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**Towton Hall, Towton  
North Yorkshire**

*Archaeological Excavation*

*August 1997*

CLIENT

North Yorkshire County Council Heritage Unit

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***Towton Hall***  
***Towton, North Yorkshire***

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## *Summary*

*In July 1996 construction workers at Towton Hall uncovered a previously unrecorded mass grave containing approximately 25 individuals. Archaeological excavation of an adjacent area in September 1996 by Archaeological Services WYAS and the University of Bradford, revealed a continuation of the grave. A further minimum number of 43 individuals were excavated and recorded under archaeological conditions. The human remains are believed to be the victims of the Battle of Towton 1461, the largest battle of the Wars of the Roses.*

*This report summarises the background to, and the circumstances of, the excavation. It includes the stratigraphic results, and the findings of the documentary and cartographic searches carried out to date. Finally, the archaeological potential of this area of research is presented.*

*The skeletal remains are held at the Calvin Wells Laboratory, University of Bradford. The osteological analysis of the human remains is ongoing and the preliminary results are included here. It is anticipated that a full report of the osteological findings will be produced by the University of Bradford when this analysis is complete.*

## **1. Introduction**

- 1.1.1 The construction of an extension to Towton Hall, Towton disturbed a mass burial of human remains. The site was located to the west of the A162 Tadcaster to Sherburn in Elmet road in the village of Towton, at SE 4844 3956 (Figs 1 and 2).
- 1.1.2 More detailed information was subsequently obtained through a site observation carried out by the North Yorkshire County Council (NYCC) Heritage Unit Deputy Archaeologist (Fiorato 1996). The results of this work indicated the need for more detailed investigation and recording.
- 1.1.3 Archaeological excavation of the site was carried out by Archaeological Services WYAS and the University of Bradford, on behalf of NYCC, between the 9th and 16th September 1996.

## **2. Archaeological Background**

- 2.1.1 The late 15th century was a period of great political instability and military activity. In October 1460 the Act of Accord placed Richard, Duke of York, as heir to King Henry VI. The Lancastrians refused to relinquish their claim to the throne and, led by Queen Margaret, raised an army in the north. The Battle of Wakefield took place in December 1460, the Duke of York was killed and Edward, Earl of March, became the Yorkist heir. Edward subsequently defeated the Lancastrians at the Battle of Mortimer's Cross in February 1461, and was declared King Edward IV.
- 2.1.2 The Yorkists used political propaganda to maximise their support in London and the south. The propaganda was successful and Edward recruited a large army to march north. On 28th March 1461 the armies engaged at Ferrybridge and the Lancastrians were again defeated.
- 2.1.3 The Battle of Towton took place in a snowstorm on Palm Sunday 29th March 1461. Contemporary sources suggest that over 100,000 men were present and that over 28,000 fatalities occurred in ten hours of fighting. This was reputedly the largest battle of the Wars of the Roses and is still considered to be the bloodiest battle to have been fought in England. The Lancastrians were defeated and the House of York remained on the throne until 1485 when Richard III was defeated at the Battle of Bosworth. (Suggested further reading: English Heritage 1995; Boardman 1996.)
- 2.1.4 The battlefield was located between Towton and Saxton villages (Fig. 3). The outline of the battlefield (after English Heritage 1995) is indicated on Figures 3, 6 and 7. There are several known sites and finds relating to the battle recorded in the NYCC Sites and Monuments Record (SMR)(Fig. 3). A commemorative cross is located in the centre of the battlefield, west of the A162 (SMR No 9607.01), plus the sites of possible burial mounds (SMR Nos. 9609.02100, 9607.02100 and 9607.02200). Further burial pits are recorded on Chapel Hill, west of Towton Hall (SMR No 9603.04). The place name is a reference to the Richard III

commemorative chapel that was once located on Chapel Hill (see paragraph 6.3 below). Various surface finds from the battlefield area have been recorded, but the exact location of the finds and the current location of the objects is not known (SMR Nos. 9607.02010, 9607.0211, 9607.03, 9607.04 and 9607.041). Further associated sites are discussed in section 6 below.

- 2.1.5 The construction work for an extension to Towton Hall (Figs 2, 3 and 4) disturbed approximately 23 skeletons buried in a mass grave. A Home Office licence for the removal of the remains was obtained by the construction company. This licence contained no conditions for an archaeological observation or assessment of the remains. The bones were exhumed and reburied in Saxton churchyard adjacent to the tomb of Lord Dacre.
- 2.1.6 The continuation of the construction work identified two further cranial vaults which were covered, left *in situ* and the NYCC Heritage Unit was consulted. The site was subsequently visited and recorded by a NYCC Heritage Unit archaeologist on the 8th July 1996. The area excavated by the construction workers was approximately 3.15m by 2m, and the area of skeletons was approximately 2m by 1.5m (P. Knight pers. comm.; Fig. 4). The skeletons appeared at a depth of approximately 0.5m (Fiorato 1996). The minimum number of individuals removed without archaeological supervision was 23, based upon the number of cranial vaults excavated (Knight pers. comm.).
- 2.1.7 Various small fragments of corroded metal were recovered with the skeletons. Some of these appeared to be ferrous nails and one piece of ferrous material had been found embedded in a spine. This artefact was corroded but may have been a small arrowhead (Fiorato 1996).
- 2.1.8 The developer gave permission for the archaeological excavation of the remaining skeletons within the development area.

### **3. Method**

- 3.1.1 An area of approximately 5m by 3m was identified for excavation (Fig. 4). The excavation targeted the area of the two cranial vaults exposed by the construction work and the probable continuation of the grave cut.
- 3.1.2 The detailed excavation of the site sought to fully investigate and record the nature and relationships of the archaeological remains. Funding was unavailable for this work and therefore this excavation attempted to retrieve the maximum amount of information possible within a relatively short time scale.
- 3.1.3 The excavation of the human remains was carried out in accordance with the Burial Act 1857 and the Disturbed Burial Ground Act 1981. Prior to excavation HM Coroner was informed and a Home Office licence to exhume the remains was obtained.
- 3.1.4 The trench was stripped using a mechanical excavator fitted with a toothless ditching bucket under direct archaeological supervision.

Machine stripping was halted when the first skeletal remains were encountered and the area was cleaned by hand.

- 3.1.5 All recording was carried out in accordance with the WYAS standard method (Boucher 1995). The area of excavation and the extent of the grave cut were surveyed using electronic distance meter (EDM) survey equipment.
- 3.1.6 The skeletal remains initially appeared to be commingled. However, by treating each individual as a single stratigraphic unit the sequence of deposition could be established. Some of the remains could not be assigned to an individual. In particular the small bones of the extremities had in many cases become isolated and were treated as unstratified remains. For each individual the skeletal remains were cleaned and photographed, and a written description and inventory was made. The skeletal remains were not drawn to scale. A recording system was devised which maximised the potential information about the layout of the remains, but which avoided the time consuming hand illustration of the skeletal remains. A sketch plan was made of each individual separately and sixteen standard anatomical locations (where possible) were surveyed, thus locating the position of the remains 3-dimensionally (see Appendix V).
- 3.1.7 A height for the temporary bench mark (TBM) was not established and therefore all levels from this excavation have been calculated based on an arbitrary height of 10mOD for this TBM. The TBM was located on the first (bottom) step of the front entrance to Towton Hall.
- 3.1.8 The skeletal remains are held at the Calvin Wells Laboratory, at the University of Bradford for specialist analysis. The pottery, metalwork, faunal remains and a worked bone object are held by Archaeological Services WYAS.
- 3.1.9 The primary photographic archive from the NYCC Heritage Unit observation of this site has been integrated with the excavation archive.

## **4. Stratigraphic Record**

### **4.1 Summary**

- 4.1.1 The excavation confirmed the presence of a continuation of the mass grave identified during construction work. Summaries of the context descriptions and artefacts can be found in Appendices II, and III respectively. The stratigraphic matrix can be found in Appendix IV.

### **4.2 The Grave**

- 4.2.1 The grave consisted of a sub-rectangular pit (cut 101) truncated to the west (where the previously excavated remains were located), and to the south by the limit of the development area (Fig. 4). The remaining cut was 3.25m by 2.0m and was oriented north-west/south-east. The cut was shallow, with a maximum depth of 0.65m, and an irregular flat base.

The interface of the cut with the yellow sandy gravel natural below was very sharp and clear.

- 4.2.2 In the north-facing section (Section 02; Fig. 5) the cut was narrow and shallow, perhaps suggesting that this grave pit did not extend significantly to the south. In the east-facing section (Section 03; Fig. 5) the cut was wide and regular. The cut continued to the west where the construction workers had excavated the first set of human remains. The area of skeletons identified by the construction workers was approximately 2m by 1.5m. The area of skeletons apparently stopped abruptly to the west (Fiorato 1996), indicating that this was the westernmost extent of the grave cut. The complete cut was probably sub-rectangular and was a minimum of 5m east/west by 2m north/south. Figure 4 shows the known and probable extent of the grave cut. See paragraph 6.4.2 for further discussion.
- 4.2.3 The grave pit was filled by a single homogenous deposit (100). This was a very loosely compacted dark brown silty-sand, containing frequent inclusions of sub-angular and sub-rounded cobbles (lithology unknown). Mixing with, and slumping of, the loose sandy gravel natural had occurred around the edges of the cut. Much disturbance was evident with many roots still *in situ*. The grave fill (100) was very loosely compacted and contained a number of voids, particularly where cranial vaults had fragmented and collapsed inwards.
- 4.2.4 The grave fill was encountered at a depth of approximately 0.2m below the ground level. However the overall ground level of the site had been reduced by approximately 0.45m prior to the commencement of the construction work (Knight pers. comm.). The grave was therefore identified at a total of 0.65m below the modern ground level.
- 4.2.5 The articulated remains of approximately 43 individuals were recovered from this fill, plus 13 potsherds, 7 fragments of animal bone, 6 ferrous objects, 11 copper alloy objects and one worked bone object (see section 5 below).

