

# Phases 3, 4 & 5 of archaeological monitoring and excavation at Hanson Quarry, Maldon Road, Birch, Essex, CO5 9XE

September 2019, June & September-October 2020



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**commissioned by Hanson Aggregates**

National Grid Reference: TL 92059 19552

CAT project code: 19/09g

ECC code: BIBP19

OASIS ref.: colchest3-408669



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**CAT Report 1579**  
November 2020

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## 1 Summary

Three phases (Phases 3, 4 and 5) of archaeological monitoring and excavation took place at Hanson Quarry, Maldon Road, Birch, Essex in September 2019, June 2020 and September to October 2020 prior to the commencement of mineral extraction. Archaeological investigations have been carried out at the quarry since 1992 with significant remains including a Bronze Age barrow cemetery, Late Bronze Age/Early Iron Age pits, Late Iron Age and Roman enclosures, Roman cremation burials and ovens, and post-medieval field boundaries.

Phase 3, 4 and 5 monitoring revealed twelve prehistoric features, two post-medieval boundary ditches and a modern ditch, along with two undated features and a natural feature. The prehistoric features included two Bronze Age pits and a ditch. Finds were scarce but included a small quantity of Bronze Age pottery, burnt (heat-altered) stone, animal bone and burnt bone.

## 2 Introduction (Fig 1)

This is the report on monitoring and excavation carried out at the Hanson Quarry, Maldon Road, Birch, in advance of new phases of mineral extraction. The archaeological work was commissioned by Hanson Aggregates, and carried out by Colchester Archaeological Trust (CAT) on 20th September 2019, 22nd to 23rd June 2020 and 28th September to 2nd October 2020.

The quarry is located 6km to the south-west of Colchester, north-east of Palmer's Farm, at NGR TL 9217 1937 (Fig 1). It consists of approximately 19.6 hectares of land that was formerly part of a Second World War United States Army Air Force base.

The requirement for archaeological work was prompted by a western extension of the existing quarry. In March 2018, Essex County Council (ECC) Historic Environment Advisor (HEA) Richard Havis was consulted on a continuation of planning consent for mineral extraction first granted in 1995.

All fieldwork and reporting was done in accordance with the *Management of Research Projects in the Historic Environment (MoRPHE)* (Historic England 2015), and with *Standards for field archaeology in the East of England* (Gurney 2003; Medlycott 2011). This report mirrors standards and practices contained in the Institute for Archaeologists' *Standard and guidance for archaeological watching briefs* (ClfA 2014a) and *Standard and guidance for the collection, documentation, conservation and research of archaeological materials* (ClfA 2014b).

## 3 Archaeological background

The following archaeological background draws on the CAT report archive, as well as the Essex Historic Environment Record (EHER) and the Colchester Historic Environment Record (CHER), both accessed via the Heritage Gateway ([www.colchesterheritage.co.uk](http://www.colchesterheritage.co.uk)):

Prior to the 1990s, little was known of the archaeological remains in the area surrounding the quarry, but since planning consent for mineral extraction was granted in 1995, extensive archaeological investigations have been carried out here. The initial archaeological work followed an environmental impact assessment carried out in 1992 (CAT Report 8).

Aerial photographs show a large number of undated but pre-modern cropmarks indicating historic activity to the north of the quarry. Some 0.8 km to the northeast of the site is a cropmark complex containing a large sub-rectangular enclosure with associated tracks or droveways and a system of fields (EHER11548, EHER11577, EHER11582, EHER11924). Close to these sites, within the boundaries of the permissible northern quarrying area, there are several smaller cropmark sites (CAT Report 8, appendix). Neolithic and early Mesolithic flints have also been recovered some 2 km to the east of the site (Spencer & Dennis 1988).

The most significant archaeological remains identified by the 1992 assessment were two surface scatters of Roman finds to the northeast of Palmer's Farm (CAT Report 8, appendix). A

small quantity of medieval pottery was also recovered. In 1997, further work was carried out on one of the areas of Roman finds (CAT Report 8, 4 and Fig 2). Geophysical survey and trial-trenching was carried out in 1998 in the same area, revealing a number of Roman features below the ploughsoil (CAT Report 23).

