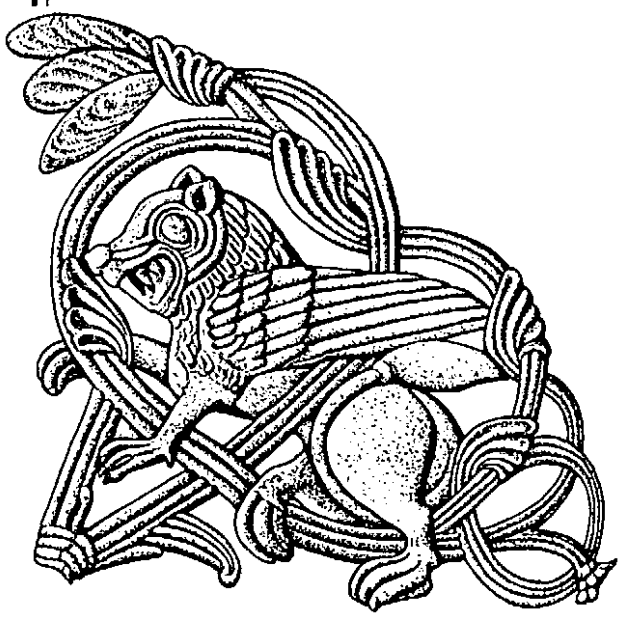
SOURCE No: 9422
Event no: 39320

SMR FILE COPY



COUNTY ARCHAEOLOGICAL SERVICE

HEREFORD & WORCESTER

COUNTY COUNCIL

# EVALUATION AT WELLINGTON QUARRY, MARDEN LANE, WELLINGTON

Robin Jackson, Elizabeth Pearson and Stephanie Ratkai

November 1996



Field Section,
County Archaeological Service,
Hereford and Worcester County Council,
Tolladine Road,
Worcester WR4 9NB

Project 1299
Report 503
HWCM 5522

## Contents

### Part 1 Project summary



### Part 2 Detailed report



## Appendices



## Tables



## Figures

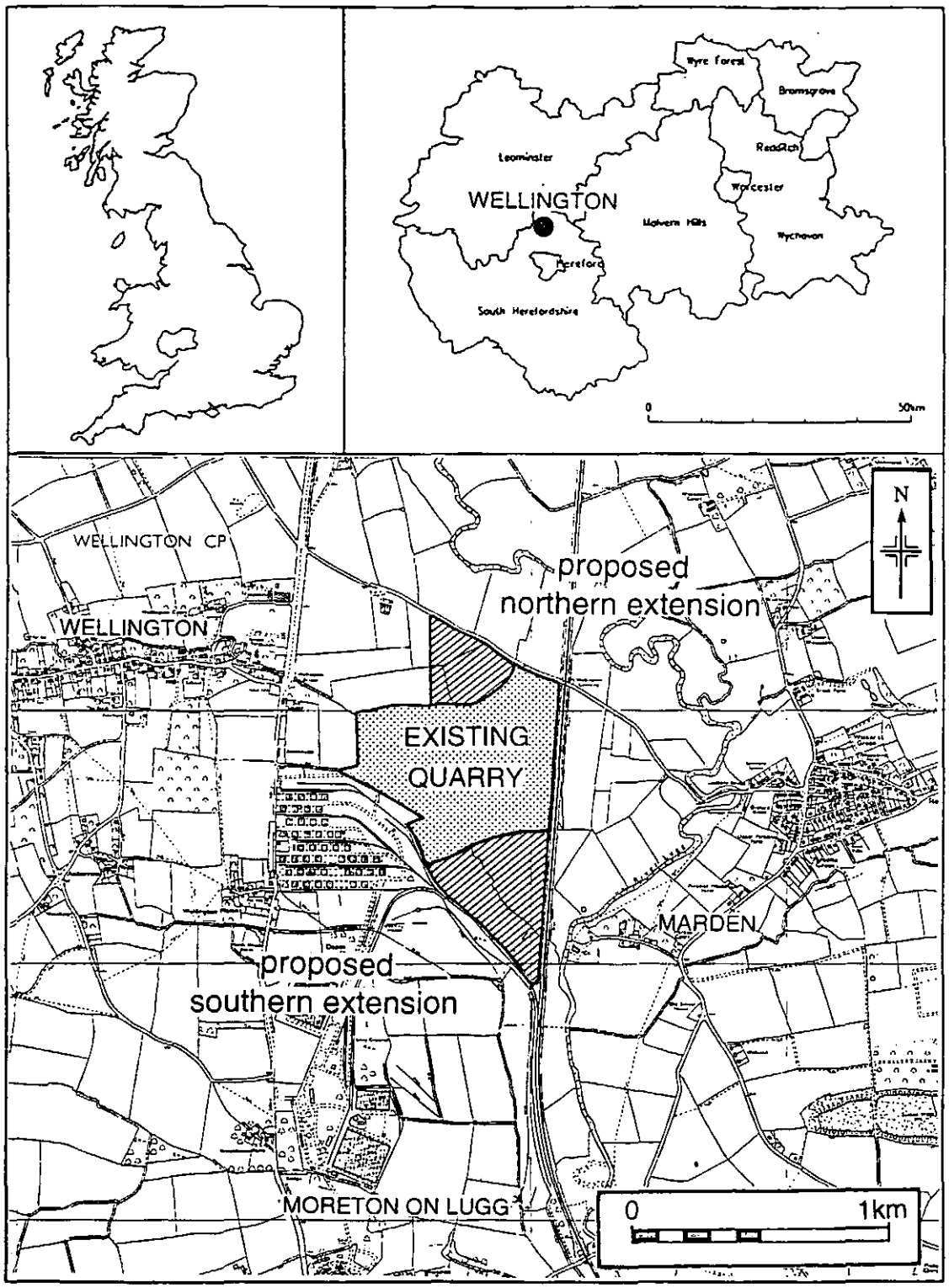



*Figure 1: Location of site*

# Evaluation at Wellington Quarry, Marden Lane, Wellington

Robin Jackson, Elizabeth Pearson and Stephanie Ratkai

## Part 1 Project summary

### 1 Reasons for the project

An evaluation was undertaken on behalf of Redland Aggregates Limited in advance of an application for planning permission to extend an existing area of quarrying at Wellington, near Hereford (Fig 1). The application is intended to propose extensions to both the north and south of the existing quarry. The archaeological project was designed in response to an archaeological Brief prepared by the Planning Advisory Section of the County Archaeological Service (dated 1 February 1996) and a specification for the evaluation prepared on behalf of Redlands by Tempvs Reparatvm, Consultancy Services Department (9 May 1996, *Specifications for archaeological evaluation: Wellington Quarry, Hereford, Hereford and Worcester, TR 31044DCA*). The site is registered on the County Sites and Monuments Record (reference number HWCM 5522) as a site of archaeological interest (Statutory Instruments 1988; no 1813).

Areas of the existing quarry have been investigated since 1988 through an on-going programme of salvage recording. This has produced extensive and significant evidence of prehistoric, Roman and medieval activity. In addition important palaeoenvironmental deposits have been identified within former watercourse channels. These have been studied along with a complex sequence of alluvial deposits which overlie the gravels and within which the archaeological remains are preserved at various distinctive horizons. Due to the depth of the alluvial material and the generally wet nature of the site, archaeological deposits are generally undisturbed and particularly well preserved. Of particular importance are a group of Neolithic pits, a high status Beaker burial, a number of Bronze Age ring-ditches, a Roman farmstead or small villa and three medieval ovens. Extensive and well preserved artefactual and ecofactual assemblages were associated with these phases of activity, as well as evidence of both earlier (Mesolithic) and later (post-medieval) activity.

The purpose of the current project was to determine whether similar deposits extended into the area presently under enquiry and thus to enable an appropriate response to be devised for any archaeological remains which might be present.

### 2 Outline of results and significance

Deposits of archaeological interest were identified in both the northern and southern evaluation areas in association with alluvial deposits of varying depth overlying the sand and gravel. Zones of high, moderate and low archaeological interest have been defined as well as palaeoenvironmental deposits of some interest. Information relating to the alluvial deposits has supported that from previous studies and extended the understanding of the overall sequence in this part of the Lugg Valley.

*The northern evaluation area*

To the north, a zone of high archaeological interest occupies the western half of the proposed extraction area (Figs 2 and 9; Trenches 17, 18, 19, 20 and 21). Here the gravel lies closest to the modern groundsurface which rises gently from east to west. A series of spreads were identified and in most cases were associated with broad, shallow, irregular-sided depressions which may represent former watercourses or ponds. These were characterised by concentrations of calcareous concretions or nodules and were heavily flecked with charcoal in places. In one trench (Trench 18) a gully was associated with these deposits as well as a shallow pit. Animal bone, prehistoric pottery and flint artefacts were recovered in small but significant quantities and indicate activity of probable Bronze Age date. The character of this activity remains uncertain. However, it seems unlikely that extensive settlement is represented and it is more probable that this material relates to widely dispersed seasonal occupation or possibly production activity. Two shallow pits and a gully identified in Trench 17 may also be associated with this phase.

To the east of this area lies a zone of moderate interest (Trenches 22 and 23) where the natural sand and gravel lies more deeply below the modern ground surface. Fewer deposits of interest were recorded here, though a Roman field boundary was identified in Trench 22 and a spread of calcareous and charcoal-flecked material was present in Trench 23 and associated with further flint artefacts and bone. In this zone there is the potential for deposits of interest but they are likely to be limited in extent or significance.

Finally, on the far east side of this evaluation area (in Trench 24), the sand and gravel appears to form a broad depression since it lay at considerable depth (Fig 4). It was overlain by a peaty deposit itself sealed by deep alluvial deposits. To the south, within the existing quarry, a similar sequence has been identified and the depression in the sand and gravel is believed to have been formed by a laterally migrating stream in glacial or early post-glacial/Flandrian times. This is believed to have been in existence until about the sixth millennium BC (Dinn and Roseff 1992). Subsequently a period of stasis (stability) of some 2000 years occurred, represented here and in previous investigations by a peat deposit. From the fourth millennium BC the channel slowly filled with alluvial deposits. This area was clearly low lying and wet for much of the prehistoric and Roman period and unsuited for occupation or settlement. It is thus considered to be of generally low archaeological interest, however, it has high potential for carefully targeted sampling of organic deposits which are likely to be of significance in developing an understanding of the early prehistoric environment.

*Southern evaluation area*

The southern evaluation area was divided on a north to south line by a zone of low archaeological interest characterised by a similar sequence of deposits to those in the zone of low interest in the northern evaluation area. Well preserved organic deposits occupied an elongated, broad depression in the gravel (Figs 3 and 10; Trenches 14, 15 and 16). This depression probably represents the southern extension of the laterally migrating stream discussed above. As in the northern extension the overlying peat deposits have the potential to provide important and datable information on former landuse and environment. However, the area as a whole is considered to be of low archaeological interest since it was low lying and wet and is unlikely to have supported former occupation or extensive activity.

Flanking the area of this former watercourse and closest to the existing quarry a zone of high archaeological interest can be defined. Small but significant quantities of flint and pottery of Neolithic and Bronze Age date were recovered from a number of trenches and these and associated postholes or small pits clearly indicate prehistoric activity. Trenches 2, 3 and 13 were particularly notable for the presence of both features and artefacts. However, the character of the activity represented remains unclear. As with areas of the existing quarry which have produced similar evidence, the majority of the features produced no artefacts but were associated with charcoal concentrations and burnt stone. Dating of these is therefore reliant on association with datable features and their position within the alluvial sequence. Of particular interest among the artefacts were a pebble hammer and a flake from a polished stone axe, both of which are indicators of relatively high status activity of probable Neolithic date. In this area the natural gravel was considerably higher than in the former watercourse (Fig 5) and thus must have been better drained and more suitable for occupation. Despite this, the considerable accumulation of alluvial overburden (which has ensured good preservation of these deposits) indicates that episodes of flooding affected this area as well. However, such episodes were interspersed with long periods of stasis identified through evidence of former occupation and breaks in the alluvial sequence within the existing quarry, for instance from the late Mesolithic through to the Late Bronze Age. A probable turfline identified in Trenches 2, 3 and 5 marks a further period of stasis and has previously been identified within the existing quarry and dated to the early post-glacial period.

A further zone of high archaeological interest can be defined towards the southern end of the proposed extension in the area of Trench 10. Here two converging artificial channels or leats are provisionally interpreted as water management features, perhaps associated with water meadows or even a mill. Postholes, a small pit and an area of metalling may relate to associated activity though contemporaneity is not certain. Dating of this activity is uncertain as no artefacts were found. However, the character of the deposits and the associated alluvial sequence are not indicative of either a prehistoric or post-medieval to modern date. As a result they are considered to be of either Roman or medieval origin.

Areas between those of high and low archaeological interest are considered to be of moderate archaeological interest. Ditches or gullies recorded in this zone are considered to be post-medieval and associated with drainage and water management. In Trench 6 a substantial feature may represent a glider trap dating from the Second World War. Apart from these features only a single unstratified flint was located within this zone. In several trenches a probable turfline of prehistoric date was identified and clearly can be equated with that in the area of high interest. This area was probably fairly well drained and suitable for occupation at certain periods in the past and may therefore potentially include significant deposits, but these are likely to be limited in extent.

## 3 Conclusions

Four zones of high archaeological interest have been identified which are associated with deposits of prehistoric and Roman/medieval date.

Prehistoric deposits were present in both the northern and southern extension areas and, though not indicative of intense activity, are widely dispersed and of some considerable interest. They are believed to relate to seasonal occupation or activity which may be associated with production activity in the northern extension. The activity in the southern area, though of indeterminate nature, may relate to high status or ritual activity since a pebble hammer and polished axe flake were recovered, both of which are items believed to have had more than a simply functional use.

The deposits of Roman or medieval date were recorded in the southern extension, within a low lying area. Two leats or channels, a cobbled surface and series of postholes and small shallow pits were identified and are believed to be associated with water management, perhaps being part of a water meadow system or even a mill. Although not associated with any artefacts, their character and location within the alluvial sequence have provided a probable date range.

Deep deposits, including a layer of peat, occupied a depression in the sand and gravel which was identified on the eastern side of the northern area and extended through the southern extension area. This depression is believed to have been caused by a laterally migrating watercourse of glacial or early post-glacial/Flandrian date. Such a feature has previously been identified within the existing quarry and clearly extends into both the northern and southern areas. Peat and alluvial deposits subsequently accumulated within this depression through the prehistoric period from about the sixth millennium BC onwards. Although this area is of low archaeological interest due to its former low lying (and therefore wet) nature, there is a high potential for sampling of the organic peat deposits to provide information on the early prehistoric environment.

Areas lying between the zones of high and low archaeological interest have been identified as of moderate interest and have the potential for the discovery of significant but discrete archaeological deposits. However, they are not considered likely to include extensive archaeological remains. Information relating to the alluvial sequence has supported that from previous work at the quarry and extended our understanding of the overall sequence in this part of the Lugg Valley.

# Part 2 Detailed report

## 4 Aims

The aims of the evaluation were to locate archaeological deposits and determine, if present, their extent, state of preservation, date, type, vulnerability, documentation, quality of setting and amenity value. The purpose of this was to establish their significance, since this would make it possible to recommend an appropriate treatment which may then be integrated with any proposed development programme.

## 5 Archaeological background

The existing quarry at Wellington is located at NGR SO 508 479 and lies between the villages of Marden and Wellington, 7km north of Hereford (Fig 1). The proposed extensions comprise an area of 7.9ha to the north of the existing quarry and of 15.9ha to its south. The current landuse of the site is agricultural, the northern area being in arable use and the southern area being under permanent pasture.

The area concerned lies on the floodplain of the River Lugg where the solid geology is Old Red Sandstone overlain by deep deposits of fluvioglacial gravels. As a result of its topographical position on the floodplain of the River Lugg and at the confluence of the Lugg and one of its tributaries (the Wellington Brook), layers of silts (alluvium) from the river have been deposited on the gravels over several millennia. Clayey pelo-alluvial gley soils of the Hollington Association have developed in this alluvium (Ragg *et al* 1984). Such alluviated floodplain areas are an important part of the landscape for archaeological research, as they formed a valuable agricultural resource in the past. Land which was annually flooded was fertilised by silt from the river, providing both pasture and rich grass (hay) for feeding animals over winter. As the extent of flooding and silting has varied throughout history and prehistory, changing river conditions have had a great influence on changing settlement patterns in these areas.

Prior to an excavation at the quarry in 1986, the archaeological significance of the site at Wellington was unknown. The following summary of the knowledge of the area at that time is taken from Clarke *et al* (1988). An unprovenanced collection of Roman pottery found near Wellington had been recorded (VCH 1 1908, 197), while excavations of Roman sites in the vicinity included those at Sutton Walls hillfort (Kenyon 1953) and Kenchester Roman town (Wilmott and Rahtz 1985). The site is close (*c* 4km) to a number of Roman roads running to the east, south and west (Crickmore 1984, 3). One Roman road passes close to the south-east of the site, at a distance of *c* 1km. The nearest cropmarks are those to the north-west, close to the 61m (200ft) contour (HWCM 5523, 6019 and 7054). A study of the neighbouring parish of Marden has investigated the medieval and earlier settlement from a historical perspective (Sheppard 1979).

