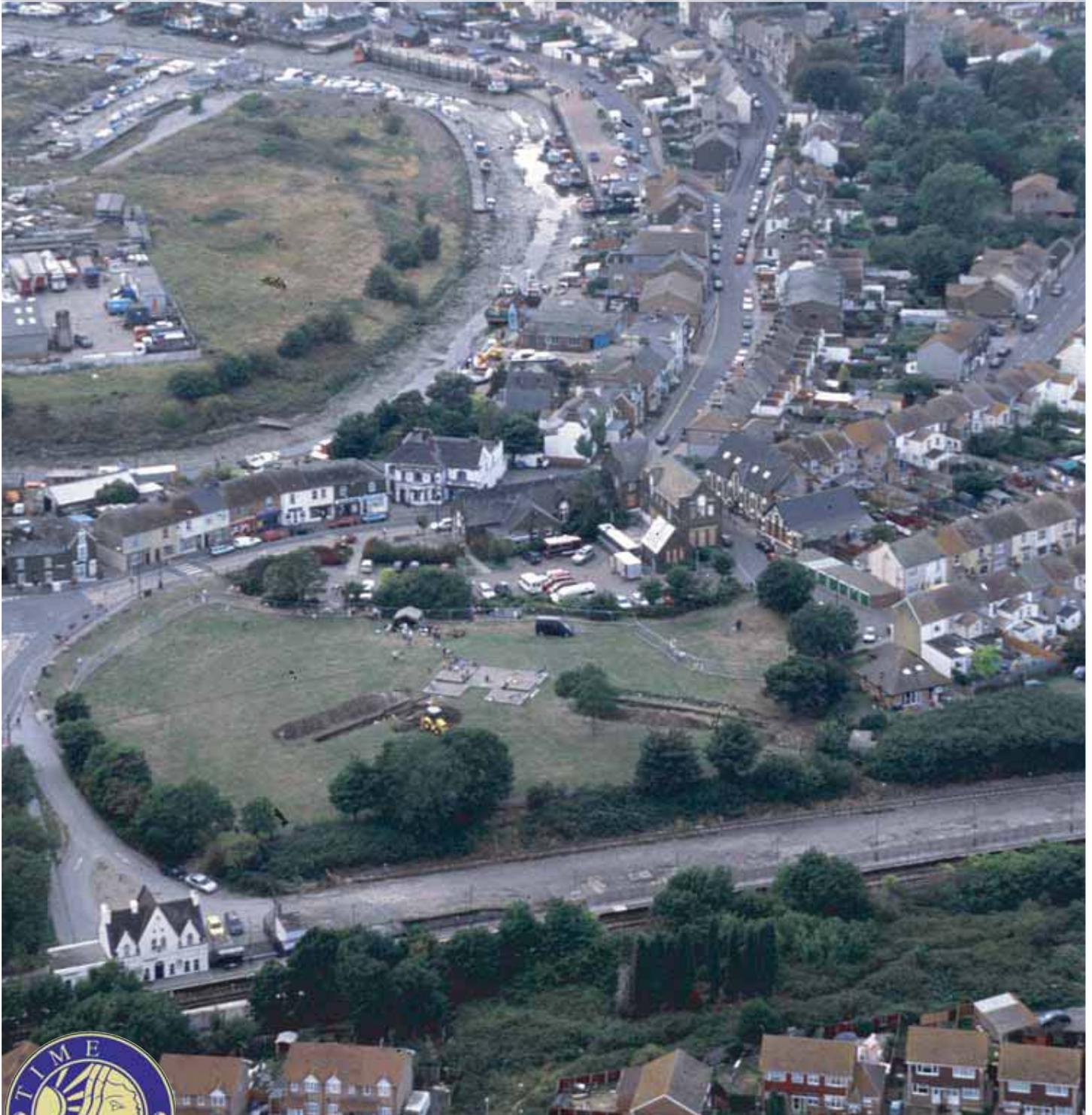




## Queenborough Castle, Isle of Sheppey, Kent

Archaeological Evaluation and Assessment of Results



**Queenborough Castle,  
Isle of Sheppey, Kent**

**Archaeological Evaluation and Assessment of Results**

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# Queenborough Castle, Isle of Sheppey, Kent

## Archaeological Evaluation and Assessment of Results

### Summary

Wessex Archaeology was commissioned by Videotext Communications Ltd to carry out archaeological recording and post-excavation analysis on an archaeological evaluation by Channel 4's 'Time Team' at Castle Green, Queenborough, Kent, centred on NGR 59122 17216. The fieldwork, comprising six machine-excavated evaluation trenches, was undertaken between 31<sup>st</sup> August and 2<sup>nd</sup> September 2005 by Time Team and local archaeologists. The evaluation area comprised Castle Green, a large, low mound used as a public area of open grassland in the centre of Queenborough. The mound, which lies at the East end of Queenborough High Street, is all that remains of Queenborough Castle and is a Scheduled Monument (SM Kent 23030).

Queenborough Castle was completed in 1367 and survived for 300 years before being systematically demolished. There are no visible remains of the castle today; the site is a public area that is grassed over. The eastern area of the site was cut into by a railway line in 1860; Queenborough Elementary School was built on a portion of the western area in 1864 and in the 19<sup>th</sup> century a pump-house was constructed in the centre of the site, on top of the original medieval well, now marked by a concrete platform.

Three possible medieval features, comprising a short, rather irregular length of gully and two small, irregular scoops or hollows, were located during the evaluation. The remains of the castle are represented by a series of large robber trenches, resulting from the mid 17<sup>th</sup> century demolition of the castle and subsequent salvage of the building materials; only very small areas of *in situ* medieval masonry foundations were recorded. The finds assemblage recovered from the fills of the robber trenches included two sherds of residual medieval pottery along with a small assemblage of Flemish brick fragments which are likely to have been used in the original structure of the castle. Further medieval pottery and building materials were recovered from other contexts, but were largely residual.

Following the mid 17<sup>th</sup> century demolition and salvage, which would have left the area scarred with large, partly filled robber trenches, a large made-ground deposit, comprising redeposited London Clay with rubble lenses was deposited over the whole of the mound. Other features and deposits recorded relate to the now demolished Victorian pump-house constructed above the castle well to provide water for the railway, the modern capping of the well-head and the landscaping of the mound undertaken by the local council in the 1970s.

The results of the evaluation means that several research questions relating to the size, orientation, morphology and preservation of the castle remains can now be addressed, although the comprehensive demolition and salvage of the fabric of the castle is likely to have destroyed all evidence of the function of individual rooms or areas within the castle, along with any evidence for repairs and alterations during the life of the castle.

## **Acknowledgements**

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Surveying was undertaken by Henry Chapman of the University of Hull, and the geophysical survey was undertaken by John Gater, Ian Wilkins and Claire Stephens of GSB Prospection. The excavation was undertaken by Phil Harding (also of Wessex Archaeology), Kerry Ely, Matt Williams, Raksha Dave, Brigid Gallagher and Ian Powlesland of Time Team and Simon Pratt, Tracy Smith, Rebecca Newhook, Abigale Guinness, Jude Westmacott, Jess Twiman and Ian Dixon of Canturbury Archaeological Trust, who were assisted by local metal detectorists Stephen Elliot and Phil Talbot. On-site recording, finds co-ordination and processing was undertaken by Vaughan Birbeck and Steve Thompson of Wessex Archaeology.

The archive was collated and all post-excavation assessment and analysis undertaken by Wessex Archaeology, including management (Roland Smith and Lorraine Mephram), finds (Lorraine Mephram, Nicholas Cooke and Stephanie Knight), report (Vaughan Birbeck), and illustrations (Rob Goller).

# Queenborough Castle, Isle of Sheppey, Kent

## Archaeological Evaluation and Assessment of Results

### 1 INTRODUCTION

#### 1.1 Project Background

1.1.1 Wessex Archaeology was commissioned by Videotext Communications Ltd to carry out archaeological recording and post-excavation analysis on an archaeological evaluation undertaken by Channel 4's 'Time Team' at Castle Green, Queenborough, Kent (centred on NGR 59122 17216). The fieldwork, comprising six machine-excavated evaluation trenches, was undertaken between 31<sup>st</sup> August and 2<sup>nd</sup> September 2005 by Time Team and local archaeologists.

1.1.2 The evaluation area (**Figure 1**) comprised Castle Green, a large, low mound used as a public area of open grassland in the centre of Queenborough. The mound, which lies at the East end of Queenborough High Street, is all that remains of Queenborough Castle and is a Scheduled Monument (SM Kent 23030). The town of Queenborough is located on the West side of the Isle of Sheppey, along the North side of a creek that empties into the Swale, the arm of the sea between the Isle of Sheppey and the mainland, immediately south of the estuary of the River Medway. The oldest part of the town lies on a coastal plateau at less than 5m OD (KHTS 2004), although the mound rises to 7.60m OD.

1.1.3 The underlying geology is London Clay surrounded by alluvial deposits which once formed extensive marshlands over much of the West and South of the Island. Today, the surrounding marshes mainly consist of low-lying rough grassland, protected from flooding by an elaborate system of dykes and earthen banks as sea defences.

#### 1.2 Archaeological and Historical Background

1.2.1 The Kent County Sites and Monuments Record (KSMR) records only six entries related to sites of medieval or earlier date in Queenborough and the immediate vicinity. There are no records relating to activities in the prehistoric, Romano-British or Saxon periods, although prehistoric and Romano-British sites have been found elsewhere on the Isle of Sheppey (Wessex Archaeology 2002). Apart from three medieval/post-medieval salt-working mounds and the parish church, KSMR records the site of the castle at castle green and the site of a moated masonry building, approximately 250m to the east of the castle. The irregularly shaped moat was first recorded as a possible earthwork in a field observation of 20<sup>th</sup> August 1963 (NMR reference 420343). The site was investigated in 1977 by the Kent Archaeological Rescue Unit. A moated platform of approximately 1ha. containing a substantial masonry building, interpreted as a 'homestead moated-site', was recorded

(Webster and Cherry, 1978). No dating is given for either the moat or the building, although a general medieval date (AD 1066-1500) is assumed.