Multiple phases of archaeological work have been undertaken in advance of quarry expansions (see Fig 3 for a location map).

In 1995 a small Roman oven was excavated on the east side of the quarry close to Brake's Farm (NGR TL 9333 2002; CAT archive 6/95b).

Evaluation trenching carried out in 2001 in advance of the extension of the quarry to the north revealed features of Bronze Age and Roman date (CAT Report 141). Excavations in this area in 2003 revealed a Bronze Age cemetery consisting of three ring-ditches with sixteen urned and un-urned cremation burials. Part of a Roman field system was also uncovered (Fig 3; CAT Report 289).

In 2005, an excavation at the Birch airfield compost site (on the former USAAF airbase) revealed features of Late Iron Age and Roman date (CAT Report 326).

During 2004-8, excavations undertaken prior to the extension of the quarry to the west revealed features of prehistoric, Roman, medieval and post-medieval date. The main periods of activity at the site were determined to be of Late Iron Age, Roman, medieval and early post-medieval date. The excavations revealed enclosures divided by tracks or droveways. A Roman oven was situated within the area of one enclosure, and a small number of cremation burials were located to the east of the enclosures. A few features dated to the Late Bronze Age, including one large pit which was possibly a waterhole. In addition, there were a small number of features of post-medieval and modern date (Fig 3; CAT Report 383, CAT Report 485, CAT Report 523).

Monitoring and excavation during topsoil stripping undertaken in 2012 in an area adjacent to the 2007 and 2008 excavations revealed only two features: a post-hole containing pot sherds dated to the Late Bronze Age or Early Iron Age, and a post-medieval or modern ditch. Most of the stripped area had been disturbed by the construction and removal of the airbase (CAT Report 671).

In 2013, further monitoring and excavations during topsoil stripping adjacent to the area excavated the previous year revealed twenty-two archaeological features. Significant remains included a 'placed deposit' (a Late Bronze Age jar without cremated bone) and seventeen pits and post-holes which contained Late Bronze Age pottery. The other features were primarily post-medieval field ditches which are depicted on 19th-century Ordnance Survey maps. As before, much of the site had been disturbed by the construction and subsequent demolition of the airbase (CAT Report 738).

In 2014 and 2015, further monitoring during topsoil stripping and subsequent excavation were carried out adjacent to the area excavated in 2013. Thirty-one archaeological features varying in date from prehistoric to modern were recorded. The most significant were three 'four-post' structures dated to the Early Iron Age. They also included features associated with the airfield, the construction and demolition of which, as in other recent phases of monitoring, had heavily disturbed the site (CAT Report 807).

In 2018, during the first phase of current monitoring, 36 archaeological features were excavated ranging in date from the prehistoric to the post-medieval period. These included a medieval plough-and-furrow field system. Half a Neolithic flint axe head was also recovered from a Late Bronze Age or Early Iron Age pit, and was thought to have represented a ritual deposition (CAT Report 1295). Excavations later that year during a second phase of monitoring revealed five further features, consisting of an Early Iron Age pit, two Late Iron Age or Early Roman ditches recorded previously, a post-medieval ditch and an undated pit (CAT Report 1345).

#### 4 Aim

The aim of the archaeological monitoring was to excavate and record any archaeological remains likely to be destroyed by the mineral extraction.

#### 5 Results (Figs 2-5)

Three areas (Phases 3-5), measuring approximately 3ha in total, were stripped under the supervision of a CAT archaeologist. The areas were reduced through ploughsoil (L1, c 0.1-0.47m thick) onto natural (L2).