Archaeological salvage recording and geophysical survey has been carried out at the quarry since 1986, providing evidence of significant archaeological deposits ranging in date from the prehistoric to medieval periods. Work on alluvial sediments has been carried out by Rebecca Roseff of Birmingham

University as part of a continuing project by the County Archaeological Service at the quarry. This work has provided information on the history of the landscape use in the area (Roseff 1992; Clarke *et al* 1988; Dinn and Roseff 1992). Excavation and salvage recording have illustrated several episodes of flooding and alluviation interspersed with periods of stasis (stability) and human occupation. Certain elements of the human activity are sealed within the alluvial sequence and have enabled refinement of the dating sequence derived from radiocarbon and infrared-stimulated luminescence dating undertaken during an early phase of work at the quarry (Dinn and Roseff 1992). These phases of alluviation reflect the broad depositional sequence for much of the Lugg Valley.

In summary, the model for the development of the sequence at Wellington, suggests that the first period of major alluviation occurred during the early post-glacial period, interrupted at some stage by a period of stasis represented by a buried soil and turfline, possibly dating to the Windermere Interglacial some 12-13500 years ago).

This period of alluviation was followed by a long period of stasis to 3890-3640 BC, and then a period of slow aggradation (build up of alluvium) during which parts of the site formed the focus for human activity and probable occupation. Mesolithic and Neolithic flint finds, a group of Neolithic pits (Fagan *et al* 1993), a Beaker burial and further broadly contemporary pits (Mike Napthan pers comm), a number of late Neolithic/early Bronze Age ring ditches (Fagan *et al* 1993; Shelley 1989) and areas of buried Neolithic/early Bronze Age soils attest to fairly intensive exploitation of the area through this period of stasis and subsequent slow aggradation.

The next major period of alluviation occurred from the Bronze Age through to the Iron Age. This period is marked by an absence of evidence for human activity at the site presumably reflecting that conditions were too wet for occupation. Mid to late Iron Age occupation debris and a ditch mark the end of this period of alluviation and the beginning of a further period of stasis (Clarke *et al* 1988).

Extensive Roman activity associated with a villa or large farmstead and including a substantial extent of the contemporary groundsurface has also been recorded and attests to a period of stability (Edwards 1989 and 1990).

A final episode of alluviation began during the late Saxon period (11th century). Ridge and furrow earthworks survive in the fields to the east of the quarry, and there appears to have been little alluviation since their abandonment. Three medieval ovens identified in 1992 (Brown 1992) indicates that a part of the site at least was in use in the medieval period.

The archaeology and landscape history of the Lugg Valley floodplain have been studied further afield through a number of projects in recent years to the south of Wellington, towards Hereford. At Eau Withington to the south-east, archaeological salvage recording was undertaken along the route of a British Gas pipeline. As a result, alluvial deposits were recorded over some distance and in direct association with a medieval site and ridge and furrow (Hurst and Pearson 1995). The presence of a stone building (HWCM 21108) indicated a period of stasis during the early medieval period. This building was abandoned in the 14th century which saw the onset of a period of renewed alluviation. The latter must have been relatively short-lived as medieval ridge and furrow

survives as a visible earthwork feature in the vicinity and has not been masked by alluvial deposits.

A further area of interest is the Lugg Meadows (HWCM 9216), which are still managed according to the medieval Lammas system and are one of only sixteen such sites surviving in the country (Brian 1993). Here, a ground probing radar survey and limited excavation (Stone 1994) and fieldwalking and augering of alluvial deposits (Pearson and Roseff 1996) have provided information on the use and history of the meadows, while organic deposits have been obtained from the base of a deep abandoned stream channel which is presently a parish boundary, and a possible abandoned meander of the River Lugg.

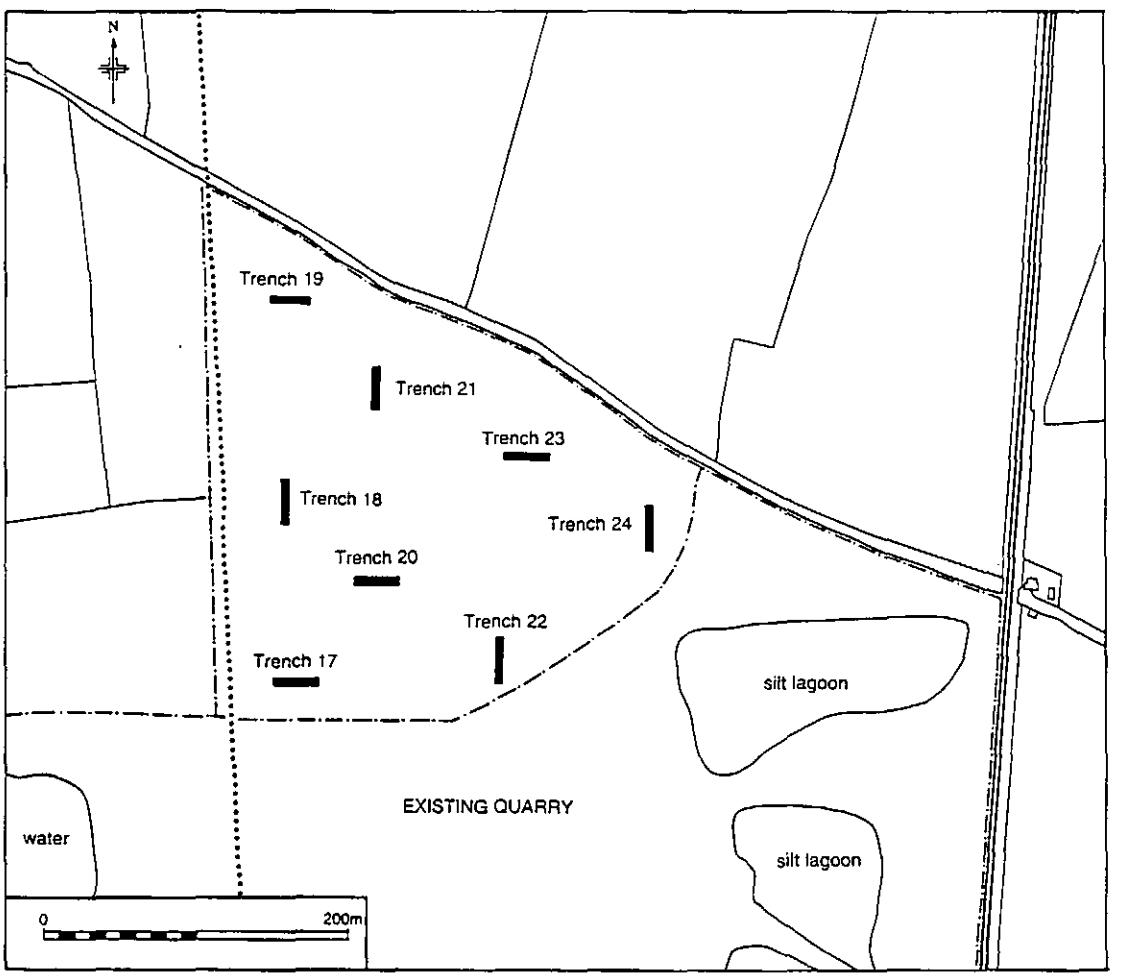



*Figure 2: Location of trenches: Northern extension*

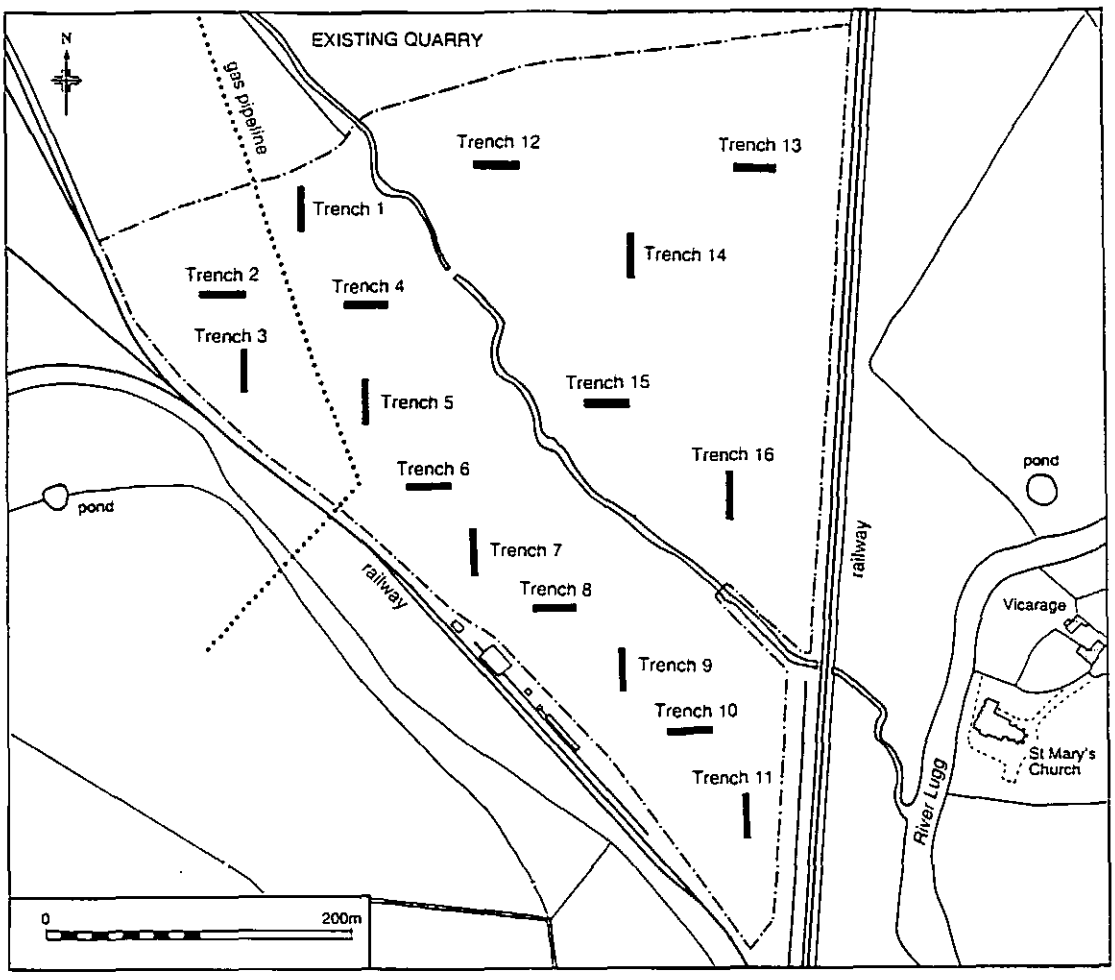



*Figure 3: Location of trenches: Southern extension*

## 6 Methods

### 6.1 Fieldwork

The evaluation fieldwork was preceded by a limited programme of geophysical survey to assess the effectiveness of this evaluative method and possibly to better target evaluation trenches. Results were limited (see Bartlett 1996) and subsequently did not influence trench location.

#### 6.1.1 Excavation strategy

Fieldwork was undertaken at the quarry in two stages. The southern evaluation area was undertaken from the 27th August to the 20th September 1996 and subsequently the northern area was evaluated from the 23rd September to the 15th October 1996. A total of 24 trenches were excavated of which 8 were in the northern area and 16 in the southern (Figs 2 and 3). Trenches were located in such a manner as to test for the presence or absence of archaeological deposits across the whole of both areas. Slight weighting was placed on their locations so as to focus more heavily on areas where borehole data demonstrated a lesser depth of overburden and higher sand and gravel deposits. It was felt that these higher areas were more likely to have been a focus for former occupation and activity as they would have been better drained than the lower lying depressions within the gravel.

Trenches measured 30x5m and were excavated to either important archaeological horizons or natural sand and gravel. In a number of cases, due to rapid influx of water when the watertable was punctured, gravel was not reached across the whole trench. In these cases box trenches were excavated to establish the depth of the sand and gravel. In one trench (Trench 10), due to the presence of potentially significant deposits at the west end, the trench was extended slightly to the north-west to facilitate investigation and understanding of these deposits. Excavation was undertaken by mechanical excavator (tracked 360 degree). Initially the modern topsoil or ploughsoil was removed across the whole trench and stored on one side. Subsequent excavation was undertaken in a series of spits, varying between 0.20 and 0.30m in thickness. Trench sides were kept as close to vertical as possible, however a ramp was left at each end to enable access for the machine.

Where archaeological deposits were present, selected deposits were then excavated by hand. Recording followed standard practice (County Archaeological Service, 1995 *Manual of Service practice: fieldwork recording manual*, HWCC County Archaeological Service internal report, **399**). A Fieldwork Progress Record (AS2) was used during machine excavation for each trench to record overall impressions of the banksman and anomalies within the alluvial sequence. Brief records were made of the deposits encountered for each spit and finds were recovered from both the trench surface and the spoil heaps.

On account of the value of the alluvial deposits demonstrated as a result of previous work, detailed descriptions of each layer of alluvial sediment were made in the field using Hodgson (1976) as a guide. These were taken from 1.00m wide representative sections which were carefully cleaned, photographed and recorded. The following characteristics were noted:

* *Structure*: appearance of soil surface when broken into pieces, that is, blocky, prismatic, plastic and laminar etc.

* *Colour*: described and recorded using a "munsell chart".

* *Texture*: proportion of sand, clay and silt estimated as percentages.

* *Inclusions and other features*: the presence of mottling, manganese flecking, tufa (calcareous concretions), charcoal, organic material, and stones was recorded as a percentage figure. The size and shape of visible stones was also recorded.

These characteristics were recorded as they can provide information on the conditions under which the sediments were deposited and the origin of the material. These aspects are discussed in more detail in the discussion, however, caution should be exercised since the sequences of alluviation are complex in places and are better recorded from long exposed sections rather than in relatively short trench sections. Thus the data recorded and the conclusions drawn are necessarily on a broad and simplistic basis and may not reflect the full complexity of the sequence of events.

### 6.1.2 Structural analysis

Structural analysis was effected through a combination of structural, artefactual and environmental evidence. Particular use was made of previous

archaeological observations at the quarry and the studies of the alluvial sequence for understanding the chronology and development of the site and the context of any archaeological deposits recorded. Alluvial deposits were compared between trenches and where possible these have been linked to the already established sequence.

## 6.2 Artefacts

### 6.2.1 Artefact recovery policy

A small quantity of finds was recovered from the trenches. These were cleaned if they were in a robust enough condition.

### 6.2.2 Method of analysis

All artefacts and ecofacts were quantified by count and/or by weight, as appropriate (Tables 1 and 2).

## 6.3 Environment

### 6.3.1 Sampling policy

The environmental sampling policy was as defined in the County Archaeological Service Recording System (1995 as amended). Large animal bone and large fragments of wood were hand-collected during excavation, while samples of 10 to 20 litres were also taken from a total of 24 contexts. A number of these were features of prehistoric or probable Roman date. A total of 8 samples were taken from a "peaty" deposit noted in several trenches. For the purposes of the evaluation 11 samples were studied which include all the prehistoric contexts, one Roman channel fill and a selection of samples from the extensive peat deposit (Table 3).

### 6.3.2 Method of analysis

Hand-collected animal bone was identified by comparison with modern reference specimens housed at the County Archaeological Service, and using identification manuals (Schmid 1972, Hillson 1992; Tables 4, 5 and 6).

With the exception of samples from the extensive organic deposit, the samples were processed by flotation followed by wet-sieving using a Siraf tank. The flot was collected on a 500µm sieve and the residue retained on a 1mm mesh. This allows for the recovery of items such as small animal bones, molluscs and seeds.

The residues were fully sorted by eye and the abundance of each category of environmental remains estimated (Table 7). The flots were fully sorted using a low-power EMT light microscope and remains identified using modern reference specimens housed at the County Archaeological Service.

The organic samples were processed by the wash-over technique as follows. A sub-sample was broken up by hand and agitated in a bowl of water. The water, containing light organic material was decanted over a 500µm sieve, and the remaining silt discarded. The flot retained on the sieve kept wet and scanned using an EMT Light microscope as above.