- 1.2.2 The Isle of Sheppey is first mentioned in Ptolemy's *Geographike Huphegesis* of c. AD161; the Romans called it the Island of Sheep (*Insula Ovinium*). The island is the first land mass on the south bank of the Thames and Medway estuaries reached when approaching from the open sea and protects riverine access inland, and was therefore of strategic importance. The island was settled and fortified in the Saxon period, when it was incorporated into the Hundred of Milton in the Lathe of Scray. Queen Sexburga, wife of King Erconbert of Kent, founded a minster on Sheppey between AD664 and 675 at *Cyningburg* – now Minster (KHTS 2004).
- 1.2.3 In the 9<sup>th</sup> century the Isle of Sheppey and the Medway area was invaded by Vikings, who ravaged the island in AD835, plundering Rochester in AD842 and over-wintered on the island in AD855. The Vikings remained a threat in the area until the early 11<sup>th</sup> century, when their last attack was repelled by advancing Saxon forces in AD1016.
- 1.2.4 Following the Norman Conquest, Sheppey was split into separate manors; the area of Queenborough becoming part of the manor of Rushenden until the founding of the castle and the town in the mid fourteenth century. Although Queenborough itself was not founded until 1368, a small settlement, called Bynne or Bynnee, derived from the Old English *binnan ea*, meaning 'within the river' and probably referring to a site at the western end of the Swale. (KHTS 2004), appears to have existed here from the Saxon period. The town charter of 1368 described Bynnee as a "little hamlet of fishermen's houses".
- 1.2.5 In 1361 Edward III purchased land belonging to the manor of Rushenden on which a castle was to be built for the 'defence of the realm' (Woodruff 1897, 170-2). At least two houses, those of Simon Waryn and John Segar, were demolished to make way for the building and the occupants were rehoused (Beresford 1967, 459). It is uncertain whether the castle was built primarily as a royal refuge, perhaps from the black death, which was ravaging the country at the time, or for national defence – the years AD1360-1369 were a time of truce in the Hundred Years' War. In a charter of 1368 the village of Bynnee was formally replaced by the Royal Borough of Queenborough, which was laid out to accompany the castle and was named after Edward's wife, Philippa of Hainault. Queenborough is the only deliberately planted town of this period in England and it included a well-organised arrangement of tenement plots, a castle, a church, a harbour, a water mill, a market and a market house. Although the church is all that remains from Edward III's medieval town, the 1864 1<sup>st</sup> edition 25 inch OS map suggests that many of the plots off the high street retained their medieval boundaries. Most of the existing standing buildings date from the 18<sup>th</sup> century although the facades may conceal remnants of earlier buildings within. Records of building work associated with the construction of the new town appear in the castle accounts from 1366 onwards, suggesting that it was already under construction before the charter was granted. In 1368 Edward III transferred the wool staple from Sandwich to Queenborough, hoping to encourage more people to live in his new town. For

the next ten years Queenborough expanded rapidly, but when the staple was returned to Sandwich in 1378 Queenborough no longer thrived, reverting to a population of fishermen, oyster dredgers and boatmen; the town, however, retained its borough status (KHTS 2004).

- 1.2.6 Although very little of the castle remains, even as earthworks, there is a wealth of documentation relating to it, largely because it remained a royal castle throughout its life. It is fully documented in various exchequer accounts and records, particularly the Calendar and Pipe Rolls. Construction of the castle began in 1361 with up to 1,600 workers, including masons, carpenters, smiths, carters and labourers, under the control of a master mason, John Box, and was completed in around 1367. The castle, the only wholly new Royal castle built in England during the later medieval period, was built to a new, concentrically circular design, anticipating the centrally planned artillery castles of Henry VIII that were built nearly two hundred years later. It was also probably one of the first castles to be designed to house artillery; in 1365 “*two great guns and nine small ones*” were supplied to the castle from the Tower of London (Tout 1911, 675) although the castle accounts also refer to the construction and use of stone-throwing ‘engines’ and trebuchets within it.
- 1.2.6 The castle comprised a large circular rotunda with six external turrets or towers around a central court with a well in the centre. The rotunda was enclosed within a circular curtain wall with a gatehouse, probably to the west, and a postern gate to the east, all enclosed by a large moat. The entrance to the central rotunda was on the eastern side, the opposite side to the main entrance into the outer court. Open walled passage ways linked the outer gate and postern to the central rotunda, dividing and blocking the outer court, so that even if the outer ring wall or gatehouse was breached the attackers would be forced to move halfway round the circumference, exposed all the way to fire from the central rotunda (Allen Brown 1954, 135). Two masonry buildings also seem to have been built in the outer court between 1369 and 1377 (Allen Brown *et al.* 1963, 798), although their function is uncertain. Whatever its military capabilities may have been, Queenborough castle, like other medieval castles, was also a residence; the central rotunda contained residential apartments, including a large hall and other accommodation considered appropriate to a royal residence. From its completion the castle was one of a small group of residences to which the king’s movements were increasingly confined as he grew older and the frequency of his visits is apparent in contemporary records (*ibid.*, 802). The castle was attacked only once during its life; during the Jack Cade rebellion of 1450 Sir Roger Chamberlayne and his small garrison successfully defended the castle.
- 1.2.7 Fresh water appears to have been a problem as no local spring could be found. Barrels were provided to catch rainwater channelled through lead pipes within the confines of the castle. However, in 1393 one Robert Weldyker was paid £10 for sixty weeks work in digging the well. When the well was examined by the Navy Board in 1723 (Tyler 1994, 64) it was found to be lined with Portland stone to a depth of 60m (200 feet) with an average diameter of 1.5m (5 feet).

- 1.2.8 Following an immediate period of prosperity following its founding, the town of Queenborough's fortunes began to decline due to competition from the more accessible ports of Rochester, Chatham and the developing naval port of Sheerness. By the mid-17th century, the relevance of the Swale as a shipping route waned and Queenborough's fortunes had declined further with the development of Sheerness. The town's fate was sealed in 1650 when the government decreed that the castle was obsolete and it was destroyed. Luckily a plan of the castle, probably of Elizabethan date, survives in a manuscript held at Hatfield House (Allen Brown *et al.* 1963, 795) (**Figure 4**). A lost engraving by W. Hollar, dated 1610 and reproduced in an 18<sup>th</sup> century copy, depicts the castle in the early 17<sup>th</sup> century. The Parliamentary Commissioners who surveyed the castle in 1650 also produced a detailed description (*ibid.*). The castle was sold the same year and demolished.
- 1.2.9 In 1723 the Navy Board sent a party of officers to survey the "old well of Queenborough Castle" with a view to providing a fresh water supply for their dockyard at Sheerness; they found the well to be "*steined 200 feet down with circular Portland stone, which was, all entire and stood fair*". Although very little water was found in the well, deeper boring was undertaken enabling the well to produce "*good, soft, sweet and fine*" water (Tyler 1994, 64).
- 1.2.10 Very little remains of the castle today other than a few low earthworks. The railway line to Sheerness cut through the eastern side of the mound when it was constructed in the 1860s and a pump-house was built over the former castle well to provide water for the steam engines. In the 19<sup>th</sup> century also, a school was built over the western side of the castle; it is now used as a community centre and library. Most of the surrounding area has been developed for housing in recent years.

### **1.3 Previous Archaeological Work**

- 1.3.1 Very little previous formal archaeological work has taken place on the site. In September 1991, at the request of Swale Borough Council, Simon Pratt of Canterbury Archaeological Trust conducted an archaeological survey of the Western area of the site prior to the development of the current car park. He supervised the machine cutting and recording of four shallow slots across the car park. Ground water was encountered at a depth of around 0.50-0.60m, which with combined rainfall running off the car park resulted in frequent flooding of the four trenches. The findings suggest that the 1991 evaluation trenches may well have located the site of the Medieval Castle moat (Pratt 1991).
- 1.23 As part of the Kent County Council Historic Towns survey, Kent County Council Heritage Conservation Group conducted a desk top study of Queenborough in order to provide an evaluation of the archaeological and historical remains of settlement (KHTS 2004). The purpose of this study was to inform any future decision making in the planning process where archaeological deposits may be affected by development proposals. The study concluded that Queenborough is "*fairly typical of many small towns in England in that there has, as yet, been no significant archaeological research within the town*". As yet, its historical significance relies upon the

documentary evidence rather than direct knowledge of the archaeological remains.

## 2 AIMS AND OBJECTIVES

### 2.1 Introduction

2.1.1 A project design for the work was compiled by Videotext Communications (Videotext Communications 2005), providing full details of the circumstances and methods of the project, as summarised here.

### 2.2 Research Design

2.2.1 The aim of this project was to investigate Queenborough Castle and its medieval planned town. Whilst there has been little formal archaeological work in Queenborough, the history of both the Castle and town are well documented. The three day excavation concentrated on the specific research questions listed below. It was hoped that the project would be especially informative in the context of the imminent urban regeneration of Queenborough, which includes the area immediately surrounding the site. The project aimed to address the following specific research questions:

- **Preservation:** What is the state of preservation of the archaeological remains?;
- **Size:** Although it has been supposed that the Hatfield MS plan (Section 1.2.8, **Figure 4**) gives an accurate sense of the Castle's morphology and scale, Pratt's investigation (1991) suggests that the moat lies nearer to the centre of the castle than the plans would suggest.
- **Orientation:** Most models of the Castle suggest that the gate house/entrance to the Castle was aligned with the High Street. However, this pre-supposes that the castle favoured an approach by land rather than sea. An earthwork survey appearing in the *Victoria County History* for Kent (Vol. 1), suggests that the castle entrance was to the south-east, favouring the creek which lies to the south of the castle. This model is supported by aerial photographs, which show a rectangular parch mark in the vicinity of the entrance highlighted on the earthwork survey, although local knowledge suggests that this is the site of a Second World War air-raid shelter.
- **Function:** Although it is documented that the primary function of the Castle was defensive (Hasted's *History and Topographical Survey of the County of Kent*, 1798) the historical evidence makes its function debatable:
  - (a) Royally commissioned castles were rare in the medieval period when private individuals or corporations were more commonly responsible for their construction (Saunders 1970, 201). Officially, the Castle was built during the Hundred Years' War as the primary defence on the Swale protecting the mouth of the Thames and Medway Estuaries. However, it was built after the Treaty of Bretigny (1360) during a 'lull' in the Hundred Years' War (1360-69). The French had been heavily defeated at the Battles of Crécy (1346) and Poitiers (1356) and their economy and

powerbase was in tatters. Although victorious, England was also financially drained by the conflict. This calls into question the need for a highly expensive defensive fortification.

