand mills 4 shillings by the same writ. And for charcoal 25 shillings by the same writ of which some 5 shillings worth was received in the castle at Orford and 20 shillings worth was lost in plundering by the Flemish (Potter *et al* 2002 22–23)

Such provisioning was most likely a response to the growing unrest in the country, which resulted in the rebellion of 1173.

## 2.4 The Rebellion of 1173

In the year the castle was completed, there was a serious rebellion against Henry, led by his eldest son Henry the Young King and supported by his two brothers Richard and Geoffrey, together with their mother, Queen Eleanor of Aquitaine. The reason for the rebellion was the king's refusal to delegate more than nominal power to his son. Although Henry the Young King had been crowned in June 1170 to consolidate his position as heir to the throne, Henry refused to give him any territories to rule. Things came to a head when Henry planned to give part of Anjou to his younger son John, as part of a marriage settlement. In March 1173 the Young King left his father's court and went to France to join the court of his father-in-law, Louis VII, and was joined by his two brothers Richard and Geoffrey. The sons enlisted the support of the Counts of Flanders, Boulogne and Blois as well as the King of Scotland and several Anglo-Norman Lords, including the Earl of Leicester and Hugh Bigod, now 80 years old. As the price of his revolt, Bigod had been promised the hereditary custody of Norwich Castle and the Honour of Eye (Potter *et al* 2002, 40).

The rebellion lasted until September 1174, when the king reached a truce with his sons. Within East Anglia there were a series of uprisings, beginning in September 1173 when the Earl of Leicester raised a force of Flemish mercenaries and crossed the North Sea, landing near Walton Castle. He failed to capture the castle and marched on to join forces with Bigod, following which they destroyed Haughley castle. Leicester was then briefly sheltered by Bigod at Framlingham before being defeated by the royal army at Fornham, as he made his way home. Following the formation of a royal army at Bury St Edmunds and Ipswich, Bigod pleaded for a truce until Whitsun, after which he sacked Norwich, having been strengthened by a new force of Flemish soldiers sent over by Philip of Flanders. The victory was short lived and soon overturned by local forces, following which the king formed an army to attack Framlingham and Bungay. At this point Bigod submitted, surrendered his castles, bought peace and swore fealty to the King (Allen Brown 1952, 134).

It appears that Orford was not a direct target in the uprising. Its status as one of the strongest castles in the country may well have deterred Bigod and Leicester. However, the Pipe Rolls suggest that Orford had been put on a war footing: in addition to the construction of the outer defences and the provisioning during 1172-1173, some 20 knights together with horse and foot 'serjeants' were resident at the Castle. The size of the garrison was more than the castle could accommodate, as Ralph the Breton was given 5 marks in compensation for his dwellings which were transferred inside (Potter *et al* 2002, 25-26 & 28). Some building work and repairs to the *bretaschia* followed the rebellion, probably not the result of an attack, but probably to maintain a state of readiness should there be any further trouble (Potter *et al* 2002, 26 & 40-41).

## 2.5 The Later History of the Royal castle

Orford remained in royal hands until 1336. During this period the castle was put on a war footing on several occasions, the first in 1192-93 during the political upheavals in the reign of Henry's son, Richard. It was also from Orford that Richard's mother, Queen Eleanor,

assembled a fleet of ships to carry ransom money to Germany where the King had been captured on his way home from crusade (Rhodes 2003, 45).

Following the failure of the Magna Carta in 1215 and the resulting Civil War, Orford was a base and centre of active military operations. King John placed the castle in the custody of Hubert de Burgh, the Justiciar, and the castle is likely to have been a base for Savaric de Mauléon, one of John's foreign captains, involved in attacking the king's enemies in East Anglia during 1216. In March of that year John himself was in Suffolk, conducting a lightning campaign against the rebel castles, in the course of which he took Framlingham. In the following year, following John's death at Newark, the tide of war in East Anglia flowed the other way. Orford, together with Cambridge, Colchester, Pleshey and Hedingham, were taken by the French Prince Louis, the appointed leader of the rebel magnates and contender for the throne. Little actual damage to Orford seems to have been done, for when peace and royal authority was restored in the name of the boy King Henry III, only small sums were spent upon its repair (Allen Brown 1964, 8).

In the Baron's War against Henry III in the 1260s, the castle was important enough to change hands frequently in accordance with the varying fortunes of the two parties. It was twice held by a later Bigod, still Earl of Norfolk; and when the King won it back he entrusted it to his son the Lord Edward. Later as king, on the 11<sup>th</sup> April 1277, Edward visited the castle - the only recorded occasion when a reigning monarch came to Orford (Rhodes 2003, 26).

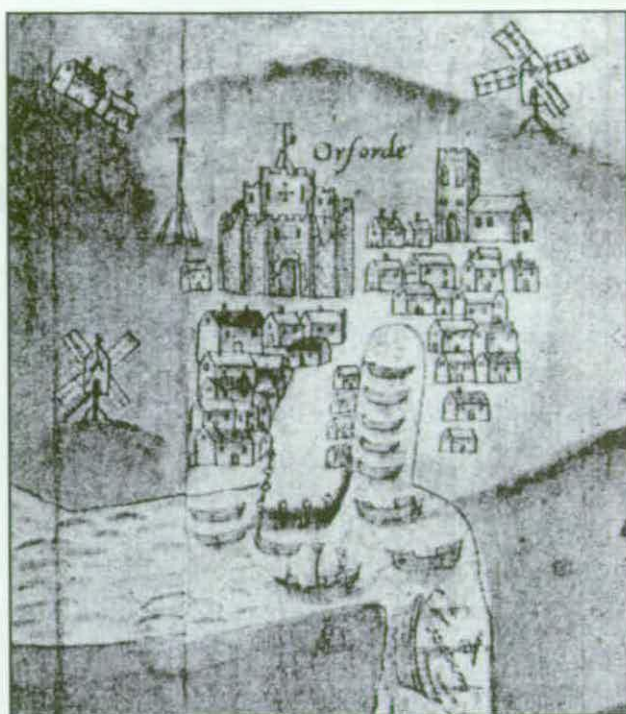
Twice more the castle was garrisoned when rebellion threatened, by Edward I in 1297 and by Edward II in 1307-8. The Pipe Rolls for the year 1301 also record paying 10 men three pence a day to guard the castle 'with cross-bows, bows, arrows and other arms'. By this time the castle was leased out, an indicator of its declining importance in the eyes of the crown, firstly to Robert of Ufford (the elder) in 1280, to Roger Bigod, Earl of Norfolk in 1302 and to Robert of Ufford (the younger) in 1330. Maintenance on the castle continued, with the turrets of the keep given new lead roofs in the 1270s, and in 1317-1318 on repair of the well, house, walls and other parts. Finally in 1336 Edward III sold it to the younger Ufford, who was created the Earl of Suffolk the next year. He and his heirs were to hold Orford from the Crown for a peppercorn rent of £20 a year (Allen Brown 1964, 8; Rhodes 2003, 26).

Throughout this period the town thrived as a place of some importance, featuring in an early 13<sup>th</sup> century version of the life of St Edmund by Denis Pyramus: 'silently the ships came to a port which the people called Orefort, then a great city of ancient renown'. Orford was also named on one of Matthew Paris' c1250 maps of Great Britain (Heslop 1991, 39-41). The town was an important port, from which Suffolk wool was exported to Europe, and shipping tolls constituted the majority of the town's income. The Pipe Rolls for the year 1203-1204 show that the volume of trade through the town exceeded that of Ipswich (Potter *et al* 2002, 45). The town received the first of a series of borough charters in 1256 and its urban status was further enhanced with the foundation of the Leper Hospital of St Leonard in 1267 and the arrival of the Franciscan Friars at the turn of the 14<sup>th</sup> century. The Friary lay to the south of Broad Street, where the remains of the church are now incorporated into a later house (Fig



5; Knowles and Hadcock 1971, 242 & 383; Gaimster and Bradley 2001, 236; OAU 2003, 65).

## 2.6 The Castle in Decline

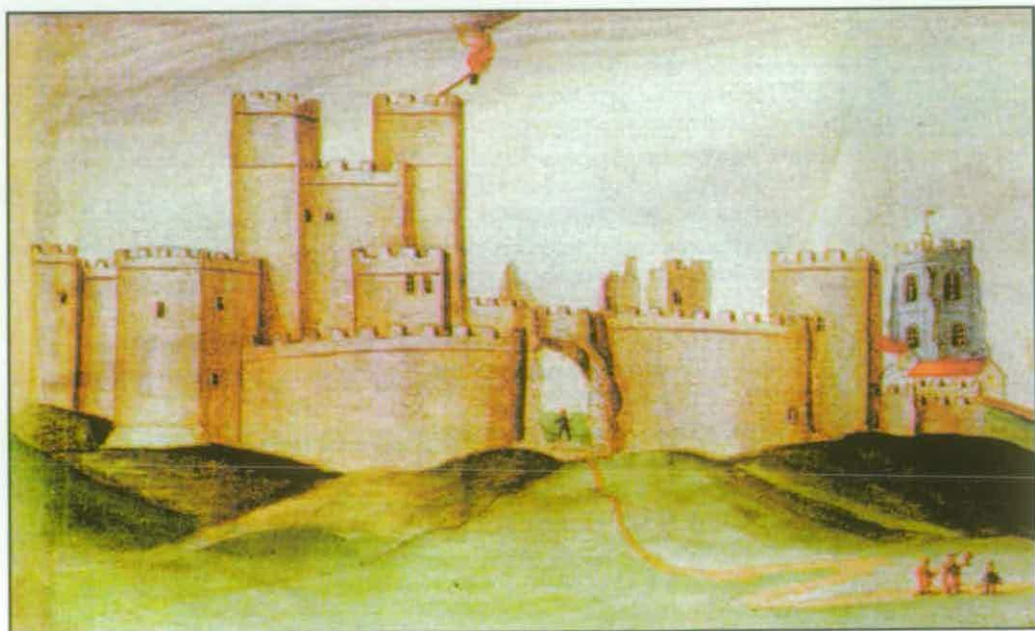


**Figure 6**

Detail of Orford showing the castle complete with beacon together with the town and harbour. From a chart of the Suffolk coast made in the 1570s or 80s (© The British Library/Cottonian MSS.Aug.I.i.64)

From 1336 until the end of the 16<sup>th</sup> century the castle descended with the Manor of Sudbourne and the Earls and Dukes of Suffolk, principally the de la Pole and Willoughby families (OAU 2003, 9). Though it began the period as a residence, the castle was soon empty apart from the occasional use of the keep's prison chamber to hold criminals from the town. The main role of the castle - principally the keep - was as a coastal signalling station and landmark (on a clear day the keep is visible some 25 miles out to sea (SRO: K400 Box A/20)). This

function is clearly shown on some of the earliest illustrations of the castle, which show a beacon placed prominently on top of the keep (Figs 6 and 7).



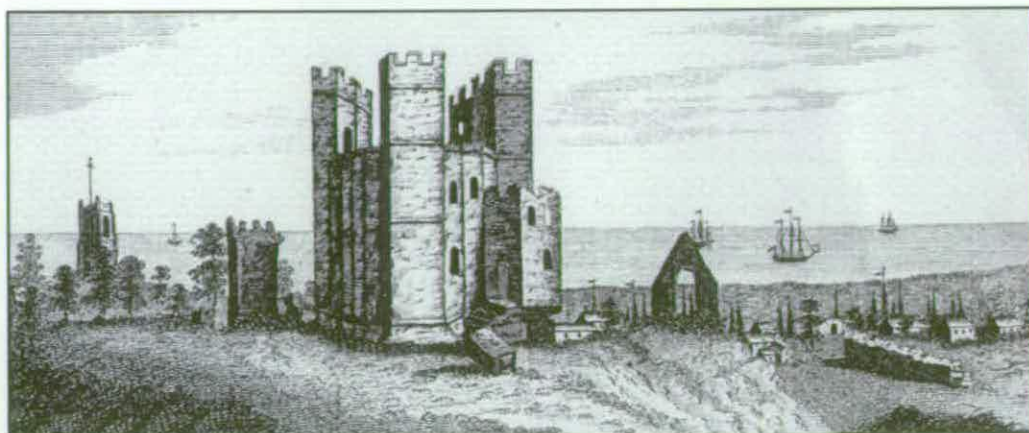
**Figure 7**

John Norden's view of Orford Castle, recorded during 1600-1602 just before the loss of the curtain wall and mural towers (© The New Orford Town Trust)

Sir Michael Stanhope became the new owner of the castle in the 1590s when he purchased Sudbourne Manor from the Willoughbys. Stanhope commissioned the cartographer John Norden to survey his new manor during 1600-02 and the resulting illustration of the castle provides the most detailed and accurate view, complete with curtain wall and mural towers (Fig 7). Thereafter, all the structures except the keep were systematically dismantled for

stone. Stanhope himself used much of it in the foundations of new buildings at Sudbourne Hall, erected in 1605-06. Norden's survey also records in considerable detail the town and surrounding landscape. The town had declined in importance to that of a minor port involved in coastal trade, partly due to the silting of the Alde and the growth of Orford Ness together with the rival ports at Aldeburgh and Ipswich (OAU 2003, 65). Camden remarks:

This was once a large and populous town, fortiy'd with a castle of reddish stone, which formerly belonged to the Valoinies and afterward to the Willoughies. But now it has reason to complain of the ingratitude of the sea, which withdraws itself by little and little and begins to envy it the advantage of a harbour (1693)



**Figure 8**

View of Orford Castle by Samuel and Nathaniel Buck, engraved in 1736. By this date only a small section of the castle's outer defences remained standing (© The British Library/Maps k.Top.39.24.a)

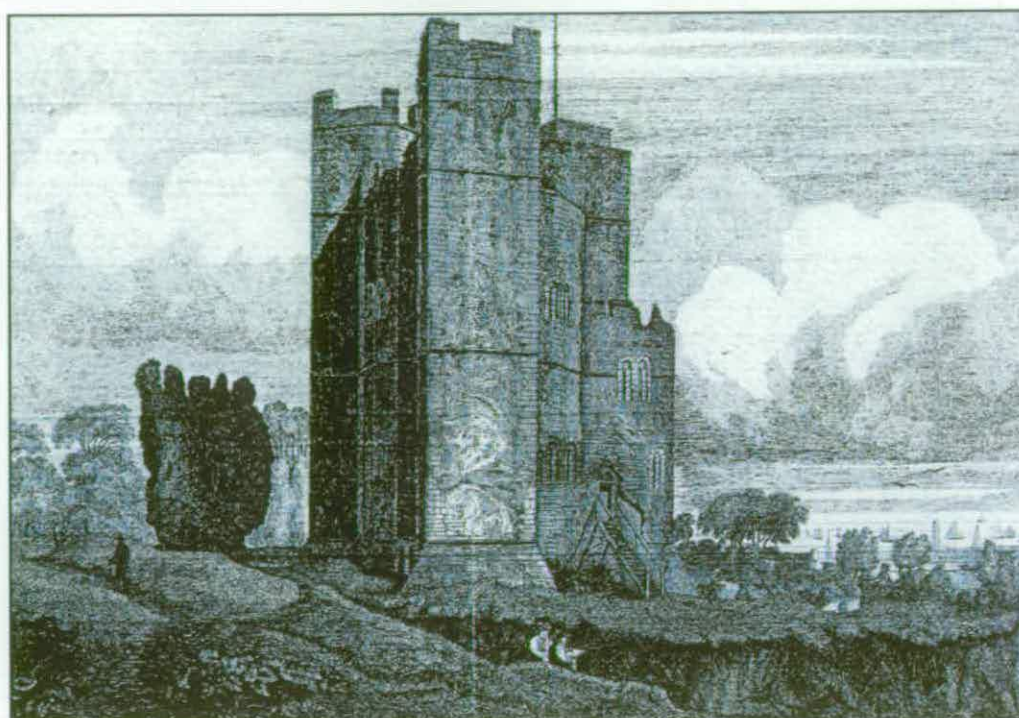
In 1621 the manor passed to Stanhope's daughter Jane and then on to her daughter Elizabeth. In 1657 Elizabeth married Leicester Devereux, Viscount of Hereford, who had been a leading parliamentarian in the Civil War. The Devereux family retained possession of the manor until 1733 when it was sold to the Earl of Hertford (Marquis of Hertford from 1793), Francis Seymour-Comway. During this period the castle slid further into neglect, a fact clearly shown on several paintings - the 18<sup>th</sup>-century enthusiasm for topography and antiquities brought a number of artists and antiquaries to the site (Appendix 1). Samuel and Nathaniel Buck's 1736 engraving clearly illustrates the extent of the robbing that had taken place since Norden's survey of 1600-02. This engraving suggests that only a small section of the curtain wall or mural tower to the north of the keep remained standing, together with a section of what may be the gateway to the south of the Keep (Fig 8). The section of wall is also shown on subsequent paintings by Godfey, Hooper, Higham and Davy (Fig 9). Whilst all these paintings portray Orford as a romantic ruin, a quite different picture was being painted in an article of the 19<sup>th</sup> century:

There are very few towns in Suffolk, perhaps even England that have decay written upon them to such a degree as Orford...Standing on a commanding edifice, to the west of the town, is one of those grim old fortresses which are to be met with here and there throughout the land (SRO: HD1064/1)

A critical point in the castle's history came in 1805 when the 2<sup>nd</sup> Marquis of Hertford decided to pull down the keep. He was prevented from doing so by the government for reasons indicated by the Suffolk Traveller in 1829:

The rest of the castle would probably have been taken down, had it not been considered as a necessary sea mark, especially for ships coming from Holland, which by steering so as to make the castle hide or cover the church, avoid a dangerous sandbank called the Whiting.

Following its survival, the keep was brought back into partial use: a wooden stair was built to provide access to the semi-ruinous building and around 1812 as part of the coastal network created during the Napoleonic Wars, a signalling mast was erected on the south turret. Davy shows both of these additions, together with a wooden shelter associated with the signalling mast (probably semaphore) (Fig 9). The shelter could still be seen on a series of photographs of c1905-08 (SRO: K400 Box A/1 and V/17).