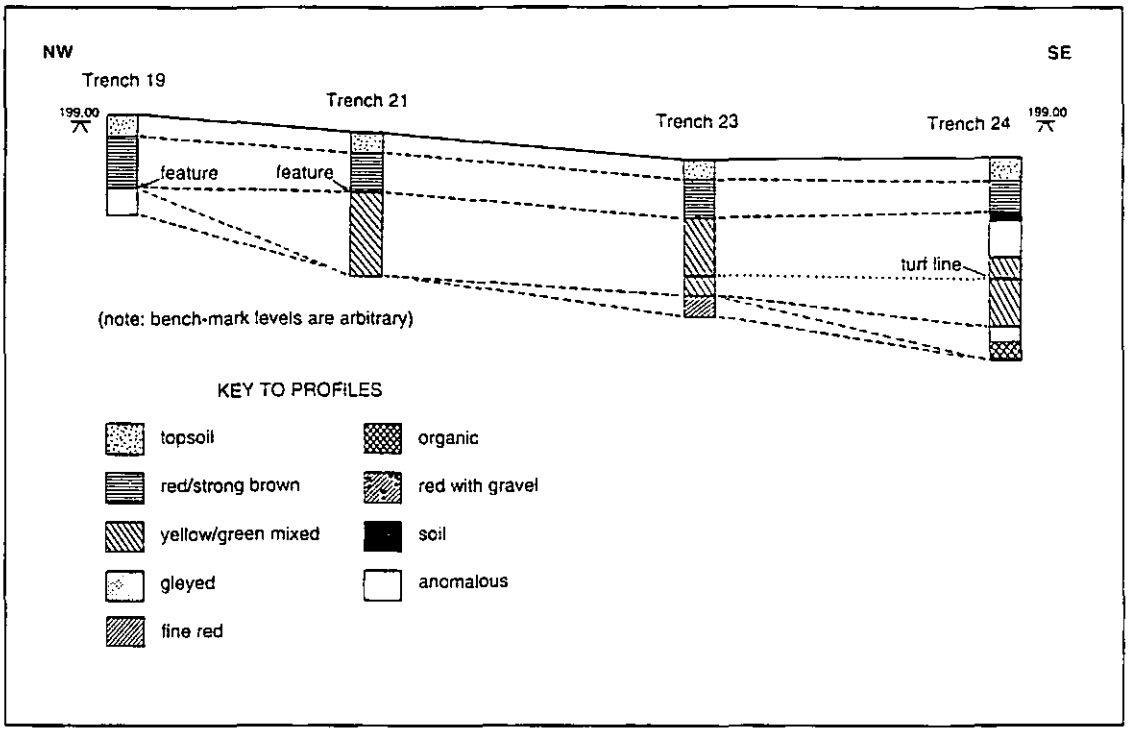



*Figure 4: Schematic profile of deposits across the northern extension (vertical scale 1:100, horizontal scale 1:2500)*

## 7 Analysis

### 7.1 Depositional analysis

Various types of deposit were recorded in both the northern and southern evaluation areas. These comprised natural sand and gravel, alluvial deposits, former channel fills including accumulations of organic material, archaeological deposits and topsoil. The modern ground surface across both evaluation areas varies very little in level with only a slight gradient down to the south in both areas and a slight slope down to the west in the southern extension and the east in the northern. Across the whole southern extension area there was a maximum variation of 2.76m in ground surface between the highest and lowest trenches while the variation for the northern extension was only 0.59m. A brief summary of the overall alluvial sequence is given below, along with brief descriptions of the deposits encountered in each area. Further details are provided in Appendix 1 and detailed records form part of the project archive.

*Natural sand and gravel*
The surface of the natural sand and gravel was variable and undulating, being generally higher to the west. The most notable characteristic was a series of trenches where the gravel was considerably lower than elsewhere. One of these lay on the east side of the northern area (Trench 24) and the others were three adjacent trenches in the southern area (Trenches 14, 15 and 16). Schematic profiles across the areas show that in these trenches the depth of alluvial overburden was greatest, that the alluvial sequences were not typical and that organic deposits were preserved at the base of these sequences (Figs 4 and 5). Those in the southern area, allied to information from the trenches flanking the three deeper ones, indicate that there is a broad depression in the surface of the gravel running on an approximately north to south alignment

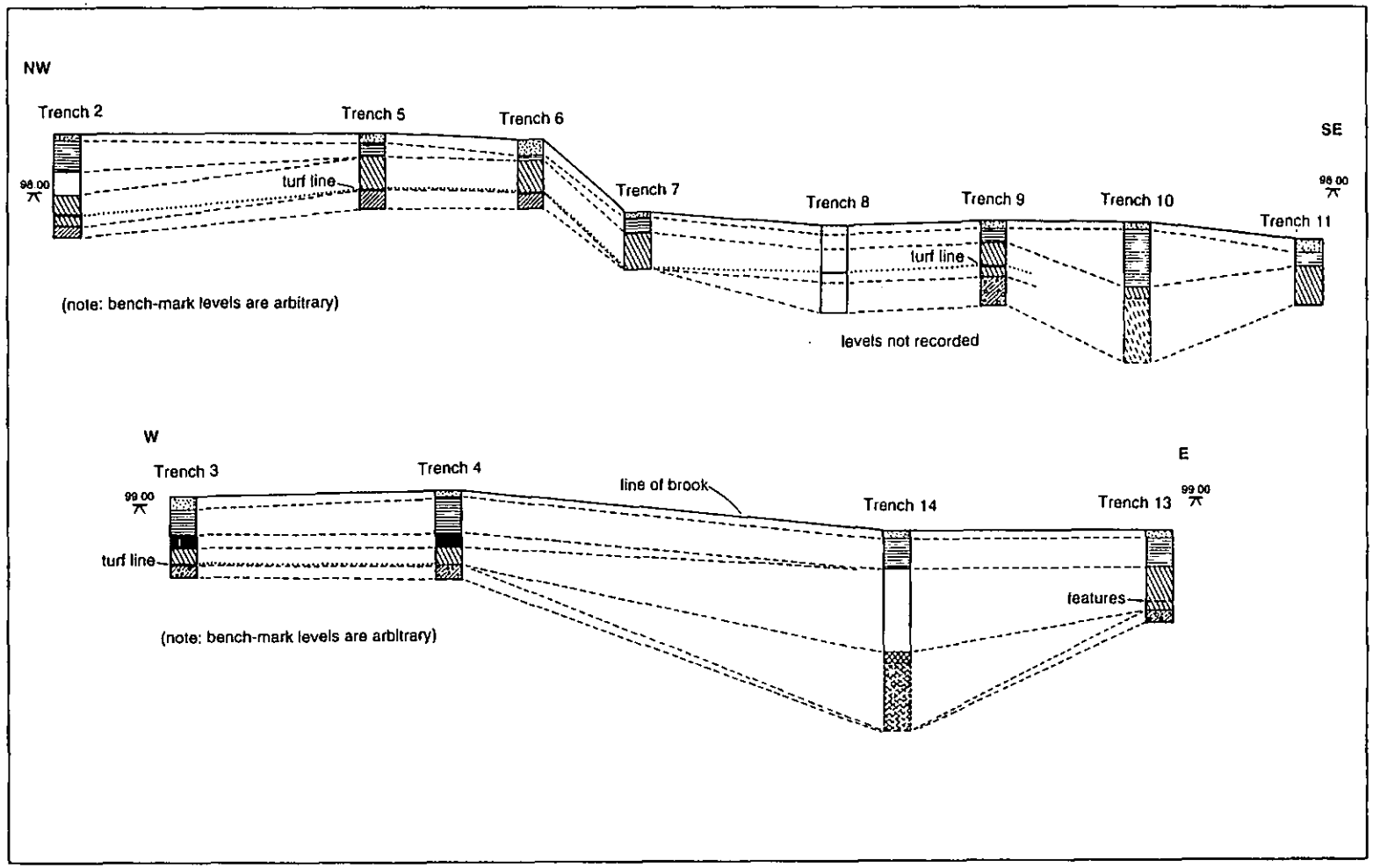



*Figure 5: Schematic profile of deposits across the southern extension (vertical scale 1:100, horizontal scale 1:2500)*

(see Fig 10: Zone of low archaeological interest). This depression appears to continue through the existing quarry and across the eastern edge of the northern area.

*The alluvial sequence*
The alluvial sequence and modern ploughsoil/topsoil overlying the sand and gravel natural was recorded in each trench. Although varying considerably in depth, from 0.81m (Trench 17) to 2.67m (Trench 24) in the northern extension and from 0.84m (Trench 7) to 2.49 (Trench 15) in the southern extension, the sequence was generally similar across the both areas. This sequence reflects that already recorded and extensively discussed within the existing quarry (for instance Dinn and Roseff 1992; Roseff 1992). In summary this comprises a topsoil or ploughsoil varying between 0.10 and 0.30m. This overlies a yellowish red to strong brown alluvium (5YR 4/6 to 7.5YR 4/6) which varies somewhat in depth but generally forms an accumulation between 0.50 and 1.00m in thickness, with the thickest sequences filling areas where the sand and gravel were deepest. Below this lies a yellowish brown through brown to olive brown coloured (10YR 5/4 or 5/6 to 2.5Y 4/4) alluvium of considerably variable thickness. This in turn overlies reddish clayey gravels or fine yellowish red silts above the sand and gravel. This sequence and variations within it across the evaluation areas are schematically illustrated in Figures 4 and 5.

A number of variations occur to the sequence with the yellowish brown alluvium missing from several of the shallower sequences in the northern extension (Trenches 17, 18, 19 and 20). Elsewhere a thin (0.10m max) dark stain was recorded within the yellowish brown alluvium (Trenches 2, 3, 5, 6, 8, 9 and 24) and probably represents a former turfline/topsoil which has developed during a period of stasis at the site. A brown alluvium was present in some trenches (Trenches 1, 3 and 4) sandwiched between the reddish brown and the yellowish brown alluvial deposits.

In the trenches where the gravel and overburden were at their deepest (see above) anomalous sequences were recorded which probably represent silting of a broad former channel or watercourse. These were identified in a series of trenches across the southern extension (Trenches 14, 15 and 16) and one in the northern extension (Trench 24) in all of which they overlaid organic "peaty" deposits (see below Section 7.3). Gleyed deposits and mottling were also present and result from permanent waterlogging and anaerobic conditions.

*The northern evaluation area*
Archaeological deposits were encountered in all of the trenches except Trench 24, which as described above lay on the line of a probable former watercourse.

In five of the trenches (Trenches 18, 19, 20, 21 and 23) layers rich in calcareous material were recorded (Trench 18, contexts 5246, 5249, 5254, 5255, 5257 and 5261; Trench 19, context 5152; Trench 20, context 5236; Trench 21, contexts 5159 and 5160; Trench 23, contexts 5263, 5264 and 5265). This material may be tufa or alternatively calcite concretions/nodules and probably results from redeposition of calcium carbonates which have been washed out from the limestone deposits which lie a short distance to the north of the River Lugg. It occurred in spreads across the trenches and down the sides of linear shallow depressions, which may represent shallow watercourses. These generally occurred at the base of the reddish brown alluvium and over, and cut into, the sand and gravel or yellowish brown

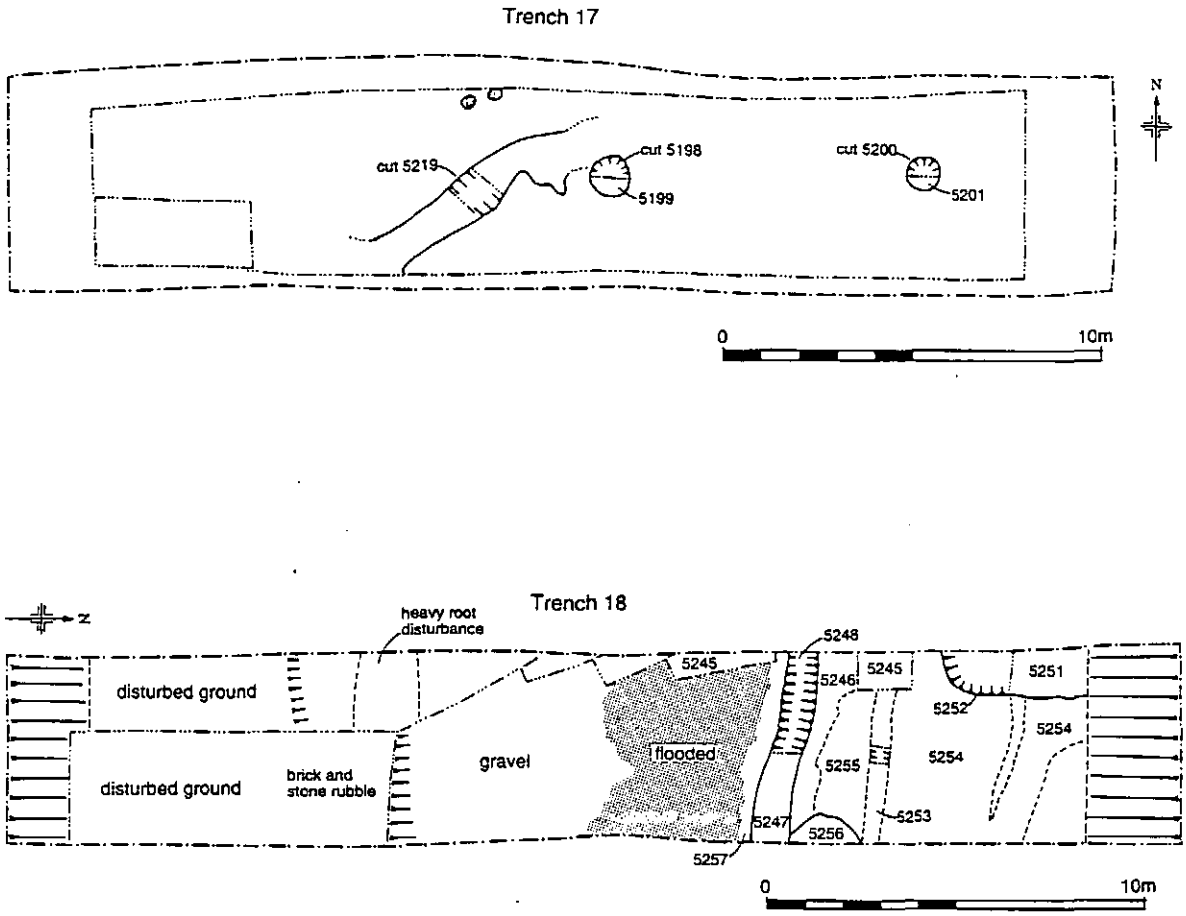



*Figure 6: Trench plans: Trenches 17 and 18*

alluvium, although in one case, in Trench 20, the calcareous deposit formed a distinct layer across much of the trench. In places, for instance in Trench 18 (contexts 5254, 5255 and 5257; Fig 6) this material formed a compact surface, but elsewhere was loose and had the appearance of a dumped layer. Here, in Trench 18, it was cut by an east to west aligned gully (contexts 5247/5248) and a shallow pit (contexts 5251/5252), and was also associated with a loose, rather sandy layer of the calcareous material (context 5246). Several of these deposits contained finds including flint, prehistoric pottery and animal bone (see below; Table 1). The deposits were flecked with charcoal, especially contexts 5246, 5254 and 5255 within which there were distinct concentrations of charcoal including small fragments of this material. In the other trenches similar deposits and associated layers/fills were also charcoal-flecked and in Trenches 21 and 24 (contexts 5159, 5160 and 5177) contained finds of flint or prehistoric pottery (see below).

In Trench 20 at the base of the reddish brown alluvium was a pit or butt-end of ditch (contexts 5241/5242/5243/5244) with a number of soily brown fills. No dating evidence was recovered but the position of the feature within the alluvial sequence suggested that it was probably Roman or post-Roman (though no later than medieval) in date. Similar undated features were recorded in Trenches 21 and 22 (contexts 5167/5168/ 5169/ 5170/5171 and 5185/5186/5187), though in both cases these were clearly east to west aligned ditches. Both were substantial and are likely to have had a dual purpose as both field boundaries and drainage features, that in Trench 21 clearly having been recut on one occasion while that Trench 22 had a waterlogged fill (5186) which included organic material (wood, animal bone and possible leather fragments).

Finally a number of undated features were recorded in Trench 17, comprising two shallow pits with heavily charcoal flecked fills (5198/5199 and 5200/5201: Fig 6) and a shallow ditch or gully (5219/5220/5221/5222). A number of small fragments of prehistoric ceramic from one of these (context 5198) suggest a prehistoric date for all of these features.

*The southern evaluation area*

Archaeological deposits were recorded in a number of trenches in this area especially in a group of trenches towards the north side of the area and in one to the south.

In most of the trenches close to the existing quarry, small charcoal flecked features were recorded, which mostly represent small pits or postholes (Trench 2, contexts 5133 and 5134; Trench 3, contexts 5107, 5114, 5115 and 5125; Trench 5, context 5044; and Trench 13, contexts 5006 and 5007). These trenches along with Trenches 1 and 12 also produced the majority of artefacts from the southern extension (see below; Table 1). These were all of Neolithic or Bronze Age date and several came from the features described above (contexts 5007, 5115, 5133 and 5134). The majority of the other finds came from the alluvial deposits immediately above these features (eg context 5128) which were below the reddish brown alluvium (or the brown alluvium where present) and cut into or within the yellowish brown alluvium. Trench 3 produced the most features (Fig 7) and artefacts several of which were included in a pit (context 5115).

In Trench 2 this phase of activity appeared to be sealed by several anomalous layers (contexts 5138, 5139 and 5140) and associated with a further anomalous deposit (context 5141). These layers were not present at the far west and east ends, but appeared focussed within a slight depression central to the trench. Two of these were notable for their pale colouration (contexts 5138 and 5140) and all included small molluscs, especially context 5138. All were flecked with charcoal and the lowest of the four layers (context 5141) was associated with apparent features and charcoal concentrations (contexts 5133 and 5134).