### 4.3 Other Features

- 4.3.1 A small ovoid pit (103) had cut the northern edge of the grave fill (100). This pit was approximately 0.5m in diameter and 0.21m in depth. The pit contained a single dark brown clay-sand fill with frequent coarse gravel inclusions. The fill of this feature contained several disarticulated human bones. These were probably part of skeleton (SK) 012 which cut 103 disturbed. No datable finds were recovered.
- 4.3.2 The excavation focused upon the removal of the skeletal remains from the mass grave. However, after the grave cut had been emptied the trench sections were straightened in order to observe and record any possible stratigraphic relationships. A number of archaeological features were recorded. These features were not identified in plan and therefore any interpretation must be treated with caution.

- 4.3.3 In the north-facing section (Section 02; Fig. 5) the grave (cut 101) clearly truncated deposits 109, 104 and cut 108. Cut 108 was possibly linear and may have been oriented north/south. Cut 108 measured 0.3m in width (north/south) and 0.5m in depth. The cut was filled by deposit 104 which appeared to have been a levelling deposit that raised the ground level to above the top of cut 108. The fill (104) was a dark grey-brown silty-sand with orange sand mottles and frequent small cobble and gravel inclusions. Deposit 109 lay above 104 and appeared to have been the result of a second episode of levelling. Deposit 109 was a mid-brown silty-sand with frequent small stone inclusions.
- 4.3.4 In the east-facing section (Section 03; Fig. 5) feature 106 cut the grave fill 100. Cut 106 was 1.47m north/south wide and 0.48m deep. The cut was filled by a single homogenous deposit 105. This was a dark grey-brown slightly silty-sand with mid- orange-brown sand lenses which sloped downwards on both the northern and southern edges of the cut. The fill contained very frequent gravel, and frequent small and medium stone, inclusions. One potsherd was recovered from securely within fill 105. It is suggested that cut 105 may represent an interface rather than a deliberately cut feature. The surface level of grave fill 100 would have settled and slumped as a result of the decomposition of the bodies inhumed within it and the loose compaction of the grave fill itself. Deposit 105 may simply represent the levelling of the resulting uneven ground level
- 4.3.5 The east-facing section (Section 03; Fig. 5) also showed a further shallow cut feature (110) located to the north of the grave cut 101. The cut was possibly linear and was 0.55m wide (north/south) and 0.23m deep. The cut contained a single fill (107), a dark grey-brown silty-sand with orange sand mottles and frequent small cobble and occasional gravel inclusions. This feature had no observable stratigraphic relationship with any of the other features in this trench. However, the fill (107) was almost identical in composition to fill 104 (fill of 108) and therefore may have related to the same phase as 108, and pre-dated the grave cut.

## **5. Artefact Record**

### **5.1 The Human Bone**

- 5.1.1 The majority of the remains were oriented east/west, with heads to the west, along the long axis of the grave cut (Pl. 2). However, the variety of body positions (particularly of the limbs) indicated that the bodies had simply been thrown into the pit together, with little care taken over the position of the body. The human remains were excavated as single individuals where possible. The overlapping of the remains made this difficult in some cases, particularly when the arms were outstretched and the hands and feet were mixed with an adjacent skeleton. Any bones which could not be assigned to a particular individual were bagged as unstratified in the case of isolated bones, and given skeleton numbers in the case of articulated remains.

- 5.1.2 The position of each skeleton was recorded using an EDM (see paragraph 3.1.6 and Appendix V) and sketch planned. The survey data was then used to generate a 3-dimensional model of the layout of the skeletons. This information, plus the site records, could then be used to interpret the sequence of deposition of the bodies. This work was carried out by T. Sutherland at the University of Bradford.
- 5.1.3 The 3-dimensional model identified an isolated arm at the base of the cut which it had not been possible to associate with any other remains. This was possibly due to the limb having been deposited in the base of the cut prior to the rest of the bodies. Clearly the presence of a disarticulated limb within a mass battle grave did not present an interpretative problem. However, the possibility of the incorrect allocation of bones to an individual could be checked using the survey data.
- 5.1.4 The isolated limb lay in a position which was compatible with the possibility of articulation with one of the lower skeletons, except that this lower skeleton already had a right and left upper limb assigned to it. Using the survey data (which recorded each limb individually) the isolated limb could be assigned to this lower individual. The resulting spare limb could then be reallocated and traced back up through the sequence of deposition. This method identified that an arm had been wrongly assigned to an individual at the top of the grave fill (Sutherland pers. comm.). This could therefore have been the result of the truncation of one of the upper skeletons, perhaps during previous construction work or during the machining of the excavation trench.

## 5.2 *The Osteological Analysis*

- 5.2.1 The skeletal remains are being analysed at the University of Bradford by A. Boylston, J. Coughlan, M. Holst, C. Knüsel and S. Novak. The preliminary results have been summarised in Boylston *et al* (1997) which is partially reproduced below. The analysis is ongoing and a report will be produced at a later date.
- 5.2.2 The analysis will involve a detailed recording of each skeleton in order to estimate the sex of the individuals, their age at death and in order to obtain a stature estimate. The remains will then be examined for evidence of trauma and disease.
- 5.2.3 The preliminary results indicate a minimum number of 43 individuals, and that the individuals were all male aged between 18 years and 45 years. Three types of trauma have been identified:
- blunt force trauma caused by weapons such as the mace, ball hammer or flail;
  - wounds by sharp-edged weapons such as swords or daggers;
  - penetrating injuries from arrows, a poleaxe or battle-axe (Pl. 3).
- 5.2.4 Many of the crania have multiple trauma injuries, some of these had healed and others were clearly fatal. These wounds are evidence of the intensity of the combat; many skulls had suffered repeated blows, each

potentially fatal. During the 15th century it was normal for heads to be protected by a sallet (helmet). However the injuries indicate that this was not always the case.

- 5.2.5 There were very few injuries to other parts of the body, with the exception of a few cut marks on the cervical vertebrae and a slice through a left elbow joint. Injuries to the lower extremities were minimal suggesting that the legs of the combatants were adequately protected.

### 5.3 *The Medieval Pottery*

- 5.3.1 The medieval pottery was analysed by Dr C. Cumberpatch. The report (Cumberpatch 1997) is reproduced in paragraph 5.3.2 below. These artefacts are currently held by Archaeological Services WYAS.
- 5.3.2 The pottery was found to consist of a variety of medieval types dating to between the 11th or 12th century and the 13th century. Two Roman sherds, presumably residual, were associated with the medieval material. With the exception of the post-medieval and Roman sherd, the group appears to be of 12th to early 13th century in date.

#### *Catalogue of medieval pottery*

Context	Description	Date
u/s	One base sherd	?Roman
	One base sherd	late medieval
	One body sherd	late medieval
100	One small chip of unidentified sandy ware	medieval
	Round 'lid-seated' rim in a fine white Sandy ware (as above) with limited sooting. Unidentified type, but it is not local and should be considered as a regional import.	
	One body sherd in a post-medieval feathered slipware	late 15th century onwards
	One body sherd	?Roman
	One Pimply ware type body sherd, sooted externally	
	One base sherd in a dense, reduced Gritty ware fabric	
	One body sherd in a semi-vitrified Gritty ware; a dense grey fabric with abundant quartz grit giving a pimply surface with a small trace of glaze externally	
	One flat, everted rim in an unidentified fabric containing abundant medium (up to 0.2mm) quartz grit.	
100 near SK027	One small external flake of a green reduced ware, probably Humberware	13th/14th century
100 near SK028	One sherd in an Orange Gritty ware; a hard, dense oxidised fabric containing	13th century

Context	Description	Date
	abundant evenly sorted quartz grit up to 1.0mm with sparser black grit up to 0.5mm. Mottled brown glaze externally	
100 base of fill	One Pimply ware body sherd wit light sooting externally and containing quartz of varying size up to 1.0mm	12th to early 13th century
100 near SK033	One small body sherd in an unidentified medieval fine white sandy ware with a grey exterior.	
100 + 105	Two sherds, joining to form the distinctive square sectioned rim and short neck of a jar/cooking pot. No sooting. Pimply ware type	12th to early 13th century

5.3.3 The two adjoining sherds 100 and 105 were retrieved from stratigraphically separate contexts. Deposit 105 was stratigraphically later than, and physically above, grave fill 100. The sherd from deposit 105 was securely stratified in the east-facing section, the security of the sherd from 100 is not known. The two sherds appear to be recently broken, probably during excavation. It is suggested that the complete sherd originated in deposit 105 and may have been broken during the machining of the site, the sherd being redistributed in fill 100, a very loose and disturbed deposit. However, the date of this sherd suggests that its presence in deposit 105 was residual.

#### 5.4 *The Metalwork*

5.4.1 Three fragments of iron were recovered during the site visit by NYCC and a further six ferrous objects were recovered from the grave fill 100 (small find (SF) 002, SF003, SF004 and SF006). These objects were x-rayed at the University of Bradford and all appear to be nails, with the exception of SF003 which may be a small arrowhead, bodkin or nail, and the unstratified object which may be a bodkin.

5.4.2 Eleven copper alloy objects were recovered from the grave fill (100). These objects were also x-rayed. Artefact SF001 was a copper alloy finger ring, recovered from the finger of SK039. The remaining objects were undiagnostic thin metal strips.