- (b) The castle was not in an ideal strategic position. According to Simon Pratt, an early, fortified medieval manor house already occupied a much better position at the mouth of the Swale.
  - (c) The castle was not only a huge drain on England's finances but also on its manpower since the Black Death had decimated the population. Its timing, construction, design and position might suggest its function was not simply defensive, but that it acted more as a symbol of power and refuge from the plague.
- **Morphology:** The 17<sup>th</sup> Century Hatfield MS plan of the Castle (**Figure 4**) is believed to give an accurate, proportioned representation of the inner and outer curtain walls. However, it does not illustrate any of the buildings within the outer court. Aerial photos suggest underlying structures including the outer ring wall and the central rotunda. The photos also suggest the existence of intra-mural buildings, which do not feature on any of the known plans of the Castle.
  - **Chronology:** Although it is acknowledged that Queenborough Castle and town were built upon the earlier settlement, Bynnee, tradition states that Edward III built Queenborough Castle from nothing. However, Richard Kilburne's 'A Topography or Survey of Kent' (1659) states that 'A castle was here of ancient foundation' and that Edward III rebuilt and enlarged it. Kilburne does not highlight the source of this information, but an archaeological investigation of the site could give us a greater understanding of its chronology and whether Edward's Castle was built on earlier foundations.
  - **Ordnance:** How was the Castle armed?. Hasted suggests that the Castle had been built with bows and arrows in mind and had no footings for cannons (*The History and Topographical Survey of the County of Kent* by Edward Hasted Esq., 1798). This is given as a reason for its destruction. However, Tout (1911) states that the privy wardrobe was responsible for equipping the new fortress of Queenborough with iron guns.

### 3 METHODS

#### 3.1 Survey

- 3.1.1 All survey work on the site was carried out using a Trimble Real Time Differential GPS survey system. All Time Team surveys, earthwork and geophysics, are compatible with each other. Surveys are related to the National Grid/ Ordnance Datum by local control using the 25" digital map. Digital copies of the survey data will be lodged with the County Sites, Monuments Record.

### **3.2 Geophysical Survey**

- 3.2.1 The castle site was investigated using a combination of resistance survey (Geoscan RM15 resistance meter), Ground Penetrating Radar (Pulse EKKO 1000 GPR unit with a 225MHz frequency antenna) and magnetic survey (Bartington Grad 601-2 fluxgate gradiometer). The results were analysed using a mixture of GSB and commercial software.
- 3.2.2 Ground conditions were moderate to good for data collection; most of the area had a relatively short grass cover and was free of obstructions. However, the centre of the survey area contained two wells which had been capped and covered by a raised brick/concrete rectangular platform (15m x 12m). Generally the quality of the resistance data was good, allowing identification and interpretation of the suspected archaeological features; however, the ground conditions were extremely dry which did hinder probe contact. For Health and Safety reasons a metal, 2m high, perimeter fence was erected around the survey area. The fence restricted the use of the gradiometer and calibration of the instrument was also affected.

### **3.3 Excavation and Recording**

- 3.3.1 A mechanical excavator (JCB or mini-digger) fitted with a toothless bucket, was used to remove the overburden from the trenches. All machine work was undertaken under constant archaeological supervision and ceased at the identification of significant archaeological deposits. All trenches were then cleaned by hand and archaeological deposits were excavated. All spoil arising from the excavations was scanned with a metal-detector by an experienced metal detectorist.
- 3.3.2 The standard Wessex Archaeology recording systems were used and all contexts and features were recorded using standard *pro-forma* record sheets. A record of the full extent in plan of all archaeological deposits encountered was made, usually at a scale of 1:20; sections were drawn as appropriate. The OD height of all principal strata and features was indicated on appropriate plans and sections. A photographic record of the investigations and individual features was also prepared. All trenches were related to the National Grid/ Ordnance Datum by local control using the 25" digital map.

### **3.4 Finds**

- 3.4.1 Objects relating to human exploitation of the area that were exposed in the course of excavation were recovered or, where recovery was impracticable, recorded. All finds were recorded by context and significant objects were recorded in three dimensions. All recovered objects were retained unless they were undoubtedly of modern or recent origin.

### **3.5 Environmental and Scientific Sampling**

- 3.5.1 The approach to environmental sampling remained flexible. The nature of the archaeological and environmental remains and their condition was not known in advance, so the policy was to sample any contexts which were undisturbed and which could potentially yield material deemed on site to further the research aims of the project. Unfortunately all the samples taken were

destroyed when Time Team's on-site store was burnt down in an arson attack on the night of 2<sup>nd</sup> September 2005. Attempts were made to salvage the samples, but all had been irretrievably contaminated.

## 4 RESULTS

### 4.1 Introduction

4.1.1 Details of individual excavated contexts and features, the full geophysical report (GSB 2005) and results of artefact analyses are retained in the archive. Brief context descriptions are presented in Appendix 1: Catalogue of Trench Descriptions.

### 4.2 Geophysical Survey

#### *Gradiometer Survey*

4.2.1 The data are dominated by a linear highly magnetic anomaly which runs northwest-southeast through the centre of the gradiometer survey area. This is presumed to be a large pipe possibly originating from the now obsolete wells. A second linear anomaly runs parallel to the first but gave a far weaker response and may be a drain or similar feature.

#### *Resistance Survey*

4.2.2 The resistance survey (**Figure 2**) proved to be the most successful of the three geophysical techniques used at this site. A linear high resistance anomaly (1) coincided with the weak magnetic response and represents a modern pipeline, while the rectilinear responses (2) provide a clear plan of the air-raid shelter, magnetic anomaly.

4.2.3 The core of the site, surrounding the concrete platform, comprises a broad block of high resistance readings that presumably relates to the main castle structure. The curving band (3) appears to represent the inner wall of the central rotunda. Other responses are thought to be associated with demolition rubble and landscaping, though the picture is far from clear. The readings at (4) are interpreted as the inner entrance into the castle.

4.2.4 Surrounding the core of the site is a broad band of low resistance (5) that is thought to represent the courtyard between the Keep and the outer defences. These defences, which comprise a moat ditch and wall, are visible in the data at (6). The high resistance reflects the collapse rubble from the wall and the relatively dry top of the broad ditch feature. At (7) the readings are particularly high and on excavation it was discovered that large quantities of stone from the castle had been pushed into the moat at this point. It is uncertain if the high readings at (8) relate to the castle or whether they are more recent in origin.

#### *Ground Penetrating Radar Survey*

4.2.5 The GPR survey did not show any evidence of the suspected castle remains. A few anomalies identified within the GPR traces related to modern features, pipes, which were later confirmed by excavation.

4.2.6 Radar data were also collected over part of the Keep, but was only of limited penetration depth and failed to record responses even above a wall later confirmed by excavation. The clayey soil is presumed to be highly conductive which reduces the penetration depth of the radar waves and produces the strong parallel reflections, seen in all the radargrams. The nature of the soil effectively masked the subsurface features.

### **4.3 Possible Medieval Features and Deposits**

4.3.1 Only three possible medieval features, comprising a short, rather irregular length of gully and two small, irregular scoops or hollows, were located during the evaluation. All three of the features were in trench 2 (**Figure 3**). Gully 204, which was 0.50m wide and 0.30m deep with steep, concave sides and a concave base, was aligned approximately south-east to north west and was traced for 2.2m across trench 2. This was filled with a very dark greyish brown silty clay (205) with common charcoal and abundant oyster shell inclusions from which a small assemblage of sandy/shelly ware (ten sherds/61g) pottery, broadly datable to the 12<sup>th</sup> to mid 13<sup>th</sup> century was recovered, along with small quantities of animal bone and a single fragment of window glass. Immediately to the north of gully 204 were two shallow, irregular features (206 and 208) with similar dark greyish brown silty clay fills (207 and 209 respectively) with charcoal and oyster shell inclusions and on the basis of this similarity, all three features are assumed to be broadly contemporaneous. Only a single sherd of pottery, dated to the mid 12<sup>th</sup> to the late 14<sup>th</sup> century was recovered from these features along with small quantities of animal bone and an iron musket ball. The pottery recovered suggests a medieval date, perhaps even pre-dating the construction of the castle, however, the presence of a single fragment of ?post-medieval window glass in gully 204 and an iron musket ball in scoop/hollow 206 perhaps indicates a later date. The function of these features is unclear.

4.3.2 Two sherds of London-type ware, datable to the later 12<sup>th</sup> or 13<sup>th</sup> century, were recovered from a thin layer of greyish brown silty clay (211) in trench 2. This deposit directly overlay the natural sub-strata on the inner side of the ring wall foundations and was sealed below the later made ground deposits that covered most of the site and filled the upper parts of the robber trenches and moat (210). The nature of this deposit is uncertain, but from its stratigraphic position, it is possible that this may represent some form of occupation deposit contemporary with, or even earlier than, the castle. The only other finds recovered from this deposit comprised four pieces of animal bone and five oyster shells. A similar, heavily truncated, greyish brown silty clay deposit was recorded in a similar stratigraphic position in trench 3 (320), however, no closely datable finds were recovered from this. The small finds assemblage recovered from 320 comprise four fragments of animal bone, two iron nails, five oyster shells and a single, very abraded fragment of roof tile.

### **4.4 Post-Medieval Features and Deposits**

4.4.1 The remains of the castle are represented by a series of large robber trenches, which also represent the mid 17<sup>th</sup> century demolition of the castle and subsequent salvage of the building materials, filled with loose mortar, small fragments of stone and re-deposited London Clay; only very small areas of *in situ* masonry foundations were recorded. The inner wall of the central rotunda,

represented by robber trench 107, was located in the western end of trench 1 (**Figures 3 and 5; Figure 6**, Plate 2); further robber trenches probably representing the inner rotunda wall were recorded in trenches 4 and 5, but were not excavated although a part of the apse-like structure, depicted on the Hatfield plan (**Figure 4**), within the inner court was also located. The robber trench representing the inner wall of the rotunda, and so presumably the original foundation, was 2.10m wide and survived to a depth of over 1.30m; the robber trench was not fully excavated as possible *in situ* foundation deposits were encountered at this depth. Although only a very short length of robber trench was exposed, enough was seen to infer that the central court was approximately 16-17m in diameter. An internal partition wall, or more probably the southern side wall of the passageway into the central court, was also represented by a robber trench in the western end of trench 1 (109). This was also approximately 2m wide and over 1.20m deep.