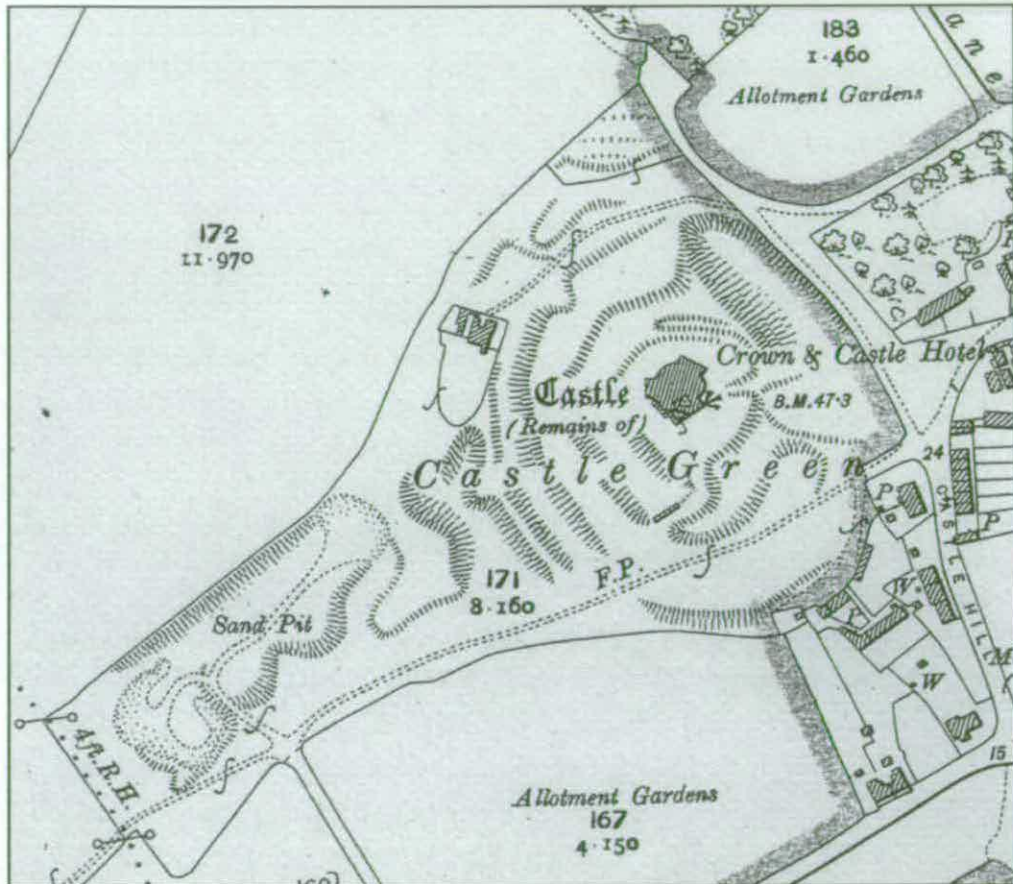
**Figure 9**

Drawing and engraving of the castle dated 1821 by H Davy for his Suffolk Antiquities (© Suffolk Record Office/HD 1678/107/6)

From the mid-19<sup>th</sup> century the 3<sup>rd</sup> Marquis used the keep as a summerhouse for banquets and private parties. In addition to furnishings, in c1831 the Marquis provided the keep with a new floor, conical roof and entrance stair. He also built a bungalow to the north-west of the keep, first noted on the Tithe Map of 1841 (SRO: FGA 189/A1/1a-b). The cottage most likely provided accommodation for a caretaker, with the kitchen used during banquets. These improvements are likely to have been reflected in the Rev Charles Hartshorne's observations of the castle, published in *Archaeologia* in 1842, where he notes the generally good state of preservation of the keep and includes drawings which depict the same section of curtain wall/mural tower as shown on the Buck's prospect of 1736. This last fragment subsequently

collapsed 'with a tremendous crash' at ten minutes after 11 o'clock on the night of Thursday 1 July 1841 (Allen Brown 1964, 9).

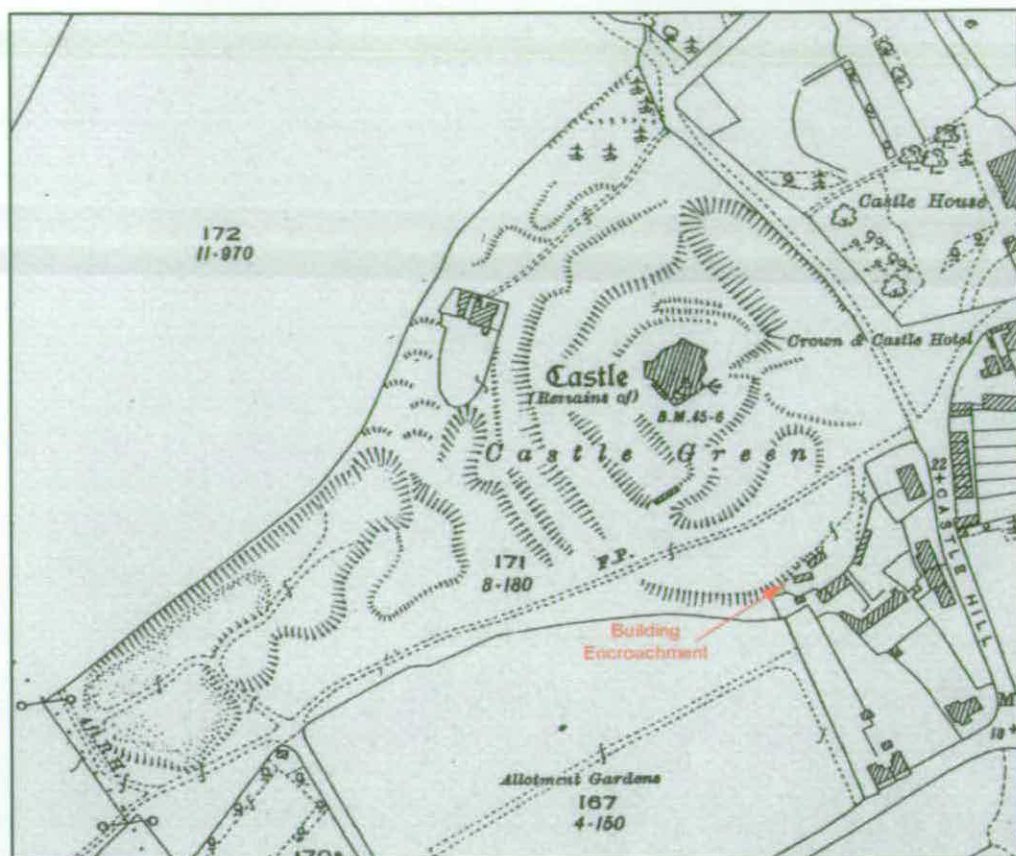
Following the death of the 4<sup>th</sup> Marquis in 1870, his son Sir Richard Wallace inherited much of his father's vast fortune along with his interest in collecting art and historical material. He subsequently brought the Sudbourne Estate from the 5<sup>th</sup> Marquis in 1874 but sold it on to Sir Arthur Heywood in 1885, thus ending the Seymour-Conway connection with the castle. Items relating to the castle are included in the Wallace Collection, bequeathed to the nation by Richard Wallace's widow in 1897 ([www.wallacecollection.org](http://www.wallacecollection.org)).



**Figure 10**  
Castle Green as shown on the first edition 25-inch Ordnance Survey, surveyed in 1880 (Reproduced from the 1882 Ordnance Survey map, sheet 69.14)

The castle was given Scheduled Monument status in 1913 and soon after a series of sales marked the end of its connection with the Sudbourne Estate. The catalogue for the first sale in 1918 records 'A manorial, residential and sporting estate' of 11,100 acres, which included 'the remains of the historical stone-built fortress known as Orford castle, together with Castle Green and a brick and tiled bungalow cottage and garden'. In the accompanying description it was noted that Castle Green consisted of 'useful accommodation grassland with profitable crag and sand pit. The east boundary is enclosed by an iron railing fence, with a small plantation to the north. The cottage contains 5 rooms, kitchen and coal house' (SRO: FSC400/1). Castle Green encompasses the area scheduled today, which is clearly shown on the 1<sup>st</sup> edition 25-inch Ordnance Survey of 1880 (Fig 10; OS 1882). The sales document of 1918, also includes a 'building encroachment' covering 0.2 acres and tenanted by W M Moss at 1s 6d per annum (SRO: FSC400/1). This relates to the two small

buildings constructed after the 1902 25-inch Ordnance Survey revision and prior to the 1924 survey (Fig 11; Ordnance Survey 1904 and 1927).



**Figure 11**  
 Castle Green as shown on the third edition 25-inch Ordnance Survey, revised in 1924 (Reproduced from the 1927 Ordnance Survey map, sheet 69.14)

The Estate was put up for sale again in 1922 following the death of Lord Manton and was purchased by Mr Winder for £925 (SRO: HD 78:2671-Sudbourne). Six years later it was for sale by auction but failed to meet its reserve (SRO HD 78:2671-Orford). It was subsequently acquired by Sir Arthur Churchman, the local MP who presented the castle to the Orford Town Trust in 1930. Following this the keep was fitted with a new flat roof, and floors of steel and concrete covered with oak. It was opened to the public in June 1930, with items of local historical interest displayed in the upper hall.

During the Second World War the castle was requisitioned and a reinforced concrete roof was constructed in the south turret (Fig 12). This was initially intended to hold an anti-aircraft gun but instead housed a radar observation post. Radar had been developed by Robert Watson-Watt and his team working at the 'Ionospheric Research Station' on Orford Ness during 1935-36 (Foyne 1994, 117). Aerial photographs of 1945 also show two huts within the castle grounds, one just to the north of the present car park and the other in the quarry ditch south of the keep (NMR: RAF/106G/UK/832 4174). The castle escaped damage, although within the town some 13 people were reported killed by a single bomb dropped in the market square during October 1942 (Foyne 1994, 258).

In 1962 the castle was transferred by the Orford Town Trust into the guardianship of the Ministry of Works and has remained in the care of its successors, the Department of the Environment and from 1984, English Heritage.



**Figure 12**  
Orford Castle c1941.  
Photograph from a  
series 'Invasion Village'  
Ministry of Information  
(© Stockwave/COI)

## **3 ARCHAEOLOGICAL INVESTIGATION AT THE CASTLE**

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Several archaeological investigations have been undertaken at the castle.

### **3.1 Geophysical Survey**

The first recorded attempts to locate surviving foundations of the curtain wall were undertaken in 1984. Two attempts at electro-magnetic survey were unsuccessful on account of very high unstable readings thought to have been due to the dry nature of the sandy soil (Andrew David pers comm; NMR Activity Report: 1067115).

As part of the 2002-3 investigation the Essex County Council Field Archaeology Unit undertook a resistivity survey over a large area of the earthworks. The resulting data was faint and fragmentary and although a small number of anomalies characteristic of archaeological features were revealed they could not confidently be interpreted as part of the castle. However, large zones of high resistance readings indicated large areas of dumped material, possibly resulting from the demolition of the outer defences or from later landscaping and quarrying (Fig 13; ECCFAU 2003).

### **3.2 Watching Briefs**

In 1995 Suffolk County Council Archaeological Service undertook a watching brief during the insertion of a new underground electricity supply from the existing car park to the visitor centre in the keep. Excavation was restricted to a trench c0.7m deep by c0.3m wide, which followed the line of an existing cable trench, the insertion of which had been monitored in 1993.

The base of a wall was located half way up the castle platform, with evidence of rendering on its upslope face, whilst on its downslope side the residual stonework appeared to represent a decorative plinth. A probe into the recess below the plinth encountered further courses of stone. Directly behind this wall there was a considerable amount of loose mortar and septaria rubble, and a cut defining a possible robber trench. This was interpreted as the site of a demolished building.

To the north of this wall was a rectangular pit, some 0.4m deep, with a primary fill comprising a layer of burnt red sand and clay. The pit was backfilled with septaria blocks in a loose matrix and contained some nineteen sherds of 13<sup>th</sup>/14<sup>th</sup>-century pottery (Fig 14; SCCAS 1995, Nenck *et al* 1996, 284).

### **3.3 Excavation**

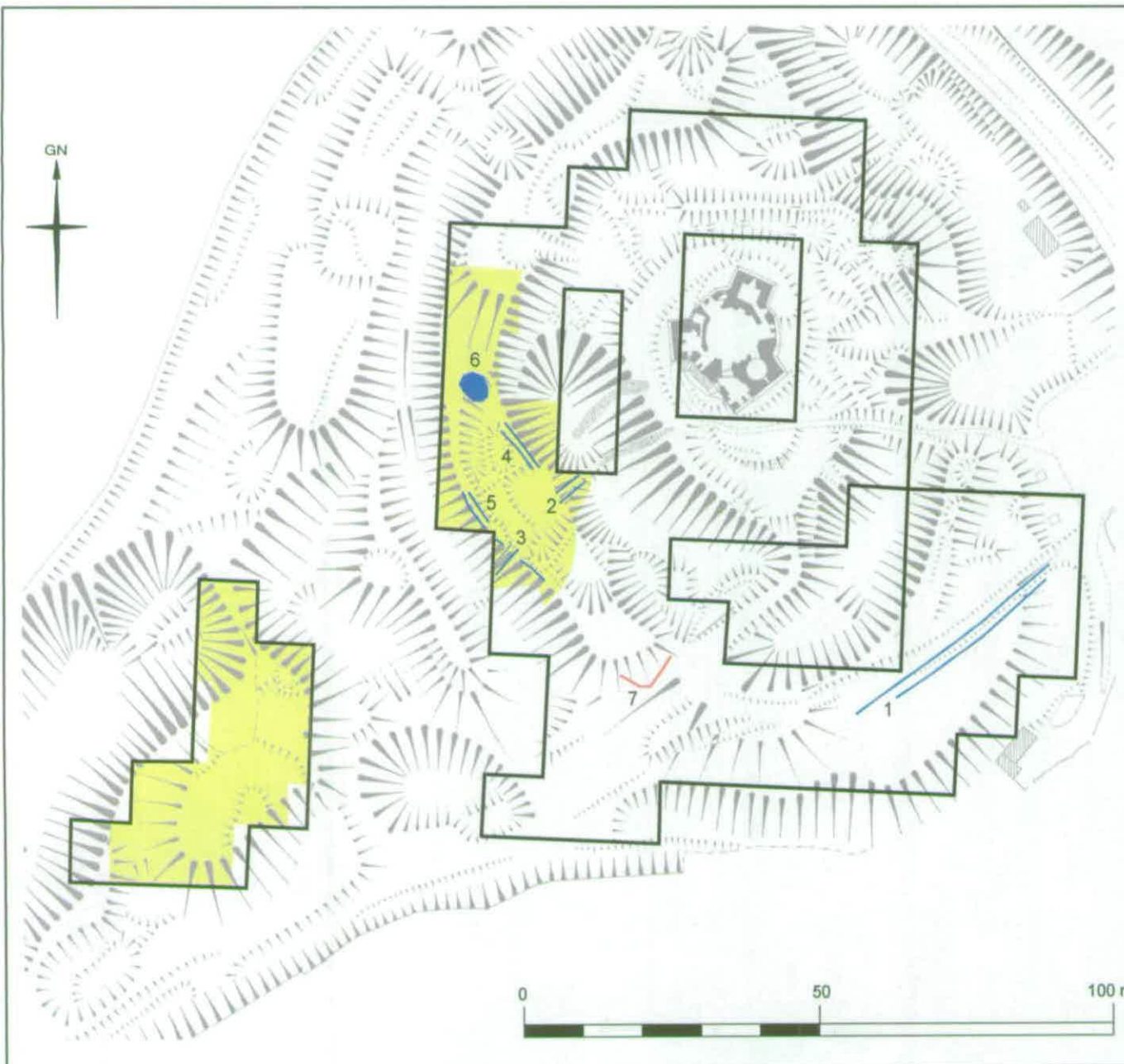
Two trial trench excavations, together with the cleaning of erosion scars, were undertaken by Suffolk County Council's Archaeological Service as part of the 2002-2003 investigation (Fig 15). Trench 1 was located in an area where the curtain wall was thought most likely to survive, some 5m north of the keep, measuring 35m in length by 1.6m wide. Remains of the robbed-out wall foundation were located some 7m north of the keep, beyond which lay a large shallow-sided ditch of at least 13<sup>th</sup>-century origin. The large outer bank centred 35m

from the keep appears to be the result of modern landscaping activity (Fig 16; SCCAS 2003, 3-6 and 11-12).

Trench 2 was located at the south-western end of the causeway, where masonry remains are visible. The trench identified two well-preserved buried walls both faced and rendered, constructed of septaria and flint (Fig 17). The evidence suggests that both walls were designed to be upstanding structures, forming an entrance passage leading to the gatehouse in the southern corner of the curtain wall, as shown on Norden's plan of 1600-02 (Fig 18). No evidence of a causeway surface was encountered at depths of up to 1.7m below the existing ground level and it was assumed that any surviving surface lay beyond the depth of excavation (SCCAS 2003, 6-8 and 13-14).

The cleaning of two erosion scars running down the inner face of the ditch directly to the west of the keep revealed no notable features in either their bases or sections. Probing also failed to locate any solid masonry (SCCAS 2003, 3).