5.4.3 Specialist identification of all of these artefacts is recommended. These artefacts are currently held by Archaeological Services WYAS and are stored under controlled conditions. It is recommended that the ring (SF001), the possible arrowhead (SF003) and the possible bodkin (unstratified) are cleaned and conserved. An estimate has been obtained from the conservation laboratory at the University of Bradford and is included in Appendix VI.

## **5.5 The Faunal Remains**

- 5.5.1 Seven fragments of animal bone were recovered from the grave fill (100). An identification and assessment has been provided by Keith (1997) and is reproduced below.
- 5.5.2 The animal bone fragments represent the domestic species of sheep/goat, cow/horse and pig. With the exception of one complete pig tooth this small assemblage comprises small fragments of bone. Sheep/goat are represented by a tooth, and jawbone and tibia fragments. A possible pig femur fragment and two cow/horse size long bone fragments complete the assemblage. The condition of the material is good but apart from the complete pig tooth, the small fragment and sample size precludes assessment of age, stature or butchery.
- 5.5.3 This assemblage is probably residual material and does not have the potential to offer any further information about the site.

## **5.6 The Bone Object**

- 5.6.1 A worked bone object was recovered from unstratified deposits during the cleaning of the trench. This object measured 31mm by 22mm and was 2mm thick. The object was incomplete, having been broken at one end. The object was rectangular and the complete end was smooth and slightly rounded. Four copper alloy rivets had been inserted through the worked bone. One of the rivets was complete and measured a total of 10mm in length, with 8mm extending from the back of the object. This object has not been examined by a specialist. The function is unclear and this may be a portion of a decorative fastening or perhaps one side of a small knife handle. Further analysis is recommended.

## **6. The Site in Context**

### **6.1 The Medieval Landscape**

- 6.1.1 The landscape between Towton and Saxton has probably changed greatly since 1461. However, modern agricultural practice involving large fields has almost completely removed the post-medieval landscape, and reverted it to a medieval open field landscape (English Heritage 1995). Medieval ridge and furrow, lynchets and associated headlands are still clearly visible in some areas across the battlefield site (Fig. 3), although modern deep ploughing and quarrying have removed them in most areas, particularly across the plateau. These medieval agricultural features are clear in the unploughed area around Towton Hall itself (Fig. 3). It is likely that much of the landscape of the battlefield would have been farmed at the time of the battle and "would have been [composed of] largely hedgeless open fields, used for grazing after the Autumn harvest, with perhaps some early season ploughing and with substantial woods on both flanks" (English Heritage 1995: 2).

## 6.2 Battlefield Graves

- 6.2.1 After the Battle of Towton the heralds calculated that the fatalities numbered approximately 28,000 men and that the corpses covered an area of 6 by 3 miles. The heralds were then responsible for organising the burial of the dead. Even allowing for exaggeration in the reports of the numbers dead, the burials would have taken time to complete, particularly given the extreme weather conditions. It would also be expected that the result would be a large number of mass graves in the area.
- 6.2.2 Several references to possible grave sites have been recorded but the details are sparse. At Dintingdale, east of Saxton at c.SE 481 371, an early 19th-century antiquarian excavation located a mass grave which was thought to relate to the Battle of Towton. The graveyard at Saxton church (SE 476 368) contains a mass grave and the tomb of Lord Dacre (a Lancastrian who died in the battle). On Bloody Meadows (SE 473 383) five grave pits were recorded by John Leland in the 16th century (Leland 1889 cited in Boardman 1995). The graves were on land belonging to the Hungate family, and the remains were exhumed and reinterred in Saxton churchyard by the landowners in the 16th century (Boardman 1996). Several graves are indicated in a field south of Towton Hall (at SE 482 393) as 'The Graves in Towton Fields' on an 18th-century map (Jeffery 1775; Fig. 6).
- 6.2.3 There have been two previous, recorded excavations of possible graves on the Towton battlefield. An antiquarian excavation of a grave pit was carried out in 1816. It is likely that this was in the area of Chapel Hill (Fig. 3; Pl. 4), approximately 100m east of Towton Hall (A. Boardman pers. comm.). This excavation recovered arrow piles, a sword, coins (of Henry IV, Henry V and Henry VI) and human remains. The excavators suggested that the presence of the sword which lay alongside a human long bone indicated that the bodies had not been stripped prior to burial (Boardman 1996).
- 6.2.4 Two further possible sites of battlefield graves are indicated on the 1st edition Ordnance Survey (O.S.) map as tumuli (O.S. 1850; Fig. 7). These are located to the south-east of Castle Hill Wood at SE 376 472, and east of the A162 at SE 384 477. In 1993 a trial excavation by the Towton Battlefield Society sampled two of the mounds south-east of Castle Hill Wood. The mounds were excavated to a depth of 0.6m where the trenches became waterlogged. No artefacts or human remains were encountered (Boardman 1996). This excavation was inconclusive although Boardman (1996) suggests that remains may have been preserved at a greater depth. This infers the possibility that waterlogged human remains may be encountered. However, given the slumping of the fill of the grave pit excavated at Towton Hall it is perhaps unlikely that an upstanding mound represents a battlefield grave. These tumuli may perhaps represent prehistoric activity rather than any association with the 15th-century battle.

### **6.3 *The Richard III Commemorative Chapel***

- 6.3.1 In the late 15th century King Richard III commissioned the building of a chapel to commemorate the dead of the Battle of Towton. This chapel was located on Chapel Hill to the west of Towton Hall (Fig 3; Pl. 4). The death of Richard at the Battle of Bosworth in 1485 meant that the chapel fell into ruin. The chapel was probably not completed or consecrated. The early 18th-century antiquarian excavation of Chapel Hill did not record the presence of any building footings, although some medieval roof tiles were present.

### **6.4 *Towton Hall***

- 6.4.1 Towton Hall (Figs 3 and 4; Pl. 4) is believed to date to the reign of King Richard II in the late 14th century (Boardman 1996: 83). The building was extended during the 18th and 19th centuries. At least four episodes of renovation and extension to the hall (prior to the 1996 work) were identified during the recent works (Knight pers. comm.). It is not confirmed whether the building existed or was occupied during the time of the battle. Three grave pits are now known to be located within the grounds of Towton Hall; on Chapel Hill, adjacent to the cellars and within the recent development area.
- 6.4.2 During the late 18th century, construction work was carried out on Towton Hall. The extension of a cellar revealed a large number of human skeletons (Boardman 1996). The location of this cellar with respect to the house is not known. The 1996 construction work also included an extension to the cellar of the possible 14th-century house. The cellar was located beneath the southern end of the house, and the removal of the northern cellar wall revealed articulated skeletal remains (the approximate location is indicated on Fig. 4). The cellar wall was subsequently replaced (Knight pers. comm.).
- 6.4.3 In the area excavated by the construction company in 1996, the 18th/19th-century pad stones lay 0.45m to 0.5m below ground level, and the human remains lay at a depth of 0.6m below ground level. It is therefore probable that the skeletons had not been disturbed during the 18th/19th-century work (Knight pers. comm.). These remains extended beneath the hall to the south of the development area. The probable extent of these remains is indicated on Figure 4.

## **7. *Discussion and Interpretation***

- 7.1.1 The mass grave identified during the recent works at Towton Hall contained the skeletal remains of at least 43 individuals. The osteological analysis has established that these individuals were all males, aged between 18 years and 45 years, many of whom had died as a result of trauma injuries, mainly to the skull. It therefore seems reasonable to conclude that these men were the casualties of the Battle of Towton in March 1461.

- 7.1.2 However, few artefacts were recovered from the grave fill (100) and no conclusive independent dating to corroborate a 15th-century date was produced. The pottery from the grave fill provides a 12th to early 13th-century date with one small sherd dated to the late 15th century. Therefore the pottery does provide a tentative *terminus post quem* of the 15th century for the grave fill. The wide range of dates is consistent with the majority of the pottery being residual. It is likely that the grave cut would have been backfilled soon after being opened, leaving little time for the accumulation of contemporary refuse which would be usual in, for example, a domestic pit. This would account for the relative lack of 15th-century pottery. The lack of weapons and armour associated with the skeletal remains indicates that the bodies had probably been stripped before burial. This is in contrast with the findings of the antiquarian excavation on Chapel Hill (see paragraph 6.2.3 above).
- 7.1.3 The skeletal remains removed by the construction company during the first phase of excavation continued beneath the chimney stack of the hall, to the south of the development area (Fiorato 1996; Fig. 4). It was clear therefore that skeletal remains pre-dated the 18th/19th-century building work.
- 7.1.4 The archaeological excavation identified three features in addition to the grave pit (101). The grave cut a possible linear feature 108 which may have been associated with an early phase of construction or occupation of the hall. Another possible linear feature 110 has been tentatively assigned to this phase of activity. Any useful interpretation of these features is clearly very difficult.
- 7.1.5 Burial adjacent to a probably occupied secular building, such as Towton Hall, is highly unusual. The medieval route of the A162 is not known and it may be possible that the road lay much closer to Towton Hall. This would provide a convenient road-side location for the burials, away from the exposed limestone plateau of the battlefield where the digging of grave pits would have been extremely difficult (Boardman pers. comm.).
- 7.1.6 Social archaeologists and historians have studied many aspects of medieval death and funerary practices. However, little is known about how these practices were applied in times of war. The church and religion were central to the medieval world view. However, the teachings of the church appear to have imposed contradictions upon the burial of the battle dead. Burial in mass graves was not an uncommon practice. The exhumation of skeletonised remains for reinterment in a charnel house (within consecrated ground), where many defleshed, disarticulated bones were commingled and stored, was fairly common. In the medieval period burial in an individual grave was of less importance than burial in consecrated ground (Binski 1996). Clearly the pragmatic solution to the burial of war dead contradicted the edicts of the church.
- 7.1.7 This may perhaps indicate that Towton Hall held a significant position within medieval Towton and perhaps that a chapel may have existed on Chapel Hill or as a part of Towton Hall, prior to the Richard III commemorative chapel. The existence of such a chapel would have

legitimised the location of the burial of the battlefield dead, as the location of the graves in turn legitimised the position of the later commemorative chapel. Further work would clearly be required to confirm (or refute) this.