- 4.4.2 A massive robber trench, approximately 14m wide in trench 1 (116) and over 9m wide in trench 2 (216), appears to represent the demolition of the outer wall and towers of the central rotunda. The excessive depth of this feature precluded excavation, but a series of auger bores, which were only able to penetrate to a dense rubble deposit, across robber cut 116 indicated a depth in excess of 2.70m (**Figure 5**). This feature was again filled with loose mortar, small fragments of stone and re-deposited London Clay; it is likely that the central rotunda was cellared and that these massive features represent the demolition and removal of the outer wall of the rotunda and the walls of the cellars. The size of the robber trenches suggest that the central rotunda was between 38m and 40m in diameter, with the 6 towers extending up to 6m beyond this. The function of the *in situ* masonry foundation at the eastern end of trench 1 (112) is uncertain, but it appears likely to represent part of one of the masonry buildings known to have been constructed in the outer court.
- 4.4.3 The heavily truncated foundations of the outer ring wall were recorded in trenches 2 and 6. This was represented by relatively narrow (*c.* 1.70m) chalk foundations within a vertical sided trench; as the masonry was thought to be *in situ*, no excavation of these deposits was undertaken and the depth of the foundations is unknown. The internal diameter of the ring wall appears to have been between 84m and 85m. Immediately beyond the ring wall, the inner edge of the moat was recorded in trenches 2 and 6; the upper fill of the moat comprised re-deposited London Clay with sparse mortar and stone inclusions. In trench 2 the upper fill was excavated by machine to a depth of 2.75m, where a loose mortar and demolition rubble deposit was encountered, presumably representing the dumping of unwanted building and demolition materials into the moat during the robbing of the ring wall; the full depth and width of the moat is unknown. A large number of well-worked masonry blocks were recovered from the upper fill of the moat; when these were reassembled (**Figure 6**, Plate 1) it became clear that these represented the lining of a circular feature approximately 1.60m in diameter. Although these could have been used within a small turret or spiral stairway, it is perhaps more likely that these represent part of the lining of the castle well, possibly removed during the construction of the Victorian pump-house or the present well capping.

4.4.4 Two possible robber trenches were recorded in trench three; these were over 2m wide and up to 0.60m deep with vertical sides and were filled with loose mortar and demolition rubble. These probably represent masonry features within the outer court, probably part of the open walled passageway linking the postern gate to the central rotunda. This interpretation appears to be reinforced by a possible mortar and stone metalled surface (316) that survived between the two robber cuts and clearly predated the demolition deposits associated with the robbing of the walls.

4.4.5 The finds assemblage recovered from the fills of the robber trenches included two sherds of residual medieval pottery (shelly ware, dated to mid 11<sup>th</sup> to early 13<sup>th</sup> century) along with a small assemblage of Flemish brick fragments, which are likely to have been used in the original structure of the castle. The remainder of the assemblage comprised small fragments of moulded stone, roof tile fragments, clay pipe stems, oyster shells and a small assemblage of animal bone.

#### **4.5 Later features and deposits**

4.5.1 Following the 1650s demolition and salvage, which would have left the area scarred with large, partly filled robber trenches, some over 2m deep, a large made-ground deposit, comprising re-deposited London Clay with rubble lenses was deposited over the whole of the mound. Other features and deposits recorded relate to the now demolished Victorian pump-house that was constructed above the castle well to provide water for the railway, the modern capping of the well-head and the landscaping of the mound undertaken by the local council in the 1970s.

4.5.2 Finds recovered from the later features and deposits included much modern material and residual medieval (fragments of Flemish brick and roof tile) and post-medieval material. Two pieces of stone recovered from the topsoil in trench one are of interest; both are fragments of carefully worked spheres of a very similar size and appearance, possibly representing ammunition for a wrought-iron gun, a perier, trebuchet or catapult.

## **5 FINDS**

### **5.1 Introduction**

5.1.1 Finds were recovered from all six of the trial trenches excavated. The assemblage ranges in date from medieval to post-medieval, and includes structural materials and other artefacts relating to the construction and use of the medieval castle, although in small quantities, and mostly recovered from demolition and robbing contexts.

5.1.2 All finds have been quantified by material type within each context, and totals by material type and by trench are presented in **Table 1**. Subsequent to quantification, all finds have been at least visually scanned in order to gain an overall idea of the range of types present, their condition, and their potential date range. Spot dates have been recorded for selected material types as

appropriate (pottery, ceramic building material). All finds data are currently held on an Access database.

- 5.1.3 This section presents an overview of the finds assemblage, on which is based an assessment of the potential of this assemblage to contribute to an understanding of the site in its local and regional context, with particular reference to the construction and use of the castle.

## **5.2 Pottery**

- 5.2.1 The recovered pottery assemblage is very small (21 sherds). Of this, 16 sherds are medieval and five post-medieval. Medieval wares include shelly, sandy/shelly and sandy wares, all probably originating from source(s) in north-west Kent. The shelly ware (two sherds from robber trench 107) is potentially the earliest; this ware has a broad date range of mid 11<sup>th</sup> to early 13<sup>th</sup> century, and the sherds from 107 are from a jar rim of a type unlikely to be later than 12<sup>th</sup> century. The sandy/shelly ware, too (ten sherds from gully 204), includes a jar rim of similar type, although the ware itself has a slightly later date range (12<sup>th</sup> to mid 13<sup>th</sup> century). One sandy sherd from feature 206 is undiagnostic, and could date anywhere from mid 12<sup>th</sup> to late 14<sup>th</sup> century. Two sherds of London-type ware from lower moat fill 211 represent the only non-local wares; these are likely to be of later 12<sup>th</sup> or 13<sup>th</sup> century. With the exception of the sherds within moat fill 211, none of the medieval pottery is likely to be *in situ*, instead deriving from later robber trenches and topsoil contexts.
- 5.2.2 The six post-medieval sherds comprise coarse redwares, not closely datable (robber trench 116, context 307), and modern stonewares (topsoil in trenches 1 and 2)

## **5.3 Ceramic Building Material and Fired Clay**

- 5.3.1 The ceramic building material includes fragments of brick and roof tile. None of this material was recovered from *in situ* structural elements, and most instead derived from robber trenches, and levelling or demolition deposits.
- 5.3.2 Amongst the brick are several fragments of early Flemish bricks in a distinctive, pale-firing fabric, fairly poorly wedged (examples came from all trenches except 4 and 6). Some fragments are vitrified on one or more surfaces. Where measurable, these bricks are between 90 and 100mm wide and between 40 and 50mm thick; the thickest examples appear slightly better finished. Most of the bricks used in England before *c.* 1325 appear to have been imported from the Low Countries (and used for 'high status' buildings), and when the manufacture of bricks was reintroduced to this country it was at first carried out by immigrant craftsmen (Salzman 1952, 140-3). Alongside these imported bricks are fragments in a standard orange-red fabric, none of measurable size.
- 5.3.3 The remainder of the ceramic building material consists of flat roof tile, probably all of later medieval or early post-medieval date. Only one fragment (very abraded) came from a context likely to be contemporary with the occupation of the castle (320).

- 5.3.4 Seven small, abraded and undiagnostic fragments of fired clay, all from trench 2, are also likely to be of structural origin.

#### **5.4 Stone**

5.4.1 This category consists mainly of building material, and includes two fragments of moulding (context 104, robber trench 107) and two pieces with surviving tooled (flat) surfaces (107), as well as three pieces with no visible traces of working but which may have been reused in later walls, as two have mortar adhering (trench 1 topsoil, context 304 and robber cut 503). One piece of chalk (made ground deposit 203) is likewise unworked. One piece of roofing slate, probably of fairly recent origin, came from levelling/landscape deposit 302. The masonry remains possibly deriving from the medieval well lining (see **Figure 6**, Plate 1) were not retained for further examination or quantification following excavation.

5.4.2 Two other pieces of worked stone were recovered, both from topsoil in trench 1; both are fragments of shot of very similar size and appearance (possibly both from the same ball). Both fragments are of even shape and well finished by pecking; the ball(s) was of 170mm diameter (6¾ inches), and had an original weight of approximately 10kg (22lb). This type and size of ball could have been fired from a wrought-iron gun (late 14<sup>th</sup> to late 16<sup>th</sup> century), or from a perier (15<sup>th</sup> to 17<sup>th</sup> century).

#### **5.5 Metalwork**

5.5.1 Metalwork includes coins and tokens, as well as other objects of silver, copper alloy, iron and lead.

##### *Coins and tokens*

5.5.2 Five coins and tokens were recovered (four copper alloy and one lead). Two of the copper alloy coins were recovered unstratified from trench 1. One is probably a post-medieval half penny, too worn and corroded for closer identification, and the second is a farthing of George V (1920).

5.5.3 The other three objects were unstratified in trench 3. The first is a jeton, probably minted in Paris or Tournai during the reign of Louis XI (AD 1461 – 1483) or his successor Charles VIII (AD 1483 – 1497) (see Mitchener 1988, no. 580 and 581). Jetons were reckoning counters used in medieval accounting and mathematical calculations. They were used in conjunction with checkerboards or cloths in order to record values and sums of money. Specialist tokens for this purpose were produced from the late 13<sup>th</sup> century onwards, and they were in widespread use from the 14<sup>th</sup> century until the late 17<sup>th</sup> century, when they were made redundant by the increasing spread of Arabic numerals.

5.5.4 The second is a crude lead token. It comprises a circular flan bearing the letters H W above O(?) B W on the obverse. The lettering is poorly executed, but presumably represents the name of a tradesman. The reverse is blank. Tokens such as this were common in the mid to late 17<sup>th</sup> century, particularly during the period of the Commonwealth when Parliament failed to issue official small coinage. As a result, from 1648 onwards, tradesmen,

corporations and even private individuals struck their own tokens, usually in copper alloy, but sometimes in lead. No copper coinage was issued for the duration of the Commonwealth, and tokens effectively acted as the small change for the nation. It was not until 1672 that the crown started minting small coinage once again under Charles II that the use of these tokens became prohibited.

- 5.5.5 The third object is too badly worn corroded to be closely identified, and may not even be a coin or token.

#### *Silver and copper alloy*

- 5.5.6 The silver object, from trench 3 topsoil, is a cufflink. Apart from the coins and tokens, copper alloy objects comprise four buttons, four buckles, a small decorative fitting, a cutlery handle, and miscellaneous sheet/strip/bar fragments; all are demonstrably or probably of post-medieval date.

#### *Iron*

- 5.5.7 Ironwork consists almost entirely of nails and other structural items, although one musket ball was recovered (feature 206).