**KEY**

- Survey Area
- Low resistance anomalies
  - 1 Footpath
  - 2 Erosion scar
  - 3 Erosion scar
  - 4 Trench
  - 5 Trench
  - 6 Pit
- High resistance anomaly
  - 7 Consolidated ground associated with the castle entrance and possibly the remnants of a wall
- Areas of high resistance (dumped material/demolition rubble)

**GEOPHYSICAL SURVEY  
2002**



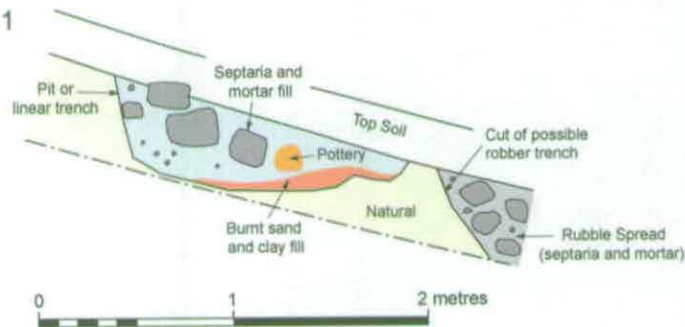
**Figure 13**  
Interpretation of the resistivity survey data (after ECCFAU, 2003)

A: Trench Location

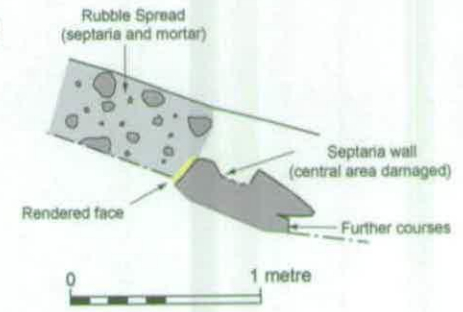


**WATCHING BRIEFS**

B: Section 1

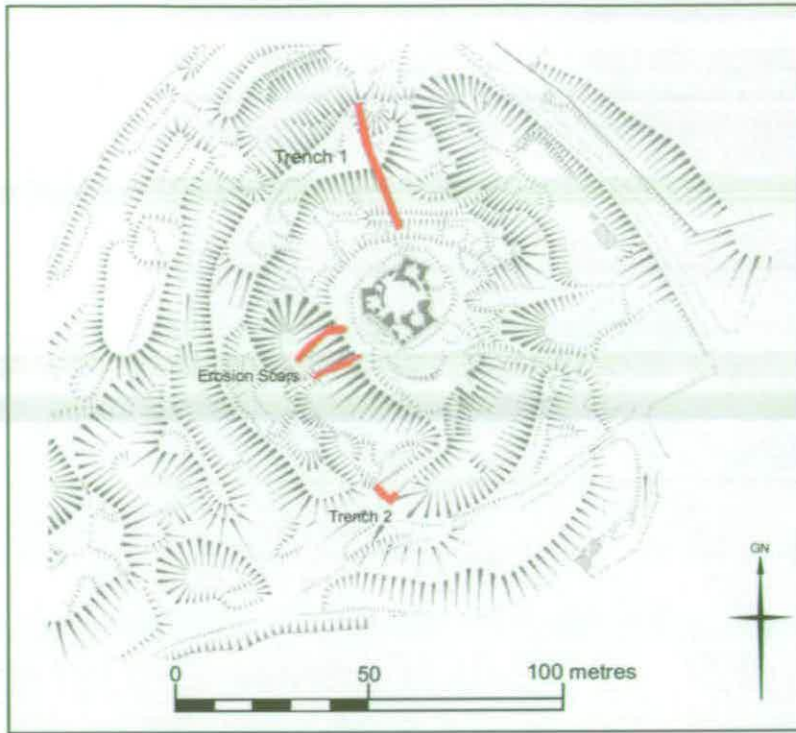


C: Section 2

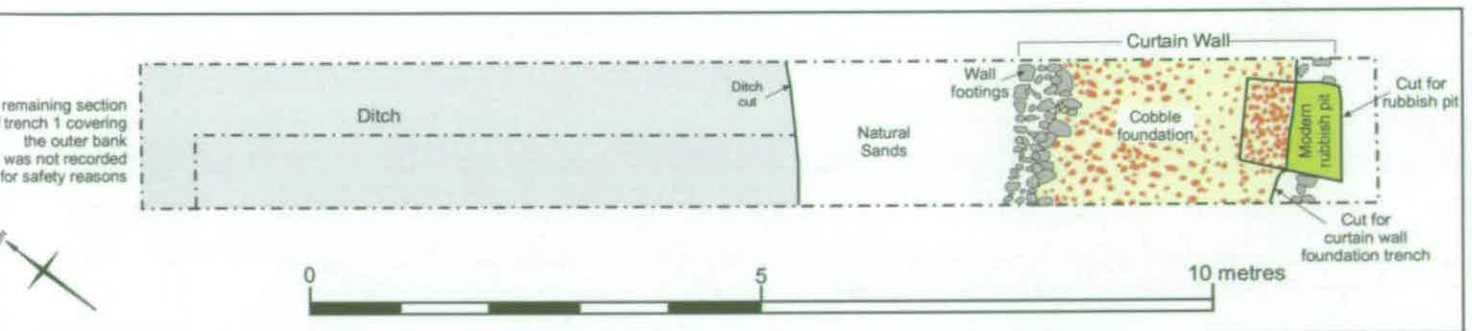


**Figure 14**  
Features uncovered during monitoring in 1993 and 1995 (after SCCAS 1995)

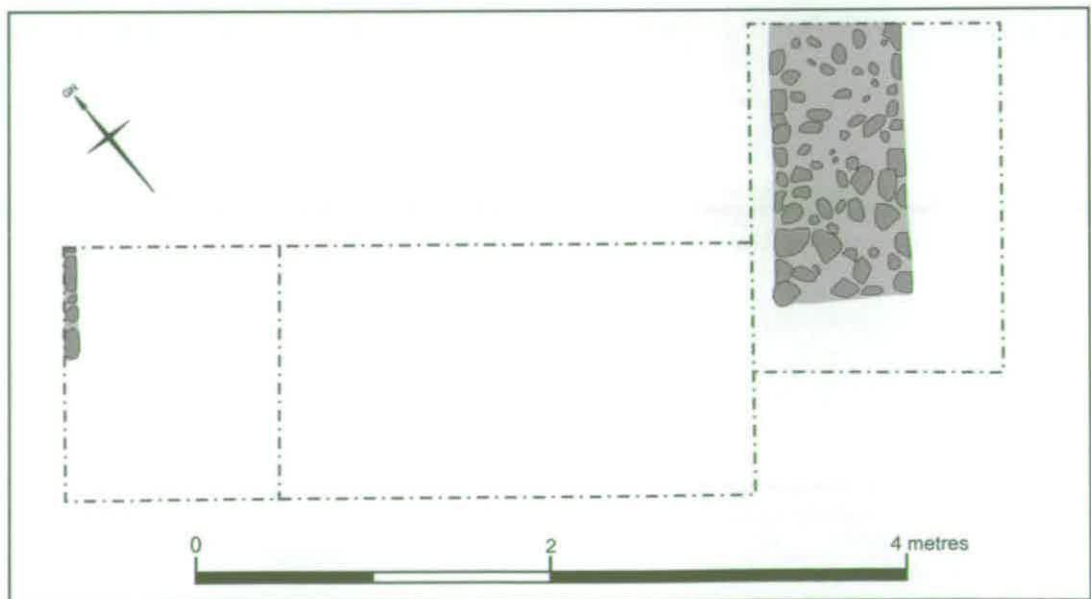
# Orford Castle: The 2002/2003 Excavation



**Figure 15**  
Location of trenches



**Figure 16**  
Cross-section of the southern half of trench 1 (after SCCAS 2003, figure 2)



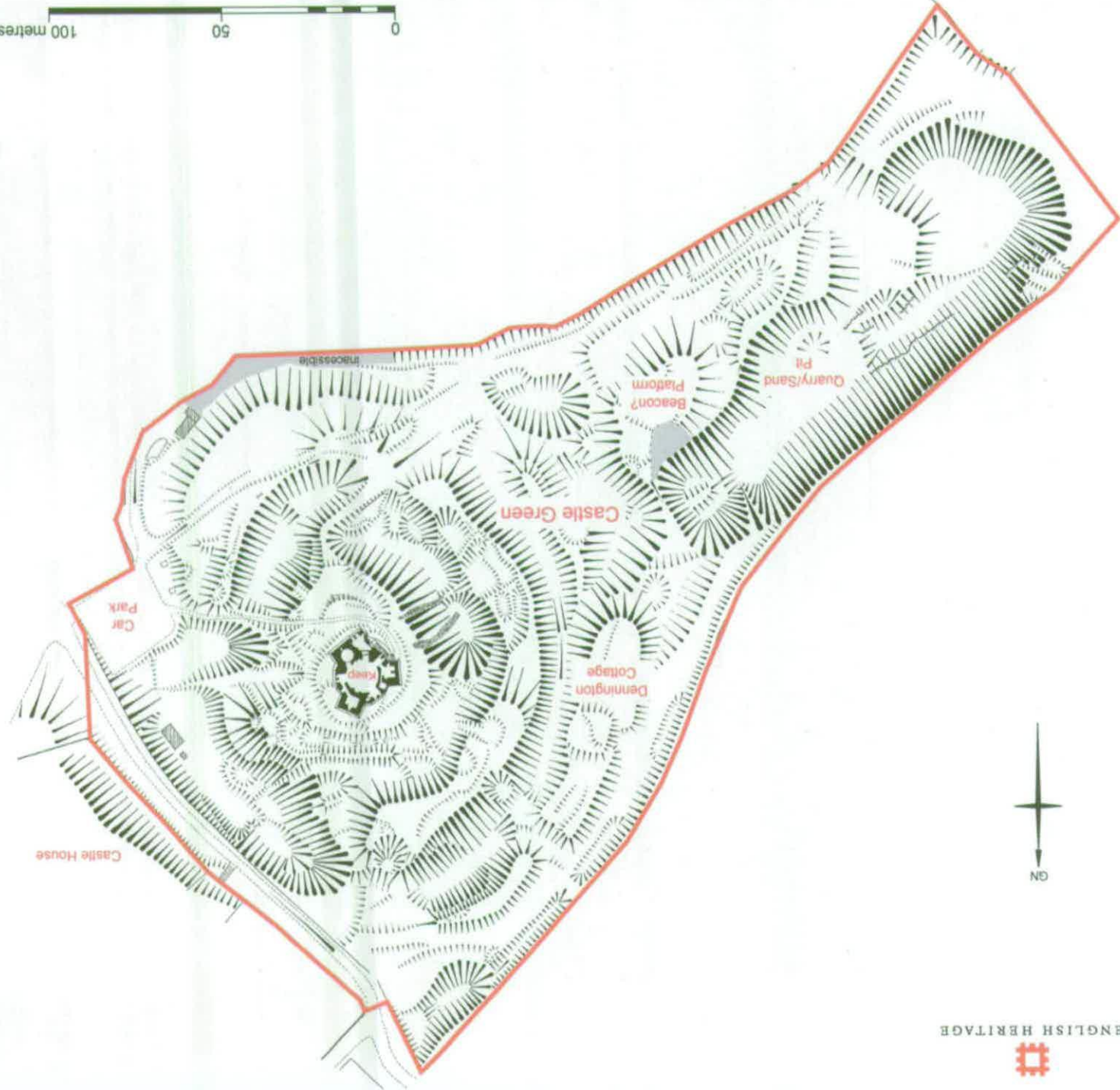
**Figure 17**  
Plan of trench 2 showing the two passageway walls which formed the barbican of the castle (after SCCAS 2003, figure 3)



**Figure 18**

Extract from John Norden's 1600-02 survey of the Sudbourn Estate showing Castle Green. Note the passageway (barbican) running up to the castle entrance, this was revealed during the 2003 excavation  
(© The New Orford Town Trust)

0 50 100 metres



ENGLISH HERITAGE



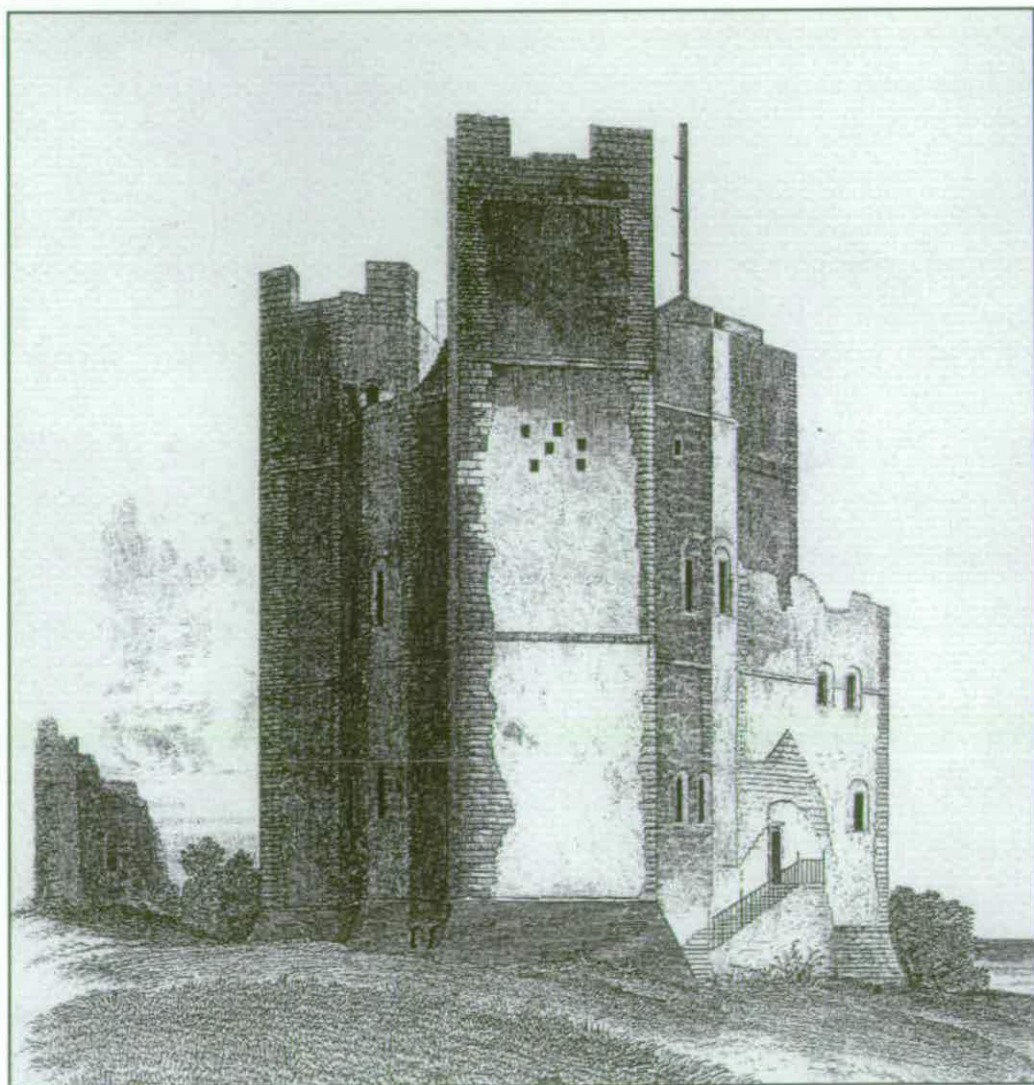
**Figure 19** English Heritage survey plan of the earthworks within the Scheduled Monument area of Orford Castle (boundary shown in red). The earthworks were surveyed at a scale of 1:500 (the archive plan is located inside the back cover)

## 4 THE ARCHAEOLOGICAL SURVEY

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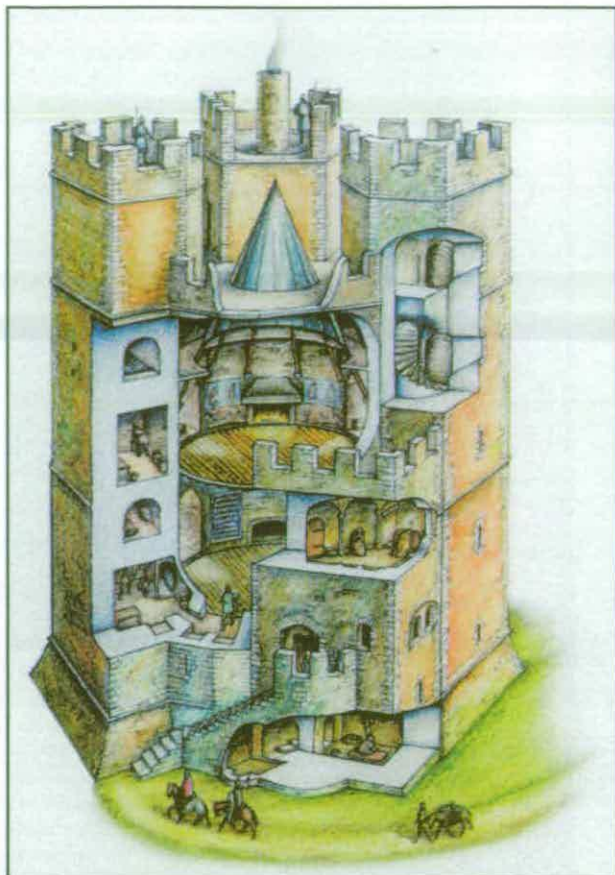
Figure 19 is the English Heritage earthwork plan resulting from the survey of 2003; the full archive plan, at 1:500 scale, is located in the wallet at the end of this report (Fig 53). In the following description words and letters which appear in **bold** are shown on the figures indicated at the beginning of each section.

The earthwork survey, with the exception of a 90m long by 15m wide strip on the eastern edge, encompasses the Scheduled Monument of 'Orford Castle with adjoining quarry and remains of 20<sup>th</sup> century lookout post' (SM 21408). This pear-drop shaped area, measuring a maximum 325m in length and 175m in width is known as **Castle Green**, as depicted on Norden's 1600-02 survey (Fig 18). In broad terms, the north-eastern half of the Green encompasses the castle earthworks, whilst the south-western half contains a series of **quarries and sand pits**. Within this are further discrete features such as the platform of **Dennington Cottage**, a possible **beacon platform** and a series of pathways.