##### Phase 3

A group of four pits lay in an isolated cluster towards the western boundary of the stripped area. They were all small sub-oval or round features with sloping sides and a concave base, and all of had charcoal within the fill. Pit F83 was 0.38m by 0.35m and 0.08m deep, pit F84 0.27m by 0.23m wide and 0.09m deep, pit F85 0.24m diameter and 0.04m deep, and pit F86 0.27m by 0.22m and 0.26m deep. No dating evidence was recovered from any of the pits, but F83, F84 and F86 all produced quantities of burnt (heat-altered) stone and flint, with F83 and F86 also containing small fragments of fired clay. Also recovered from pits F83 and F84 was a very small quantity of heavily fragmented burnt bone, 31 pieces at 2.2g and 8 pieces at 1g respectively. This material was too small and fragmentary to be identified as animal or human. A large quantity of bone, mostly unburnt, also came from F86. Among the assemblage were three cattle bones and a pig bone. There were no finds from pit F85. The quantities of burnt (heat-altered) stone and flint from three of the features would suggest that they could be of prehistoric date.

Pits F87 and F88 lay further to the east. They were also small sub-oval features with sloping sides, a concave base and charcoal fill. Pit F87 was 0.25m by 0.21m and 0.09m deep and produced only four pieces of burnt flint, and pit F88 at 0.22m by 0.19m and 0.09m deep was devoid of finds.

##### Phase 4

Four discrete pits lay dispersed through the northern part of the stripped area. They were small sub-oval or round features with sloping sides and a concave base, and all of had charcoal within the fill. Pit F89 was 0.63m by 0.49m and 0.12m deep, pit F90 0.65m by 0.46m and 0.08m deep, pit F92 0.57m diameter and 0.18m deep, and pit F93 0.58m by 0.4m wide and 0.1m deep. Pit F90 produced a single sherd of Bronze Age pottery, pit F92 five pieces of fired clay, and pits F90, F92 and F93 all contained some pieces of burnt (heat-altered) flint and stone (ranging from 1 to 10 pieces). Pit F89 was devoid of finds.

Ditch F91 extended through the middle of this area on an east-north-east to west-south-west alignment. Modern detritus, including CBM, pottery and iron objects, was observed on its surface, it was therefore not excavated but measured approximately 1.1-1.8m wide.

##### Phase 5

Ditch F95 entered the stripped area from the west on an east-north-east to west-south-west alignment before turning northward and terminating. It ranged from 0.39-0.78m wide and 0.07-0.29m deep, and appeared to be either segmented or perhaps only partially-surviving. A small sherd of Bronze Age pottery was the only piece of dating evidence recovered from this feature. A fragment of Bronze Age pottery was also recovered from pit F97. The pit was 1.37m long, 0.47m wide and 0.25m deep, and had a charcoal fill.

Post-medieval field boundary ditches F94 and F100 were aligned north/south and east/west. Ditch F100 was 2.07m wide and 0.55m deep and ditch F95 1.01-1.49m wide and 0.19-0.36m deep. Fragments of peg-tile came from F94 with fragments of post-medieval pan tile and a piece of 18th- to 19th-century brick from F100. Ditch F100 was not identified to the south during the Phase 4 monitoring.



The relationship between ditch F95 and undated pit F96 could not be established, but the pit was 1.4m long and 0.24m deep. A second undated pit, F99, was 1.38m by 1.2m and 0.31m deep. Probable natural clay patch F98 was also excavated.



**Photograph 1** Phase 3, general site shot, looking E



**Photograph 2** Phase 3, pits F83, F84 and F86, looking E





**Photograph 3** Phase 3, pits F87 and F88, looking south



**Photograph 4** Phase 4, site shot





**Photograph 5** Phase 4, pit F90, looking W



**Photograph 6** Phase 4, pit F92, looking E





**Photograph 7** Phase 5, site shot



**Photograph 8** Phase 5, ditch F95  
sx8, looking southwest





**Photograph 9** Phase 5, ditch F34 sx4, looking east



**Photograph 10** Phase 5, pit F97, looking north



## 6 Finds

### 6.1 Ceramic finds

by Dr Matthew Loughton

Monitoring produced a small assemblage of prehistoric, Roman and post-Roman pottery and ceramic building material (henceforth CBM) with 27 sherds weighing 868g and 0.08 vessels represented (Table 1). This material was recovered from seven features and one layer (Table 2).