#### *Lead*

- 5.5.8 A lead musket ball can be added to the iron example (trench 1 topsoil), and other objects (apart from the two tokens: see above) include two window came fragments. One of these (from trench 1 topsoil) is identifiable as a cast type, of which examples are known from medieval contexts, for example at Battle Abbey, East Sussex (Knight 1985, 156, fig. 48, 2a). The remaining lead consists of waste and offcut sheet fragments.

### **5.6 Other Finds**

- 5.6.1 Other finds include a few fragments of clay pipe stem, one with a bowl heel, stamped with maker's initials on the sides of the heel (?/R); and two fragments of post-medieval window glass.

### **5.7 Animal Bone**

- 5.7.1 Most bones were in fair (25) or good (ten) condition, and no evidence of carnivore gnawing was observed. Over half were identified to species of which sheep/goat were most common, as is often the case in the medieval period (**Table 2**). Cattle and pig were present and the single bird bone was probably domestic fowl.
- 5.7.2 Sixteen bones could be aged and three measured. Cattle were often skeletally immature, although sheep/goats (one horned) were mature (again typical of the period where wool was an important commodity). A male pig was present (identified from the single loose tooth recovered), and all pig remains appeared to be from immature individuals.
- 5.7.3 Butchery marks were relatively common (seven in total), and (excepting the modern saw marks seen on a cattle sacrum) were mainly chops for portioning the meat on the bone and extracting marrow. Several bones were however

almost or fully intact and the marrow from these had not been utilised, indicating relatively un-intensive exploitation.

- 5.7.4 A large proportion of the bones were of high meat utility, perhaps suggesting that most material was from consumption rather than butchery waste, although the sample is far too small to be able to say this with any certainty. Some large fragments and a skull piece were recovered from contexts associated with the moat and this may at some stage have functioned as a repository for waste from butchery.

## **5.8 Marine Shell**

- 5.8.1 The marine shell includes examples of oyster, mussel, cockle and whelk. Both left and right valves are present amongst the oyster shell, in other words, both preparation and consumption waste.

## **6 DISCUSSION**

### *Introduction*

- 6.1 The results of the evaluation means that several of the research questions (see section 2.2 above) can now be addressed. Unfortunately the comprehensive demolition and salvage of the fabric of the castle is likely to have destroyed all evidence of the function of individual rooms or areas within the castle, along with any evidence for repairs and alterations during the life of the castle.

### *Preservation*

- 6.2 Very little of the original fabric of the castle remains, with only small areas of *in situ* masonry foundations surviving within the robber trenches. However, the robber trenches themselves preserve the ground plan of the castle, although evidence for repairs, alterations and function is likely to have been severely compromised, if not totally destroyed. The state of preservation of the castle remains must therefore be described as poor, with all of the castle superstructure destroyed and even the foundations heavily robbed.

### *Size*

- 6.3 The ringwall of the castle appears to have had an internal diameter of approximately 84-5m and the internal diameter of the central court appears to have been around 16-17m. The diameter of the central rotunda is more problematic, but a diameter of approximately 38-40m is suggested, with the six towers extending approximately 6m beyond this. When compared to the physical remains of the castle, recorded during the course of the project, the thickness of the ringwall depicted on the Hatfield MS plan (Figure 3) appears rather thicker than the remains indicate, suggesting that while this plan is broadly accurate, some elements of it may have been exaggerated.

### *Orientation*

- 6.4 The locating of the foundations of the apse-like feature which appears in the central court and the two parallel walls, probably representing a passageway between the rotunda and the postern gate on the Hatfield MS plan indicates that the main gate of the castle was to the west, facing down the High Street of the town and the postern gate to the east. Although not investigated, the parch-

mark seen on several aerial photographs of the site is, according to local knowledge, the site of a Second World War air raid shelter and is unlikely to represent the site of the gatehouse.

#### *Function*

- 6.5 Later demolition and robbing has probably destroyed all evidence of function within the various elements of the castle. It therefore appears that documentary records are more likely to produce evidence for function than archaeological excavation.

#### *Morphology*

- 6.6 The evaluation has confirmed the general accuracy of the Hatfield MS plan, although the thickness of the ringwall appears to have been slightly exaggerated on this. This interpretation appears to be supported by the results of the earlier evaluation within the car park (Pratt 1991), where the moat was located, but slightly closer to the centre of the mound than was expected.

#### *Chronology*

- 6.7 Later demolition and robbing has probably destroyed all evidence of any chronological detail within the structure of the castle. Documentary evidence suggests that the castle was built to a single plan over several years, but appears to have been altered very little over its subsequent life.

#### *Ordnance*

- 6.8 The recovery of two fragments of a stone ball or balls from the topsoil in trench 1 is significant. There is documentary evidence for cannon being supplied to the castle from the Tower of London in 1365 and for the presence of an artillery specialist (*valettus artillerie*), John Arblaster, at Queenborough between 1373 and 1375 (Tout 1911, 675 and 682). Although these finds may represent ammunition for other devices, such as catapults and trebuchets, the stone appeared very carefully worked into a sphere, which would have been required for a cannon ball, but not necessarily for catapult or trebuchet projectiles. The report of the Parliamentary Commissioners of 1650 stated that the castle was unsuitable for artillery, however, it may be that emplacements built for 14<sup>th</sup> century cannon were too small, or too weak, to house the larger and more powerful cannon of the 17<sup>th</sup> century.

## **7 RECOMMENDATIONS**

- 7.1 A short article, probably between 2000-3000 words with two or three supporting illustrations, based on the results, finds, discussion and figures in this assessment report, in the *Archaeologia Cantiana* or *Medieval Archaeology* is suggested as an adequate level of publication given the results from this project. This would comprise a brief introduction detailing the circumstances of the project and the aims and objectives; a results section detailing the structural remains recorded, with finds information integrated into the text as appropriate; and a brief discussion of the results, with reference to the original project aims and objectives.

## **8 ARCHIVE**

- 8.1 The archive, which includes all artefacts, written, drawn and photographic records relating directly to the investigation is undertaken, is currently held at the offices of Wessex archaeology under the site code QCM 05 and Wessex Archaeology project no. 59470. The paper archive is contained in one lever arch file. In due course, Time Team will transfer ownership of the archive to Maidstone Museum.

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**Table 1: Finds totals by material type and by trench (number / weight in grammes)**

<b>Material</b>	<b>Tr 1</b>	<b>Tr 2</b>	<b>Tr 3</b>	<b>Tr 4</b>	<b>Tr 5</b>	<b>Tr 6</b>	<b>TOTAL</b>
Pottery	6/56	14/144	1/5	-	-	-	<b>21/205</b>
<i>Medieval</i>	3/32	13/79	-	-	-	-	<b>16/111</b>
<i>Post-Medieval</i>	3/24	1/65	1/5	-	-	-	<b>5/94</b>
Ceramic Building Material	32/3426	20/1470	24/4404	3/82	18/4200	11 /511	<b>108/14,093</b>
Fired Clay	-	7/93	-	-	-	-	<b>7/93</b>
Clay Pipe	8/23	-	3/9	-	-	-	<b>11/32</b>
Glass	1/7	1/25	-	-	-	-	<b>2/32</b>
Stone	7/7554	1/653	2/1659	-	-	1/226	<b>11/10,092</b>
Metalwork	66	12	18	11	-	-	<b>107</b>
<i>Coins/tokens</i>	2	-	3	-	-	-	<b>5</b>
<i>Silver</i>	-	-	1	-	-	-	<b>1</b>
<i>Copper Alloy</i>	12	6	1	1	-	-	<b>20</b>
<i>Iron</i>	30	4	8	8	-	-	<b>50</b>
<i>Lead</i>	22	2	5	2	-	-	<b>31</b>
Animal Bone	12/111	19/791	12/104	-	-	1/28	<b>44/1034</b>
Shell	1/63	177/1596	10/72	-	-	3/70	<b>191/1801</b>

**Table 2: Species list and percentages (NISP)**

	<b>Cattle</b>	<b>Sheep/Goat</b>	<b>Pig</b>	<b>Bird</b>	<b>Unidentified</b>	<b>Total</b>
NISP	5	11	3	1	15	35

## APPENDIX 1: CATALOGUE OF TRENCH DESCRIPTIONS

Trench 1		NGR 591237 172144
Dimensions -24m x 3.8m		Ground Level 6.54m-7.38m OD
Context No.	Description	Depth
101	Mid greyish brown silty clay loam topsoil with sparse-moderate small stone inclusions.	0-0.25m
102	Dark greyish brown slightly silty clay with abundant stone, slate and mortar inclusions. Recent levelling or landscaping deposit.	0.25-0.70m
103	Mid-dark yellowish brown clay with sparse stone and mortar inclusions. Made ground deposit.	0.70-2.60m
104	Mid greyish brown silty clay. Small lens of material only seen in western end of trench.	1.10-1.20m
105	Mid yellowish brown clay and mid-light grey degraded mortar and stone demolition rubble. Fill of robber trench 107.	1.50-2.40m+
106	Pale grey degraded mortar with abundant stone inclusions. Upper fill of robber cuts 107 and 109, but extends beyond the cuts.	1.20-1.50m
107	Curvilinear robber trench, 2.70m+ long, 1.70m wide and 1.20m+deep (not fully excavated) with vertical, stepped, sides. Represents the demolition and removal of the inner wall of the central rotunda.	1.20-2.40m+
108	Mid yellowish brown clay and mid-light grey degraded mortar and stone demolition rubble. Fill of robber trench 109.	1.50-2.40m+
109	Linear robber trench, 2.80m+ long, 1.80m wide and over 1.20m deep (not fully excavated) with vertical sides. Represents the demolition and removal of an inner partition wall within the central rotunda.	1.20-2.40m+
110	Pale yellowish brown sandy clay with abundant degraded mortar inclusions. Basal fill of robber cut 116	0.25-1.50m+
111	Mid brown slightly silty clay. Possibly natural London Clay sub strata, or re-deposited natural clay used to construct the castle mound.	0.25m+
112	Large sub-rectangular pit or masonry robbing trench, 3.70m+ long, 1.90m wide and 1.10m deep with steep, slightly irregular stepped sides and a fairly flat base, possibly representing some form of structure within the outer court.	0.25-1.30m
113	Pale grey degraded mortar with abundant stone inclusions. Fill of robber cut 112.	0.25-1.30m
114	Very dark grey sandy silt deposit. Secondary fill of massive robber trench 116.	2.20-3.40m
115	Pale yellowish brown sandy clay with abundant degraded mortar inclusions. Fill of robber cut 116, probably the same deposit as 110.	2.80-3.40m+
116	Massive robber trench, assumed to be sub-circular, approximately 16m wide and over 3.25m deep with steep, convex sides, representing the demolition of the whole of the outer wall and interior walls and structures of the central rotunda. Cuts the fill of feature 112 and the natural sub-strata 111.	0.25-3.40m+