*Figure 20*  
The keep from the  
west by the Rev  
Charles Hartshorne  
(1840, 68)

#### 4.1 The keep (Fig 20)



The keep is the only surviving standing structure. It was not investigated as part of this work but a brief description will provide some context for the description and interpretation which follow. The structure stands on a great battered plinth and rises some 27m from ground level. It consists of a central tower designed with a cylindrical interior and polygonal exterior, projecting from which are three rectangular turrets and a forebuilding. Internally the keep is divided into a basement containing storage rooms and the castle well, and two principal storeys, each comprising a hall or main apartment which occupied the entire space of the central tower, with subsidiary rooms and

**Figure 21**

Reconstruction drawing showing the arrangement and layout of the keep as built in the 12th century  
(© English Heritage)

chambers in the northern and western turrets. The southern turret contained the newel staircase and adjoining this is the forebuilding which provided access to the keep at first floor level, via an external stair which was protected by a portcullis. The forebuilding rises to about half the height of the main tower and had its own basement below the entrance lobby which is thought to have been a prison, together with a chapel above. The original roof to the central tower was conical, whereas the forebuilding and towers were battlemented. The turrets in the last storey of the towers provided further shelter and storage space for the defenders on the battlements and in the north turret there is an oven (Fig 21; Allen Brown 1964)

#### 4.2 The Castle Earthworks (Fig 22)

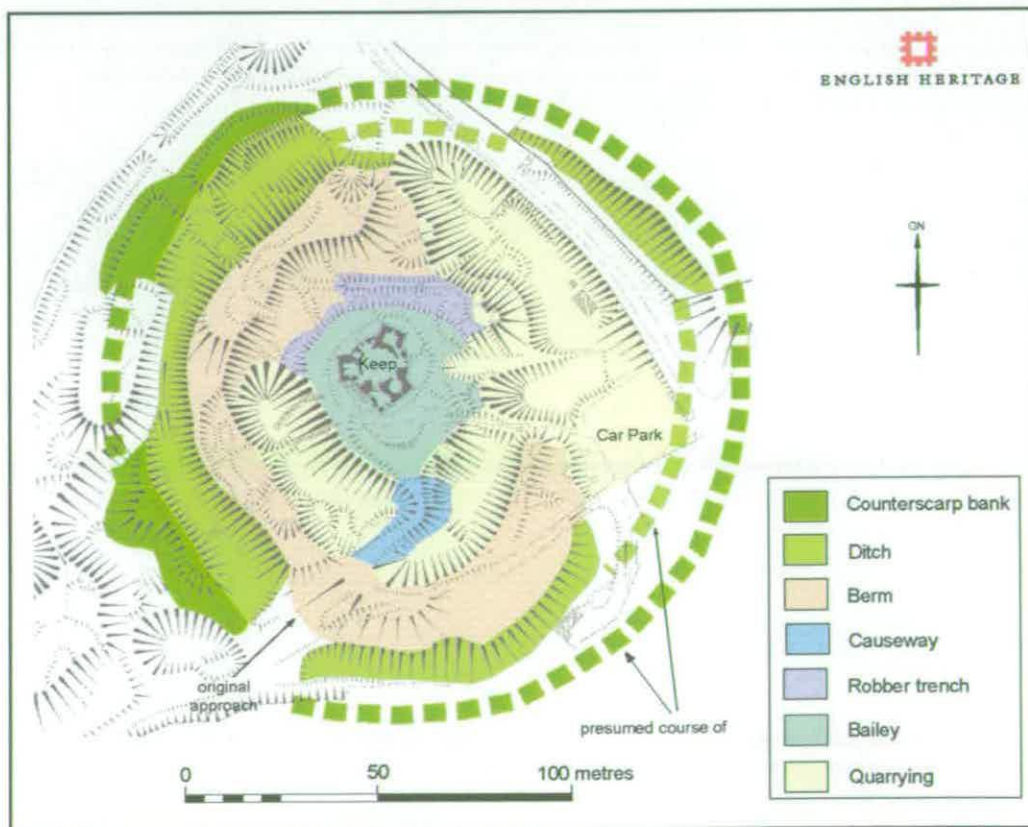
Surrounding the keep and covering an area 165m in diameter are complex earthworks associated with the castle's outer defences and with later quarrying and landscaping activity. Norden's views of the castle, dating to 1600-02 (Figs 7 and 18), show the curtain wall and mural towers, but their exact location has remained unresolved due to the confusing nature of the surviving earthworks. This has led to a range of interpretations relating to the arrangement of the defences:

Two circular ditches used to surround [the keep], one fifteen feet and the other thirty-eight feet from the walls. Between these ditches was a circular wall part of which is still remaining, opposite the south-east tower. This wall was 40 feet high and had a parapet and battlements (Suffolk Traveller, 1829).

Other interpretations have placed the curtain wall close to the keep and surrounded by two ditches:

an inner ditch surrounded the mound, the counterscarp of which, as already stated was crowned by a wall, and outside this again was an outer ditch, parts of which can still be made out. The entrance was on the south-west side protected by towers in the wall and crossing the ditches by bridges (Evans 1912, 301)

The combined result of all the recent archaeological investigations has enabled a much clearer interpretation. A single circular **ditch** with **counterscarp bank** defined the extent of the castle complex, within which the keep was centrally placed. Around part of the keep, a section of curtain wall and the outline of one mural tower is revealed in earthwork form as a **robber trench**. The remaining stretch of wall and towers lay within the ditches which surround the keep on its south, east and west sides. This is not part of the castle defences as so often has been suggested, but in fact represents **quarrying**, initially created during the removal of the curtain wall and towers and then deepened by removal of sand. The curtain wall would have defined a roughly circular **bailey** with the keep situated in the northern half. This arrangement leaves a substantial **berm** between the castle ditch and curtain wall, much of which has also been affected by quarrying and landscaping, but a **causeway** crossing the quarry ditch to the south-west of the keep contains masonry remains which excavation revealed to be a barbican, in the form of a passageway which ran from a bridge over the ditch to the gatehouse in the curtain wall.



**Figure 22**  
Interpretation plan of  
the castle earthworks



### Ditch and Counterscarp Bank (Fig 23)

A large part of the castle ditch survives in earthwork form, the most complete section at **a**, some 150m in length, lying to the north and west of the keep. This curving feature is flat-bottomed with some fluctuations in the surface level and is an average 17m wide and 2m deep (Fig 24). Later landscaping has removed some sections, although the scarp face survives for a length of 90m to the south of the keep at **b**. From here, the ditch would originally have run across the present car park and into the grounds of Castle House. Here a scarp, **c**, some 80m long and a maximum 2.5m high runs through two adjacent gardens and is thought to represent the counterscarp face of the ditch. Suffolk County Council Archaeology Service undertook excavation in this area during 1978 in advance of new housing. Finds and features of medieval date were recorded, the majority being recovered from the eastern end of the site fronting Munday's Lane (Fig 1; Martin 1980, 220). Of particular importance is the mention of a deep earthwork feature cutting across the south-west corner of the site, which was subsequently infilled by the contractors. This was interpreted as the outer ditch of the castle and although there is no accurate plan locating the feature, it appears to fit with the section of earthwork surveyed at **c** (K Wade pers com).

A counterscarp bank survives in two areas at **d** and **e**, between which are the remains of Dennington Cottage (see section 4.3). A large part of section **d** has been quarried away but it stands to a height of 1.5m, while section **e** adjacent to the cottage is better preserved and suggests a width of 13m.

The ditch would have been crossed by a bridge leading to the main gatehouse and possibly by another leading to a postern gate. The main gatehouse was situated south of the keep and was approached from the south-west as illustrated on Norden's view of 1600-02 (Fig 7).

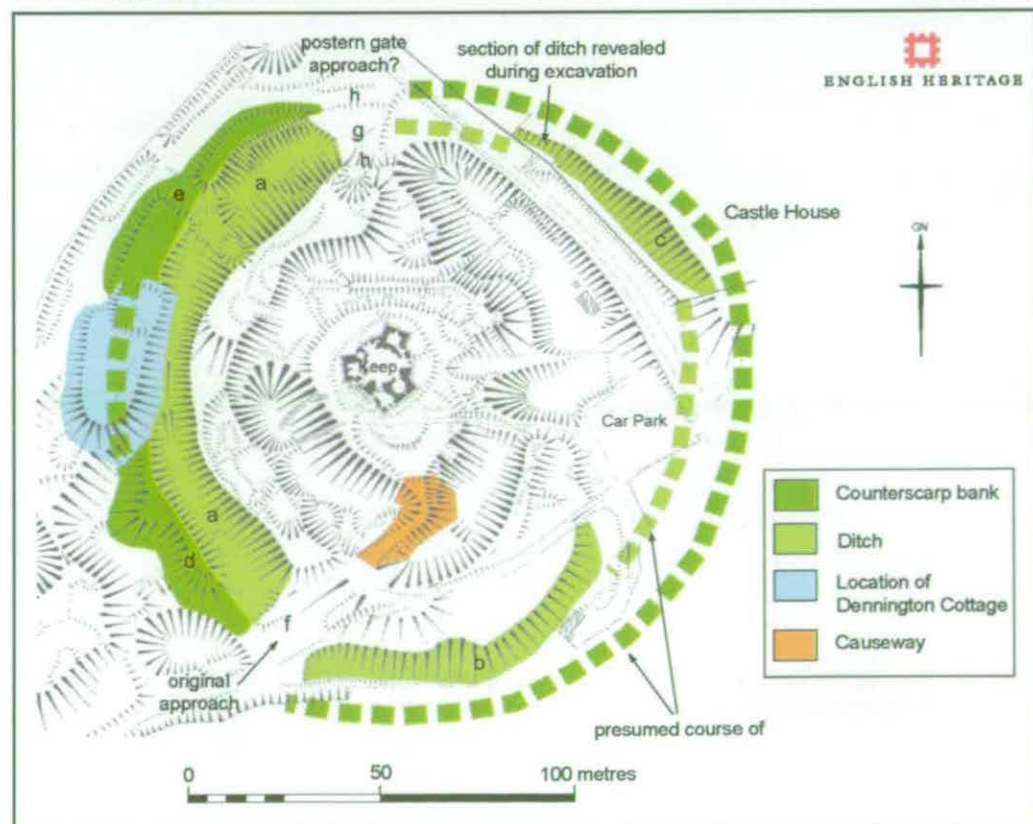


Figure 23  
Interpretation plan of  
the ditch and  
counterscarp bank

and indicated on the ground by the **causeway** crossing the quarry ditch. This infers that the bridge crossed the ditch at **f**, where a slight causeway can be seen and where counterscarp bank **d** has a clear terminal. The geophysical survey also revealed a slight anomaly here, in the form of an 'L' shaped band of raised readings which may represent consolidated ground associated with the entrance and possibly part of the bridge or barbican (Fig 13; ECCAFU 2003, 3).

The most likely position of a bridge for the postern gate would be at **g**, which corresponds with a pathway shown on Norden's plan running up to the curtain wall from the northern corner of Castle Green (Fig 18). Here the main section of ditch **a** ends, and a causeway 13m wide is defined. Counterscarp bank **e** also has a terminal here, although earthworks at **h** suggest the original continuation of both the ditch and bank across this area, implying that this may not have been an original feature of the castle.



**Figure 24**

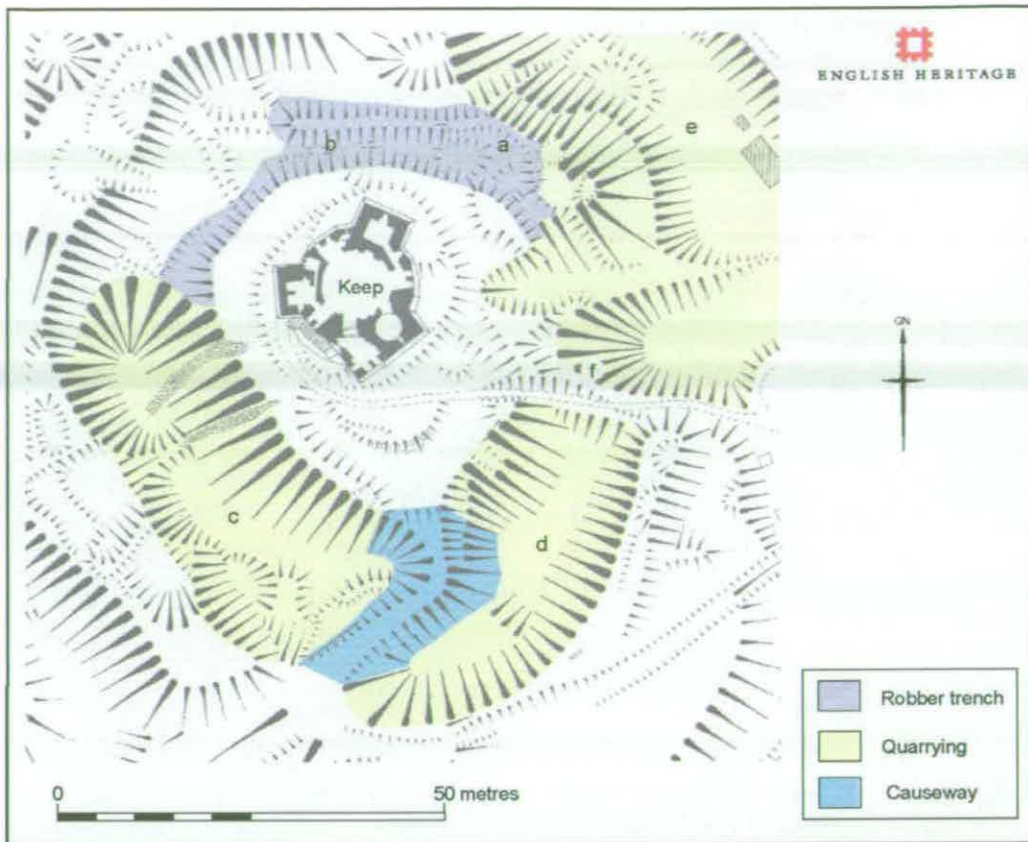
Section of ditch and counterscarp bank to the west of the keep. The figure in yellow stands in the base of the ditch with the counterscarp bank to the left  
(© English Heritage. NMRAA044145)

#### **Curtain Wall and Mural Towers (Fig 25)**

Earthwork evidence for the position of the curtain wall and mural towers is revealed by a robber trench and through a series of post-medieval quarry ditches. This section primarily deals with the evidence for their location; a detailed discussion of their form is given in section 5.

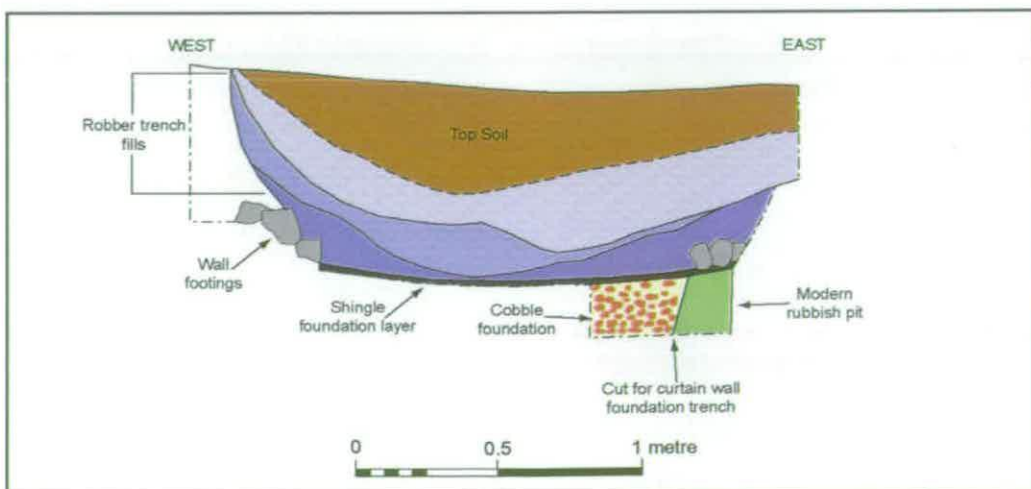
The robber trench is situated to the north of the keep, between two areas of quarrying. The eastern half consists of a ditch 6m wide and 0.5m deep with an outer bank, 4m wide and 0.7m high; whilst the western half is defined by a scarp, 0.4m high, continuing the line of the scarp face of the ditch, with a small section of the counterscarp face traceable at its western end. It was in the eastern half that the section of curtain wall and mural tower shown on several 18<sup>th</sup> and 19<sup>th</sup> century illustrations stood (Figs 8-9 and Appendix 1). Furthermore it can be suggested that a mural tower was situated at **a**, where the ditch and bank bulge outwards.

The 2002-3 excavation confirmed the location of the curtain wall at **b** where a 1.6m-wide section of foundation was exposed beneath the robber trench fills, 0.75m below the surface. The wall lay in a substantial vertical-sided trench that had been cut into the sand of the castle platform and filled with cobbles and sand that became more densely packed with



**Figure 25**  
Interpretation plan showing the earthwork evidence for the curtain wall and mural towers

depth. A thin layer of shingle was then spread over the cobbles on top of which lay the surviving remnants of more solid footings, principally flint rubble with occasional septaria, again packed with sand (Fig 26). There was no evidence of mortar having been used although it is possible that the free-draining and acidic nature of the soil has removed traces. At first sight this would not seem to provide a particularly solid base for such a substantial structure, however, techniques of medieval foundation building indicate that solid foundations are rare. The most common approach was to fill a foundation trench with alternating layers of crushed mortar or chalk together with more elastic clayey deposits containing pebble or cobble inclusions, thus providing a flexible foundation with high load-bearing properties that enables some degree of gradual lateral movement. The example seen at Orford demonstrates a similar approach and would likely have had similar properties, albeit achieved using very different locally available materials (SCCAS 2003, 12).