Ceramic material	No.	Weight/g	MSW/g	Rim EVE
Pottery	7	44	6	0.08
CBM	15	824	41	-
<b>All</b>	<b>27</b>	<b>868</b>	<b>32</b>	<b>0.08</b>

**Table 1** Details on the main types of ceramics and pottery

Context	Description	No.	Weight/g	MSW/g
F90	Pit	1	6	6
F91	Ditch	1	24	24
F92	Pit	5	19	4
F94	Ditch	3	83	28
F95	Ditch	1	3	3
F97	Charcoal-rich pit	1	4	4
F100	Ditch	6	453	76
L1	Ploughsoil	9	276	31
<b>Total</b>		<b>27</b>	<b>868</b>	<b>32</b>

**Table 2** Quantities of pottery and CBM from specific features and contexts

Handmade flint-tempered pottery of possible Bronze Age date was recovered from pit F90, ditch F95 and charcoal-rich pit F97. Medieval/post-medieval peg-tile was recovered from ditch F91 and ditch F94, while pit F92 contained five sherds of baked-clay with a weight of 19g. Ditch F100 contained a fragment of abraded Roman flue tile and a small sherd of fine oxidised ware (DZ) as well as a piece of post-medieval pan tile (17th century onwards) and a small fragment of 18th-19th century brick. Finally, ploughsoil L1 produced a Late Iron Age lid (0.08) in grog-tempered ware (GTW), a sherd of Roman coarse oxidised and related ware pottery (DJ) and six sherds of abraded and burnt Roman tegulae with a weight of 246g.

Table 3 summarizes the dating evidence for the features and layers which produced dateable ceramic finds.

Context	Feature type	Prehistoric	Late Iron Age/ Roman	CBM	Overall date approx.
F90	Pit	HMF	-	-	Bronze Age
F91	Ditch	-	-	PT	Medieval/post-medieval
F92	Pit	-	-	Baked clay	?
F94	Ditch	-	-	PT	Medieval/post-medieval
F95	Ditch	HMF	-	-	Bronze Age
F97	Charcoal-rich pit	HMF	-	-	Bronze Age

Context	Feature type	Prehistoric	Late Iron Age/ Roman	CBM	Overall date approx.
F100	Ditch	-	DZ	RFT, PANT, BR	Modern
L1	Ploughsoil	-	GTW (lid), DJ	RT	Modern

**Table 3** Approximate dates for the specific features and contexts

## 6.2 Small finds and other metalwork, fired/backed clay, burnt (heat-altered) stone

by Laura Pooley

### Small finds and other metalwork

**SF1:** A copper-alloy token was found in ploughsoil L1 (finds no.66). The token is very worn and virtually illegible, although the vague outline of several letters are visible reading horizontally across one side, but not enough to be able to read the inscription or to even accurately determine which way up the token should be read. Probably 18th or 19th century. 20.02mm diameter, 2.7g.

A tiny fragment of iron (0.9g) with no distinguishing features was recovered from environmental sample <15> from pit F93. Fragments of a modern penknife (18.7g) and four fragments of iron sheet (17.5g) also came from ditch F91 (finds no. 59), along with a post-medieval/modern iron handle (63.1g) and nail (22.2g) from ditch F100 (66). All of these iron finds have been discarded.

### Fired/baked clay

Seventeen fragments of fired/baked clay came from pits F83 and F86. Most were small fragments with no distinguishing features, but two pieces from pit F86 included short lengths of semi-circular indentations typical of wattle voids.

Context	Finds no.	Description
F83	52	Five small fragments of fired/baked clay, no distinguishing features, 12.9g.
F86	54	Twelve small- and medium-sized fragments of fired/baked clay, the two largest pieces (one now broken into two joining fragments) have short lengths of semi-circular indentations suggestive of wattle voids, 104.4g.