## **8. Potential for Further Work**

- 8.1.1 The Towton mass grave is believed to be the only mass grave to be excavated and recorded under archaeological conditions in this country. The only comparable site is in Wisby on the island of Gotland, Sweden, where archaeological excavation recorded 1,185 individuals and 20 armours in a mass grave (Gravett 1987). These were the victims of a battle that took place on 27th July 1361. The Wisby skeletal remains displayed many trauma injuries and these have been used to infer the methods and conditions of medieval hand to hand combat.
- 8.1.2 Despite the scale and importance of the Battle of Towton, detailed contemporary accounts of the battle and its aftermath are scarce. The potential for increasing our knowledge of this event through archaeological methods is good.
- 8.1.3 The analysis of the skeletal remains from Towton will provide a unique opportunity to study English medieval warfare. The osteological analysis, in collaboration with the staff of the Royal Armouries, Leeds, has the potential to characterise the weapons which caused the injuries identified on the skeletal remains from Towton. This will provide important information about the techniques of warfare such as the weapons used, their force and angle, and therefore will aid the reconstruction of the battle itself. The cases of multiple cranial trauma will be analysed in detail to ascertain the order in which the injuries were inflicted. Activity related pathologies will be identified and correlated with possible occupations which may be able to identify, for example, the archers (Boylston *et al* 1997). The osteological analysis also has the potential to provide information on the general health and diet of the medieval soldier.
- 8.1.4 An independent date has not been obtained to corroborate the theory that the human remains are of the soldiers of the Battle of Towton. If necessary a sample of bone could be submitted for radiometric dating.
- 8.1.5 Battles are (archaeologically speaking) very short events in duration. The Battle of Towton was fought in less than one day. This type of activity is extremely difficult to identify archaeologically, as battles did not involve any buildings, ditches or produce any normal occupation debris. It is the evidence of the aftermath of the battle e.g. artefacts, graves and monuments, that can be identified through archaeological methods. The areas of potential for further work are discussed below. These would each involve non-destructive methods of archaeological survey.
- 8.1.6 Fieldwalking of the battlefield with accurately surveyed spot finds (and specialist analysis of those finds) may help to locate areas of concentrated artefacts. This would provide an indication of further possible locations of battle graves.

- 8.1.7 Geophysical survey and remote sensing by air reconnaissance of the battlefield may also be able to locate the position of areas of disturbed ground, mounds or slumping, indicative of further grave sites. Geophysical survey of the area around Chapel Hill would aim to locate the remains of the commemorative chapel, the site of the antiquarian excavation and any further grave pits. The results of this type of survey may be able to suggest the extent and completeness of the chapel and the size of any possible grave pits. The probable number of individuals buried there may be inferred by comparison with the size of pit and density of remains recorded at the recent excavation, without disturbing the grave itself.
- 8.1.8 Post-medieval and modern alterations to Towton Hall and its grounds have incorporated architectural fragments which may originally have been a part of the commemorative chapel. The study of these fragments may be able to confirm this. Building recording of Towton Hall may be able to identify the 14th-century hall and the subsequent alterations. This information would clarify the proximity of the graves to the existing building.
- 8.1.9 Further documentary research focusing upon the history of Towton Hall and the commemorative chapel may elucidate the reason for the apparent concentration of burials at the hall.
- 8.1.10 As stated above, the archaeology and history of death in battle has not been widely covered. Binski (1996) discusses the medieval concepts of preparation for death and the importance of a religious burial. This is clearly not compatible with the need to bury massive numbers of fatalities in times of war. Battles, and therefore death in battles, were frequent occurrences during this period. The site at Towton provides a unique opportunity to study this aspect of medieval life.

## **9. Conclusion**

- 9.1.1 The excavation of the Towton Hall mass grave has yielded important information about the aftermath of the Battle of Towton. A total minimum number of 68 individuals were exhumed from a mass grave at Towton Hall (including those reburied at Saxton church). These individuals had suffered a violent death with multiple injuries and had apparently been hurriedly interred in large numbers in a shallow grave pit. The archaeological excavation of this pit has provided unique information on the human consequences of battles, and shown that the Battle of Towton, and all medieval battles, were far from glamorous military events.
- 9.1.2 The skeletal analysis has the potential to provide a means to study medieval warfare and other aspects of 15th-century life such as health, diet and burial practices. The excavation has highlighted areas of further research such as the history of Towton Hall and the Richard III commemorative chapel. This further work could be carried out using non-destructive archaeological techniques, thus preserving the integrity of any remaining battlefield burials.

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## Appendix I

### Primary Archive Inventory

FILE NO	FILE	Contents	no of sheets A4	
I	PRE-EXCAVATION INFORMATION	Location maps	3	
		Project information	8	
		NYCC observation record	4	
		Background info. maps	4 (A3)	
		Battlefield register	11	
		Battlefield society booklet	4	
		Medieval warfare article	5	
		Leeds Armouries seminar	3	
		Battlefield society info.	3	
		Notes	1	
		EXCAVATION ARCHIVE	Context register	1
			Context cards	11
			Skeleton register	3
	Skeleton recording sheets		37	
	Small finds register		1	
	Contexts inventory		1	
	Finds inventory		1	
	Finds registration form		1	
	X-rays & conservation costs		2	
	Specialist pottery analysis		2	
	Faunal remains assessment		1	
	Survey data		2	
	Survey plot		1 (A3)	
	Architects drawings		3 (A2) 2 (A1)	
	3½" floppy disc	1		
	II	DRAWINGS & PHOTOGRAPHS	Drawing register	1
			Drawings	7 (A3)
Photograph inventory			1	
NYCC photographic record			8 frames	
Black and white prints			5 films	
Colour transparencies			4 films	
Photograph record sheets			7	

## *Photographic Archive*

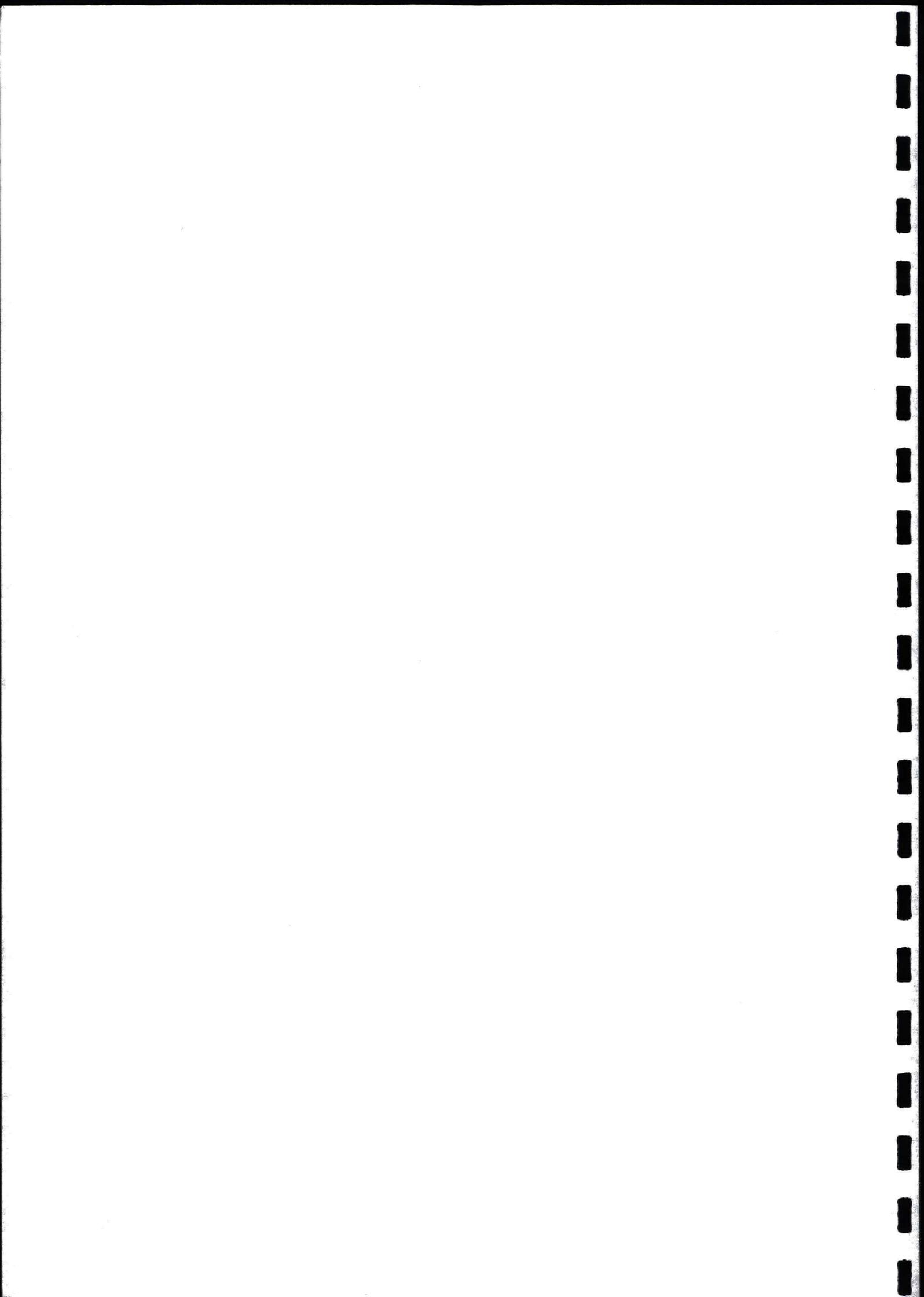
<b>Film Numbers</b>	
<b>Black and white prints</b>	<b>Colour transparencies</b>
3854	3749
3855	3852
3856	3853
3903	3896
3976	
NYCC film	

Note. The black and white print negatives are currently stored at West Yorkshire Archaeology Service, Wakefield.