**Figure 26**  
South facing section of trench 1, showing the curtain wall foundation and footings together with the robber trench (after SCCAS 2003, fig 2)

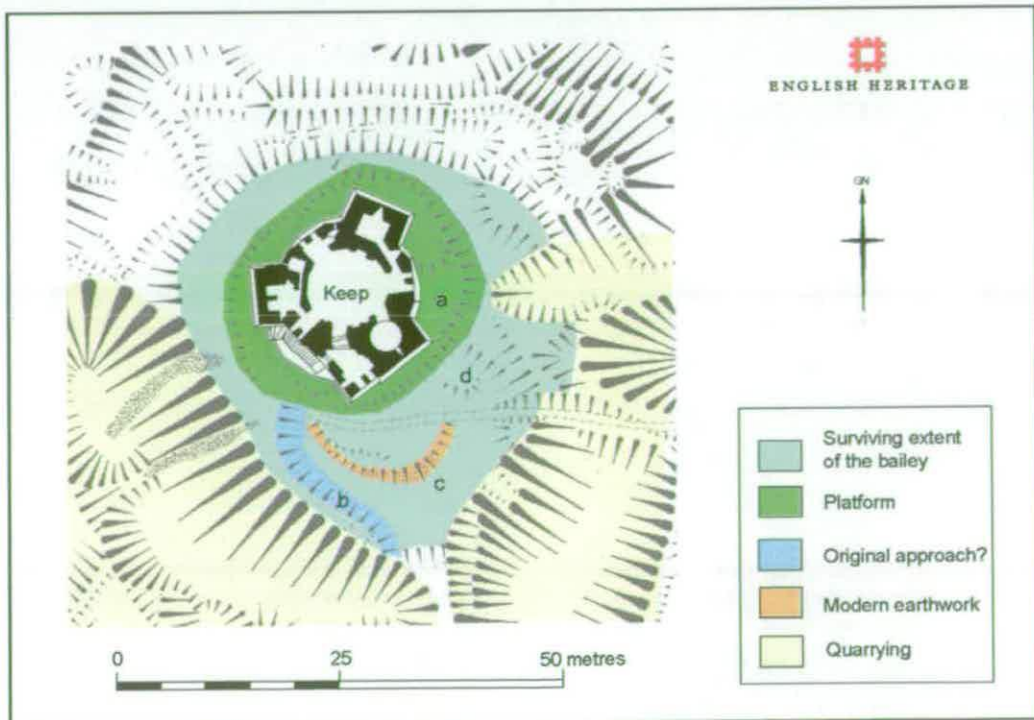
To the east, south and west of the keep a series of substantial quarries less accurately mark the line of the curtain wall. Quarries **c** and **d** are separated by the **causeway**, and are a maximum 23m wide and some 4.5m deep (Fig 27). Quarry **e** is a more substantial feature encompassing a much larger area of the castle defences. Here the curtain wall is thought to have run along the western edge of the quarry face and would cross at or near to **f**, the stonework and demolition rubble encountered during the 1993 and 1995 watching briefs (Fig 14; section 3.2).



**Figure 27**  
View looking south  
along quarry **c**.  
(© English Heritage.  
NMRAA044143)

### Bailey (Fig 28)

With the exception of a c 8m wide strip of quarrying to the south, west and east of the keep, a large proportion of the bailey survives and comprises a roughly circular area some 48m in diameter. The keep is located in the northern half, on a raised platform **a**, 0.4m high. Further earthworks include a scarp running from the causeway towards the entrance of the



**Figure 28**  
Interpretation plan of  
the castle bailey

keep at **b**, which may well mark the line of the original approach, and a stony scarp at **c** which appears to be of a relatively modern date.

Early descriptions of the castle also note:

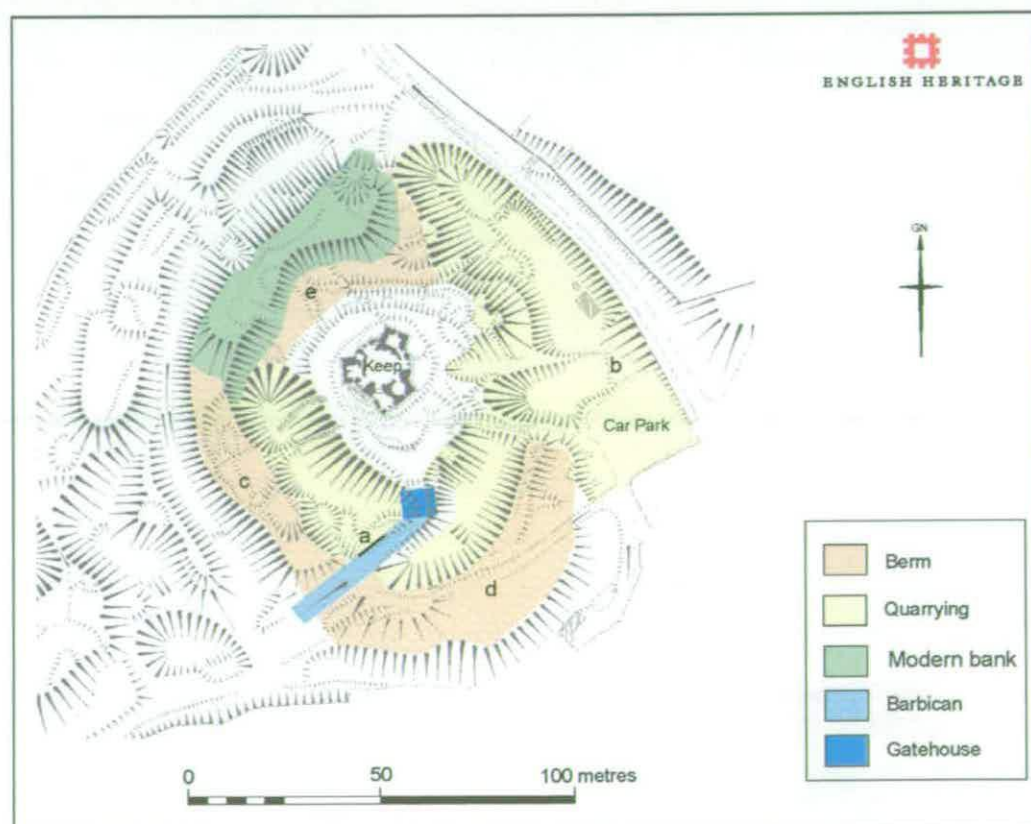
There was a small building in the narrow space between the inner ditch and tower, it was destroyed about 1760 and was called 'Kettle House' [a building used to store fish or fishing tackle](Balding and Turner 1908, 64; also referred to in SRO: HD 1678/102/3).

Samuel and Nathaniel Buck's 1736 engraving of Orford (Fig 8) does not show this building which suggests it was located to the south-east of the keep, possibly where several slight earthworks are visible at **d**.

As the bailey is relatively small in size, other buildings such as the dwellings belonging to Ralph the Breton and mentioned in the Pipe Rolls of 1173-74, are most likely to have been ranged along the curtain wall to the south of the keep, where the most space was available and where quarrying has removed any trace (Potter *et al* 2002, 26).

#### Berm (Fig 29)

Between the ditch and curtain wall was a berm some 30m wide, as shown on the earliest illustration of the castle, dating to c1530 (Fig 30). Since the post-medieval period this has been extensively quarried and landscaped and the only original feature surviving is the causeway, 10m wide and 1.3m high, running between two areas of quarrying, which marks the line of an entrance passageway or **barbican**. Excavation here in 2003 uncovered two

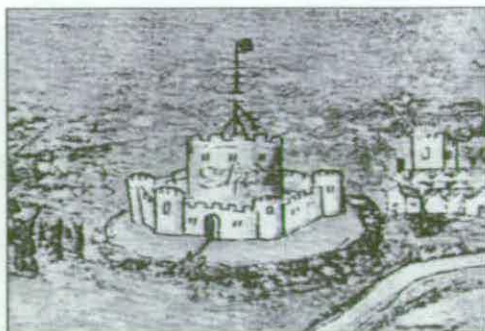


**Figure 29**

Interpretation plan of the earthworks within the area of the castle berm

**Figure 30**

Plan of Orford Castle clearly showing the berm which lay between the ditch and curtain wall. From a chart of the Suffolk coast made in c1530 (© The British Library/Cottonian MSS.Aug.I.i.58)

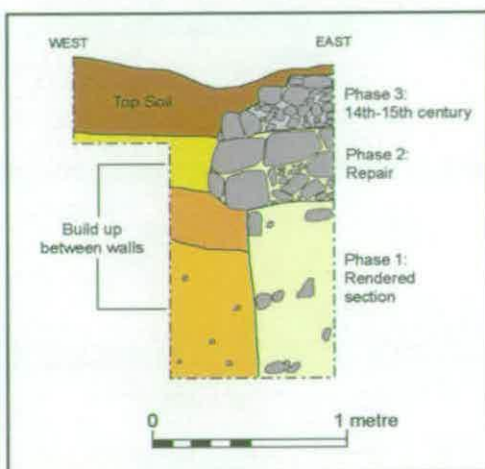


sections of wall 4m apart. The northern section formed a continuation of the masonry remains visible in the side of the causeway at a and was excavated to a limited depth of 1.7m below the existing ground level, where neither the base of the wall nor any construction trench was encountered. Three different building phases were noted, the earliest consisting of a 1m-high rendered section, which was followed by a 0.4m-high faced but unrendered section of large septaria blocks with occasional smaller roughly hewn flints and finally a 0.3m-high section of roughly hewn flints and occasional smaller fragments of ceramic building material which appeared to represent a later 14<sup>th</sup>-15<sup>th</sup> century repair or capping (Figs 31 and 32; SCCAS 2003, 6-7).



**Figures 31-32**

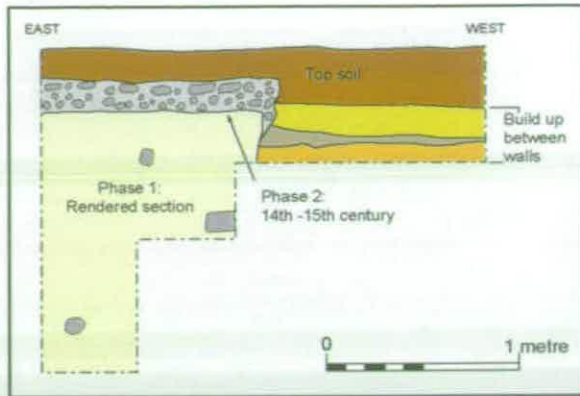
Photograph and section showing the inside face of the north barbican wall (after SCCAS 2003, plate 2 and fig 3)



**Figure 33**

Photograph showing the south barbican wall (after SCCAS 2003, plate 3)

Both faces of the 0.74m-wide southern wall were exposed to a limited depth of 1.7m (Fig 33). Two phases to the wall were identified of which the earliest stood 1.35m high and was faced on both sides as well as rendered with a hard whitish-grey lime mortar. Occasional loss of the render enabled a mixture of septaria and roughly knapped flints to be identified, bonded with identical mortar to that used for the render, and laid in a random uncoursed fashion. The upper component of the wall was just 0.10-0.15m thick and was predominantly constructed of flint cobbles with occasional septaria and also bricks of probable 14<sup>th</sup>-15<sup>th</sup> century date. These



**Figure 34**  
Section showing the inside face of the south barbican wall (after SCCAS 2003, fig 3)

materials were laid in a random manner and bonded with a poor quality crumbly yellowish sandy mortar (Fig 34; SCCAS 2003, 7-8).

Between the two walls were deposits of silt and sand and at no point was there evidence of consolidation or metalling that might indicate a surface. The deposits

encountered would not have endured even light foot traffic and it seems likely that a surface lies beyond the 1.7m depth of excavation (SCCAS 2003, 14). There was also no evidence of any gate or closure at the western end of the passageway so it is thought that the passageway would have continued to the bridge over the ditch, as suggested by the anomaly encountered during the recent geophysical survey (Fig 13). The survival of the passageway here results from its conversion to a causeway, which enabled continued level access to and from the keep following the period of quarrying around it. The surviving visible section of the northern wall is 8m in length, with the causeway then continuing on the same alignment for a further 11m before turning northwards almost at right angles to join the castle platform. It seems likely that the passageway continued to this turning at which point the **gatehouse** was located. Both of Norden's 1600-02 views suggest aspects of this arrangement with his plan clearly showing the barbican, and his illustration of the castle looks through the partially demolished gatehouse at an angle in line with the turn in the causeway (Figs 7 and 18).



**Figure 35**  
Quarrying to the east of the keep. (© English Heritage. NMR.AA046862)

Other sections of the berm have been substantially quarried away, most severely on its eastern side, which extends well below the surrounding ground level, to a depth some 6m below the castle platform (Fig 35). A car park occupies the southern end of this area and two structures are now situated in the quarry base. A section of the service trenches cut in 1993 and 1995 ran across the area immediately north of the car park and indicated that the platform at **b** consists of destruction materials of brick and tile, concrete chippings and septaria fragments which date to the 20<sup>th</sup> century (Fig 14; SCCAS 1995). This may result from the war time use of the site, with

aerial photographs of 1945 showing a hut situated in this area (NMR: RAF/106G/UK/832 4174).

**Figure 36**

Earthworks in the berm to the west of the keep which lie between a quarry on the left hand side of photograph and the castle ditch on the right hand side

(© English Heritage. NMRAA044142)



A 12m-wide section of berm escaped quarrying to the west of the keep and here are a series of earthworks at **c**, forming sub rectangular depressions up to 0.4m deep (Fig 36). Resistivity survey over this area encountered high readings indicative of large quantities of dumped material, which suggests that the original ground level of the berm may lie beneath this, possibly level with the section of berm surviving at **d** to the south of the keep (Fig 13; ECCFAU 2003, 2).

**Figure 37**

Earthworks on the berm to the north of the keep. The figure in yellow stands on the modern bank whilst the figure in red stands on the bank resulting from the robbing of the curtain wall which originally stood to the right of this feature

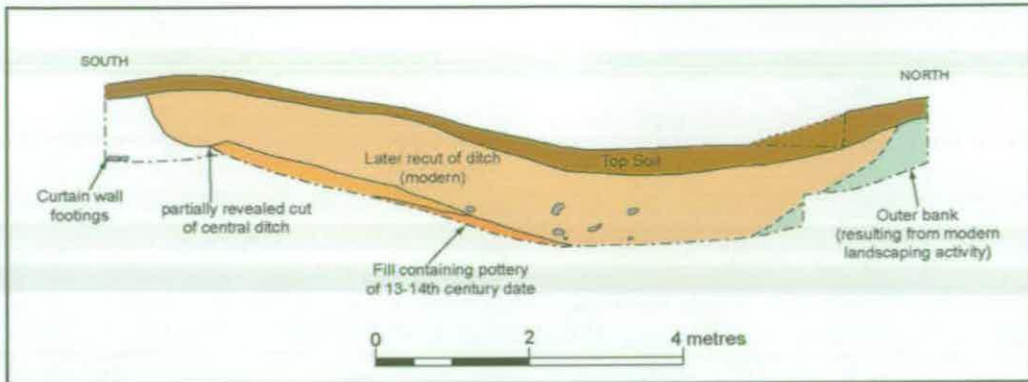
(© English Heritage. NMRAA044141)



The section of berm to the north of the keep has escaped quarrying and contains an 18m wide by 2.1m high **bank** together with several slight earthworks at **e**, which correspond to the position of a trough shown on the 1<sup>st</sup> edition Ordnance Survey (Fig 10). The recent excavation indicates that the bank results from late 19<sup>th</sup>/early 20<sup>th</sup> century landscaping activity and is made up of 1.9m of friable mottled yellowish brown sand with occasional silty patches, under which lies the earlier ground surface (Fig 37). South of this, excavation revealed the southern edge of a smooth shallow-sided ditch lying some 2.3m north of the curtain wall which was excavated to a limited depth of 1.2m and which contained pottery of 13<sup>th</sup>/14<sup>th</sup> century date (Fig 38; SCCAS 2003, 5-6). Without more extensive excavation interpretation of this feature is difficult and whilst it would appear to be contemporary with



the castle, its shallow depth suggests that it is unlikely to have formed an integral part of the castle defences.

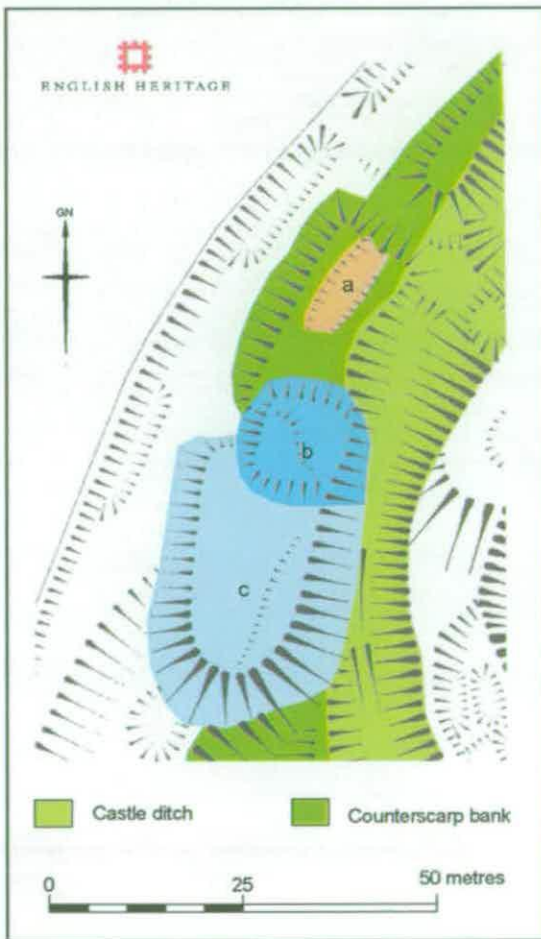


**Figure 38**

Section showing the southern edge of a ditch uncovered outside the curtain wall to the north of the keep (after SCCAS 2003, fig 2)

### 4.3 Later Activity

#### Dennington Cottage (Fig 39)



**Figure 39**

Interpretation plan showing the earthwork evidence for Dennington Cottage

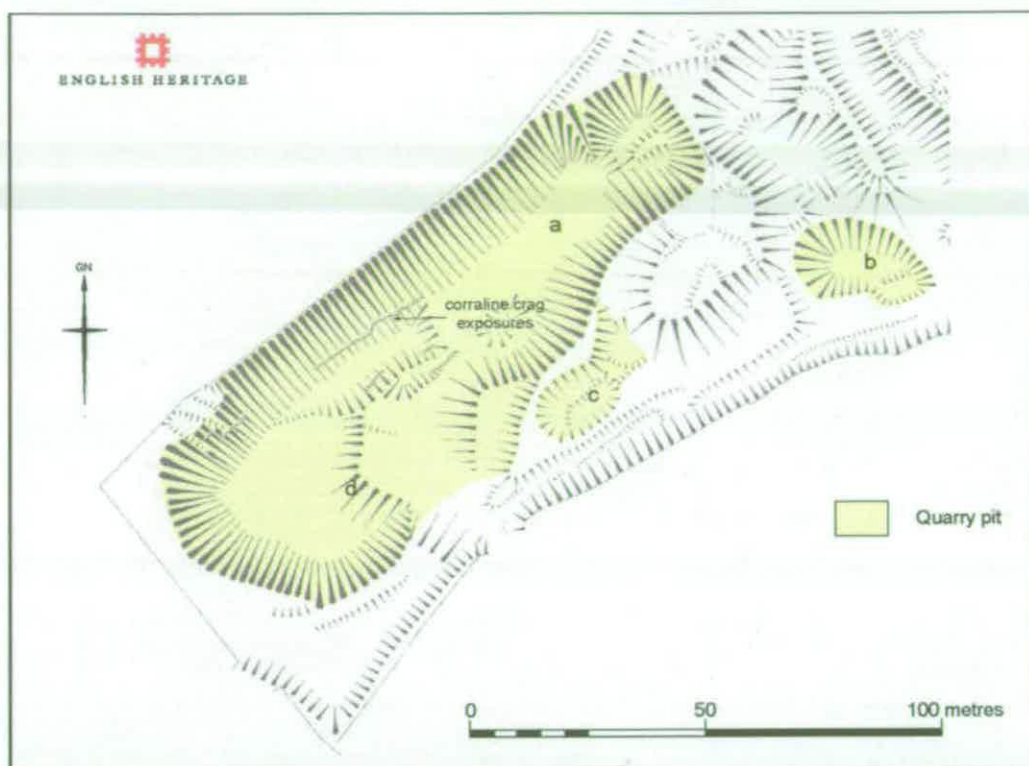
Overlying a section of the ditch and counterscarp bank to the north-west of the keep is a sub-rectangular platform 18m wide by 50m long and a maximum 2.2m high. This marks the position of a 19<sup>th</sup> - century 'brick and tiled bungalow cottage and garden' (SRO: FSC400/1). The first reference to this cottage appears on the Tithe Map of 1841 when it was owned by the Marquis of Hertford and tenanted by John Dennington. It seems likely that this was built for a caretaker following the renewed use of the keep by the Marquis as a summerhouse for banquets and parties (SRO: FDA 189/A1/1a and b).