Several of these trenches in this part of the southern evaluation area (north) also included a probable former turfline (Trenches 2, 3, 4 and 5; Fig 5) which was also recorded further to the south within Trenches 6, 8 and 9. Where this was observed in trenches which also included prehistoric features it was not associated with them and occurred earlier in the alluvial sequence.

In one trench towards the south end of this area (Trench 10) complex and well-preserved deposits were recorded (Fig 7). Two north-west to south-east aligned artificial channels or leats (contexts 5093 and 5096) appeared to converge. These were vertical-sided and flat-based with waterlogged and gleyed lower fills. A number of irregularities were recorded in the sides of the more northerly feature. Several worked stakes (of both round and square section) survived in the sides of these features and driven into the reddish

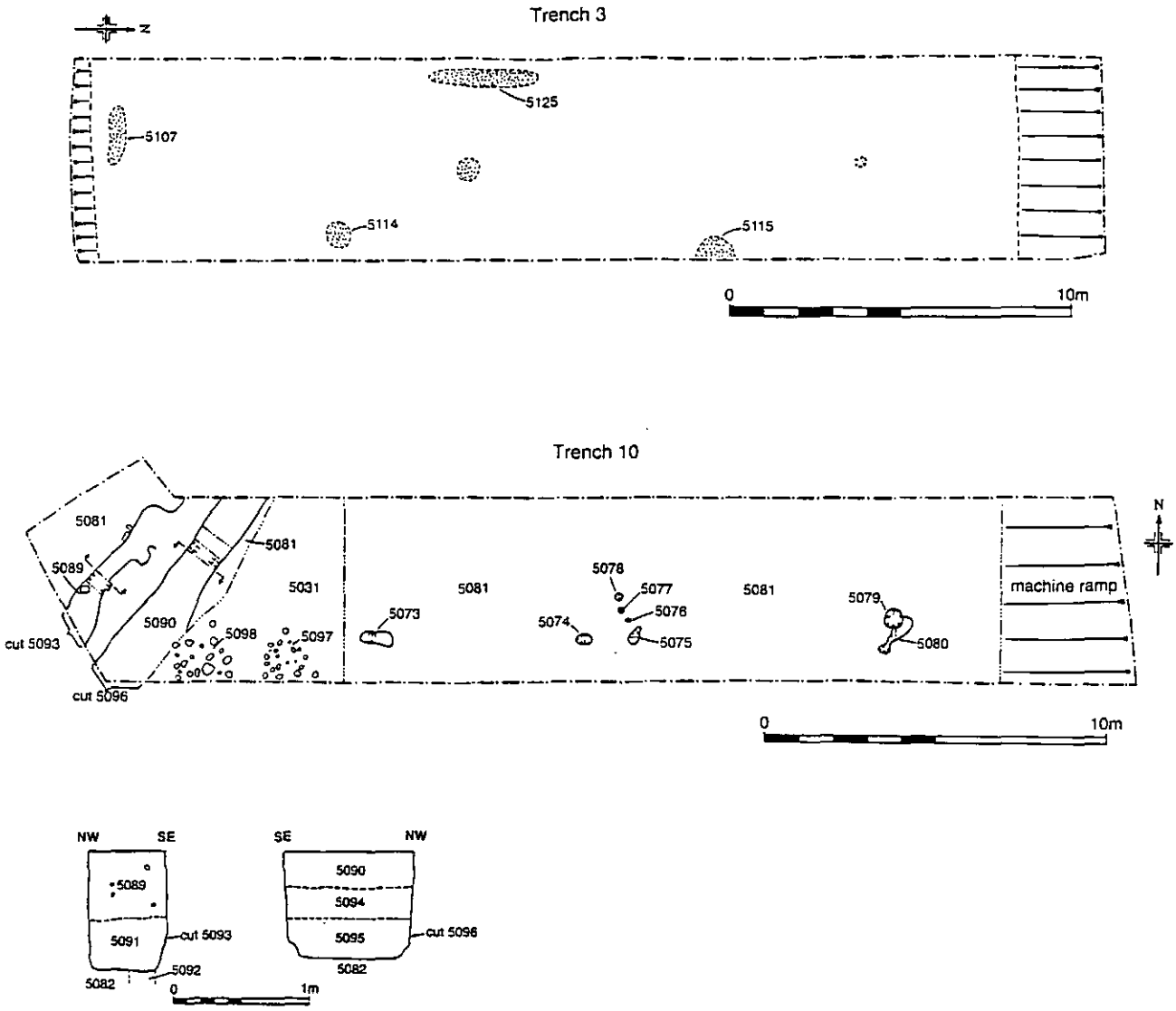



*Figure 7: Trench plans: Trenches 3 and 10*

brown alluvium through which they cut and by which they were sealed. Both the irregularities and stakes may be have been related to associated structural elements such as linings or gates to control water flow through the channels/leats. To the west was an area of irregular cobbling, probably laid to consolidate a wet area or provide access to the channels or leats. Scattered across the remainder of the trench were a number of postholes or stakeholes and a shallow pit (context 5079) the fill of which was abundantly flecked with charcoal and included much burnt stone and pebble. These may have been contemporary with the channels/leats, though this was unclear due to slight variations within the alluvial sequence into which they were cut. Overall dating of the activity in this trench was uncertain since no artefacts were recovered from these features, however, their position within the alluvial sequence appears to associate them with the reddish brown alluvium indicating that they were probably of Roman or medieval date.

In Trench 15, one of the trenches within which the former channel and associated peat deposits were identified, the eastern side of a distinct dark, organic filled feature (contexts 5052, 5053 and 5056) was recorded. This feature had a straight north to south aligned east side, with a near vertical slope to a flattish base and was cut into the upper of the channel fills. This may also be a former channel or watercourse but is clearly later in date than the others.

Apart from these deposits described above a number of other features were identified across the southern extension. In Trench 1 a substantial ditch, on a broadly east to west alignment was recorded (contexts 5123/5124). A calcareous and charcoal-flecked lower fill included a fragment of worked animal bone. This deposit was suggestive of a prehistoric date for the feature but an upper reddish silty fill was more suggestive of a Roman or post-Roman date, and consequently the dating of this ditch remains uncertain. Ditches or gullies were also recorded in Trenches 8, 9 and 11. Due to their position within the alluvial sequence and the nature of their fills these are considered to be post-medieval. One of these, present in both trenches and broadly aligned north-west to south-east, is still a visible feature in the field. In Trench 6 a substantial vertical-sided and flat-based, deep feature was clearly of relatively recent date. Gravelled patches and a number of iron pins were recorded within the topsoil or at its base in a number of trenches, mainly in those closest to the military base which lies to the west of the evaluation and quarry.

## 7.2 Artefactual analysis

*Pottery*

The pottery came from four phases; prehistoric, Roman, medieval and modern. The prehistoric pottery consisted of small sherds, generally undiagnostic and in poor condition. Some very small fragments may have come from pottery vessels but could equally as well have been daub or the remains of other fired clay objects. Four fabrics were identified. The most common was sparsely tempered with angular quartz grits, up to 5mm in size, and was generally mid-brown to black in colour, although there was one fully oxidised orange sherd. The second fabric was fine and contained few obvious inclusions. However with the exception of one sherd from Trench 21 in the northern area (context 5160), sherds in this fabric were very small and the apparent lack of inclusions may be misleading. This fabric was generally oxidised to a yellowish-brown colour. The sherd from 5160 had oxidised surfaces and a dark grey core and margins. The third fabric, was dark grey-black and had

some burnishing contained abundant sub-angular quartz. It closely resembled an Iron Age fabric (fabric 5.1). The fourth fabric, represented by a single sherd, mid-dark brown with a mid grey core. It was tempered with organic matter and sparse clay pellets. A similar fabric was recorded at Bromfield, Shropshire (Stanford 1982).

There were three form sherds, a flat base and two rim sherds. The flat base was in the angular gritty fabric. One rim sherd was in the fine fabric with few obvious inclusions. The rim sherd was very small and the rim was little more than a slight external roll of clay. The third sherd (fabric 5.1) was also a rim sherd probably from a tubby cooking pot.

The Roman pottery was made up entirely of Severn Valley ware. The only forms which could be identified were tankards.

The medieval pottery consisted of two Herefordshire red micaceous sherds and one siltstone tempered ware cooking pot sherd.

*Other artefacts*
Prehistoric artefacts were represented by flint artefacts, a reworked polished stone axe fragment in a fine grained stone and a pebble hammer (Fiona Roe pers comm; Fig 8:1). Also of probable prehistoric date were two pieces of worked bone (contexts 5123 and 5133). Some organic remains, possibly leather, were recovered from a possible Roman ditch fill (context 5186).

A total of 38 flints were recovered. The majority of these were undiagnostic waste products (including flakes and miscellaneous debitage), the only diagnostic items being a single D-shaped scraper (Fig 8:2), a broken (?pyramidical) blade core and five blade flakes. Although this is only a small assemblage, on the basis of these items, it can be suggested to be probably mainly of Neolithic origin, a date which is consistent with that of the pebble hammer and some of the pottery recovered.

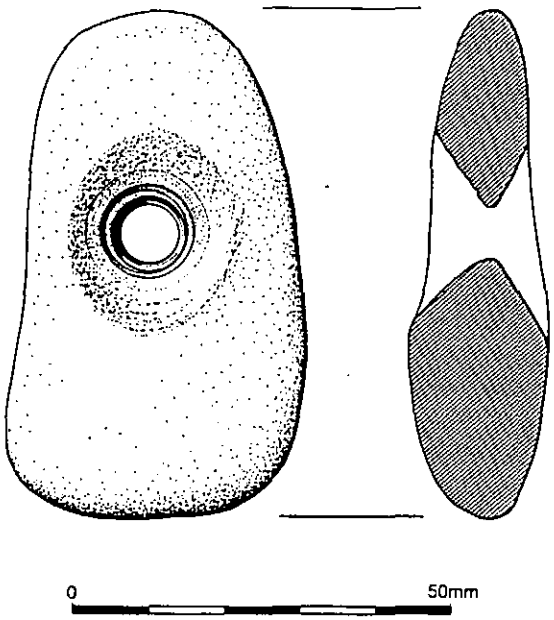
## 7.3 Environmental analysis

*Hand-collected animal bone*
A total of 1.49kg of animal bone and antler was hand-collected from 10 contexts of Neolithic, Early Bronze Age, Bronze Age or prehistoric date (Tables 5 and 6). Antler remains were generally very poorly preserved, while the condition of other bone fragments was poor to moderate.

Common domesticated species including horse (possibly), cattle, sheep or goat and pig were represented mostly by teeth and upper limb fragments (humerus and femur). This may reflect the survival of the more robust parts of the skeleton, rather than patterns of waste disposal; on sites where there is poor preservation of bone and pottery, these are the parts most commonly found. A canine tooth (from context 5160) of early Bronze Age date is likely to be from a medium to large size domesticated dog. However, the possibility of its being a wolf tooth exists, as wild wolves were still common at this period.

Antler fragments were common (contexts 5133, 5160, and 5251), mostly of red deer (*Cervus elaphus*), with a small number of possible fallow deer (*Cervus dama*). Preservation of these remains was generally too poor to determine whether they were butchered, although one fragment may have been cut. Despite the lack of definite evidence of butchery, in their context, this

material probably indicates the remains of hunted game. A lower mandible found in context 5251 may be of fallow or roe deer.



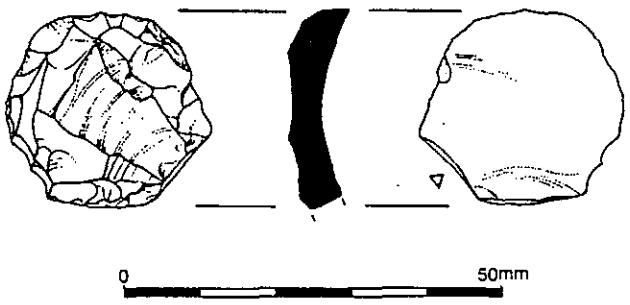




*Figure 8: Stone artefacts*

*Hand-collected wood*

Wood fragments were abundant and were preserved in organic deposits recorded in Trenches 14, 15, 16 and 24. Samples of the wood were washed and examined for evidence of cut marks and to determine their preservation.

The preservation of the wood in all four of these trenches was good, many fragments being found with the bark intact. It is likely that this material can be used to provide dating evidence. A number of fragments were sufficiently large to suggest the potential for dendrochronological dating, and the majority would also be appropriate for radiocarbon dating. A large proportion of the wood appeared to be roundwood fragments of silver birch (*Betula pendula*). The remaining fragments are potentially identifiable and further analysis may also provide information on climatic conditions and woodland management. One piece was heavily charred on one side and a number of fragments from Trenches 15 and 16 may have been worked. Finally, a number of worked stakes were recorded (one of which was recovered intact) in Trench 10 and associated with two channels or leats of Roman or medieval date.

*Remains from wet-sieved samples*
Few environmental remains were recovered from prehistoric feature fills in the southern evaluation area (contexts 5006, 5007, 5027, 5107, 5115 and 5141). One charred fragment of hazelnut shell (*Corylus avellana*), and one charred grain of emmer or spelt wheat (*Triticum dicoccum/spelt*) in context 5115 (Trench 3) are the only remains representing waste from human activities. However, context 5138 (Trench 2) was rich in mollusc remains which have the potential to provide information on the surrounding environment.

Two samples from the extensive organic deposit observed in Trenches 14, 15 and 16 in the southern evaluation area and in Trench 24 in the northern evaluation area were examined (contexts 5026 and 5183). Context 5026 in Trench 16 was moderately rich in identifiable organic plant remains, and included occasional mollusc and insect remains. The majority of the plant species are common on disturbed or cultivated ground. Seeds of elderberry (*Sambucus nigra*) were particularly numerous, and occasional seeds of crowfoot (*Ranunculus* sbgen *Batrachius*), and buttercup (*Ranunculus acris /repens/bulbosus*) are the only indication of wet or damp ground. In context 5183 (Trench 24), abundant water-pepper (*Polygonum hydropiper*), and spikerush/sedge (*Eleocharis/Carex* sp) in association with white water-lily (*Nymphaea alba*) indicate still or slow-moving water conditions *in situ*.

Samples from organic deposits within archaeological features include contexts 5091 (Trench 10) and 5186 (Trench 22). Remains from context 5091, a channel/leat fill of Roman or medieval date, indicate only bankside vegetation and disturbed or cultivated ground. An abundance of seeds of aquatic plants from context 5186, indicates that this ditch was well vegetated with sedges (*Carex* sp) and arrow-head (*Sagittaria sagittifolia*) in shallow slow-moving water. The remaining assemblage indicates open grassland (Clapham *et al* 1987), in which hawkweed ox-tongue (*Picris hieracioides*) was particularly common. Of interest are a number of cherry stones (*Prunus avium*). It is not clear in this context whether they entered the ditch with domestic waste or whether they derive from trees or bushes growing in the near vicinity.

## 8 Discussion

### 8.1 Deposits

*The northern evaluation area*
Within the northern extension a zone of high archaeological interest can be identified which occupies the western half of the proposed extraction area

(Figs 4 and 9; Trenches 17, 18, 19, 20 and 21). Here the gravel lies closest to the modern groundsurface which rises gently from east to west. This area included the majority of the deposits characterised by concentrations of calcareous concretions or nodules and heavily flecked with charcoal in places. These occurred mostly within broad, shallow, irregular sided depressions which may represent former watercourses or ponds. The association of these with a gully and a shallow pit in Trench 18, allied to the recovery of animal bone, prehistoric pottery and flint in small but significant quantities, indicates that these were associated with activity of probable Bronze Age date. The character of this activity remains uncertain but it seems unlikely that extensive settlement is represented. It is probable that this material relates to seasonal occupation or possibly production activities. The latter suggestion is supported by the presence of fuel ash and slag in deposits in Trench 18. Two shallow pits and gully identified in Trench 17 may be related to this phase of activity.

To the east of this zone of high archaeological interest, an area of moderate interest (Trenches 22 and 23) can be identified. The natural sand and gravel here lies more deeply below the modern ground surface. Fewer deposits of interest were recorded though a probable Roman field boundary in Trench 22 and a spread of calcareous material in Trench 23 are indicative of a low level of former activity. Here, there is the potential for deposits of interest but they are likely to be limited in extent or significance.