## Appendix II

### Summary of Contexts

Context	Type	Description	Interpretation	Position of fill in feature
100	fill	dark brown silty sand. loosely compacted. frequent rounded cobbles. lithology unknown	fill of 101	sole fill
101	cut	shallow cut of grave filled by 100	grave cut	
102	fill	very dark brown loamy sand. loose and sticky. frequent coarse gravel	fill of 103	sole fill
103	cut	small oval pit filled by 102	pit cut	
104	fill	dark grey brown silty sand. firmly compacted. frequent rounded cobbles. lithology unknown	fill of 108	sole fill
105	fill	dark brown slightly silty sand with orange sand lenses. very frequent gravel. frequent cobbles	fill of 106	sole fill
106	cut	possible pit. probable interface between deposits	interface	
107	fill	same as 104 but with occasional gravel	fill of 110	sole fill
108	cut	probable ditch. possibly associated with hall construction	ditch cut	
109	fill	mid-brown silty sand. loose compaction. frequent small stone. lithology unknown	levelling deposit	
110	cut	pit/ditch filled by 107	ditch cut	



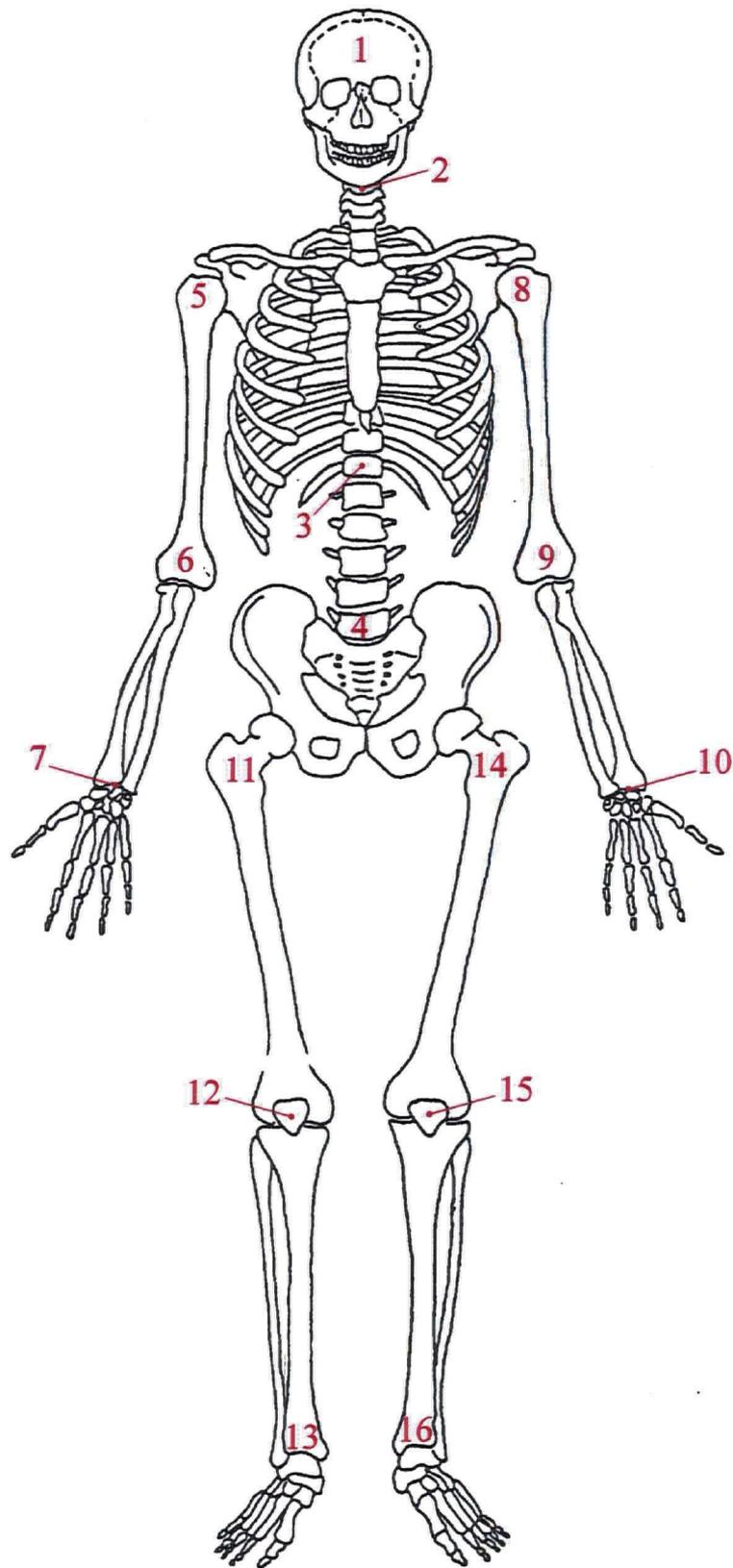
## Appendix III

### Inventory of Artefacts

Material	Context	Amount	Comment
POTTERY	u/s	3	
	100	8	
	100	1	base of fill
	100	1	near SK028
	100	1	near SK027
	100	1	near SK033
	100	1	secure, from E facing section
	105	1	secure, from E facing section
	Total		17 sherds
BONE	100	7	animal bone
	Human bone inventory in progress (University of Bradford)		
FE OBJECTS	u/s	3	possible bodkin
	100 SF002	1	nail
	100 SF003	1	near SK033. ?arrowhead/bodkin ?nail
	100 SF004	1	near SK038. nail
	100 SK006	1	nail
	total		7 fragments
BONE OBJECT	u/s	1	worked bone with 4 Ae rivets, possible armour or handle
AE OBJECTS	u/s	1	
	on pelvis of SK048	1	?
	100 SF001	1	finger ring
	100 SF005	1	
	100 SF007	7	?pins
	total		11

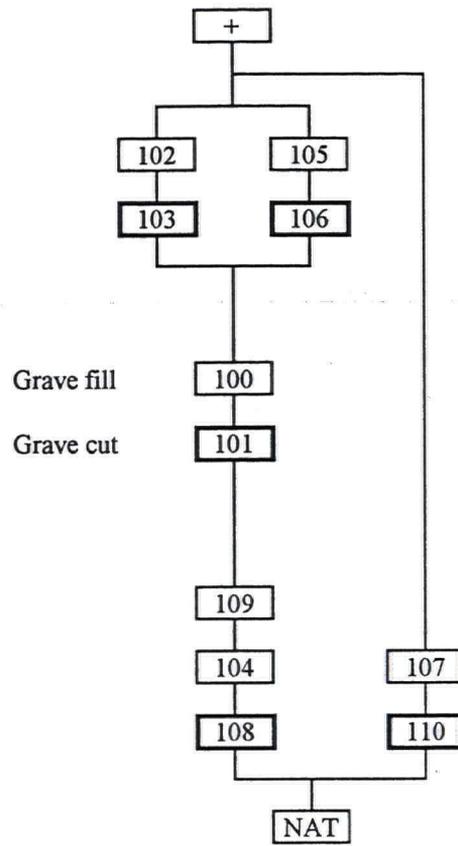
## Appendix V

### Location of Survey Points on the Skeleton



# Appendix IV

## Stratigraphic Matrix



## *Appendix VI*

### *Conservation of Metalwork Finds: Estimated cost*

<b>Object</b>	<b>Cost</b>
4 Ae objects (u/s, on SK042, SF001, SF005)	£80
If the Fe objects need cleaning	£320
total	£400

Estimate provided by Yannick Minvielle-Debat, Contract Conservator, Department of Archaeology, University of Bradford (25th February 1997).



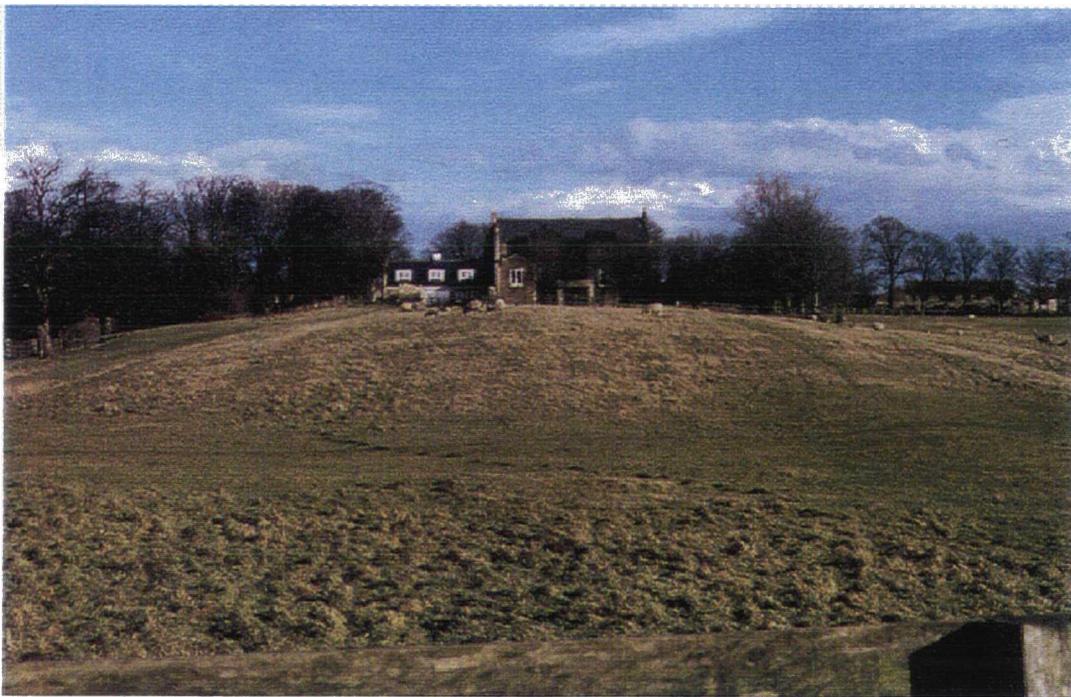
*Pl. 1. The excavation of the human remains*