'Dennington Cottage' is shown on a painting of 1886 (Orford Museum: 1993.5) and was described in the 1918 sales particulars of the Sudbourne Estate as containing five rooms, kitchen and coalhouse with a garden of 0.174 acres. At this date it was still tenanted by the

Dennington family at a rent of £5 per annum; it was subsequently demolished in 1962 (SRO: FSC400/1). The first edition 25-inch Ordnance Survey map dated 1882, shows the layout of the cottage and garden, which clearly matches the earthwork evidence (Fig 10). Here the cottage was approached via a pathway running along the ditch and up over the counterscarp bank as indicated by the earthworks at a. The site of the cottage is represented by a square platform, b, 13m wide, still containing rubble from its destruction, beyond which was the D-shaped garden, c.

### Quarrying on Castle Green (Fig 40)

As well as those quarries which result from the plundering of castle stone and subsequently sand, the south-western area of Castle Green is dominated by quarrying with pits evident at a – c, which result from the extraction of both sand and corraline crag.



**Figure 40**

Interpretation plan showing quarry pits on Castle Green

Whilst Norden's 1600-1602 plan of Castle Green shows an undulating ground surface, no quarries are indicated. Furthermore some of the pathways he shows crossing the Green are situated in the area now encompassed by quarry a (Fig 18). This, combined with the condition of the exposures within the quarry indicates it is unlikely to have been opened in the 12<sup>th</sup> century to provide building material for the castle. Perhaps some of the large deep pits uncovered during an evaluation and excavation of land at Castle Hill during 2000-2001 or the 'gravel pit' shown on Castle Hill at the junction with Broad Street on a 1770 plan of the town are more likely candidates (Gainster and Bradley 2001, 326; SRO: EE5/11/2).

Although the Tithe map of 1841 does not note or illustrate quarrying on the Green, Bright's painting of 1856 clearly shows the exploitation of the sand ridge (Fig 44). The Ordnance Survey maps between 1882-1927 also indicate the continued extraction in the area with the 1918 sales particulars of the Sudbourne Estate noting that 'Castle Green consists of useful accommodation grassland with profitable crag and sandpit' (SRO: FSC400/1).

Quarry a is now overgrown with scrub and surrounded by planting of specimen trees. It is first shown on the 25-inch Ordnance Survey of 1882, when the 'sand pit' encompassed an area some three quarters of its present size. A ramp led down into the pit on line with the scarp at d, 2.2m high (Fig 10; Ordnance Survey, 1882). By 1902, the sand pit had extended eastwards encompassing the area seen today by 1925 (Fig 11; Ordnance Survey 1904 &

1927). The smaller pits at **b** and **c** are not represented on these maps and are of uncertain date.



**Figure 41**

Orford Castle and village, painted by Henry Bright in 1856 showing the extensive quarrying on Castle Green  
(© Norwich Castle Museum and Art Gallery)

#### ***Routes Across Castle Green (Fig 42)***

A series of paths are shown crossing Castle Green on several illustrations. Some of these are visible as slight earthworks on the 2002 survey. Norden's plan (Fig 18) shows one path following the northern boundary of the Green, part of which now survives at **a**, whilst the path which follows the southern boundary can be traced in the earthworks at **b**. This ran to and from Castle Green via two lanes **c** and **d**, still used today. A path down the eastern boundary of the site corresponds to the current track at **e**, where a hard standing is also shown by Norden at **f**. A small section of the path, otherwise removed by quarrying, can be traced at **g**, as can the route running to the south of the castle at **h**, which subsequently divided and ran north along the base of the castle ditch to join path **a**, possibly following an earlier approach to a postern gate as noted earlier. In addition to the path into the sand pit shown on the first edition 25-inch Ordnance Survey at **i**, additional routes are shown running to the cottage at **j**, as well as from the track on the east boundary to the northern boundary at **k** (Ordnance Survey, 1882).

0 50 100 metres

Presumed line of route not  
surviving as an earthwork



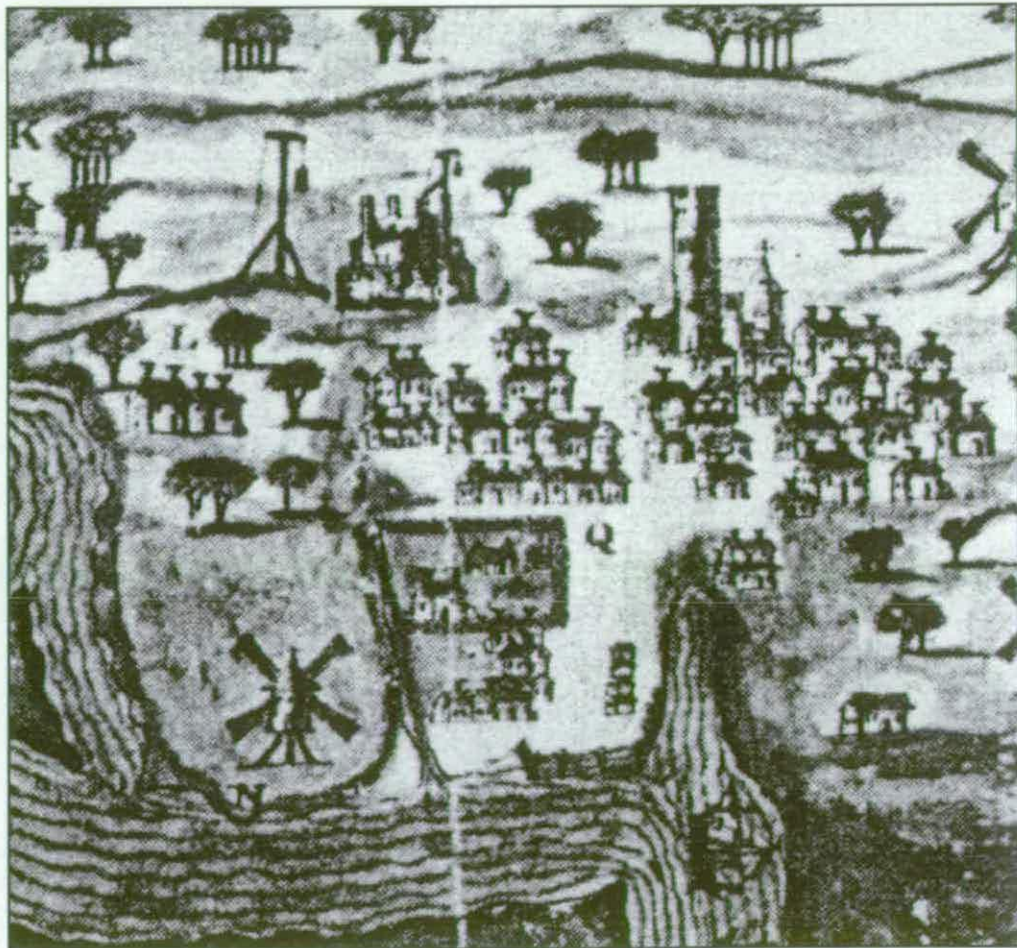
Figure 42  
Interpretation plan showing the  
position of routes across  
Castle Green

#### 4.4 Miscellaneous Features on Castle Green

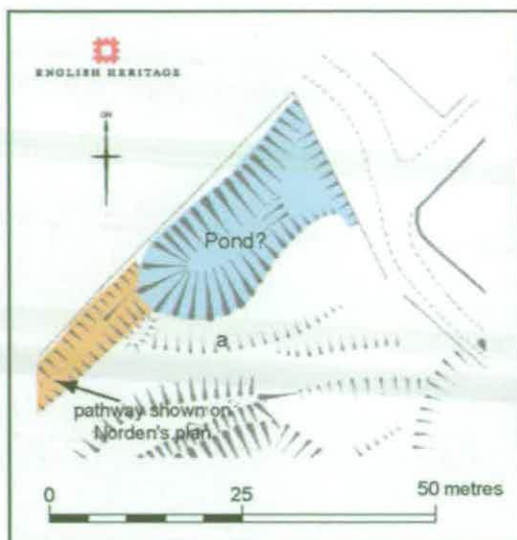


**Figure 43**  
Interpretation plan showing the possible beacon platform on Castle Green

Adjacent to, and partially cut by quarry a between 1902 and 1925, is a roughly triangular platform 45m long by 25m wide standing 1.9m high (Fig 43; Ordnance Survey 1904 & 1927). Resistivity survey over this feature indicates that it appears to comprise large quantities of dumped material (Fig 13; ECCAFU 2003, 2). Whilst this may be associated with spoil from the adjacent quarry, the Ordnance Survey maps do not suggest such a relationship and it seems more likely to be a feature in its own right. Two of the 16<sup>th</sup>-century illustrations of the castle show a beacon on Castle Green and this may represent a platform for such a feature (Figs 6 and 44).

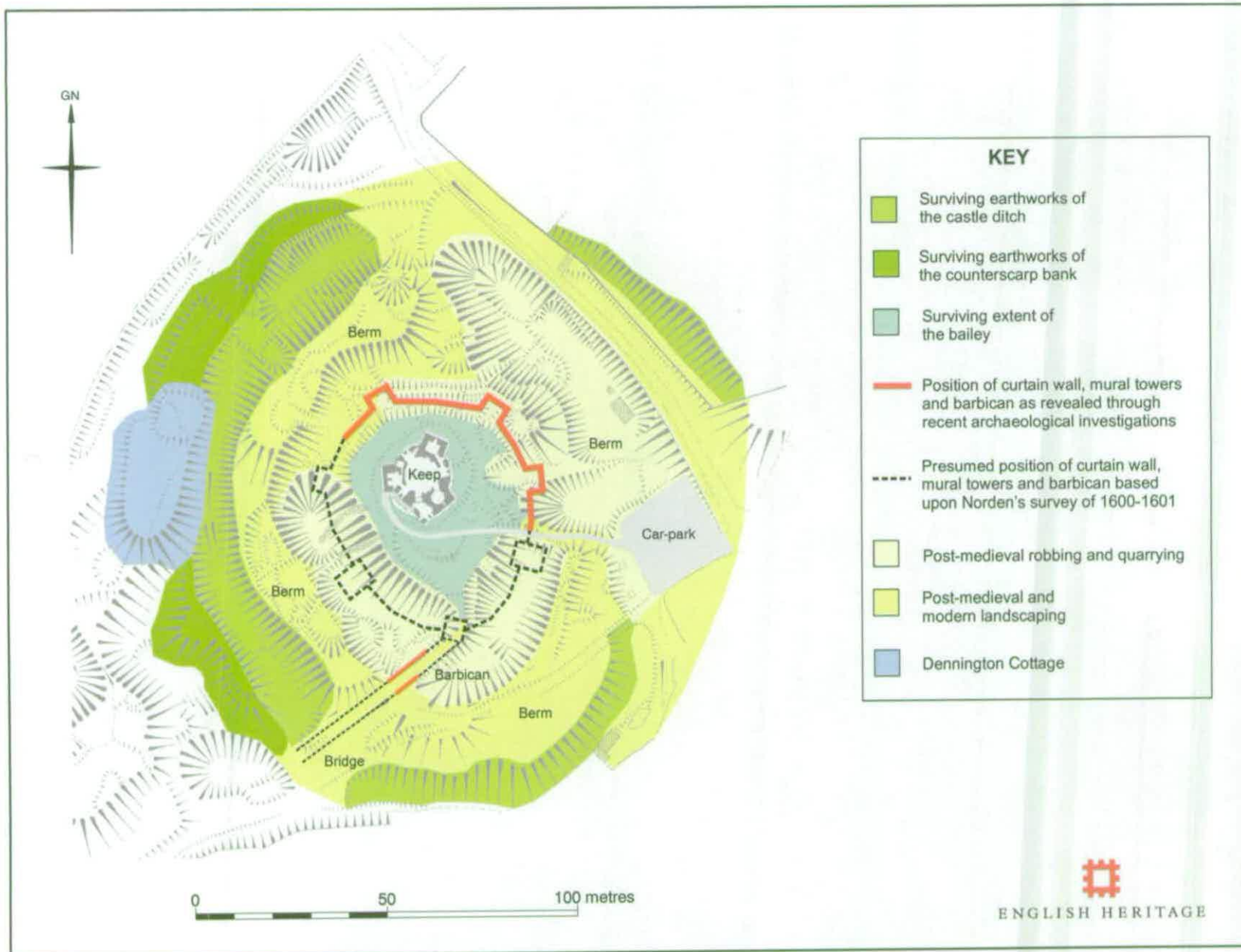


**Figure 44**  
Plan of Orford showing the castle complete with beacon on Castle Green. From a chart of the Suffolk coast made by Ananias Appleton in 1588  
(© The British Library/ Additional MSS. II.802n)

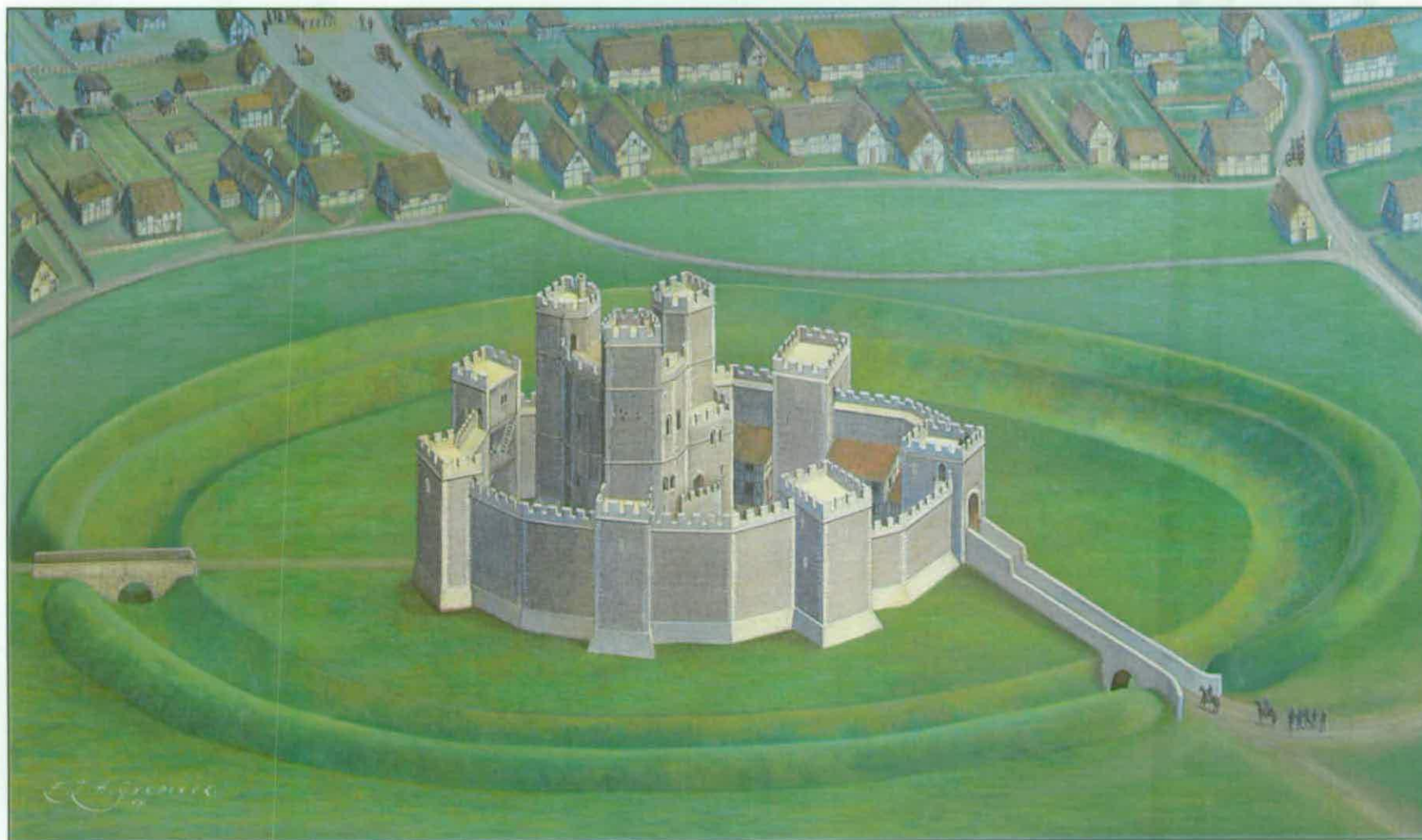


**Figure 45**  
Interpretation plan  
showing the pond - like  
depression in the  
northern corner of  
Castle Green

In the northern corner of Castle Green there is a pond-like depression 30m long by 13m wide and 1.5m deep (Fig 45). This appears as a pathway on Norden's plan (Fig 18) but by 1880, it is depicted as a depression, and by 1902 had been fenced off from the rest of the Green (Ordnance Survey 1882 and 1904). The line of this fence may be represented by the scarp at a. By 1924 it had been removed and the area planted with trees (Ordnance Survey 1927).