**Table 4** Fired/baked clay by context

### Burnt (heat-altered) stone

A total of 95 burnt (heat-altered) stones with a combined weight of 3.8kg was recovered from seven pits. Most of this came from pit F86 (56 pieces, weight 1,932g) with the other pits containing between one and 13 pieces. By count the number of pieces of burnt flint and sandstone/quartzite is roughly equal, 50 and 45 pieces respectively. The sandstone/quartzite pieces also have a greater combined weight than the burnt flint (2,479g compared to 1,321g).

The burnt flints were small- to medium-sized irregular broken pieces, most of which had been cracked and crazed from the heat and discoloured various shades of white (calcified), grey, pink and red. The sandstone-quartzite was less broken-up, having better thermal properties, with many representing parts of rounded stones or small pebbles. They too were discoloured various shades of white, grey and pink.

Burnt stones are commonly associated with prehistoric occupation, often occurring as groups in pits. Created when in close proximity to heat, notably ovens, hearths and cremations, deliberately heated stones could also have been used as an indirect method for heating water and are often referred to as 'pot boilers' (although their precise use is debated). The types of stones utilised here, flint and sandstone/quartzite, occur in the underlying gravel deposits and would have been available to be collected from the surrounding area.

All of the burnt (heat-altered) stone has been recorded in Table 5 and discarded.



Context	Finds no.	Description
F83	52	Two pieces of burnt (heat-altered) flint, small, cracked and crazed, one burnt white and grey, the other a deep red, 21g. Eight pieces of burnt (heat-altered) sandstone/quartzite pebbles, small, cracked and crazed, burnt white/light grey with occasional patches of pinkish-red, 93g.
F84	53	Eleven pieces of burnt (heat-altered) flint, small- to medium-sized, cracked and crazed, most burnt white and grey, two also have pinkish-red patches with a third burnt a deep red/black, 134g. Two pieces of burnt (heat-altered) sandstone/quartzite pebbles, small, cracked, burnt white and red, 42g
F86	54	Thirteen pieces of burnt (heat-altered) flint, small- to medium-sized, cracked and crazed, burnt white and grey with occasional patches of pinkish-red, 352g. Thirty-eight pieces of burnt (heat-altered) sandstone/quartzite pebbles, small- to medium -sized, cracked and crazed, burnt white and grey with occasional patches of pinkish-red, 1,580g.
F87	55	Four pieces of burnt (heat-altered) flint, small, burnt pink and red, 9g.
F90	56	One piece of burnt (heat-altered) flint, small, burnt white and a pinkish-red, 10g.
F92	58	Ten pieces of burnt (heat-altered) flint, small- to medium -sized, cracked and crazed, burnt white, grey and a pinkish-red, 345g.
F93	60	Two pieces of burnt (heat-altered) flint, medium-sized, cracked, burnt white and grey with some areas a pinkish-red, 152g. Two pieces of flint with minor traces of being burnt (heat-altered) as some edges have a slightly pinkish tinge, medium -sized, 298g. Two pebbles with minor traces of being burnt (heat-altered) as some edges have a slightly pinkish tinge, medium -sized, 764g.

**Table 5** Burnt (heat-altered) stone by context

### 6.3 Bone from Phase 3

by Julie Curl

Three bags of bone, collected from the environmental samples of pits F83, F84 and F86, were submitted for recording and analysis. The bags were sorted by sieving to fragments above 10mm, 9-5mm, 2-4mm and fragments below 1mm to quantify and analyse. Greatest lengths were measured for the larger pieces in the assemblage. In total 198 elements, totalling 33.5g, was recovered. This is quantified by feature in Table 6 with additional information in the catalogue in Appendix 3.

Con-text	>10 mm	5-9 mm	2-4 mm	<1 mm	Level	Warp-ing	Crac- ked	Condition	Max. length	Total Qt.	Total wt(g)	HSR	Faunal species
F83	3	11	17	0	Brown, grey, white	*	*	Heavily fragmented	11mm	31	2.2	?	
F84	2	6	0	0	All fully oxidised and white	*	*	Heavily fragmented	10mm	8	1	?	
F86	93	54	12	0	Most unburnt, some grey-white	*	*	Heavily fragmented	31mm	159	20.3	?	x3 cattle, x1 pig

**Table 6** Summary of the burnt bone assemblage

Preservation is fairly poor with few large fragments recovered and a low number of fragments over 10mm in length surviving. Few fragments below 4mm were present with no fragments of 1mm or less. The total weight for each deposit was also small at 1g (F84), 2.2g (F84) and 20.3g (F86).