*Pl. 2. Mass grave (cut 101, east to top of photograph)*



*Pl. 3. Square sided penetrative injury to cranium of skeleton 009*



*Pl. 4. Chapel Hill and Towton Hall. Facing east.*

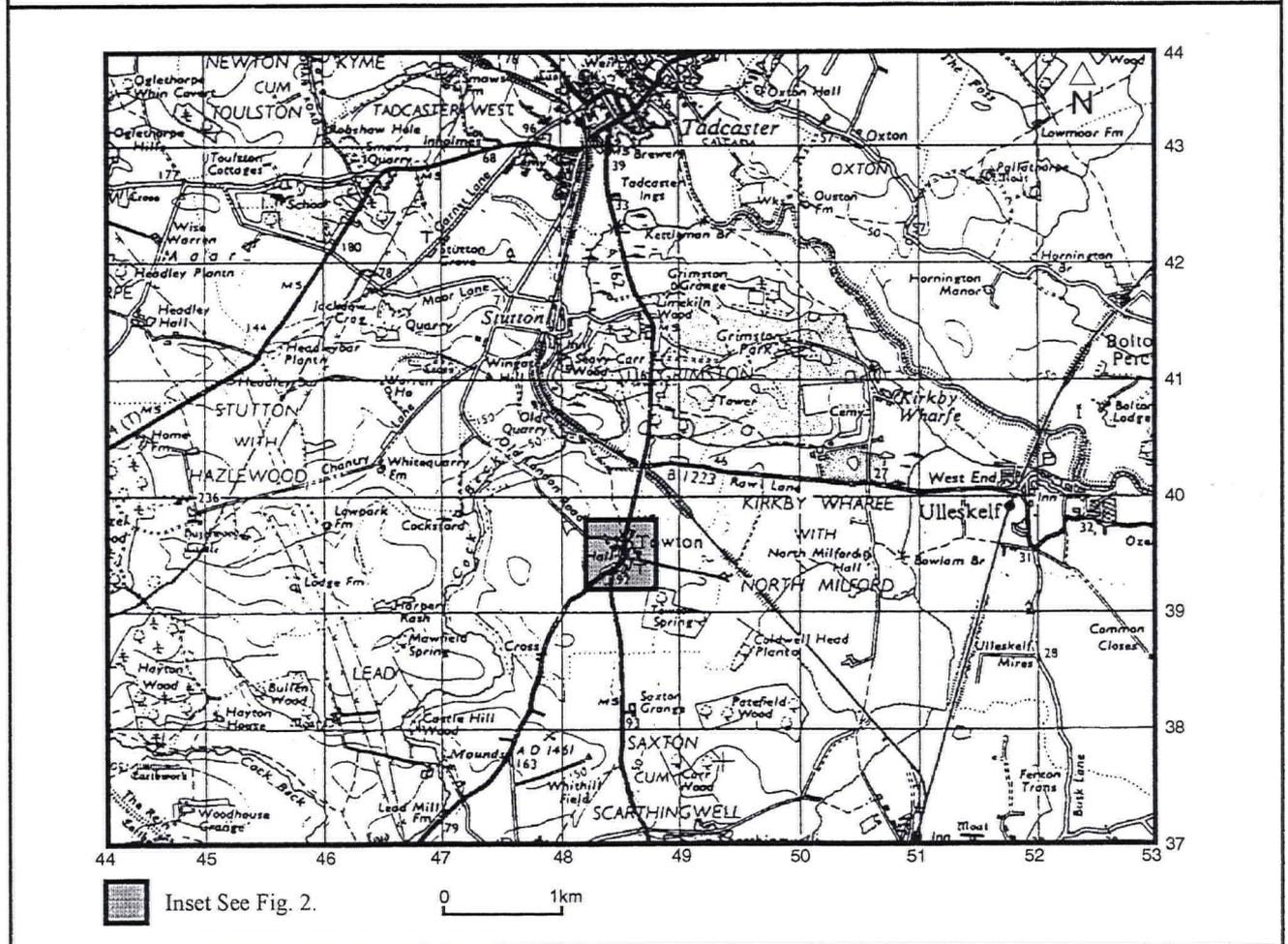
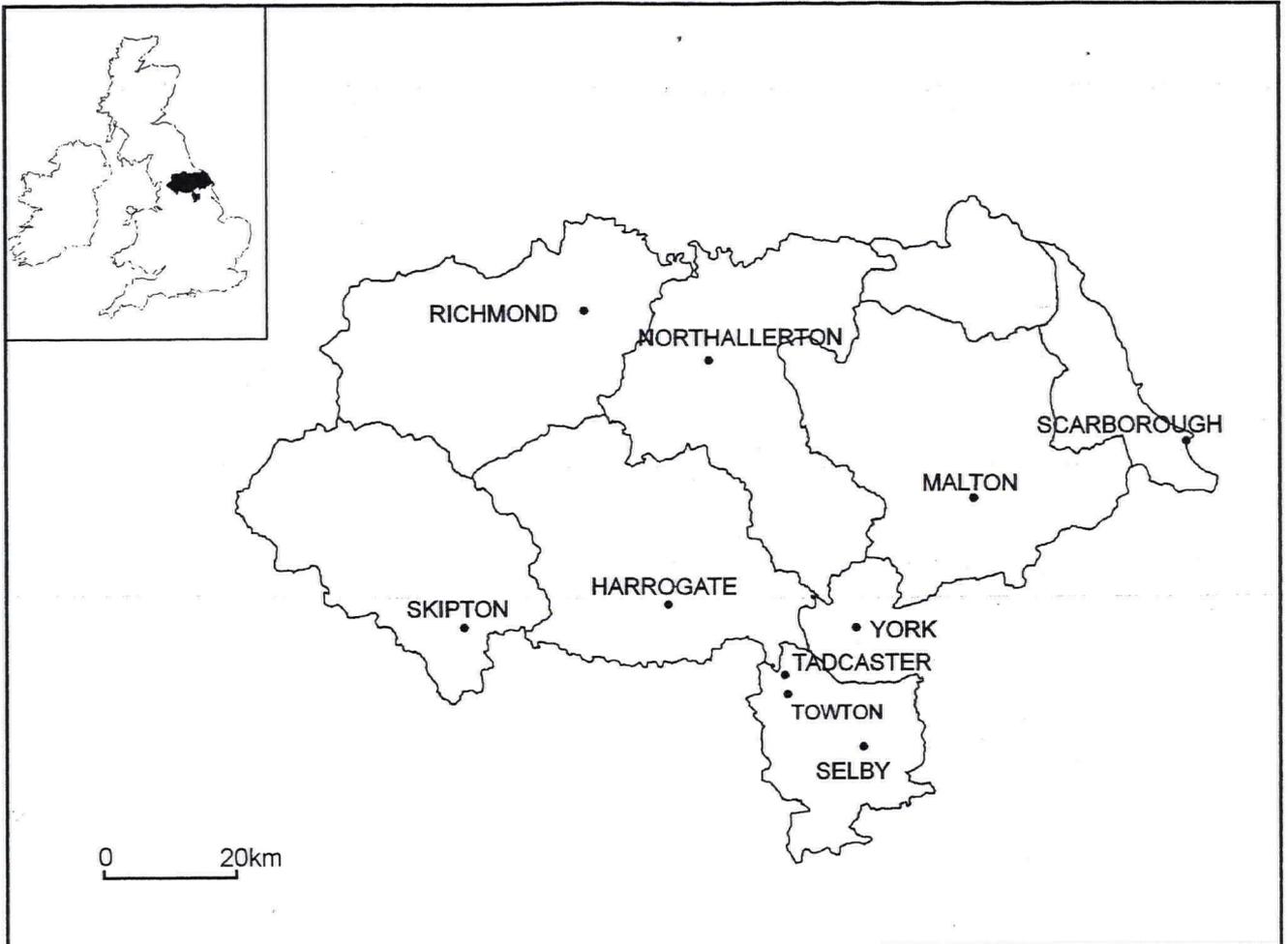
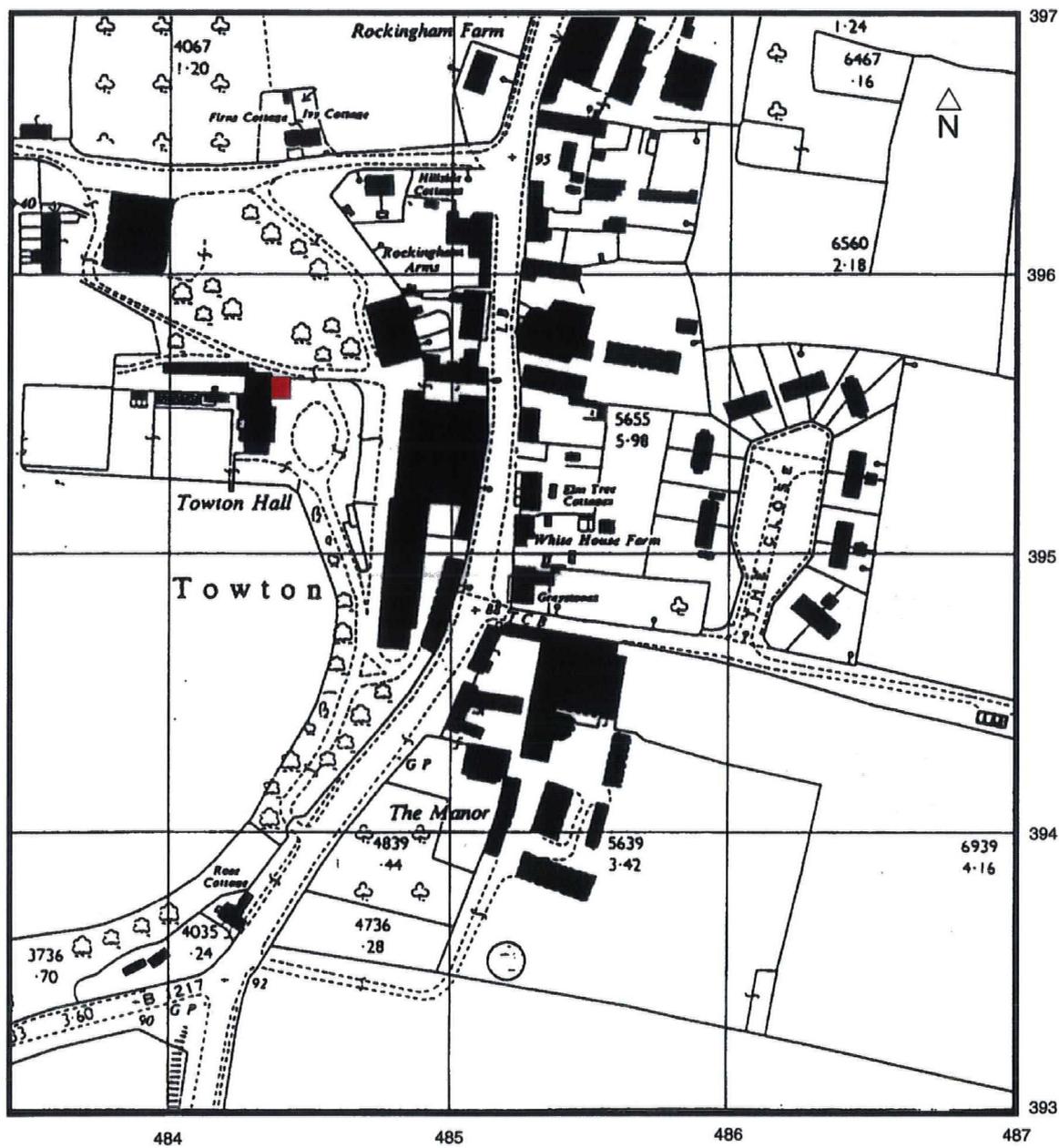