**Figure 46**  
Orford Castle: Interpretation plan of the earthworks together with the inferred position of the lost defences



**Figure 47**  
*Reconstruction drawing of Orford Castle as it may have appeared around 1300. This drawing by Frank Gardiner is based on the results of the recent archaeological investigations as well as from early illustrations of the castle (© English Heritage)*

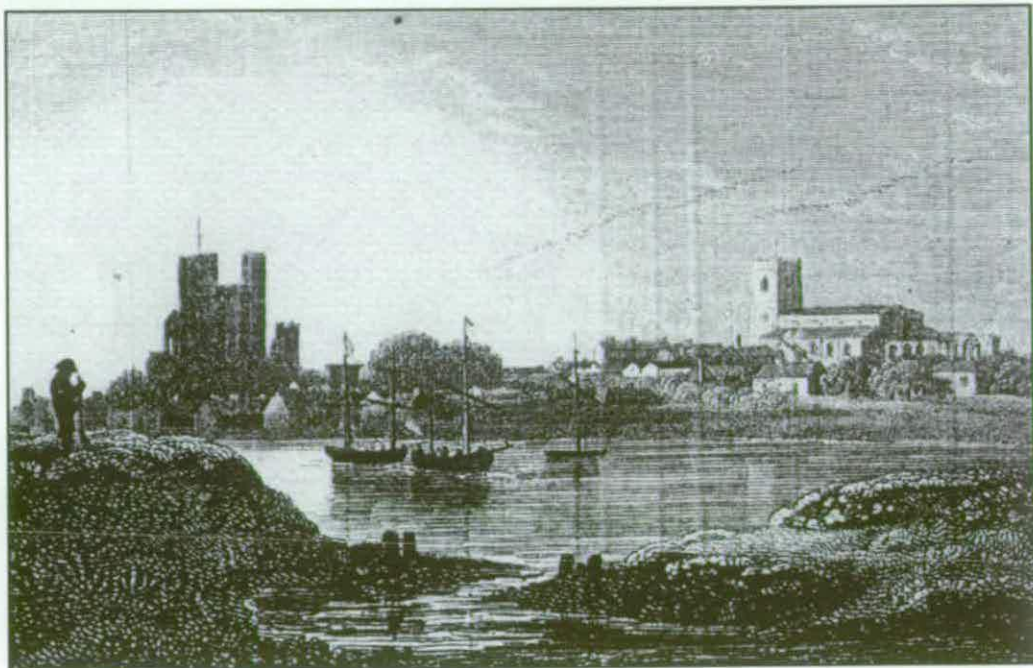


## 5 DISCUSSION

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The recent archaeological investigations have greatly increased our understanding of Orford Castle, in particular the layout of the vanished defences. The results of this work are reflected in the interpretation plan (Fig 46), as well as the reconstruction painting by Frank Gardiner showing the castle as it may have appeared around 1300 (Fig 47). Whilst aspects of these pictures remain conjectural and more extensive work would undoubtedly reveal more, it is increasingly clear that later landscaping and quarrying has altered and removed a substantial amount of evidence.

What is clear about the setting of Orford Castle is that its main visual impact was intended for those approaching by sea. Both castle and town lie on a low shelf of Corraline Crag (a Pliocene marine deposit of shelly sand), which rises above the alluvium of the River Ore, thereby affording significant views over the river and marshes to the sea beyond. This is in comparison to the view inland which is hindered by slightly rising ground, as well as the view between the castle and town; St Bartholomew's church stands on higher ground than the castle (Fig 48). The visual context of the castle in relation to the town has been significantly altered through quarrying to the east of the keep. The keep now appears raised on a clearly defined mound, which would not have been the case in the medieval period, when the main approach and visual impact was intended to have been from the south-west, facing away from the town.



**Figure 48**

19th century engraving  
by T Higham from a  
painting by G Arnold  
for the Antiquarian  
Itinerary  
(SRO: GD 1678/107/2)

It is unclear how much the ground level was raised or altered to create the castle platform, although the keep was almost certainly too heavy to have been supported on a large mound. The keep sits on the edge of a sand ridge which overlies the Pliocene deposit and both the 1995 and 2002-03 excavations encountered relatively undisturbed sands close to the ground surface. However, these are almost certainly re-deposited, as the base of the keep is

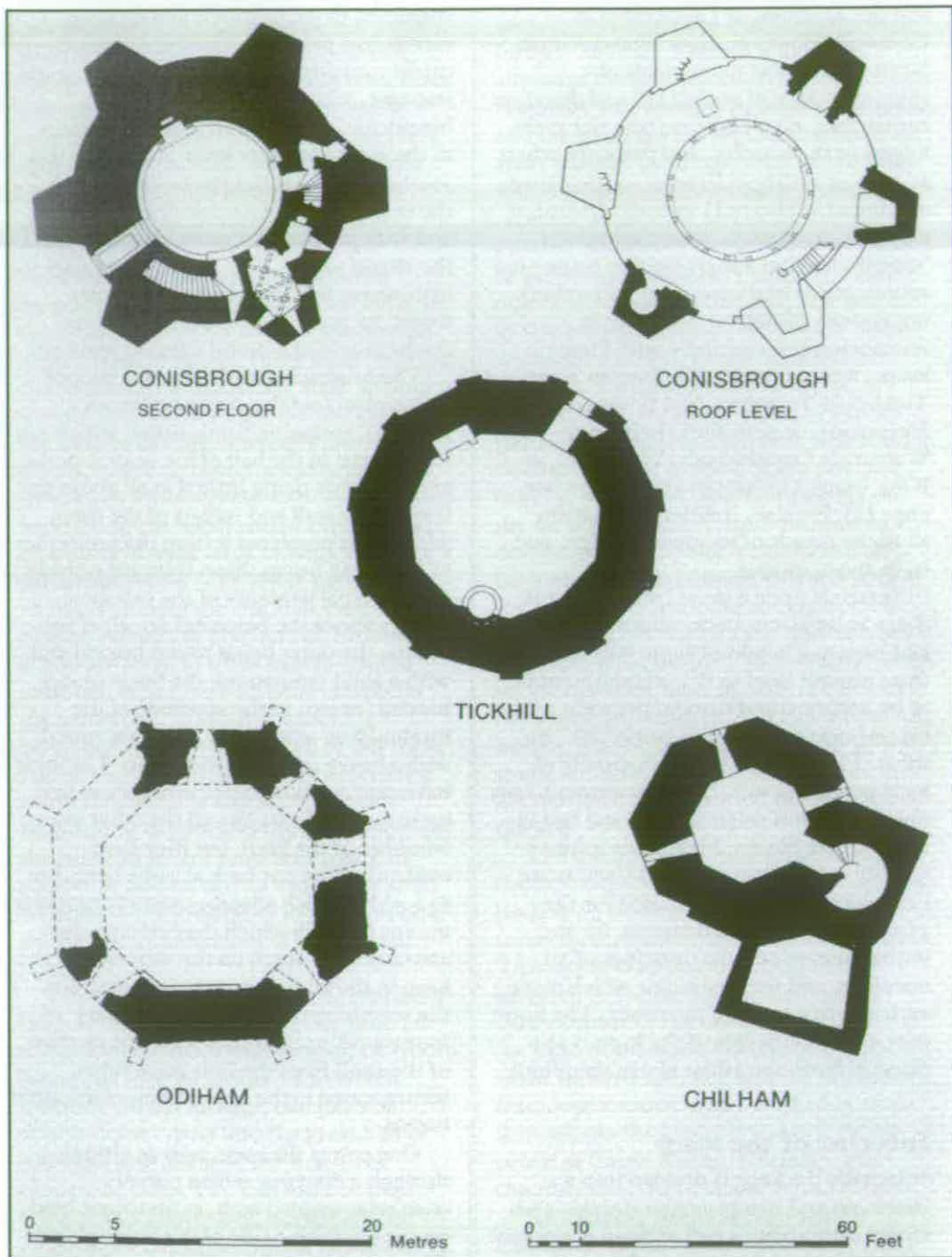
located well below the present ground level (SCCAS 1995 & 2003, 4). This could suggest that the keep was constructed on the original ground surface and that the ground level was raised around it, thereby acting as an additional support or buttress, as seen at Farnham Castle in Surrey (Kenyon 1990, 41; Platt 1995, 28). There, a late 12<sup>th</sup>-century shell keep further revetted the motte, and this may also have been the case with the curtain wall at Orford particularly to the south and west of the keep, where the recent excavation indicates that the barbican stood at a much lower level than the keep. Norden's view also suggests that the curtain wall and mural towers were set at a much lower level than the rest of the circuit in this area (Fig 7).

The castle was built during a period of great change in castle design, brought about not only by the transition from a predominantly timber fortification to one of stone, but also by advances in weaponry which enabled and necessitated a more scientific approach to construction. It is unclear where these ideas initially came from, though one suggestion is from Saracen sources during the Crusades. This is not really supported by the evidence and ultimately many aspects of Orford's design may have been inspired by the great fortifications of Byzantium (Cathcart King 1991, 78-89; Rhodes 2003, 23).

Orford was a new castle built under royal supervision on a previously undeveloped site, probably by the experienced engineer Alnoth. This resulted in a highly innovative and modern structure which is clearly represented in the surviving keep. The keep was one of the basic elements of castles at the time, with Henry II responsible for a number of new and experimental designs. Whilst retaining the traditional rectangular tower keeps at his castles of Scarborough, Bridgenorth, the Peak in Castleton, Newcastle and Dover, he also built at Orford, Chilham (Kent), Tickhill (South Yorkshire) and Gisors (Normandy) towers of a different form and style (Fig 49). Of these Orford is unique and was by far the most complex and elaborate but surprisingly never attracted any imitators. It is wrong to simply classify these as 'transitional', as the alteration of the keep from a standard rectangular plan to an equally standard circular one makes a much longer and less connected story than is often portrayed, with the development neither consecutive or concurrent, a feature represented in Henry's own building programme with the rectangular keeps at Newcastle and Dover built after Orford and Chilham (Allen Brown 1964, 12; Allen Brown 1977, 71; Cathcart King 1991, 99-103).

The change from a rectangular to a circular keep was primarily defensive. The inherent defect in any rectangular keep was the dead ground at its angles, where it was difficult to see what an enemy was doing and almost impossible to interfere with their activities. The polygonal form of the central tower at Orford was therefore stronger defensively but the addition of the three rectangular turrets and a forebuilding negated this and would have provided an obvious target to an enemy which managed to break through the outer defences. It seems, therefore, that the unique design of the Orford keep owes as much to domestic planning as that of military engineering. Given that the bailey at Orford is small, the keep needed to house a large proportion of the castle's accommodation which would have been

impossible in a central tower and thereby necessitated the construction of the turrets and forebuilding, thus creating a convenient, comfortable and grand dwelling (Heslop 1991, 44).

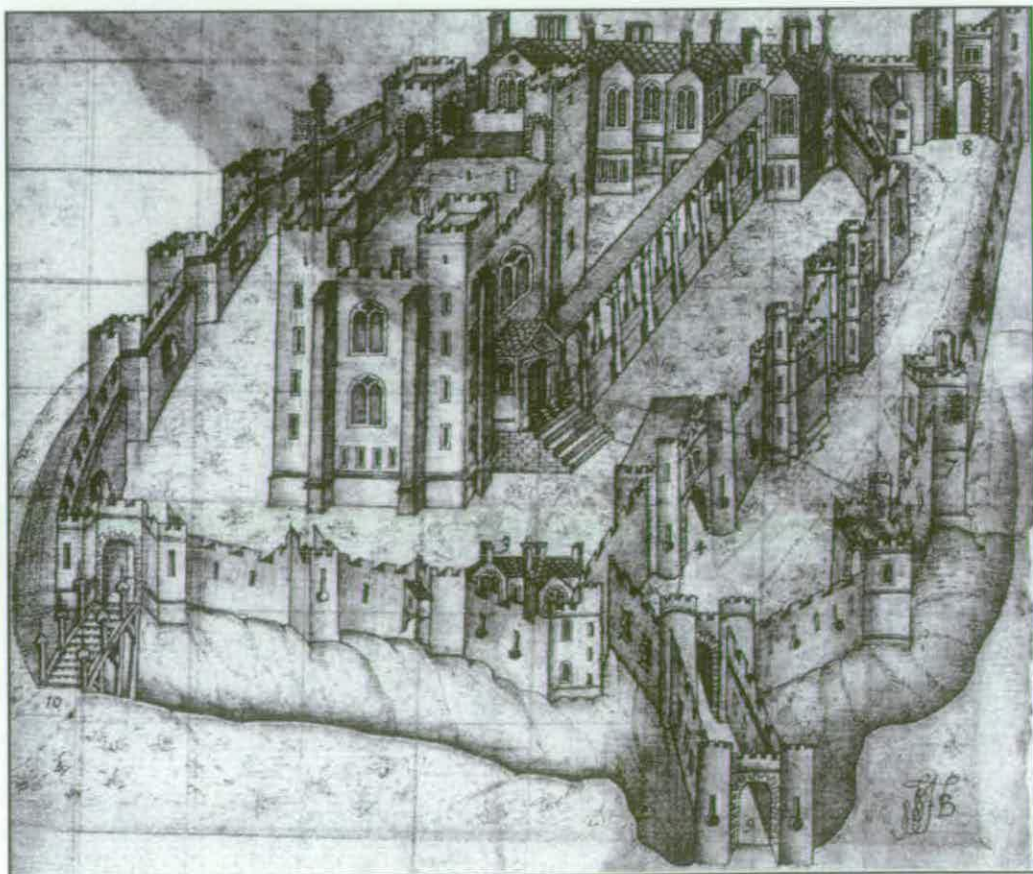


**Figure 49**  
Comparative plans of  
12th-century keeps  
(© Crown Copyright)

New thoughts concerning the defence of the bailey were also being brought into play during this period. The central role of keep as the main defensive stronghold gave way to defence in depth on the curtain wall, which was enhanced by carefully sited mural towers. These in turn brought about a change in keep design; Orford may represent a new domestic and symbolic sophistication brought about by these changes (Heslop 1991). A recent study on the keep at Orford suggests that its architectural detail is for the most part deliberately distinguished from contemporary church building, which is not hugely surprising when one considers the period of construction falls at the height of the controversy between Henry and the Archbishop Thomas Becket (1991, 47-48). Furthermore, Heslop writes that many

of the features were 'meant to call to mind the glories of the ancient Mediterranean', in particular that of Byzantium. For example the polygonal shape can be seen in many of the mural towers of Constantinople and the circular hall with conical roof follows an eastern tradition noted in a number of contemporary sources (1991, 49-50). More specifically a Crusader/Moorish influence has also been suggested in relation to the pointed embrasures inside the keep (Martin Palmer pers com). This was certainly a period of transition in architectural style with the castles at Dover and Framlingham retaining the traditional round-headed (Romanesque) arches, whilst buildings such as Orford and Lincoln Cathedral were starting to employ a mixture of both Romanesque and Gothic styles (Jeremy Ashbee pers comm).

Archaeologists have for many years accorded English castles, particularly those of the 12<sup>th</sup> century and the King-Dukes of Normandy, the principle credit for the development of a new form of scientific fortification, in particular the use of mural towers (Cathcart King 1991, 90-91). Orford appears to have been one of the earliest castles in the country to employ this new technique of defence in depth, and whilst nothing of the castle's curtain wall or mural towers survive above ground, recent investigations have located part of the circuit. Surviving contemporary examples in the inner ward of Dover Castle as well as at Framlingham Castle provide us with some insight as to how Orford may have looked (Fig 50). This information, combined with Norden's illustration (Fig 7), has formed the basis of their depiction in the reconstruction painting.



**Figure 50**  
John Bereblock's 1626  
view of the keep and  
inner bailey of Dover  
Castle  
(© The College of  
Arms/Philipot's  
Collection MS.P.b.47)

The use of the mural or flanking towers was a classical device that became one of the most important developments in medieval military architecture. It is a surprisingly late development in the light of surviving Roman fortifications which employed mural towers or bastions, and within which many Norman castles were placed eg Pevensey (Sussex) and Portchester (Hants) (Kenyon 1990, 72). The mural tower enabled the whole circuit of the castle wall to be adequately defended by dividing it into sections. Each section would have been overtopped and commanded by a tower which projected forward into the field and which enabled flanking and cross-fire to be directed along the outer exposed face and base of the curtain wall, whilst at the same time protecting the defenders (Allen Brown 1964, 9).

Developments in weapons technology are thought to have been the main reason behind the return of the mural tower, in particular the crossbow, which provided effective flanking fire along stretches of curtain wall. The history of the crossbow is long and confused but its use was frowned on by the church as too cruel for use against Christians. It was banned by the Lateran Council in 1139, though its use was sanctioned against infidels in the east. However, by the 1160s, crossbowmen provided a technical advantage that was impossible for lords to resist (Cathcart King 1991, 93-96).

Whilst there is evidence for the use of mural towers in the timber defences of some early castles as well as in the 11<sup>th</sup> - century stone built defences of Richmond in Yorkshire, the earliest surviving examples of their extensive and systematic use is in the inner curtain wall at Dover, built by Henry II between c1168 and c1180 and at Framlingham following its rebuild by Roger Bigod at the end of the 12<sup>th</sup> century. At both sites the towers closely resemble each other, being small, rectangular and open-backed, and it seems likely that those at Framlingham are based upon the ones at Orford. This seems more plausible when other affinities between the two castles are noted, most notably the arch of the gateway at Framlingham and the entrance to the keep at Orford (Allen Brown 1977, 65).

The design of the curtain wall and mural towers at Orford remains conjectural but the available evidence suggests that the bailey was defined by a faceted curtain wall containing six mural towers and a gatehouse tower. Norden's view indicates that both wall and towers would have been raised on a battered plinth, which provided extra resistance to the battering ram and the bore, while also enabling stones and missiles dropped in defence to bound, ricochet and splinter amongst the assailants (Allen Brown 1976, 182-83). The building materials used in these defences would probably have matched the keep - sandy oolitic limestone from Northamptonshire for the plinth, quoins, door and window openings and local septaria for the main panels of walling. This soft stone weathers badly, and it seems likely that both the keep and defences would have been rendered to protect it from the rain and winds off the sea. This theory is supported through the recent excavations which revealed that the barbican walls had been rendered. Local coralline crag as well as Caen stone from Normandy for the finer detail may also have been used (Rhodes 2003, 4).