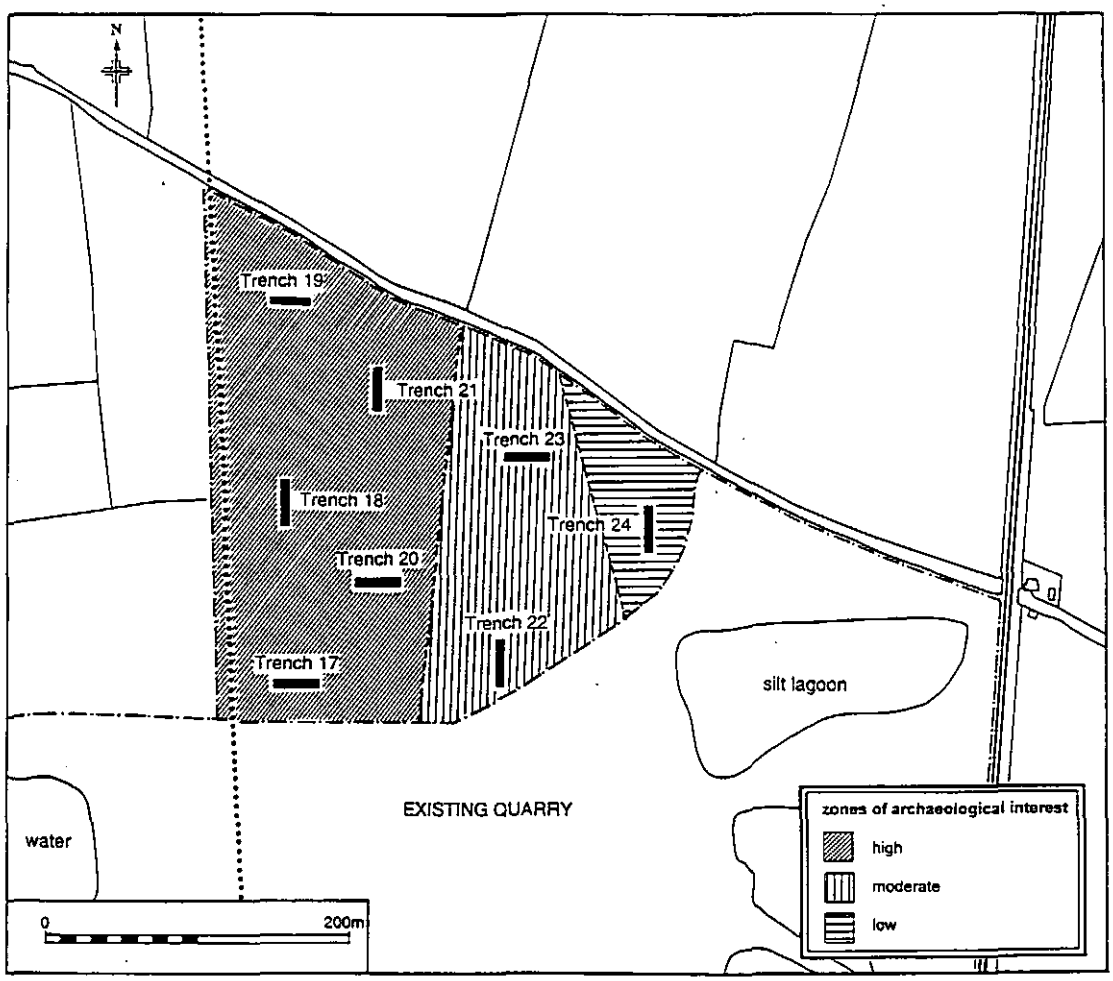



*Figure 9: Zones of archaeological interest: Northern extension*

Finally, on the far east side of this evaluation area, Trench 24 seemed to occupy a former broad depression within which the sand and gravel lay at considerable depth. It was overlain by a peaty deposit sealed by deep alluvial deposits. To the south, within the existing quarry, a similar sequence has been identified and is believed to have been formed by a laterally migrating stream in glacial to early post-glacial or Flandrian times. This appears therefore to continue into the northern evaluation area. It is believed to have been in existence until about the sixth millennium BC (Dinn and Roseff 1992) when a period of stasis (stability) of some 2000 years occurred, represented here and in previous investigations by a peat deposit. Subsequently, probably during the fourth millennium BC the channel slowly filled with alluvial deposits. This area was clearly low lying and wet for much of the prehistoric and Roman period and unsuited for occupation or settlement. Plant remains recovered in samples from the peat deposit supports this impression of a wet environment and this area is thus considered to be of low archaeological interest. However, it has high potential for carefully targeted sampling of organic deposits which are likely to be of some significance in developing an understanding of the early prehistoric environment.

*The southern evaluation area*

The southern evaluation area can be divided on a north to south line by a zone of low archaeological interest characterised by the presence of well preserved organic deposits lying in an elongated, broad depression in the gravel (Figs 5 and 10). These were recorded in three of the evaluation trenches (Trenches 14, 15 and 16). This depression probably represents a continuation of the laterally migrating stream discussed above. The organic (peat) deposits identified here were better preserved than those in the similar area to the north (Trench 24) and have the potential to provide important and datable information on former landuse and environment. However, this area (like that to the north) is considered to be of low archaeological interest since it was low lying and wet for much of the past and is unlikely to have supported former occupation or extensive activity. In Trench 15 the channel or watercourse cut into the upper fills of the early laterally migrating stream may represent a former course of the River Lugg. To the north within the existing quarry two similar features have been identified (Dinn and Roseff 1992; Edwards 1989) and interpreted as former courses of the River Lugg dating to a period between the mid to late 2nd century to the later first Millennium AD.

Flanking the area of this former watercourse, in the part of the proposed southern extension closest to the existing quarry, a zone of high archaeological interest can be defined (Fig 10). Small but significant quantities of flint and pottery of Neolithic and Bronze Age date were recovered from a number of trenches and these, and the associated postholes or small pits, are clearly indicative of prehistoric activity. Trenches 2, 3 and 13 were particularly notable for the presence of both features and artefacts, however, the character of the activity represented remains unclear. As with areas of the existing quarry which have produced similarly dated evidence, the majority of the features produced no artefacts but were associated with charcoal concentrations and burnt stone. Of particular interest among the artefacts were the pebble hammer and the reworked polished stone axe fragment, both of which are indicators of relatively high status activity. In this area the natural gravel was considerably higher than in the former watercourse (Fig 5) and thus must have been better drained and more suitable for occupation. Despite this, the considerable accumulation of alluvial overburden (which has ensured good preservation of these deposits) indicates that episodes of flooding affected this

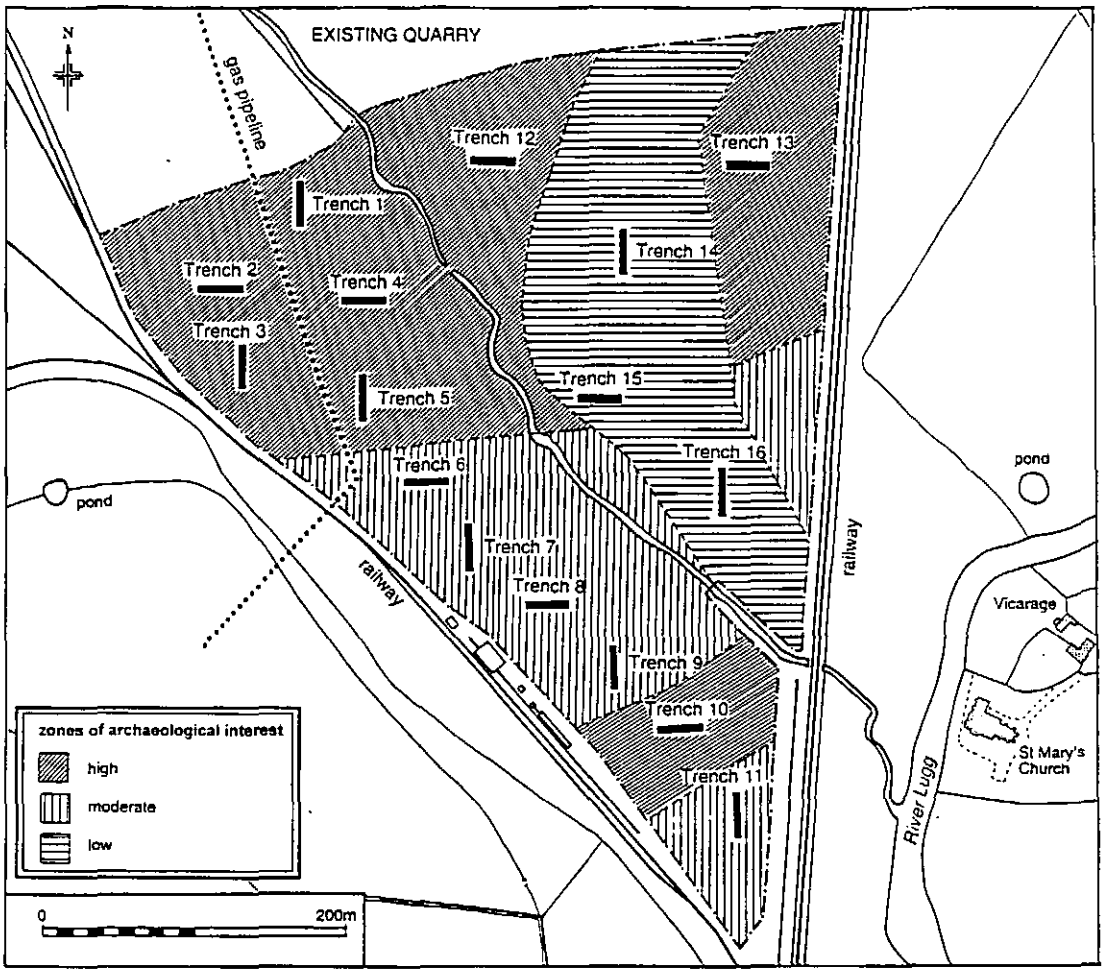



*Figure 10: Zones of archaeological interest: Southern extension*

area as well. However, as has been demonstrated within the existing quarry, such episodes were interspersed with long periods of stasis. One of these episodes has been identified as coinciding with the Neolithic and Bronze Age periods to which these features and artefacts dated.

The turfline provisionally identified in Trenches 2, 3 and 5 (Fig 5) reflects a further, but apparently earlier, period of stasis when a topsoil and associated turf must have developed. Such a turfline has previously been identified within the existing quarry and has been interpreted as reflecting a period of stasis within the earliest phase of alluviation. It has been suggested that this period (of stasis) may date to the Windermere interglacial (Dinn and Roseff 1992). Finally in this area, in Trench 1, the broadly east to west aligned ditch with a sterile upper fill and lower fill incorporating animal bone and charcoal fleck may represent a Roman field boundary or drain. Although no dating evidence was recovered, the position of this feature within the alluvial sequence and the colouration of the fill support this dating.

A further zone of high archaeological interest can be defined towards the southern end of the proposed extension. Here the two well preserved and converging artificial channels or leats identified are identified as water

management features, perhaps associated with water meadows or even a mill. The associated small wooden stakes may represent the remains of some form of revetting or lining while the opposing irregularities in the sides of one of the channels can be interpreted as slots for gates to control water flow. The postholes, small pit and area of metalling may relate to associated activity though contemporaneity is not certain. Dating of this activity is uncertain as no artefacts were found. However, the overlying alluvial material allied to the character of the deposits are not indicative of a prehistoric date and they are thus likely to be of Roman or early medieval date.

Areas between these zones of high and low archaeological interest are considered to be of moderate archaeological interest. Ditches or gullies recorded in Trenches 8, 9 and 11 are considered to be post-medieval and associated with drainage and water management. In Trench 6 the substantial and vertical-sided feature of relatively recent date may represent a glider trap or other wartime feature since this field adjacent to the military base was apparently commandeered during the Second World War and laid out with temporary railway sidings during D-Day landing preparations. Further evidence of such activity was present in the form of the gravelled patches and the iron pins for securing rails which were recorded. Only a single unstratified flint was located within this zone of moderate interest, but the alluvial sequence included a probable turfline within Trenches 6, 8 and 9 which can clearly be equated with that in the area of high interest. This area, due the relatively high level of the gravel deposits flanking the former watercourse, was probably fairly well drained and suitable for occupation during one of the periods of stasis already discussed. Discrete but significant deposits have regularly been recorded elsewhere in parts of the existing quarry, such as for instance the high status Beaker burial found earlier this year. This zone may therefore potentially include significant deposits but in the absence of many artefacts or any features recorded through the evaluation these are likely to be limited in extent.

*The alluvial sequence*

The recorded alluvial sequence supported the evidence of previous projects at the quarry with the main three phases of alluviation represented, along with evidence of former channels and watercourses. Overall the impression is that early alluviation, represented by the yellowish-brown material, affected most of the site but focussed on the lower lying areas of gravel, filling in depressions and hollows, and also being affected by former courses of the Lugg. These deepest sequences lay mainly in the south and east parts of the site. Deposition of the reddish brown alluvium was more even across the site. Of particular interest within the sequence was the identification in both evaluation areas of the continuation of the laterally migrating stream of glacial to early post-glacial date discussed above. The broad depression created by this clearly would have influenced settlement at the site since it must have remained a wet and low lying area for a considerable period of time.

## 8.2 Artefacts

The dating of the prehistoric pottery is problematic. Coarse quartz-gritted pottery of Neolithic date has been found during previous work within the quarry at Wellington (Fagan *et al* 1993). These vessels were round-based. A tradition of coarse gritted Bronze Age pottery exists at Kemerton (fossiliferous limestone temper), Wyre Piddle and Chase Woods, near Ross-on-Wye (both

quartz tempered). The single base sherd from the current evaluation was flat-based, suggesting a date in the Bronze Age or later. Angular grains of milky quartz occur in the gravels and it is quite probable that clay containing these was utilised both in the Neolithic and Bronze Age, making the dating of the small body sherds uncertain.

The rim in the fine fabric closely resembles the Neolithic pottery recovered elsewhere in Wellington (see above) and the lack of grits may simply be due to the very small size of the sherd. The clay matrix is basically the same as that of the Bronze Age beaker found during previous work at Wellington. This strongly suggests that all the Neolithic and Bronze Age pottery so far recovered is of local manufacture. Two joining sherds in this fabric from Trench 18, context 5246, may be mould fragments. The sherds although gritty on the exterior have smooth reduced/blackened internal surfaces.

The third fabric is known from Beckford (fabric 5.1, Hurst 1994). The rim sherd in this fabric recovered from Wellington seems to have come from a form similar to a tubby cooking pot. It was found with a Severn Valley ware sherd suggesting that this pottery belongs to the late Iron Age tradition which overlapped with early Roman occupation.

The fourth fabric is parallelled among Bronze Age material found at Bromfield (Stanford 1982).

The artefacts covered all periods from the Neolithic to the medieval period. Roman and medieval artefacts tended to come from topsoil/ploughsoil or upper alluvial deposits but there was no obvious patterning of the spatial distribution of objects (ie there was no particular focus of activity relating to one period), although Roman finds were only represented in the northern extension and flint finds were more numerous in the southern extension. In addition there was an apparent bias of earlier (Neolithic) dates for artefacts from the southern area and of later (Bronze Age) dates for the northern area.

8.3 **Environment**

Well preserved organic deposits dating from the sixth to fourth millennium BC (late Boreal to Atlantic period) survived at depth, and covered an extensive area. In several trenches, well preserved wood has been recovered from this deposit which has the potential to provide dating evidence (using both dendrochronological and radiocarbon techniques), information on species type, and possibly indications of contemporary environmental conditions. Should similar deposits be encountered as a result of further fieldwork, well preserved wood fragments would merit detailed investigation. In particular the identification of a number of fragments of apparently worked wood and a charred fragment provide tantalising evidence of human activity at this early date. Although plant macrofossil remains are moderately well preserved, the samples investigated have not provided very specific habitat information. Pollen analysis may also potentially provide further environmental information relating to this period as has been demonstrated within the main quarry.

The condition and range of animal bone recovered demonstrates poor survival of these remains. However, the presence of a significant quantity of deer antler is of interest, indicating a relatively wooded environment within the near vicinity and some reliance on hunted game. The extent to which hunted

game supplemented meat from domesticated animals in the diet is an aspect of the prehistoric economy on which information is scarce.

Bone and charred plant remains were both poorly preserved at the site and were not recovered in significant quantities. The sparsity of these remains may reflect the conditions of preservation or alternatively (particularly in the case of the plant remains) it may suggest that there was only limited or sporadic disposal, either in this part of the site or in general. However, since environmental remains from prehistoric occupation sites are generally sparse, the accumulation of data from even small quantities of such remains is a high priority, to provide information on aspects of the economy such as the relative importance of cultivated crops (Palmer and Jones 1991).

Organic deposits survive in Roman channels and ditches, and like the assemblages from organic deposits of earlier date, plant macrofossils provide only general information on the conditions within the features and the surrounding environment.

## 9 Significance

In considering significance, the Secretary of State's criteria for the scheduling of ancient monuments (DoE 1990, annex 4), have been used as a guide.

These nationally accepted criteria are used for assessing the importance of an ancient monument and considering whether scheduling is appropriate. Though scheduling is not being considered in this case they form an appropriate framework for the assessment of any archaeological site. Deposits are considered below under the criteria headings used (rarity, group value, documentation, diversity, survival/condition, fragility/vulnerability and potential). The criteria should not, however, be regarded as definitive; rather they are indicators which contribute to a wider judgment based on the individual circumstances of a case.

No closely defined areas of deposits were recorded which are considered to be of national significance. However, in the overall context of the site at Wellington and of previous discoveries, the deposits within the zones of high archaeological interest, though apparently widely dispersed, are considered to be of national significance.

The later water management features and Roman ditches are considered to be of local interest for their contribution towards the overall understanding of the development and use of this significant landscape.