<b>Trench 2</b>		<b>NGR 591238 172190</b>
<b>Dimensions – 33m x 1.5m</b>		<b>Ground Level 6.47m–7.23m OD</b>
<b>Context No.</b>	<b>Description</b>	<b>Depth</b>
201	Mid greyish brown silty clay loam topsoil with sparse-moderate small stone inclusions.	0-0.20m
202	Dark greyish brown slightly silty clay with abundant stone and mortar inclusions. Recent levelling or landscaping deposit.	0.20-0.40m
203	Mid-dark yellowish brown clay with sparse stone inclusions and common pale grey sandy lenses. Made ground deposit.	0.40-0.85m
204	Small linear gully, 2.20m+ long, 0.50m wide and 0.30m deep with steep, concave sides and a concave base. Aligned approximately south-east to north-west. Cuts deposits 215.	0.30-0.60m
205	Very dark greyish brown silty clay with common charcoal and abundant oyster shell inclusions. Fill of gully 204.	0.30-0.60m
206	Irregular, sub-circular feature, 1.10m+ long, 1.00m wide and 0.28m deep with irregular sides and a concave base. Probably represents the remains of a heavily truncated pit or scoop. Cuts deposit 215.	0.30-0.58m
207	Dark greyish brown silty clay with sparse charcoal and oyster shell inclusions. Fill of feature 206.	0.30-0.58m
208	Irregular sub-circular feature, 0.80m long, 0.35m wide and 0.15m deep with steep, irregular sides and a fairly flat base. Possibly represents a heavily truncated pit or post-hole.	0.30-0.45m
209	Dark greyish brown silty clay with sparse charcoal and oyster shell inclusions. Fill of feature 208.	0.30-0.45m
210	Mid brown slightly silty clay with sparse stone and mortar inclusions. Upper fill of moat 219 which also covers wall 217 and extends beyond the southern edge of the moat.	0.30-1.10m
211	Mid greyish brown silty clay. Small lens of darker clay sealed between 210 and natural sub-strata 215.	0.50-0.60m
212	Mid yellowish brown silty clay with common stone and mortar inclusions. Upper fill of robber cut 216.	0.40m-1.70m+
213	Mid greyish brown silty clay with abundant stone and mortar inclusions. Lower fill of robber cut 216.	0.25-0.90m+
214	Mid yellowish brown silty clay, cut by robber cut 216. Directly overlies natural sub-strata 215. Confined to central area of trench.	0.25-0.90m
215	Mid brown slightly silty clay. Possibly natural London Clay sub strata, or re-deposited natural clay used to construct the castle mound.	0.90m+
216	Massive robber cut, assumed to be sub-circular, more than 10m wide within the trench and over 1.5m deep with steep, convex sides, representing the demolition of the whole of the outer wall and interior walls and structures of the central rotunda. Probably the same as robber cut 116 in trench 1.	0.25- 1.70m+
217	A single course of limestone and pale grey sandy mortar footings, possibly representing the line of the curtain wall.	0.75-0.85m
218	Mid brown slightly silty clay with sparse stone and mortar inclusions. Fill of moat 219. Sealed below 210 and overlies rubble deposit 220.	1.10-2.50m
219	Cut of moat. As the moat was cut into the natural London Clay substrata and was mostly filled with re-deposited natural clay, this cut proved impossible to find, however, it was assumed to have been immediately to the north of the remains of the possible curtain wall 217. This was excavated by machine to a maximum depth of 2.75m, where the moat was filled with mortar and stone demolition rubble (220).	0.75-2.75m+
220	Pale grey mortar and stone demolition rubble in lower part of moat. Sealed below 218. Not excavated due to excessive depth.	2.50-2.75m+

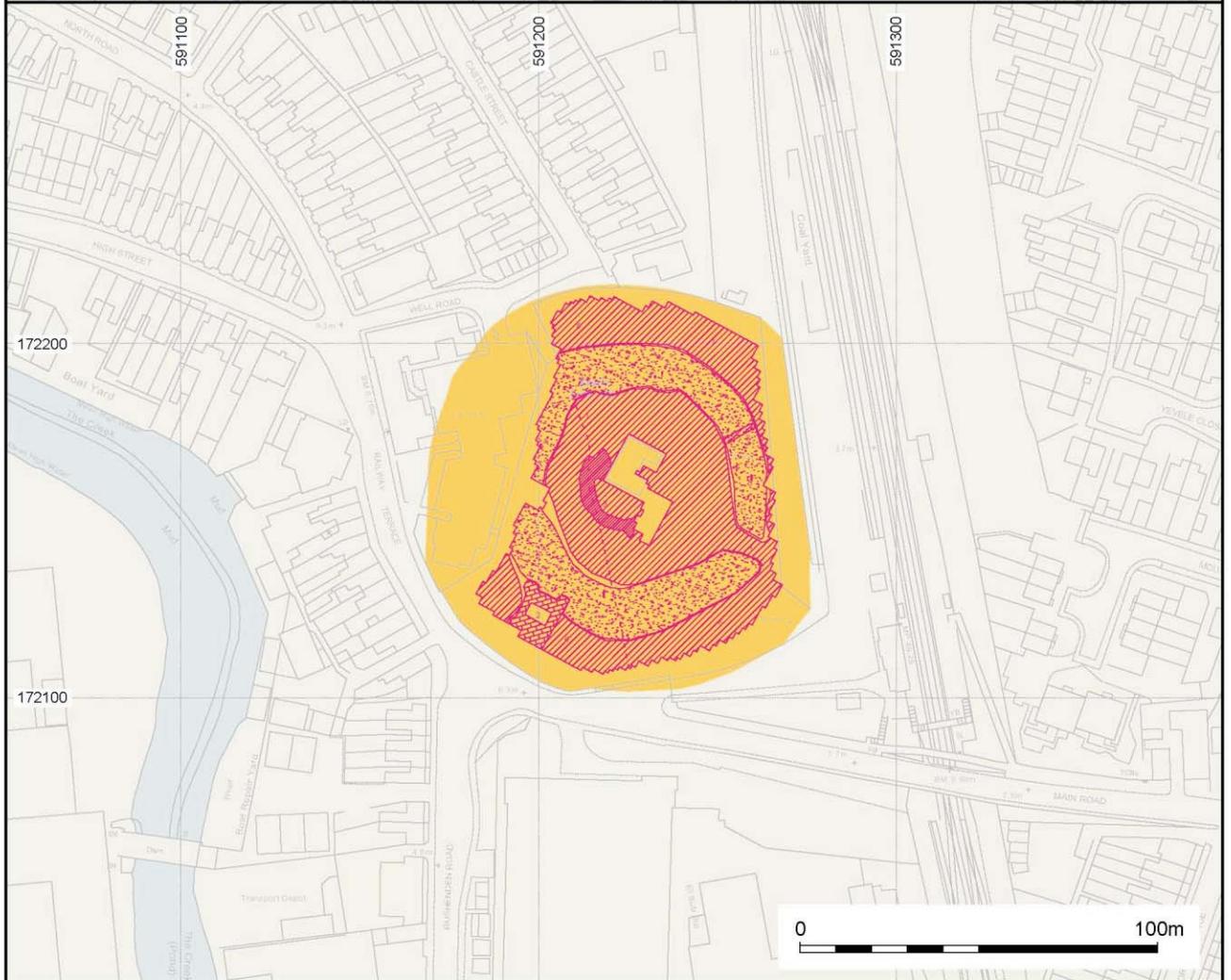
<b>Trench 3</b>		<b>NGR 591257 172145</b>
<b>Dimensions – 11.5m x 1.5m</b>		<b>Ground Level - 6.50m OD</b>
<b>Context No.</b>	<b>Description</b>	<b>Depth</b>
301	Mid greyish brown silty clay loam topsoil with sparse-moderate small stone inclusions.	0-0.20m
302	Dark greyish brown slightly silty clay with abundant stone, modern brick and concrete inclusions. Recent levelling or landscaping deposit within cut 321.	0.20-0.70m
303	Mid brown clay with common stone and mortar inclusions. Made ground deposit. Probably the same as 322.	0.35-1.10m
304	Pale grey degraded mortar and stone demolition deposit with rare mid brown clay lenses.	0.20-1.10m
305	Dark greyish brown clay with common stone and mortar inclusions. Upper fill of robber trench 311.	0.80-1.40m
306	Mid greyish brown slightly silty clay with abundant stone and mortar inclusions. Fill of robber trench 311.	0.80-1.40m+
309	Dark brown clay with sparse stone and mortar inclusions. Fill of robber trench 311.	0.80-1.40m+
310	Mid greyish brown clay with sparse stone and mortar inclusions. Lowest visible fill of robber trench 311.	1.10-1.40m+
311	Approximately east-west aligned robber trench, 2.10m wide and over 0.60m deep with vertical sides. Probably represents the demolition and removal of a corridor wall leading to the entrance to the central rotunda. Not fully excavated.	0.80-1.40m+
312	Mid yellowish brown clay with common stone and mortar and sparse oyster shell inclusions. Fill of feature 313.	1.10-1.50m+
313	East-west aligned linear feature with fairly steep, straight sides. The northern side of this feature has been removed by a modern service trench, however, it is over 1.80m wide and over 0.40m deep. It is unclear whether this feature represents a robber trench, but it is assumed to be broadly contemporary with the demolition of the castle.	1.10-1.50m+
314	Mid brown slightly silty clay. Possibly natural London clay sub strata, or re-deposited natural clay used to construct the castle mound. Same as 319 and 323	0.95-1.50m+
315	Mid greyish brown clay with abundant stone and mortar inclusions. Pre-dates cut 311, but appears to represent a demolition deposit.	0.75-0.95m
316	Pale grey crushed mortar with very abundant small greensandstone inclusions. This deposit could represent a metallated surface, as this pre-dates demolition deposit 315 and robber trench 311; this could be the remains of the surface of the outer court or corridor.	0.95-1.07m
317	Mid brown clay with rare white mortar inclusions. Possible bedding deposit below possible surface 316.	1.07-1.18m
318	Pale grey crushed mortar with very abundant small greensandstone inclusions. This deposit could represent an earlier phase of metallated surface pre-dating possible surface 316.	1.18-1.28m
319	Mid brown slightly silty clay. Possibly natural London clay sub strata, or re-deposited natural clay used to construct the castle mound. Same as 314 and 323.	1.28-1.40m+
320	Very dark greyish brown silty clay with common charcoal inclusions. This deposit was very heavily truncated by later features; however, it is possible that this deposit represents some form of occupation during the life of the castle rather than activities relating to the demolition.	0.60-0.75m
321	Modern cut, 5.5m wide within trench with moderately steep, straight sides and a fairly flat base, filled with modern rubble deposit 202. This presumably represents either the landscaping of the present park or the demolition of the pump-house.	0.20-0.70m
322	Mid brown clay with common stone and mortar inclusions. Made	0.20-0.50m