Fig. 1. Site Location

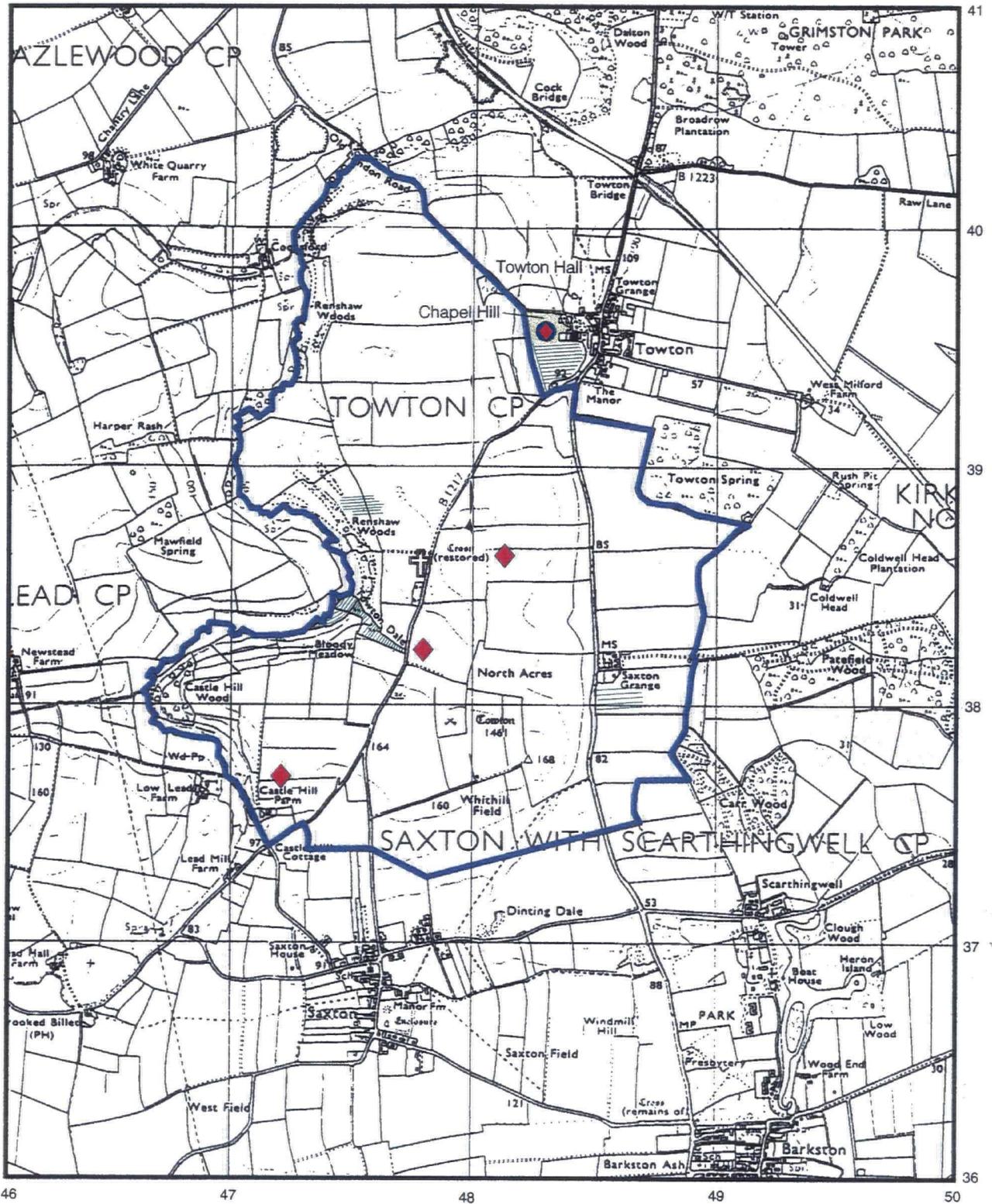


 Area of archaeological excavation



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Fig. 2. Location plan



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**KEY**

- ◆ SMR: possible burial site
- SMR: Richard III commemorative chapel
- Extent of battlefield (after English Heritage 1995)
- ⊕ Commemorative cross
- Ridge and furrow / lynchets