The prehistoric features identified in the zones of high archaeological interest in both the northern and southern evaluation areas are considered to be of considerable archaeological importance. Although no great concentrations of features or artefacts were identified, deposits of Neolithic or Bronze Age date have been rarely found and studied in the County and are far from common on either a regional or even national basis. They can thus be identified as *rare*. In the light of previous discoveries within the quarry (including broadly contemporary deposits such as the Neolithic pit group, the Beaker burial and a number of ring ditches and pits of Bronze Age date), the *group value* of these deposits is particularly high, while they contribute to the considerable *diversity* of archaeological deposits which have been recorded at Wellington. Due to the

depth of associated alluvial deposits overlying these features their *survival/condition* is particularly good with waterlogging of some deposits, though bone preservation was generally poor. Such good preservation of deposits of prehistoric or Roman date is particularly unusual. The areas of prehistoric activity also have high *potential* for the discovery of further features such as burials and pits rich in artefacts since previous areas of the quarry investigated have produced such features in association with deposits similar to those revealed through the evaluation. This long sequence of well preserved deposits makes the quarry a particularly valuable and significant site for the study of former landuse, environmental change and human activity over many millennia.

The water management features identified towards the southern end of the southern extension also have a high archaeological interest. These may relate to a mill or water meadows and although dating is problematic their *group value* and *survival/condition* are both high as is the *potential* for further associated features. Although no artefacts were recovered waterlogged remains including timber indicate that radiocarbon dating can potentially provide enable the date of this activity to be determined. The *rarity* of these deposits is difficult to assess since the date is uncertain, however, such well preserved remains of either water meadow systems or mills would be unusual in a medieval context and extremely rare in a Roman one.

Features of later date, the Roman field boundaries and archaeological deposits in the zones of moderate and low archaeological interest also have high *group value* in association with the extensive deposits already recorded in the quarry while their *survival/condition* is good. However, these features are not in categories which can be considered as *rare* and they are limited in extent. There is the *potential* for important deposits to survive in the zones of moderate interest but they are likely to be limited in extent (for instance an isolated burial or small pit group).

Due to the low lying nature of the zones of low archaeological interest there is little potential for deposits of archaeological interest to survive, though important palaeoenvironmental deposits have been demonstrated to survive in these low interest zones. These can provide environmental information (waterlogged wood, plant macrofossils, molluscs and potentially pollen and insect remains) dating from the sixth to the fourth millennium BC which is important in its own right and also as background information relating to Mesolithic and earlier Neolithic activity at the site.

The *fragility/vulnerability* of these deposits is high since the proposed quarrying will necessitate removal of all overburden to sand and gravel.

*Documentation* of all deposits is in the form of this report.

## 10 Academic summary

The Service has a professional obligation to publish the results of archaeological projects within a reasonable period of time. To this end, the Service intend to use this summary as the basis for publication through local or regional journals. The Client is requested to consider the content of this section as being acceptable for such publication.

*Four zones of high archaeological interest were identified during the course of an evaluation undertaken at Wellington Quarry, near Hereford. The work, on behalf of Redland Aggregates Limited, was carried out in advance of submission of an application for permission to extend an existing gravel quarry to both the north and south of the current extraction area.*

*Areas of the existing quarry have been investigated since 1988 through an on-going programme of salvage recording. This has produced extensive and significant evidence of prehistoric, Roman and medieval activity. In addition important palaeoenvironmental deposits have been identified within former watercourse channels. These have been studied along with a complex sequence of alluvial deposits which overlie the gravels and within which the archaeological remains are preserved at various distinctive horizons. Due to the depth of the alluvial material and the generally wet nature of the site, archaeological deposits are generally undisturbed and particularly well preserved. Of particular importance are a group of Neolithic pits, a high-status Beaker burial, a number of Bronze Age ring-ditches, a Roman farmstead or small villa and three medival ovens. Extensive and well preserved artefactual and ecofactual assemblages have been associated with these phases of activity as well as evidence of both earlier (Mesolithic) and later (post-medieval) activity.*

*The purpose of the current project was to determine whether similar deposits extended into the area presently under enquiry and thus to enable an appropriate response to be devised for any archaeological remains which might be present.*

*Prehistoric deposits were present in both the northern and southern extension areas and although these were not indicative of intense activity were widely dispersed and of considerable interest. They are believed to relate to seasonal occupation or activity. In the northern extension this activity may be productive in character since both fuel ash and slag were recovered. Artefactual evidence in the form of pottery and flints suggests that this activity is probably of Bronze Age date. The activity in the southern area though also of indeterminate nature may relate to high status or ritual activity since a pebble hammer and polished axe flake were recovered, both of which are items believed to have more than a simple functional use. Here datable artefacts were more indicative of a Neolithic date for the activity represented.*

*Well-preserved deposits were recorded within a low lying area in the southern extension. Two leats or channels, a cobbled surface and series of postholes and small shallow pits were identified and are believed to be associated with water management, perhaps being part of a water meadow system or even a mill. Although not associated with any artefacts their character and location within the alluvial sequence indicate that they are either Roman or medieval in date.*

*Deep deposits including a layer of peat occupied a depression in the sand and gravel which was identified on the eastern side of the northern area and extended through the southern extension area. This depression is believed to have been caused by a laterally migrating watercourse of glacial, early post-glacial or Flandrian date. Such a feature has previously been identified within the existing quarry and clearly extends into both the northern and southern areas. Peat deposits subsequently accumulated within this depression from about the 6th millennium BC for some 2000 years and subsequently were*

*overlaid by alluvial deposits. Although this area is of low archaeological interest due to its former low lying (and therefore wet) nature, there is a high potential for the targeted sampling of the organic peat deposits to provide information on the early prehistoric environment.*

*Areas lying between the zones of high and low archaeological interest have been identified as of moderate interest and have the potential for the discovery of important but discrete archaeological deposits.*

## 11 The archive

The archive consists of:

| | |
|---|---|
| 268 | Context records AS1 |
| 54 | Fieldwork progress records AS2 |
| 16 | Photographic records AS3 |
| 1 | Drawing number catalogue AS4 |
| 5 | Context number catalogue sheets AS5 |
| 11 | Sample records AS17 |
| 1 | Sample number catalogue AS18 |
| 2 | Flint finds record forms AS34 |
| 8 | Colour transparency films (268 slides) |
| 8 | Black and white photographic films (222 shots) |
| 30 | Scale drawings |
| 1 | Box of finds |
| 1 | Computer disc |

The project archive has been placed at:

Hereford and Worcester County Museum
Hartlebury Castle
Hartlebury
Near Kidderminster
Worcestershire DY11 7XZ

Tel Hartlebury (01299) 250416

## 12 Acknowledgements

The Service would like to thank Nigel Weir, Ian Pearson and Dennis Finch of Redland Aggregates Limited for their kind cooperation and assistance in the successful conclusion of this project.

The landowner of the northern area Mr Charles Rees and the tenants of the southern area J and G Rees are also thanked for their cooperation in allowing access to the sites and for their local knowledge of the recent history of the land.

I M G Lisboa and C E Howlett of Tempvs Reparatvm Consultancy Services Department are thanked for their input to the project. The preliminary geophysical survey was undertaken A D H Bartlett of the Bartlett-Clark Consultancy.

Mr Roger Yates of the County Administrative and Legal Services Department is also thanked for his help in the development of this project.

## 13 Personnel

The project was designed and coordinated by Robin Jackson BA AIFA and Elizabeth Pearson MSc.

Assistance on site was provided by Duncan Brown MA AIFA, Martin Cook BA AIFA, Paul Godbehere, Annette Hancocks MA AIFA, Derek Hurst MA AIFA, Helena Smith BA, Nigel Topping PIFA and David Wichbold.

The illustrations for the report were undertaken by Carolyn Hunt PIFA.

Stephanie Ratkai undertook finds analysis and reporting with flint identification and reporting by Robin Jackson and comment on the pebble hammer and axe flake by Fiona Roe.

Simon Woodiwiss BA AIFA initiated the project and Hal Dalwood BA MIFA edited this report.

## 14 Bibliography

Bartlett, A D H, 1996 *Wellington Quarry, Hereford. Report on archaeogeophysical survey*, Bartlett-Clark Consultancy

Brian, A, 1993 Lammas Meadows, *Landscape history: Journal of the Society for Landscape Studies*, **15**, 57-71

Brown, D L, 1992 *Salvage recording IV at Wellington Quarry, Marden Lane, Wellington*, HWCC County Archaeological Service internal rep, **119**

Clarke, A, Taylor, G and Woodiwiss, S, 1988 *Evaluation excavation at Marden quarry, Wellington, HWCM 5522*, HWCC County Archaeology Section internal rep, **9**

Crickmore, J, 1984 *Romano-British urban settlements in the West Midlands*, BAR (Brit Ser), **127**

Dinn, J, and Roseff, R, 1992 Alluvium and archaeology in the Herefordshire valleys, in S Needham and M G Macklin, *Alluvial archaeology in Britain*, Oxbow Monographs, **27**, 141-151

DoE, 1990 *Planning policy guidance: archaeology and planning*, Department of the Environment, **PPG16**

Edwards, R E, 1989 *Salvage recording at Wellington Quarry, Marden Lane, HWCM 5522*, HWCC County Archaeology Section internal rep, **27**

Edwards, R E, 1990 *Salvage recording III at Wellington Quarry, Marden Lane, HWCM 5522*, HWCC County Archaeology Section internal rep, **49**

Fagan, L, Dalwood H, Hurst, D, Jackson, R, de Rouffignac, C, 1993 *Salvage recording V at Wellington Quarry, Marden Lane, Wellington* HWCC County Archaeological Service internal rep, **184**

Hillson, S. 1992 *Mammal bones and teeth: an introductory guide to methods of identification*, Institute of Archaeology, University College London

Hodgson, J M (ed), 1976 *Soil survey field handbook: describing and sampling soil profiles*, Soil survey technical monograph, **5**

Hurst, J D (ed), 1994 *Pottery fabrics; a multi-period series for the County of Hereford and Worcester*, HWCC County Archaeological Service internal rep, **445**

Hurst, J D, and Pearson, E A, 1995 *Salvage recording on the Lugg Bridge to Withington pipeline, Herefordshire*, HWCC County Archaeological Service internal rep, **280**

Kenyon, K M, 1953 Excavations at Sutton walls, Herefordshire, 1948-51, *Arch J*, **110**, 1-87

Palmer, C, and Jones, M, 1991 Plant resources, in N M Sharples *Maiden Castle: Excavations and field survey 1985-6*, English Heritage Archaeological Report, **19**, 129-38

Pearson, E, and Roseff, R, 1996 *Palaeoenvironmental reconstruction at the Lugg Meadows, Hereford: Pilot study*, HWCC County Archaeological Service internal rep, **428**

Ragg, J M, Beard, G R, George, H, Heaven, F W, Hollis, J M, Jones, R J A, Palmer, R C, Reeve, M J, Robson, J D, and Whitfield, W A D, 1984 *Soils and their use in midland and western England*, Soils Survey of England and Wales, **12**

Roseff, R, 1992 *A study of alluviation in the River Lugg catchment, Herefordshire*, unpublished PhD thesis, Univ of Birmingham

Shelley, D C, 1989 *Salvage recording at Wellington Quarry, Marden Lane, HWCM 5522*, HWCC County Archaeology Section internal rep, **32**

Sheppard, J A. 1979 *The origins and evolution of field and settlement patterns in the Herefordshire manor of Marden*, Department of Geography, Queen Mary College, University of London, Occasional Paper, **15**

Stanford, S C, 1982 Bromfield, Shropshire. Neolithic, Beaker and Bronze Age sites, 1966-79, *Proc Prehist Soc*, **48**, 279-320

Stone, R, 1994 Lugg Meadows, Hereford: report on an archaeological investigation, *Hereford Archaeology Series*, **203**

Schmid, E, 1972 *Atlas of animal bones*, Amsterdam

VCH I, Page, W (ed) 1975 *The Victoria History of the County of Hereford*

Wilmott, T. and Rahtz, S P Q, 1985 An Iron Age and Roman settlement outside Kenchester, (Magnis), Hereford. Excavations 1977-79, *Trans Woolhope Natur Field Club*, 45(1)

## 15 Abbreviations and glossary

HWCM - Numbers prefixed with "HWCM" are the primary reference numbers used by the Hereford and Worcester County Sites and Monuments Record.

HWCC - Hereford and Worcester County Council.

## Appendix 1: Trench and context summaries

### Trench 1

*Site area* South extension

| | | |
|---|---|---|
| *Topsoil depth* | 0.12m | Context 5116 |
| *Depth to natural sand and gravel* | 1.15m | |

*Alluvial deposit description*

| | | |
|---|---|---|
| Reddish brown alluvium | 0.56m | Contexts 5117 and 5118 |
| Yellowish brown alluvium | 0.38m | Contexts 5120 and 5121 |
| Reddish fine or gravelly alluvium | Nil | |

*Anomalous alluvium*
Brown alluvial deposit context 5119 between reddish and yellowish brown material

*Channel deposits*
Nil

*Features/other deposits*
Context 5123/5124. Ditch. NE to SW aligned. 1.60m wide, 0.97m deep. Below reddish brown (5118) and cutting anomalous brown (5119)

### Trench 2

*Site area* South extension

| | | |
|---|---|---|
| *Topsoil depth* | 0.10m | Context 5135 |
| *Depth to natural sand and gravel* | 1.54m | |

*Alluvial deposit description*

| | | |
|---|---|---|
| Reddish brown alluvium | 0.46m | Contexts 5136 and 5137 |
| Yellowish brown alluvium | 0.47m | Contexts 5142, 5143, 5144 and 5147 |
| Reddish fine or gravelly alluvium | 0.16m | Context 5145 |

*Anomalous alluvium*
Pale brown alluvial deposits, 0.25m deep, contexts 5138, 5139, 5140 and 5141, between reddish and yellowish brown material. Charcaterised by heavily charcoal flecked patches and molluscs.

*Channel deposits*
Nil

*Features/other deposits*
Probable turfline within yellowish brown alluvium between 5142 and 5143 Contexts 5133 and 5134. Irregular ill-defined possible features. Comprise heavily charcoal flecked areas with animal bone within context 5141.

**Trench 3**

*Site area* South extension

| | | |
|---|---|---|
| *Topsoil depth* | 0.21m | Context 5126 |
| *Depth to natural sand and gravel* | 1.20m | |

*Alluvial deposit description*

| | | |
|---|---|---|
| Reddish brown alluvium | 0.37m | Context 5127 |
| Yellowish brown alluvium | 0.24m | Context 5129 |
| Reddish fine or gravelly alluvium | 0.12m | Context 5131 |

*Anomalous alluvium*
Brown alluvium, 0.20m deep, context 5128, between reddish and yellowish brown material.

*Channel deposits*
Nil

*Features/other deposits*
Probable turfline, context 5130, 0.06m, between yellowish and red gravelly alluvium
Context 5125. Elongated feature, 0.55m deep with near vertical sides and a sterile fill. Below brown alluvium and cutting yellowish brown.
Context 5115. ?Sub-oval feature, 1.25 x 0.35m. Charcoal flecked fill. 2 x flint recovered. Below brown alluvium and cutting yellowish brown.
Context 5114. Ill-defined amorphous feature, 0.05-0.10m deep. Charcoal flecked fill. Below brown alluvium and cutting yellowish brown.
Context 5107. Well-defined, irregular feature, 1.10 x 0.80 x 0.60. Heavily charcoal flecked fill with stones and also molluscs. Below brown alluvium and cutting yellowish brown.

**Trench 4**

*Site area* South extension

| | | |
|---|---|---|
| *Topsoil depth* | 0.10m | Context 5037 |
| *Depth to natural sand and gravel* | 1.33m | |

*Alluvial deposit description*

| | | |
|---|---|---|
| Reddish brown alluvium | 0.55m | Contexts 5038 and 5039 |
| Yellowish brown alluvium | 0.24m | Context 5041 |
| Reddish fine or gravelly alluvium | 0.21m | Context 5042 |

*Anomalous alluvium*
Brown alluvium, 0.23m deep, context 5040, between reddish and yellowish brown material.

*Channel deposits*
Nil

*Features/other deposits*
Nil

**Trench 5**

*Site area* South extension

| | | |
|---|---|---|
| *Topsoil depth* | 0.17m | Context 5108 |
| *Depth to natural sand and gravel* | 1.17m | |

*Alluvial deposit description*

| | | |
|---|---|---|
| Reddish brown alluvium | 0.18m | Context 5109 |
| Yellowish brown alluvium | 0.54m | Context 5110 |
| Reddish fine or gravelly alluvium | 0.22m | Context 5112 |

*Anomalous alluvium*
Nil

*Channel deposits*
Nil

*Features/other deposits*
Probable turfline. Context 5111 between yellowish brown and reddish fine alluvium.
Context 5044/5064. Posthole/pit. Pear-shaped. 0.66 x 0.40 x 0.18m. Heavily charcoal-flecked fill. within yellowish brown alluvium.
Context 5065/5066. Drainage ditch. NE to SW aligned. 0.40m wide. 0.20m deep. Below reddish brown alluvium and cutting yellowish brown.