	ground deposit. Probably the same as 303.	
323	Mid brown slightly silty clay. Possibly natural London clay sub strata, or re-deposited natural clay used to construct the castle mound. Same as 314 and 319.	0.50-1.15m+
324	Very heavily truncated remains of an east-west aligned wall footing, truncated by cut 321 and a modern service trench. This comprised rough-hewn chalk and greensandstone bonded with pale grey sandy lime mortar constructed within a foundation trench. Survives to a maximum height of 0.60m and a width of 0.70m. It is uncertain whether this feature represents the remains of a corridor wall or an auxiliary building within the outer court.	0.25-0.85m
325	Construction cut for wall 324, completely destroyed on southern side by cut 321. Sides appear to vertical, or even slightly undercutting.	0.25-0.85m

<b>Trench 4</b>		<b>NGR 591217 172164</b>
<b>Dimensions: - 5.4m x 3.5m</b>		<b>Ground Level - 7.50m OD</b>
<b>Context No.</b>	<b>Description</b>	<b>Depth</b>
401	Mid greyish brown silty clay loam topsoil with sparse-moderate small stone inclusions.	0-0.15m
402	Concrete wall footing. Part of Victorian pump-house.	0.15-0.70m+
403	Yellow brick wall. Part of Victorian pump-house.	0.15-0.70m+
404	Construction cut for pump-house wall 403.	0.30-0.70m+
405	Dark greyish brown silty clay loam with modern brick and concrete inclusions. Demolition deposit associated with the destruction of the pump-house.	0.15-0.35m
406	Backfill of construction cut 407	0.30-0.70m+
407	Construction cut for pump-house wall 402.	0.30-0.70m+
408	Mid greyish brown silty clay with common stone and mortar inclusions. Made ground deposit.	0.30-0.47m
409	Approximately north-south aligned robber trench, 3.20m+ long and 1.30m+ wide with vertical sides. Cuts earlier robber trench 410. Not fully excavated.	0.47-0.87m+
410	East-west aligned robber trench, 2.50m+ long and over 2.00m wide with vertical sides. Not fully excavated.	0.47-0.87m+
411	Mid-dark brown clay with abundant stone and mortar inclusions. Fill of robber trench 410. Cut by later robber trench 416	
412	Concrete base of present well capping.	0.15-0.70m+
413	Backfill of construction cut 404	0.30-0.70m+
414	Mid-light yellowish grey chalk and mortar deposit. Possible <i>in situ</i> wall footing, or alternatively a metalled surface, 1.05m long and over 0.75m wide. Cut by robber trench 416.	0.50-0.70m+
415	Pale grey degraded mortar and stone rubble fill of robber trench 416.	0.47-0.87m+
416	Mid-light yellowish grey chalk and mortar deposit. Possible <i>in situ</i> wall footing, or alternatively a metalled surface, 3.10m long and up to 2m wide. Cut by robber trenches 410 and 416, construction cuts 404 and 407 and well capping 412. Not fully excavated. This deposit was presumably originally within a construction cut, however, truncations on all sides have removed any trace of this.	0.47-0.70m+
419	Mid-dark greyish brown slightly silty clay with common-abundant stone and mortar inclusions. Made ground deposit.	0.35-0.47m

<b>Trench 5</b>		<b>NGR 591223 172150</b>
<b>Dimensions – 5m x 1.7m</b>		<b>Ground Level 7.05m OD</b>
<b>Context No.</b>	<b>Description</b>	<b>Depth</b>
501	Mid greyish brown silty clay loam topsoil with sparse-moderate small stone inclusions.	0-0.25m
502	Pale grey mortar and stone rubble, possible <i>in situ</i> wall footings overlain by sparse lenses of mid brown clay. Fill of robber cut 503.	0.25-1.15m+
503	Large robber cut aligned approximately east-west, 1.70m+ long and 2.70m wide with vertical sides. Filled with 502. Not fully excavated.	0.25-1.15m+
504	Mid brown slightly silty clay. Possibly natural London clay sub strata, or re-deposited natural clay used to construct the castle mound.	0.25-1.15m+

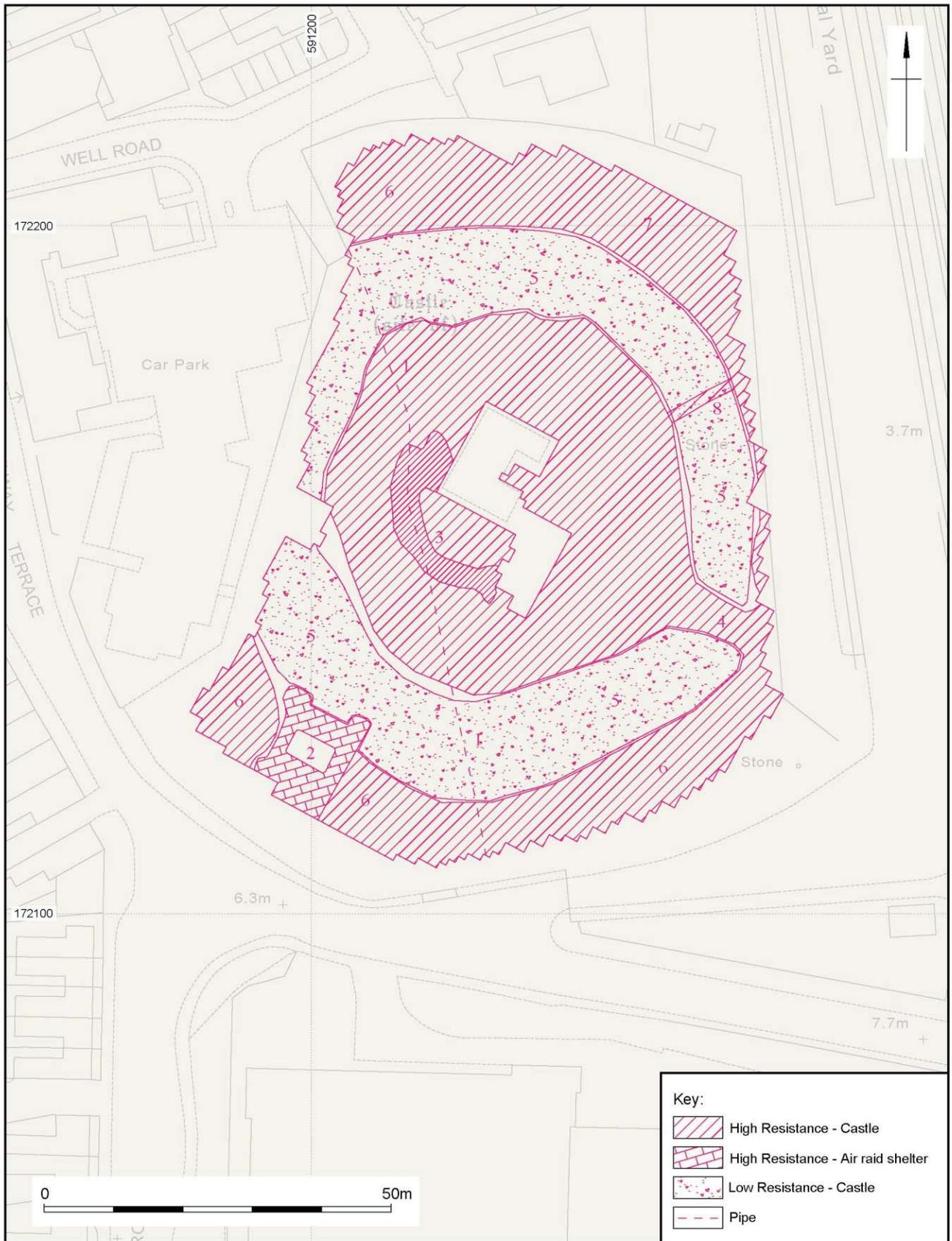
<b>Trench 6</b>		<b>NGR 591262 172136</b>
<b>Dimensions – 5.75m x 1.60m</b>		<b>Ground Level - 5.66m-6.17m OD</b>
<b>Context No.</b>	<b>Description</b>	<b>Depth</b>
601	Mid greyish brown silty clay loam topsoil with sparse-moderate small stone inclusions.	0-0.10m
602	Linear cut aligned approximately north-south. Not fully excavated, 0.35m+wide with very steep-vertical sides. Possible construction cut for curtain wall 612. Only western side survives.	0.10-0.85m+
603	Light greyish brown silty clay with sparse limestone inclusions. Backfill of possible construction cut 602.	0.10-0.85m+
604	Robber trench, aligned approximately north-south, 2.70m wide with near vertical, slightly concave sides. Filled with demolition deposits 605, 606 and 607. This feature represents the demolition and removal of curtain wall 612, the footings of which (612) survive below the base of the robber cut.	0.10-1.05m
605	Pale grey degraded mortar and stone demolition rubble. Basal fill of robber trench 604.	0.30-1.05m
606	Mid greyish brown silty clay with abundant mortar and stone inclusions. Fill of robber trench 604.	0.10-0.65m
607	Light-mid grey silty clay with sparse stone inclusions. Top fill of robber trench 604.	0.10-0.65m
608	Mid yellowish brown clay with sparse mortar and stone inclusions. Made ground deposit. Partly extends across the fills of robber trench 604 and overlies the possible moat fill 609.	0.10m-0.65m
609	Mid yellowish brown clay with very rare limestone inclusions. Very similar to 608 in appearance, this could represent the same levelling of the area as the made ground deposit or it could represent the uppermost fill of the moat.	0.65-1.05m
610	Pale –mid grey silty clay with common mortar and stone inclusions. Probable demolition deposit within the assumed moat to the east of wall 612.	1.00-1.20m
611	Mid grey silty clay with common stone and mortar inclusions. Probable demolition deposit within moat.	0.90-1.45m+
612	Compact limestone and grey sandy lime mortar wall footings within construction cut 602. Aligned approximately north-south and 1.50m wide this deposit appears to represent the surviving footing of the curtain wall. Not excavated.	0.65m+
613	Mid brown slightly silty clay. Possibly natural London clay sub strata, or re-deposited natural clay used to construct the castle mound.	0.10-0.80m+