Fig. 3. Map of the battlefield

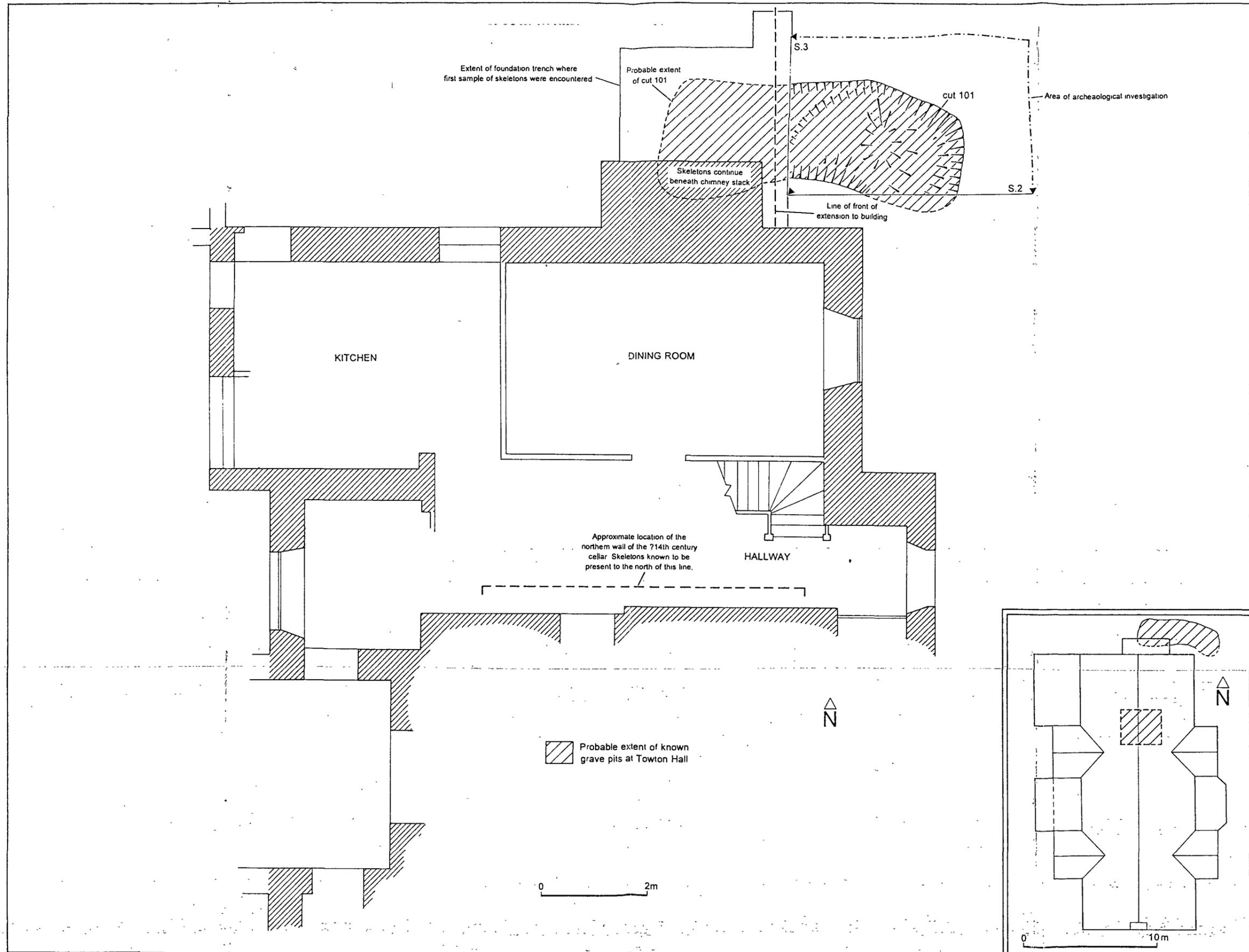


Fig. 4. Towton Hall. Location of the area of archaeological excavation and probable extent of the grave pit

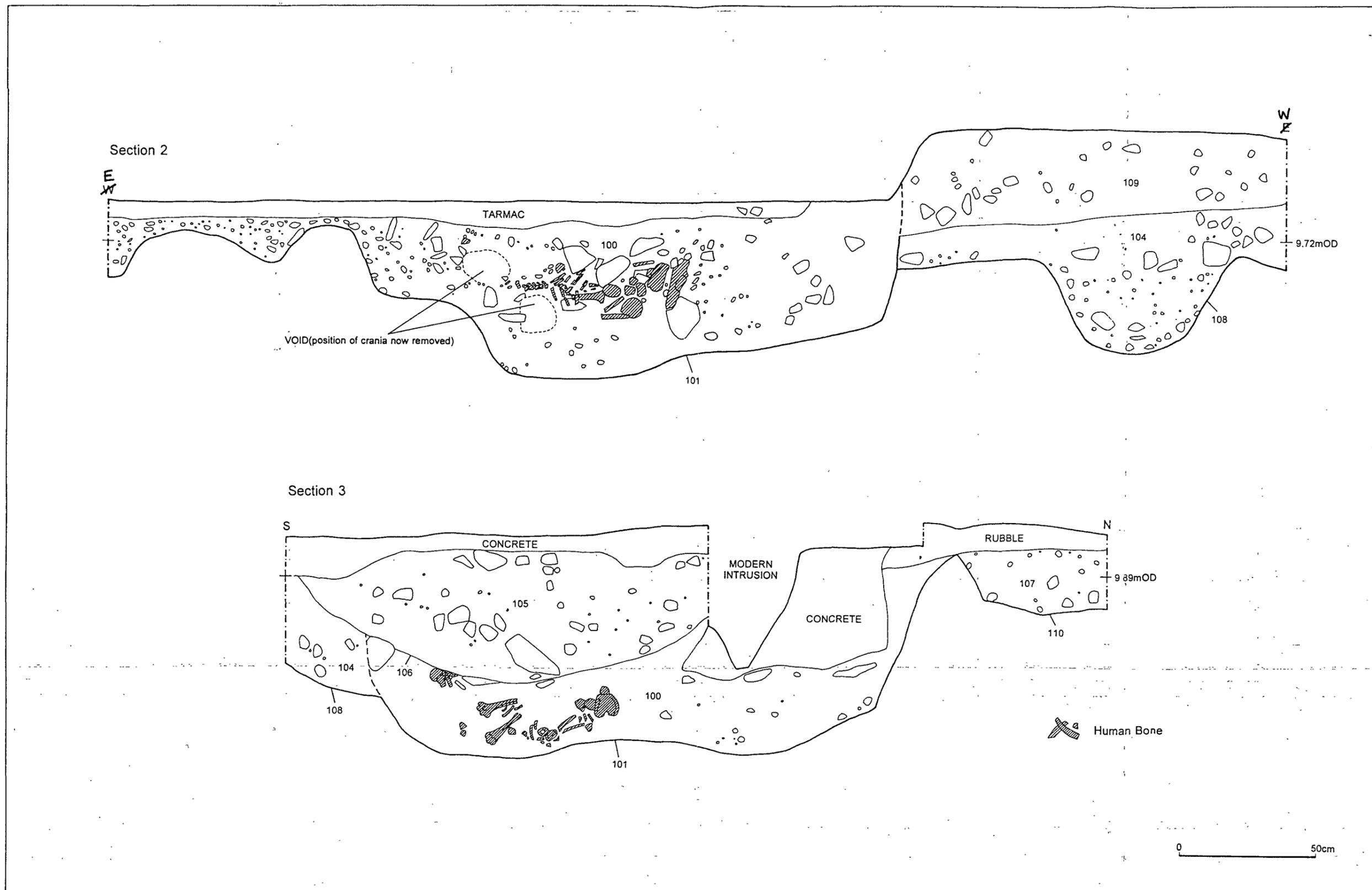
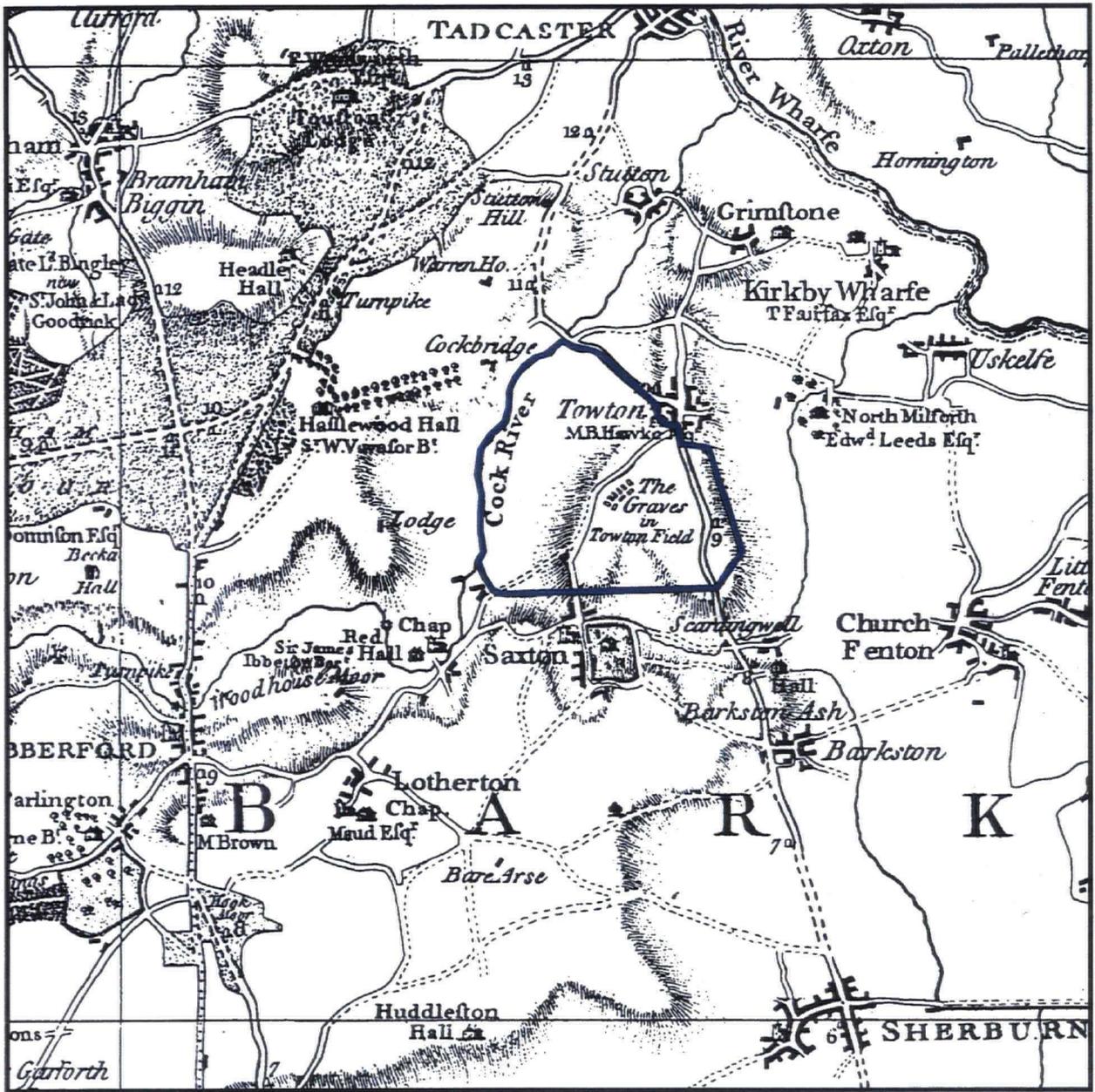


Fig. 5. North and east facing trench sections



Extent of battlefield (after English Heritage 1995)  
 Note site of "The Graves in Towton Field"



Fig. 6. Extract from Jeffery 1775 edition, 1" to the mile



— Extent of battlefield (after English Heritage 1995)

Note site of tumuli within battlefield



Fig. 7. Extract from Ordnance Survey 1st edition 1850, 1" to the mile