**Trench 6**

*Site area* South extension

| | | |
|---|---|---|
| *Topsoil depth* | 0.24m | Context 5099 |
| *Depth to natural sand and gravel* | 1.26m | |

*Alluvial deposit description*

| | | |
|---|---|---|
| Reddish brown alluvium | 0.01m | Context 5100 |
| Yellowish brown alluvium | 0.55m | Context 5101 |
| Reddish fine or gravelly alluvium | 0.17m | Context 5103 |

*Anomalous alluvium*
Nil

*Channel deposits*
Nil

*Features/other deposits*
Probable turfline. Context 5102 between yellowish brown and reddish fine alluvium.
Context 5067. Linear flat-based and steep-sided cut. NW to SE aligned. sterile reddish brown fill. Below topsoil. Cut into reddish brown alluvium. ?Glider trap.

**Trench 7**

*Site area* South extension

*Topsoil depth* 0.09m Context 5060

*Depth to natural sand and gravel* 0.84m

*Alluvial deposit description*

| | | |
|---|---|---|
| Reddish brown alluvium | 0.21m | Context 5061 |
| Yellowish brown alluvium | 0.54m | Context 5062 |
| Reddish fine or gravelly alluvium | Nil | |

*Anomalous alluvium*
Nil

*Channel deposits*
Nil

*Features/other deposits*
Nil

**Trench 8**

*Site area* South extension

*Topsoil depth* Not recorded Context 5057

*Depth to natural sand and gravel* 1.28m

*Alluvial deposit description*

| | | |
|---|---|---|
| Reddish brown alluvium | Not recorded | Context 5058 |
| Yellowish brown alluvium | Not recorded | Context 5059 |
| Reddish fine or gravelly alluvium | Not recorded | Context 5071 |

*Anomalous alluvium*
Nil

*Channel deposits*
Nil

*Features/other deposits*
Probable turfline. Context 5070 between yellowish brown and reddish gravelly alluvium.

**Trench 9**

*Site area* South extension

*Topsoil depth* 0.08m Context 5083

*Depth to natural sand and gravel* 1.24m

*Alluvial deposit description*

| | | |
|---|---|---|
| Reddish brown alluvium | 0.25m | Context 5084 |
| Yellowish brown alluvium | 0.46m | Contexts 5085 and 5087 |
| Reddish fine or gravelly alluvium | 0.39m | Context 5088 |

*Anomalous alluvium*
Nil

*Channel deposits*
Nil

*Features/other deposits*
Context 5086. Probable turfline within yellowish alluvium.
Context 5069. Drainage ditch. E to W aligned. 0.90m wide and 0.35m deep. Reddish brown fill with sparse gravel and molluscs. Below topsoil/turfline and cutting reddish brown alluvium.

**Trench 10**

*Site area* South extension

*Topsoil depth* 0.09m Context 5029

*Depth to natural sand and gravel* Not observed (1.11m+)

*Alluvial deposit description*

| | | |
|---|---|---|
| Reddish brown alluvium | 0.87m | Contexts 5030 and 5031 |
| Yellowish brown alluvium | 0.15m | Context 5081 and 5082 |
| Reddish fine or gravelly alluvium | Not observed | |

*Anomalous alluvium*
Nil

*Channel deposits*
Nil

*Features/other deposits*
A series of features were recorded all apparently cut from below the base of the reddish brown (5031) and into the yellowish brown alluvium.
Context 5027/5028=5079/5080. Posthole or pit with charcoal rich and burnt stone sub-circular main fill and amorphous charcoal flecked area to south-east.
Contexts 5073-5078. 6 shallow postholes and stakeholes. Fills largely sterile except a few flecks of charcoal in a couple of them. No patterning.
Contexts 5089, 5091, 5092 and 5093 (cut). Near vertical sided artificial channel/leat, NE to SW aligned with gleyed lower fills and organic material within. Associated with stakes, wattle and stones and a number of squarish irregularities along its sides - ?lining/structural elements. Converges with 5096.
Contexts 5090, 5094, 5095 and 5096 (cut). Near vertical sided artificial channel/leat, NE to SW aligned with gleyed lower fills and organic material within.
Contexts 5097 and 5098. Two adjacent patches of metalling comprising large to medium gravel cobbles compacted into base of alluvial deposit 5031. Division between them may be false and result from slight over-machining.

**Trench 11**

*Site area* South extension

| | | |
|---|---|---|
| *Topsoil depth* | 0.20m | Context 5032 |
| *Depth to natural sand and gravel* | 0.96m | |

*Alluvial deposit description*

| | | |
|---|---|---|
| Reddish brown alluvium | 0.20m | Context 5033 |
| Yellowish brown alluvium | 0.56m | Contexts 5034, 5035 and 5036 |
| Reddish fine or gravelly alluvium | Nil | |

*Anomalous alluvium*
Nil

*Channel deposits*
Nil

*Features/other deposits*
Nil

**Trench 12**

*Site area* South extension

| | | |
|---|---|---|
| *Topsoil depth* | 0.05m | Context 5000 |
| *Depth to natural sand and gravel* | 1.55m | |

*Alluvial deposit description*

| | | |
|---|---|---|
| Reddish brown alluvium | 0.51m | Context 5001 |
| Yellowish brown alluvium | 0.81m | Contexts 5002, 5003 and 5004 |
| Reddish fine or gravelly alluvium | 0.20m | Context 5005 |

*Anomalous alluvium*
Nil

*Channel deposits*
Nil

*Features/other deposits*
Nil

**Trench 13**

*Site area* South extension

| | | |
|---|---|---|
| *Topsoil depth* | 0.14m | Context 5008 |
| *Depth to natural sand and gravel* | 1.35m | |

*Alluvial deposit description*

| | | |
|---|---|---|
| Reddish brown alluvium | 0.44m | Context 5009 |
| Yellowish brown alluvium | 0.60m | Contexts 5010 and 5011 |
| Reddish fine or gravelly alluvium | 0.17m | Context 5012 |

*Anomalous alluvium*
Nil

*Channel deposits*
Nil

*Features/other deposits*
Context 5006. ?Linear (N to S). 1.40+ x 0.76 x 0.30m. 2 Charcoal flecked and stony fills. No finds. Within yellowish brown alluvium. ?Ditch.
Context 5007. Sub-oval. 0.20m deep. 2 Charcoal flecked and stony fills. No finds. Within yellowish brown alluvium. ?Pit.

**Trench 14**

*Site area* South extension

*Topsoil depth* 0.10m Context 5014

*Depth to natural sand and gravel* 1.82m

*Alluvial deposit description*

| | | |
|---|---|---|
| Reddish brown alluvium | 0.46m | Context 5015 |
| Yellowish brown alluvium | Nil | |
| Reddish fine or gravelly alluvium | Nil | |

*Anomalous alluvium*
Nil

*Channel deposits*
Context 5016. 0.26m thick greyish brown silty deposit with charcoal flecking. Overlies organic peaty layer over gravel. Part of broad peat and silt filled depression created by former laterally migrating watercourse.

*Features/other deposits*
Nil

**Trench 15**

*Site area* South extension

*Topsoil depth* Not recorded Context 5014

*Depth to natural sand and gravel* 2.49m

*Alluvial deposit description*

| | | |
|---|---|---|
| Reddish brown alluvium | 0.78m | Contexts 5046 and 5047 |
| Yellowish brown alluvium | Nil | |
| Reddish fine or gravelly alluvium | Nil | |

*Anomalous alluvium*
0.54m thick accumulation of strong brown mottled and calcareous flecked deposits (Contexts 5048-51). Some molluscs present as well. Below reddish brown alluvium. Possibly infill over channel depression (see below).

*Channel deposits*
Contexts 5054 and 5055. 0.28m thick gleyed alluvium over 0.39m organic peaty deposit over gravel. ?Part of broad peat and silt filled depression created by former laterally migrating watercourse.

*Features/other deposits*
Context 5052, 5053 and 5056. North to south aligned, linear, steep sided cut with silty organic over gravelly organic fills. Cuts into top of channel deposit 5054 and sealed by later depression infill 5051. May represent former course of River Lugg.

**Trench 16**

*Site area* South extension

| | | |
|---|---|---|
| *Topsoil depth* | 0.12m | Context 5017 |
| *Depth to natural sand and gravel* | 2.08m | |

*Alluvial deposit description*

| | | |
|---|---|---|
| Reddish brown alluvium | 0.92m | Contexts 5018 and 5019 |
| Yellowish brown alluvium | 0.27+m | Contexts 5022 and 5023 |
| Reddish fine or gravelly alluvium | Nil | |

*Anomalous alluvium*
Contexts 5020 and 5021. Grey to green grey silty deposits below reddish brown and above yellowish brown in generally depressed area over former channel (see below)

*Channel deposits*
Context 5024, 5025 and 5026. Dark grey gleyed alluvium/silt (0.24m) over calcareous organic deposit (0.05m) over organic peaty deposit (0.17m) over further calcareous deposit over snad and gravel. Thus 0.51 thick accumulation. ?Part of broad peat and silt filled depression created by former laterally migrating watercourse.

*Features/other deposits*
Nil

**Trench 17**

*Site area* North extension

| | | |
|---|---|---|
| *Topsoil depth* | 0.25m | Context 5231 |
| *Depth to natural sand and gravel* | 0.81m | |

*Alluvial deposit description*

| | | |
|---|---|---|
| Reddish brown alluvium | 0.15m | Context 5224 |
| Yellowish brown alluvium | Nil | |
| Reddish fine or gravelly alluvium | Nil | |

*Anomalous alluvium*

Context 5223. 0.24m yellowish red alluvium below topsoil and above reddish brown alluvium. Slightly sunk into a number of depressions above features.
Context 5225. 0.17m clayey red gravelly alluvium. Below reddish brown and sealing a number of features.

*Channel deposits*

Nil

*Features/other deposits*

Context 5198/5199. 1.04 x 1.00 x 0.12m pit with heavily charcoal flecked fill. Some daub. Cut into gravel.
Context 5200/5201. 0.86 x 0.80 x 0.13 pit with heavily charcoal flecked fill. Cut into gravel.
Context 5219/5220/5221. NE to SW aligned ditch or gully. 1.20m wide, 0.26m deep. Observed over some 5.00m with apparent butt-end to NE. Cut into gravel. Apparently below 5224 (reddish brown) and 5225 (clayey reddish gravel) but also having an upper fill (context 5220) similar to 5223 the uppermost yellowish alluvium. The lower fill (context 5221) comprised densely packed rounded stones in a sandy clay matrix. The stones were particularly concentrated in the base and up the sides of the feature.
Context 5227/5228. Ill defined pit or ditch observed in south trench section and having a brown fill. Cut into clayey gravel 5225 and below reddish bron alluvium.
Context 5222. Ill-defined irregular hollow and fill. Not a real feature merely a depression into the gravel filled with a stony sandy clay similar in many ways to 5225.
Context 5229. Ill-defined irregular hollow and fill. Not a real feature merely a depression into the gravel filled with a stony sandy clay similar in many ways to 5225.
Context 5230. Ill-defined irregular hollow and fill. Not a real feature merely a depression into the gravel filled with a stony sandy clay similar in many ways to 5225.

**Trench 18**

*Site area* North extension

| | | |
|---|---|---|
| *Topsoil depth* | 0.32m | Context 5258 |
| *Depth to natural sand and gravel* | Not observed (1.09+m) | |

*Alluvial deposit description*

| | | |
|---|---|---|
| Reddish brown alluvium and 5262 | 0.77+m | Contexts 5245, 5259, 5260, 5261 |
| Yellowish brown alluvium | Nil | |
| Reddish fine or gravelly alluvium | ? | Context 5250 |

*Anomalous alluvium*
Nil

*Channel deposits*

*Features/other deposits*
Context 5247/5248. E to W aligned gully observed over full width of trench. 0.90m wide and 0.25m deep. Drains across base of a S-facing slope. Clayey strong reddish brown fill. Within set of layers and features below reddish brown alluvium.
Contexts 5251/5252. Hollow cut into 5254. 0.12m deep. Charcoal flecked fill with finds especially bone.
Context 5256. Red clay filled irregularity. Possibly a tree hole.
Contexts 5246, 5249, 5253, 5254, 5255 and 5257. Series of layers characterised by calcareous concretions and charcoal flecking. Bone and pot also recovered. 5254 and 5255 were both compacted and may have formed surfaces. These layers generally lay in a series of overlapping spreads down a S-facing slope in the trench to Gully 5248 and slightly beyond it. They may have been naturally deposited on the edge of a broad shallow watercourse which has subsequently been the focus of human activity.

**Trench 19**

*Site area* North extension

*Topsoil depth* 0.0.28m Context 5148

*Depth to natural sand and gravel* 1.32m

*Alluvial deposit description*

| | | |
|---|---|---|
| Reddish brown alluvium | 0.0.67m | Contexts 5149 and 5150 |
| Yellowish brown alluvium | Nil | |
| Reddish fine or gravelly alluvium | 0.37m | Context 5154 |

*Anomalous alluvium*
Nil

*Channel deposits*
Contexts 5151/5152/5153. Broad (c8.50m) irregular linear feature NE to SW aligned. 1.20m deep with flat to irregular base and shallow sloping sides. Cut into reddish fine alluvium (5154). Calcareous lower fill of varying thickness extending across base and up sides. Upper strong brown to yellowish red silty clay upper fill. The latter probably represents silting of the hollow and was very similar to overlying reddish brown alluvium (5150).

*Features/other deposits*
Nil

**Trench 20**

*Site area* North extension

*Topsoil depth* 0.0.27m Context 5232

*Depth to natural sand and gravel* 1.66m

*Alluvial deposit description*

| | | |
|---|---|---|
| Reddish brown alluvium | 0.65m | Contexts 5233 and 5234 |
| Yellowish brown alluvium | Nil | |
| Reddish fine or gravelly alluvium | 0.18m | Context 5238 |

*Anomalous alluvium*
Contexts 5235 and 5236. Pale, yellowish red alluvial material with concentration of calcareous concretions in the lower part (5236). Some molluscs. Of varying thickness 0.56-0.74m. Cut by 5244 (see below), below reddish brown alluvium and above reddish fine alluvium. Clearly a waterbourne/lain deposit. Possibly within a broad hollow (?channel or pond) the limits of which were not observed within the trench.

*Channel deposits*
Nil

*Features/other deposits*
Contexts 5241/5242/5243 and 5244. Pit or ditch butt-end observed in S-facing trench section. 0.65m deep and 2.10m across at section. Clearly had three fills all with calcareous concretions and the lower two with molluscs. Fill 5242 was very soily in character and flecked with distinctive grey stony flecks.
Contexts 5239 and 5240. Two rather sandy deposits fporming lenses within the alluvial sequence to the west of 5244 and clearly associated with the phase of deposition of the reddish brown alluvium. The lower of these (context 5240) was heavily flecked with calcareous concretions.

**Trench 21**

*Site area* North extension

*Topsoil depth* 0.27m Context 5156

*Depth to natural sand and gravel* 1.90m

*Alluvial deposit description*

| | | |
|---|---|---|
| Reddish brown alluvium | 0.51m | Contexts 5157 and 5158 |
| Yellowish brown alluvium | 1.11m | Contexts 5161, 5162, 5163 and 5166 |
| Reddish fine or gravelly alluvium | Nil | |

*Anomalous alluvium*
Nil

*Channel deposits*
Nil

*Features/other deposits*
Contexts 5168/5169/5170. Ditch. E to W aligned. 0.72m deep. N side truncated by re-cut 5171. Two rather mottled brown based fills. Below reddish brown alluvium and cut into yellowish brown.

Contexts 5167/5171. Re-cut of earlier ditch 5170. 1.20 across and 0.72 deep. Single orange brown fill.
Contexts 5171/5172. E to W aligned gully with steeply sloping sides. 0.51m wide and 0.20m deep. Truncated at E by 5170. Below reddish brown alluvium and cut into yellowish brown.
Contexts 5159 and 5160. Two heavily calcareous flecked layers, the lower (5160) particularly so. 0.20-0.40m thick and occupying a slight depression in the yellowish brown alluvium and sealed by the reddish brwon alluvium. The southern limit of 5159 was at ditch 5170 beyond which it did not extend.

**Trench 22**

*Site area* North extension

*Topsoil depth* 0.0.44m Context 5204

*Depth to natural sand and gravel* 2.23m

*Alluvial deposit description*

| | | |
|---|---|---|
| Reddish brown alluvium | 0.33m | Context 5205 (see also below) |
| Yellowish brown alluvium | See below | |
| Reddish fine or gravelly alluvium | Nil | |

*Anomalous alluvium*
Sequence here very strange though generally red based in upper part (Contexts 5206, 5207, 5208, 5210 and 5211) and yellow based lower down (Contexts 5212, 5213, 5214, 5215 and 5217). The upper red based material totalled 1.11m in thickness and included two gravelly horizons (5206 and 5207). A thin (0.05m) brown deposit (context 5209) was sandwiched within these. The yellow based material totalled 0.68m in thickness with a 0.24m thick gleyed band within it (context 5216). The deposits were distinctly banded and included olive and gleyed mottling. The lower elements were distinctly more sandy than the majority of alluvial deposits at the site. The interpretation of this sequence is unclear though these may lie in a former channel the limits of which were not observed within the trench.