The position of the mural towers shown on figure 46 is based upon extrapolation of Norden's illustration together with evidence from the investigations to the north of the keep as well as

**Figure 51**  
Reconstruction of how  
one of the mural  
towers at Framlingham  
Castle may have  
looked  
(© English Heritage)



their logical positioning in relation to the keep (the turrets of the keep could be used as fighting platforms, so generally required clear views out over the curtain wall between the towers) and each other. With the exception of the two towers either side of the gatehouse, they are thought most likely to have resembled those at Framlingham, being relatively small and open backed (Fig 51). These may well have had temporary back walls, in the form of a wooden barrier, or a simple curtain, with each floor accessed via a ladder. The floors would most likely have been wooden gangways which could be easily removed in time of attack, thereby isolating an enemy which had succeeded in getting onto the wall-walk. The top of

each tower would have contained the main fighting gallery, although additional arrow loops may have been located at a lower level.

On each side of the gatehouse, Norden's view suggests that the mural towers were larger and possibly enclosed. This seems logical when considering the size of the bailey, as they would have provided additional accommodation as well as being in the most likely position to house the garderobes for those on gate duty, as seen at Framlingham. An example of the different uses of the mural tower can also be seen at Dover, where superficial similarity masks differences in firepower and purpose, with the north-eastern towers the only ones with upper storeys and first-floor garderobes (Fig 50; Coad 1995, 34).

The Orford curtain wall was probably formed into a series of short faces which met at very obtuse angles, thereby producing a trace which closely resembles that of the keep. However Norden's view (Fig 7), together with a watercolour of c1760 by Grosse or Grimm suggests the possibility of a curving wall. This seems incredibly unlikely for the period and builders would undoubtedly have preferred straight walling; the norm therefore, was for short faces, as can be seen at both Dover and Framlingham. With the exception of a window located close to ground level (probably a later addition) adjacent to the tower east of the gateway, Norden's view doesn't show any loopholes within the curtain. With the exception of Framlingham this was the norm and it seems possible that contemporary builders felt that loopholes at all levels of the curtain wall would have weakened it structurally (Cathcart King 1991, 84). A battlemented wall-walk would have linked all areas of the curtain, from which defenders would have been able to observe and shoot between the crenels, which would have held wooden shutters that could be swung out of the way or removed as required. The battlements of the keep turrets were organised in this way, as surviving sockets in the sides

of the merlons attest; these held iron pegs which attached to the shutters (Rhodes 2003, 18).

The reconstruction painting shows the section of wall on either side of the gatehouse to be lower than the rest of the circuit. This matches what is shown on Norden's illustration and corresponds to the level of the barbican revealed through the excavation. It has been suggested that this would have allowed a better view from the roof of the keep of those approaching the castle, and thus allow added defence if required (Sandy Heslop, pers comm). As mentioned at the beginning of this section, it may be that the walls on this side acted as a revetment to the castle platform where the sand ridge began to drop away. It may also have enhanced the visual impact of the castle, the lower walls increasing the grandeur of the keep. Lower walls would also have allowed more light into what was a small bailey with the curtain wall built very close in to the keep.

It is unclear if further defences, in the form of wooden galleries known as hoards or brattices, were employed at Orford. The Pipe Rolls for the year 1172-73 record the building of a *bretaschia* here, which has been interpreted by some as meaning a brattice, however this term could also infer the construction of a palisade (Potter *et al* 2002, 22). Our knowledge of such defences is limited as no timber versions survive in England, although stone examples - known as machicolations - can be seen on structures dating from the late 13<sup>th</sup> century. There is some evidence elsewhere for temporary hoards, in the form of single row of square mortices along the base of a parapet, into which lightly built screens could be inserted in an emergency. Larger holes, a second tier of holes or in some cases stone corbels, suggest a more substantial, possibly permanent hoard arrangement (Cathcart King 1991, 97).

Norden's view suggests that the gatehouse consisted of an enclosed mural tower pierced by an entrance passage that would most likely have been closed by doors and a portcullis and which had a room for accommodation and storage above. This was standard for the period and is closely comparable to the earlier gatehouse, of 1138, at the nearby Castle Rising (Norfolk). Furthermore at Castle Rising two straight walls originally projected out from each side of the entrance, to enclose and defend the approach with a barbican (Allen Brown 1978, 29-30). This closely matches the entrance arrangement at Orford, shown on Norden's plan and verified through excavation, and also be seen in several other castles and town defences eg Alnwick, Conisburgh, Lincoln, Prudhoe, Scarborough and Walmgate Bar in York (Fig 18; Kenyon 1990, 78-79; SCCAS 2003, 14). At Orford the passageway stretched some 35m across the berm from a stone bridge over the ditch, recorded in the Pipe Rolls as being constructed 1172-73. The gatehouse appears to have been set obliquely to the passageway, a defensive tactic which would have made use of the battering ram difficult. Further defence may have been provided on top of the passageway walls in the form of *hericia* (a revolving bar with spikes) as noted in the pipe rolls of 1172-73 (Potter *et al* 2002, 22). These could not have been placed upon a battlemented structure, which therefore leaves the passageway walls as a likely candidate.

The arrangement of the defences, particularly the situation of the ditch and counterscarp bank, with a berm some 35m wide between the ditch and curtain wall, is unusual. Such an arrangement suggests that the castle was placed inside an earlier earthwork, the best example being Old Sarum (Wilts) where the Norman castle occupies the centre of an Iron Age hillfort (Cathcart King 1991, 57). As noted in section 2.1, there is little evidence for extensive prehistoric activity and settlement in the area, and this combined with the fact that the Pipe Rolls of 1172-73 record the construction of 'a great ditch round the castle at Orford', strongly suggests that this feature is contemporary with the castle. Several theories can be advanced for this arrangement. First of all, the cutting a huge ditch into a sand ridge directly adjacent to a heavy stone structure was structurally unsound and would have risked collapse of the curtain wall and towers. It is possible that the ditch uncovered during the 2002 excavation outside the curtain wall was an initial attempt at a more standard arrangement which was found to be unfeasible.

It could also be tentatively suggested that the castle originally consisted of the keep encircled by the ditch and palisade - the *bretaschia* mentioned in the Pipe Rolls - and that the curtain walls were constructed at a later date. Such a theory cannot be substantiated with the Pipe Rolls which, whilst not specifically mentioning the construction of the curtain wall during 1165-73, do not in subsequent accounts indicate later building work. A more likely story may relate to the events of 1173 with the rebellion against Henry by his sons. Could the ditch together with a palisade have been constructed as a response to the political unease, to create a larger bailey for the increased provisioning or possibly to enable building work to be finished on the castle defences?



## **6 METHODOLOGY**

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The earthwork survey and field investigations were carried out by Louise Barker, Wayne Cocroft and Paul Pattison from the Cambridge office of English Heritage between October and December 2002. The survey was carried out at a scale of 1:500 using a Leica 1610 theodolite with integral electronic distance measurement, based upon a system of linked traverses (Fig 52). Further details were supplied using conventional graphical methods.

The survey was calibrated to the National Grid using a Trimble dual frequency Global Positioning Satellite (GPS) system. The base receiver was set up on a temporary survey station with a receiver (Trimble 4800) recording the position of three permanent survey markers which formed part of the survey traverse (Appendix 2). The co-ordinates of the base receiver were calibrated to the National Grid (OSGB 36) using Trimble Geomatics software, based on the position of the receiver relative to Ordnance Survey active GPS stations at Kings Lynn, Colchester, North Foreland, London and Northampton.

The report was researched and written by Louise Barker who also prepared the illustrations; it was edited by Paul Pattison and commented upon by Moraig Brown.

The site archive has been deposited in English Heritage's National Monuments record, Great Western Village, Kemble Drive, Swindon SN2 2GZ (NMR Reference: TM 44 NW 1), to where applications for copyright should be made.

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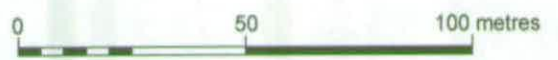
## **7 ACKNOWLEDGEMENTS**

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This report owes much to the input and help provided by John Rhodes, John Etté, Frank Gardiner, David Sherlock, Suffolk County Council Archaeological Service, Essex County Council Field Archaeology Unit, Kieth Wade, Jim O'Sullivan and staff at Orford Castle, Cain Hegarty, Sandy Heslop, Jonathan Coad, Martin Palmer, Jeremy Ashbee and the New Orford Town Trust.



**Figure 52**  
Survey Methodology:  
Traverse diagram



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OAU: Oxford Archaeology Unit

SCCAS: Suffolk County Council Archaeological Service

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## APPENDIX 1: ANTIQUARIAN ILLUSTRATIONS

Date	Description	Source
c1530	Chart of the coast of Suffolk: Picture on map (Fig 30)	British Library: Cottonian MSS, Aug.i.i.58; reproduced in Steer, J A 1966, plate 1
c1570-80	Chart of the Coast of Suffolk: Picture on map (Fig 6)	British Library: Cottonian MSS, Aug.i.i.64; reproduced in Steer, J A 1966, plate 3
1588	Chart of the Coast of Suffolk by Ananias Appleton: Picture on map (Fig 44)	British Library: Additional MSS, 11.802n; reproduced in Steer, J A 1966, plate 5
1600-1602	John Norden's survey of the estate of Sir Michael Stanhope (Fig 18)	SRO: EE5/11/1
1600-1602	John Norden's colour drawing of the castle 'Castri Orfordensis in orientem Prospectus' (Fig 7)	SRO: EE5/11/1
1738	Engraving by Samuel and Nathaniel Buck showing the castle from the north-west (Fig 8)	British Library: Maps k.Top.39.24.a
c1760	Watercolour by Grosse or Grimm showing the castle from the north	Private Collection
No date (1775-1851)	Watercolour by J W M Turner, showing Orford town from across the River Ore	Private Collection; sold as postcard in the parish church and reproduced as an engraving in Rhodes 2003, 30
1773	Engraving by Godfrey showing the castle from the east	British Library: Maps k.Top.39.24.b
1785	Engraving by Samuel Hooper based on Godfrey	Orford Museum; reproduced in Rhodes 2003, 31
1770-1790	A south and west view of the castle in Indian Ink by Isaac Johnston	British Library: Additional MS.8987.art.141-142
Late 18 <sup>th</sup> century	A view of the castle from the north-west	The Suffolk Traveller, 1829, reproduced in Potter et al 2002, 37
1818	Drawing and engraving by Higham showing the castle from the south-east (Fig 48)	SRO: GD 1678/107/2
1821	Drawing and etching by H Davy for his Suffolk Antiquities (Fig 9)	SRO: HD 1678/107/6
1833	Oil painting by William Clarkson Stanfield of Orford from across the River Ore	The Wallace Collection, Hertford House, Manchester Square, London
1840	Plans, drawings and elevations by Rev Charles Hartshorne (Fig 20)	Published in <i>Archaeologia</i> XXIX, 60-69
1856	Orford castle and Village by Henry Bright showing the quarrying on castle Green (Fig 41)	Norwich Castle Museum and Art Gallery; reproduced in Rhodes 2003, 5
1872	Two pencil drawings by Edward Blore of the Keep	British Library: Add.42,023 ff.61-62
c1880-90	Pen and ink sketch of the joggled arch in the entrance to the first floor hall by Emily Rope	Orford Museum; reproduced in Potter et al 2002, 38
1882	Pen and ink sketch of Dennington Cottage and the keep by Emily Rope	Orford Museum
C1890	Painting of Orford from across the River Ore	Orford Museum, sold as a postcard in the parish church
No date	Painting by G Arnold of Orford from across the River Ore	SRO: HD 1678/107/1 reproduced in an engraving by Higham dated 1816
No date	Painting showing the approach to Orford Castle from the town	Reproduced in Redstone 1900, 205 by kind permission of G Crisp

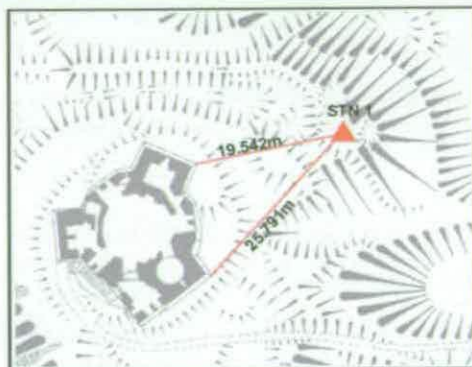
## APPENDIX 2



### SURVEY STATION INFORMATION

ENGLISH HERITAGE

<b>SITE NAME</b>	Orford Castle		
<b>Station number</b>	1	<b>Status</b>	Permanent
<b>Type of mark</b>	Metal spike and plate	<b>NMR number</b>	TM 44 NW 1
<b>Date of survey</b>	October 2002	<b>SAM/RSM no.</b>	21408
<b>Office of origin</b>	Cambridge	<b>Surveyors</b>	LB, WC
<b>OS National Grid</b>	<b>Eastings</b>	<b>Northings</b>	<b>Height</b>
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## APPENDIX 2



### SURVEY STATION INFORMATION

ENGLISH HERITAGE

<b>SITE NAME</b>	Orford Castle		
<b>Station number</b>	2	<b>Status</b>	Permanent
<b>Type of mark</b>	Metal spike and plate	<b>NMR number</b>	TM 44 NW 1
<b>Date of survey</b>	October 2002	<b>SAM/RSM no.</b>	21408
<b>Office of origin</b>	Cambridge	<b>Surveyors</b>	LB, WC
<b>OS National Grid</b>	<b>Eastings</b>	<b>Northings</b>	<b>Height</b>
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## APPENDIX 2



### SURVEY STATION INFORMATION

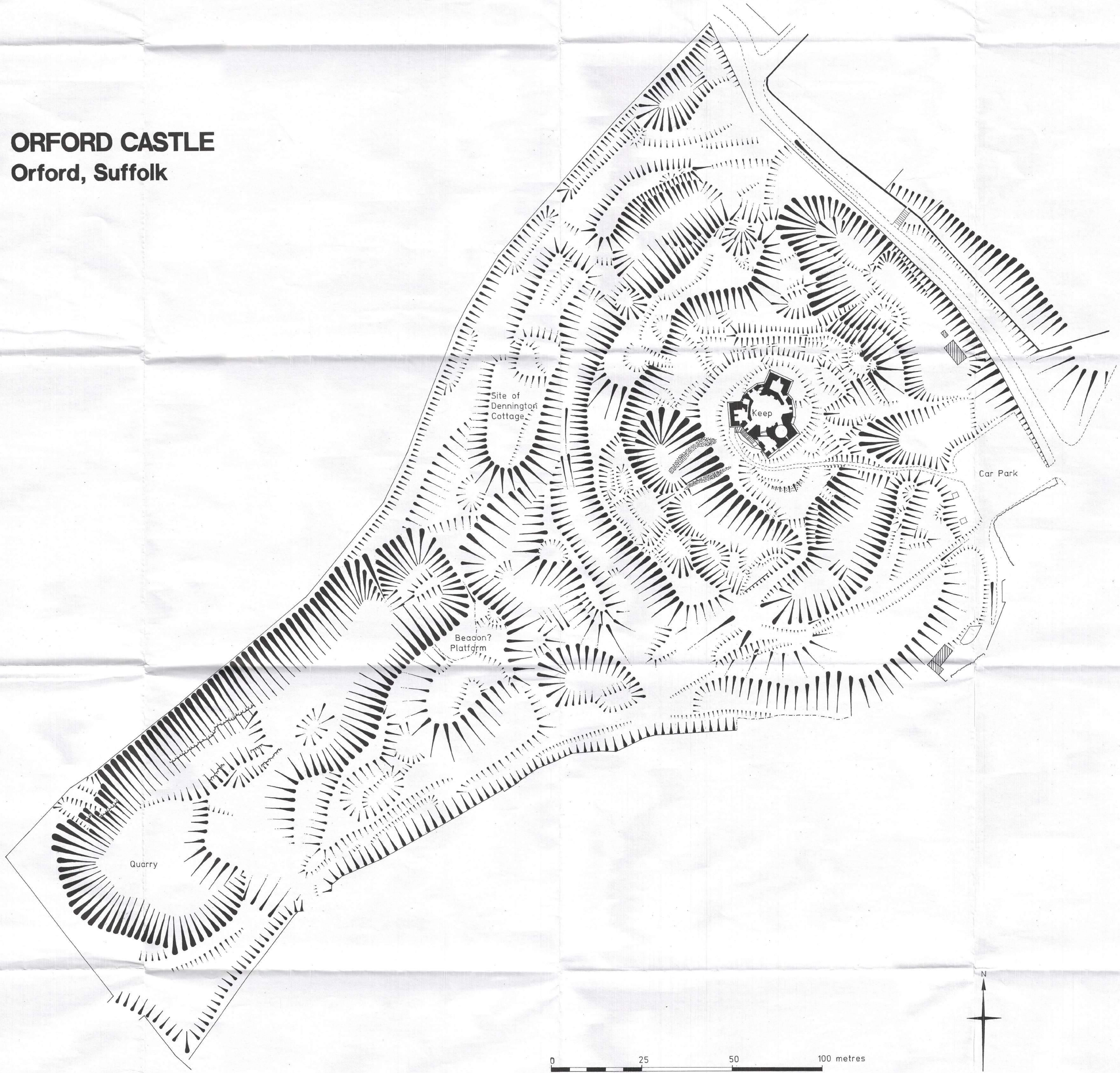
ENGLISH HERITAGE

<b>SITE NAME</b>	Orford Castle		
<b>Station number</b>	3	<b>Status</b>	Permanent
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<b>Date of survey</b>	October 2002	<b>SAM/RSM no.</b>	21408
<b>Office of origin</b>	Cambridge	<b>Surveyors</b>	LB, WC
<b>OS National Grid</b>	<b>Eastings</b>	<b>Northings</b>	<b>Height</b>
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