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Site location plan showing scheduled area

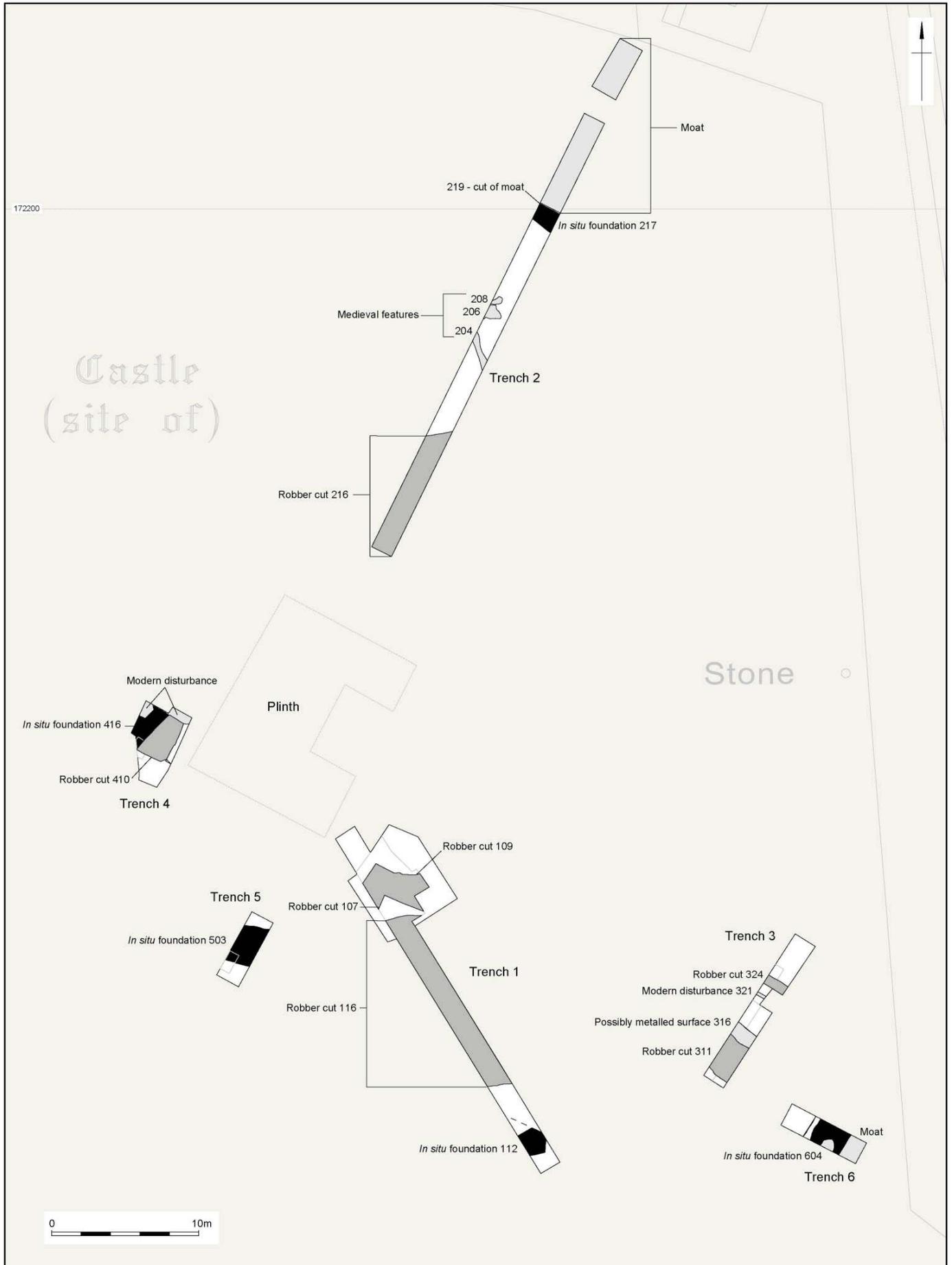
Figure 1



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Geophysical Resistance interpretation

Figure 2



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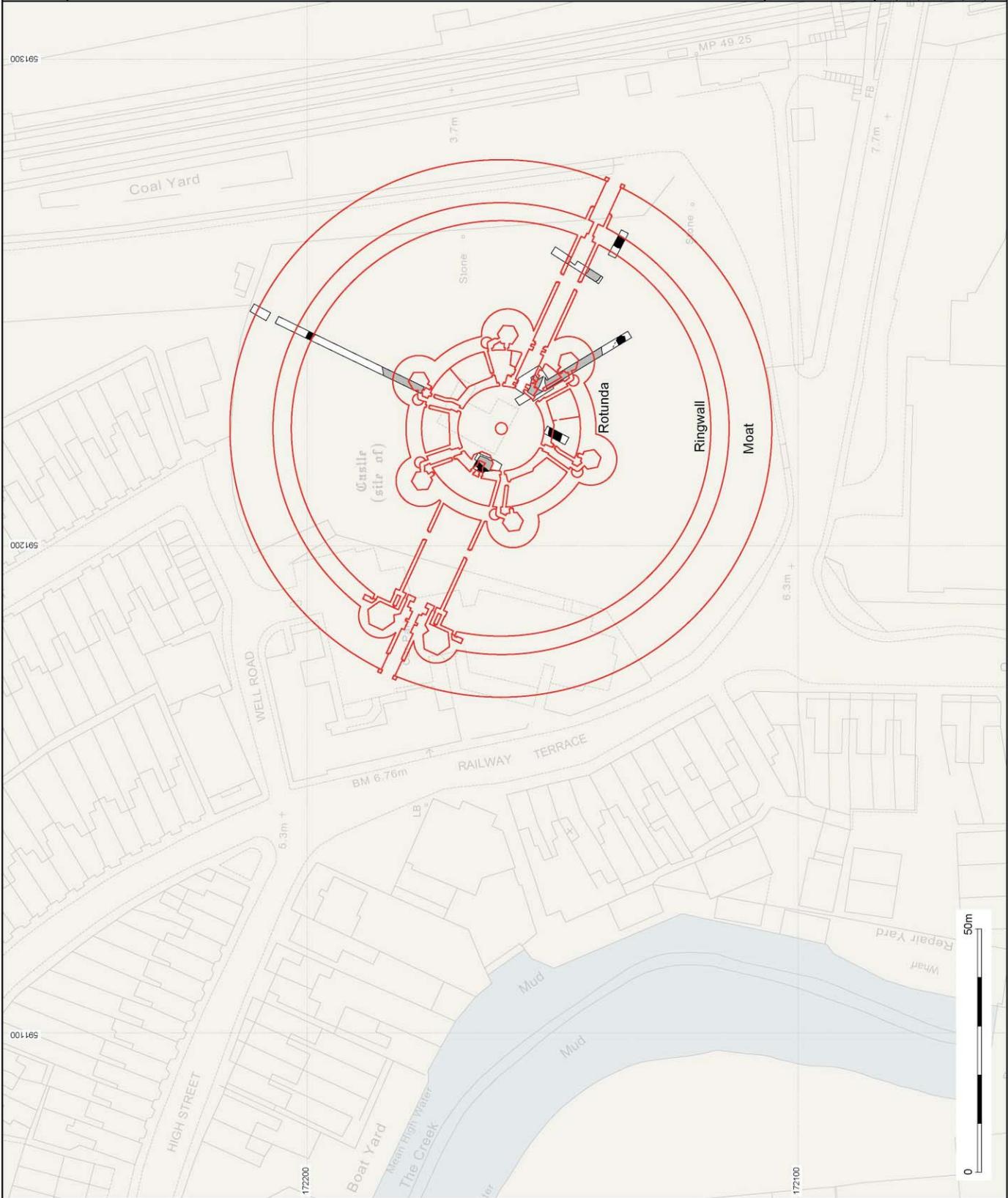


- Key:
- Trench
  - Wall foundation
  - Robber trench
  - Possible castle outline

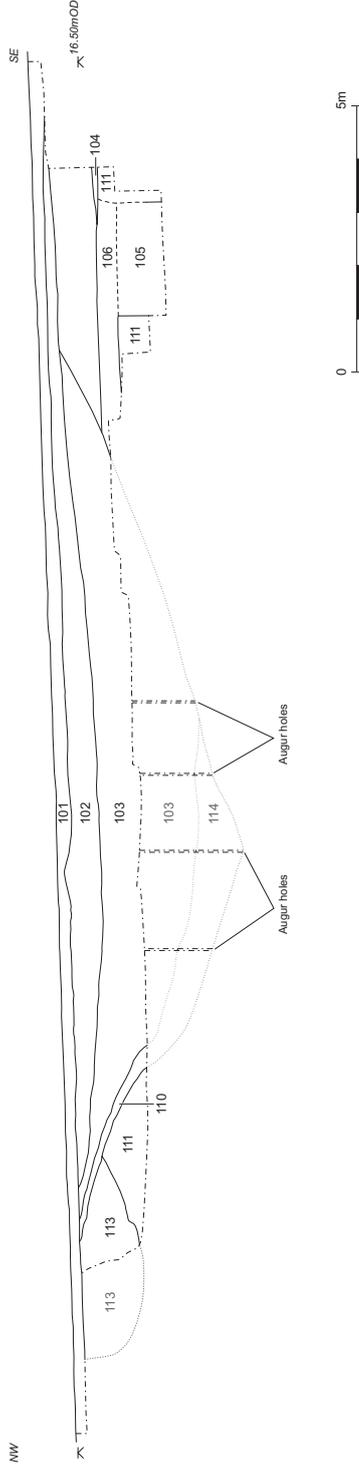
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Trenches overlain with Hatfield's plan of Queenborough Castle



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North east facing section of trench 1

Figure 5



Plate 1: Possible masonry remains of well lining



Plate 2: Rubble filled robber cuts in trench 1

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