*Channel deposits*
Nil

*Features/other deposits*
Contexts 5185/5186 and 5187. NW to SE aligned ditch with steeply sloping sides and a U-shaped profile. 2.25m wide and 0.65m deep. Fills were very clayey and the lower one was waterlogged with gleying and organics. Below the upper reddish brown alluvium and cut into the reddish gravelly alluvium.
Contexts 5202/5203. NE to SW aligned ditch/gully. This had a U-shaped profile and its base was sloping towards the SW suggesting it drained into 5187. Reddish brown clayey fill.

**Trench 23**

*Site area* North extension

*Topsoil depth* 0.0.25m Context 5188

*Depth to natural sand and gravel* 2.09m

*Alluvial deposit description*

| | | |
|---|---|---|
| Reddish brown alluvium | 0.49m | Contexts 5189 and 5190 |
| Yellowish brown alluvium | 1.08m | Contexts 5191, 5192 and 5194 |
| Reddish fine or gravelly alluvium | 0.27m | Contexts 5195 and 5196 |

*Anomalous alluvium*
Nil

*Channel deposits*
Nil

*Features/other deposits*
Context 5193. Probable turfline within yellowish brown alluvium.
Contexts 5263/5264/5265 and 5266. Eastern edge of a broad, possibly N to S aligned, rather irregular feature with an irregular base and sloping sides. This may have been a natural feature such as a pond or channel but dumps of stony rubble, some of which was burnt lay on its eastern edge and bone and charcoal flecking within a pale calcareous rich and possibly dumped lower fill indicate some human exploitation. Reddish brown upper silting fill.Below reddish brown alluvium and cut into top of yellowish brown.

**Trench 24**

*Site area* North extension

*Topsoil depth* 0.35m Context 5174

*Depth to natural sand and gravel* 2.67m

*Alluvial deposit description*

| | | |
|---|---|---|
| Reddish brown alluvium | 0.41m | Context 5175 |
| Yellowish brown alluvium | 0.94m | Contexts 5179 and 5181 |
| Reddish fine or gravelly alluvium | Nil | |

*Anomalous alluvium*
Context 5176. 0.10m thick brown alluvial deposit. May represent buried Roman soil. Below reddish brown above 5177 and 5178.
Contexts 5177 and 5178. 0.47m thick accumulation of rather brown coloured alluvium above yellowish alluvium. My represent infilling of hollow surviving (even after yellow accumulation within this area) over former channel - see below.

*Channel deposits*
Contexts 5182 and 5183. 0.18m of gleyed alluvial material over 0.22m of heavily gleyed and organic peaty material. ?Part of broad peat and silt filled depression created by former laterally migrating watercourse.

*Features/other deposits*
Nil

| Trench | Context | Ceramic | Wght | Flint | Stone | Other | Animal bone | Wgt | Period |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 5123 | | | | | | 1 | 5 | ? |
| 1 | 5123 | | | | | worked bone | 1 | 2 | Prehistoric? |
| 1 | 5117/5118 | 1 | 2 | 1 | | | 1 | 28 | Bronze Age? |
| 1 | 5118/5119 | | | 3 | | | 8 | 9 | Prehistoric |
| 1 | 5119/5120 | | | 2 | 1 | | | | Prehistoric |
| 2 | 5133 | | | | | | 50 | 155 | ? |
| 2 | 5133 | | | | | | 126 | 91 | ? |
| 2 | 5133 | | | | | worked bone | 1 | 2 | Prehistoric |
| 2 | 5134 | | | | | | 23 | 126 | ? |
| 2 | 5141 | | | 1 | | | 10 | 15 | Neolithic |
| 2 | 5141 | | | | 1 | pebble hammer | | | Neolithic |
| 3 | 5128 | | | 7 | 1 | stone axe frag | | | Neolithic |
| 3 | 5115 | | | 2 | | | | | Prehistoric |
| 3 | 5127 | | | 3 | | | | | Prehistoric |
| 3 | 5268 | | | 3 | | | | | Neolithic |
| 5 | 5110 | | | 3 | | | | | Neolithic |
| 9 | 5268 | | | 1 | | | | | Prehistoric |
| 12 | 5000 | | | 4 | | | 1 | 1 | Prehistoric |
| 13 | 5007 | 1 | 1 | | | | | | Neolithic? |
| 13 | 5010 | | | 1 | | | | | Prehistoric |
| 13 | 5011 | 1 | 2 | | | | | | Bronze Age |
| 14 | 5016 | | | 1 | | | | | Neolithic |
| 16 | 5018 | 2 | 41 | | | furnace slag | | 52 | Modern |
| 17 | 5198 | frags | 24 | | | | | | Prehistoric |
| 18 | 5246 | 13 | 35 | 1 | | | 24 | 61 | Bronze Age |
| 18 | 5246 | | | | | fuel ash? | | 1 | ? |
| 18 | 5247 | | | | | slag | | 74 | ? |
| 18 | 5251 | 3 | 3 | | | | 21 | 184 | Bronze Age? |
| 18 | 5253 | | | | | | 6 | 80 | ? |
| 18 | 5257 | 2 | 35 | | | | | | Bronze Age? |
| 18 | u/s | | | | | glass | | 29 | Post-med/Modern |
| 20 | 5232 | 1 | 3 | | | | | | Medieval |
| 21 | 5157 | 2 | 37 | | | | | | Roman |
| 21 | 5159 | | | 1 | | | | | Prehistoric |
| 21 | 5160 | 1 | 13 | | | | 44 | 352 | Early Bronze Age |
| 22 | 5185 | | | | | | 1 | 130 | ? |
| 22 | 5186 | | | | | | 15 | 362 | ? |
| 22 | 5186 | | | | | leather? frags | | 1 | ? |
| 22 | 5205 | 1 | 9 | | | charcoal | | 1 | Roman |
| 22 | 5206 | 1 | 6 | 1 | | | | | Medieval |
| 23 | 5191 | 5 | 13 | | | | | | Roman |
| 23 | 5263 | | | 2 | | | 7 | 68 | Neolithic |
| 24 | 5177 | | | 1 | | | | | Prehistoric |
| u/s | 5267 | 1 | 12 | | | | | | Medieval |
| u/s | 5267 | 1 | 1 | | | | | | Roman |
| Total | | 36 | 237 | 38 | 3 | | 340 | 1829 | |

*Table 1: Summary of artefact results*

| Context | Qty | Weight | Type | Form | Period | Description |
|---|---|---|---|---|---|---|
| 5007 | 1 | 1 | rim | unknown | Neolithic? | v fine, fab same as Wellington beaker |
| 5011 | 1 | 2 | body | unknown | Bronze Age | clay pellets and organic temper |
| 5018 | 2 | 41 | body | jar | 19-20th c | stoneware |
| 5157 | 1 | 36 | bodyba | unknown | Roman | Severn Valley ware |
| 5157 | 1 | 1 | body | unknown | Roman | samian |
| 5160 | 1 | 13 | body | cp? | EBA | v fine, fab same as Wellington beaker |
| 5191 | 3 | 6 | body | unknown | Roman | Severn Valley ware |
| 5191 | 2 | 7 | body | tubby cp? | Roman | hand-made sandy fab 5.1 |
| 5198 | | 23 | frags | unknown | unknown | clean , fired clay |
| 5205 | 1 | 9 | bodyba | tankard? | Roman | Severn Valley ware |
| 5206 | 1 | 6 | shoulder | cpj | Medieval | siltstone tempered |
| 5232 | 1 | 3 | ba | unknown | Medieval | Herefordshire micaceous ware |
| 5246 | 11 | 17 | body frags | unknown | BA? | angular quartz grits |
| 5246 | 2 | 18 | body | mould? | BA? | angular quartz grits |
| 5251 | 3 | 3 | body frags | unknown | BA? | angular quartz grits |
| 5257 | 2 | 2 | body | unknown | BA? | angular quartz grits |
| 5257 | 1 | 33 | flat base | unknown | BA | angular quartz grits |
| 5267 | 1 | 12 | rim | bowl? | Medieval | Herefordshire micaceous ware |
| 5267 | 1 | 1 | rim | tankard | Roman | Severn Valley ware |
| 5117/5118 | 1 | 2 | body | unknown | LBA? | angular quartz grits |
| 5118/5119 | 2 | 1 | frags | unknown | unknown | clean , fired clay |

*Table 2: Pottery and fired clay*

| HWCM | Context | Sample | Type | Sample size (l) | Volume sieved (l) | Residue sorted (ml) | Residue remaining (ml) | Flot sorted (ml) | Flot remaining (ml) |
|---|---|---|---|---|---|---|---|---|---|
| 5522 | 5091 | 4 | channel | 10 | 1 | 0 | 0 | 50 | 0 |
| 5522 | 5138 | 7 | layer | 10 | 10 | 20 | 0 | 10 | 0 |
| 5522 | 5107 | 8 | pit | 10 | 10 | 50 | 0 | 0 | 0 |
| 5522 | 5141 | 9 | layer | 10 | 10 | 20 | 0 | 0 | 0 |
| 5522 | 5027 | 10 | posth/hearth | 20 | 20 | 50 | 0 | 30 | 0 |
| 5522 | 5115 | 12 | pit | 10 | 10 | 20 | 0 | 10 | 0 |
| 5522 | 5026 | 13 | layer | 10 | 0.5 | 0 | 0 | 50 | 0 |
| 5522 | 5007 | 16 | pit | 10 | 10 | 100 | 0 | 30 | 0 |
| 5522 | 5006 | 19 | fill | 10 | 10 | 300 | 0 | 0 | 0 |
| 5522 | 5183 | 23 | layer | 10 | 0.5 | 0 | 0 | 50 | 0 |
| 5522 | 5186 | 24 | ditch | 10 | 24 | 20 | 0 | 40 | 0 |

*Table 3: Environmental samples selected for analysis*

| sitecode | context | description | period | weight (g) | preserv | fragmentn |
|---|---|---|---|---|---|---|
| HWCM 5522 | 5117 | alluvial layer | BA? | 30 | mod | 1 |
| HWCM 5522 | 5118 | " | prehis | 10 | poor | 1 |
| HWCM 5522 | 5133 | linear feature | prehis | 166 | poor | 4 |
| HWCM 5522 | 5134 | ploughsoil? | undate | 124 | poor | 4 |
| HWCM 5522 | 5141 | layer | Neo | 46 | poor | 5 |
| HWCM 5522 | 5160 | alluvial layer | EBA | 320 | poor | 4 |
| HWCM 5522 | 5185 | ditch/channel | prehis | 100 | poor | 2 |
| HWCM 5522 | 5186 | ditch/channel | prehis | 364 | mod | 2 |
| HWCM 5522 | 5246 | layer/dump | BA? | 64 | poor | 4 |
| HWCM 5522 | 5251 | pit/hollow | BA? | 192 | poor | 3 |
| | | | | | | |
| Key: | | | | | | |
| preserv = preservation (condition) | | | | | | |
| fragmentn = fragmentation | | | | | | |
| Neo = Neolithic | | | | | | |
| BA = Bronze Age | | | | | | |
| EBA = Early Bronze Age | | | | | | |
| prehis = prehistoric | | | | | | |

*Table 4: Hand-collected animal bone (summary)*

| Sum of frags | species | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| context | cow | rd deer | rd deer? | fa deer? | deer | shp/gt | pig | ?dog | l ungul | ungul | l mammal | indet | Grand Total |
| 5117 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 1 |
| 5118 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 8 | 0 | 0 | 0 | 8 |
| 5133 | 0 | 100 | 25 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 126 |
| 5134 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 22 | 0 | 22 |
| 5141 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 5160 | 2 | 0 | 3 | 0 | 1 | 0 | 0 | 1 | 12 | 9 | 0 | 0 | 28 |
| 5185 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| 5186 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 7 | 0 | 0 | 0 | 8 |
| 5246 | 1 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 21 | 24 |
| 5251 | 1 | 2 | 0 | 2 | 6 | 0 | 1 | 0 | 0 | 0 | 0 | 4 | 16 |
| Grand Total | 6 | 102 | 28 | 2 | 7 | 2 | 1 | 1 | 29 | 9 | 22 | 25 | 234 |
| | | | | | | | | | | | | | |
| Key: | | | | | | | | | | | | | |
| rd deer = red deer | | | | | | | | | | | | | |
| fa deer = fallow deer | | | | | | | | | | | | | |
| shp/gt = sheep or goat | | | | | | | | | | | | | |
| l ungul = large ungulate (horse/cow red deer size) | | | | | | | | | | | | | |
| l mammal = large mammal | | | | | | | | | | | | | |

*Table 5: Hand-collected animal bone (species distribution)*

| Trench no | context | period | weight (g) | preserv | fragmentn | species | part | state | data | frags |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 5117 | BA | 30 | mod | 1 | l ungul | head | | age | 1 |
| 1 | 5118 | prehis | 10 | poor | 1 | l ungul | head | | | 8 |
| 2 | 5133 | prehis | 156 | poor | 4 | rd deer? | antler? | | | 25 |
| 2 | 5133 | prehis | 82 | poor | 5 | rd deer | antler | | | 100 |
| 2 | 5133 | prehis | 156 | poor | 4 | l ungul | indet | | | 1 |
| 2 | 5134 | undate | 124 | poor | 4 | l mammal | indet | | | 22 |
| 2 | 5141 | Neo | 46 | poor | 5 | indet | indet | | | 0 |
| 18 | 5251 | BA? | 192 | poor | 3 | cow | head | | age | 1 |
| 18 | 5246 | BA? | 64 | poor | 4 | cow | head | | age | 1 |
| 18 | 5246 | BA? | 64 | poor | 4 | shp/gt | head | | age | 2 |
| 18 | 5246 | BA? | 64 | poor | 4 | indet | indet | | | 20 |
| 18 | 5246 | BA? | 64 | poor | 4 | indet | indet | bn | | 1 |
| 18 | 5251 | BA? | 192 | poor | 3 | pig | head | | | 1 |
| 18 | 5251 | BA? | 192 | poor | 3 | rd deer | antler | | | 2 |
| 18 | 5251 | BA? | 192 | poor | 3 | fa deer? | antler | | | 2 |
| 18 | 5251 | BA? | 192 | poor | 3 | deer | head | | meas/age | 1 |
| 18 | 5251 | BA? | 192 | poor | 3 | deer | antler | | | 5 |
| 21 | 5160 | EBA | 320 | poor | 4 | cow | head | | age | 1 |
| 21 | 5160 | EBA | 320 | poor | 4 | cow | l limb | bt | meas | 1 |
| 21 | 5160 | EBA | 320 | poor | 4 | rd deer? | antler | | | 3 |
| 21 | 5160 | EBA | 320 | poor | 4 | deer | antler | ?bt | | 1 |
| 21 | 5160 | EBA | 320 | poor | 4 | l ungul | limb | | | 8 |
| 21 | 5160 | EBA | 320 | poor | 4 | l ungul | indet | | | 4 |
| 21 | 5160 | EBA | 320 | poor | 4 | ungul | indet | | | 9 |
| 21 | 5160 | EBA | 320 | poor | 4 | ?dog | head | | | 1 |
| 22 | 5185 | prehis | 100 | poor | 2 | cow | u limb | bt | | 1 |
| 22 | 5186 | prehis | 364 | mod | 2 | cow | u limb | | meas | 1 |
| 22 | 5186 | prehis | 364 | mod | 2 | l ungul | u limb | | | 1 |
| 22 | 5186 | prehis | 364 | mod | 2 | l ungul | indet | | | 6 |
| | | | | | | | | | | |
| Key: | | | | | | | | | | |
| preserv = preservation (condition) | | | | | Neo = Neolithic | | | | | |
| fragmentn = fragmentation | | | | | BA = Bronze Age | | | | | |
| state: bt = butchery | | | | | EBA Early Bronze Age | | | | | |
| data: meas/age = measurable or ageable bones | | | | | prehis = prehistoric | | | | | |
| | | | | | | | | | | |
| rd deer = red deer | | | | | | | | | | |
| fa deer = fallow deer | | | | | | | | | | |
| l ungul = large ungulate (horse/cow/red deer size) | | | | | | | | | | |
| ungul = ungulate | | | | | | | | | | |
| l mammal = large mammal | | | | | | | | | | |

*Table 6: Hand-collected animal bone (detailed break-down)*

| HWCM | Context | Sample | Type | large mammal | mollusc | insect | charred plant | waterlog plant |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | | |
| | | | | | | | | |
| 5522 | 5007 | 16 | pit | | occ | | | |
| 5522 | 5026 | 13 | layer | | | occ | | abt |
| 5522 | 5027 | 10 | posth/hearth | | occ | | | |
| 5522 | 5091 | 4 | layer | | occ | occ | | mod |
| 5522 | 5115 | 12 | pit | | occ | | occ | |
| 5522 | 5138 | 7 | layer | | abt | | | |
| 5522 | 5183 | 23 | layer | | | occ | | abt |
| 5522 | 5186 | 24 | ditch | occ | | occ | | abt |

*Table 7: Summary of environmental remains from selected samples*