Approximately 79% of the bone by fragment count was not burnt, and 21% by fragment count was burnt to a high temperature leaving it a blue-grey colour. Samples <8> and <9> (F83 and F84) showed all fragments burnt, while sample <10> (F86) produced 127 fragments of unburnt bone and 32 smaller fragments of burnt bone. The mix of burnt and unburnt bone in sample <10> (F86) suggests a possible mixed deposit.

Approximately 15% of the bone showed warping, twisting, cracking and fissures, with fragments that were burnt at higher temperature and fully oxidised. It is likely that if the average fragment size was larger then more warping and cracking would be evident.

The vast majority of the bone in this assemblage, in terms of both fragment count and weight was identified only as 'mammal'. In sample <10> (F86) where most of the bone was unburnt, three fragments of an unburnt cattle metapodial condyle were seen which was identical in condition with the other unburnt bone in this pit fill. A single intermediate phalange from a pig/boar was also seen in the same sample, which had been heavily burnt to a grey-white colour.

### Conclusions

This is a very small assemblage with no human bone positively identified. It is possible that samples <8> and <9> (F83 and F84) may be remains of human cremations, but they are so small and heavily fragmented that it is not possible to confirm this. The bone from sample <10> was mostly unburnt, which could suggest some residual burnt remains. Two animal species in this pit fill would suggest disposal or placement of animal or meat waste.

## 6.4 Animal bone from Phase 5

*by Alec Wade*

A single piece of animal bone (6g) came from F100 (find no. 67), a post-medieval boundary ditch. The bone was a fragment from a medium-sized mammal's humerus (most likely a sheep or goat), the surface of which had been very badly eroded.

## 7 Environmental Assessment

*by Lisa Gray MSc MA ACIfA Archaeobotanist*

### Introduction

Ten samples were presented for assessment (Table 7). The aims of this assessment are to determine the significance and potential of the plant macro-remains in the samples, consider their use in providing information about diet, craft, medicine, crop-husbandry, feature function and environment.

Sample	Feature no.	Feature type	Dating	Sample volume (L.)
8	F83	Pit	?Prehistoric	20
9	F84	Pit	?Prehistoric	10
10	F86	Pit	?Prehistoric	40
11	F87	Pit	?Prehistoric	10
12	F88	Pit	?Prehistoric	10
14	F90	Pit	Bronze Age	20
15	F93	Pit	?Prehistoric	40
16	F97	Pit	Bronze Age	30
17	F99	Pit – fill A (upper fill)	Undated	10
18	F99	Pit – fill D (lower fill)	Undated	10

**Table 7** Sample details



### **Sampling and processing methods**

Samples were taken and processed by Colchester Archaeological Trust. All samples were processed using a Siraf-type flotation device. Flot was collected in a 300-micron mesh sieve then dried.

Once with the author the flots were scanned under a low powered stereo-microscope with a magnification range of 10 to 40x. The whole flots were examined. The abundance, diversity and state of preservation of eco- and artefacts in each sample were recorded.

Identifications were made using uncharred reference material (author's own and the Northern European Seed Reference Collection at the Institute of Archaeology, University College London) and reference manuals (such as Beijerinck 1947; Cappers *et al.* 2006; Charles 1984; Jacomet 2006). Nomenclature for plants is taken from Stace (2010). Latin names are given once and the common names used thereafter.

At this stage, to allow comparison between samples, numbers have also been estimated but where only a very low number of items are present, they have been counted. Identifiable charred wood >4mm in diameter has been separate from charred wood flecks. Fragments this size are easier to break to reveal the cross-sections and diagnostic features necessary for identification and are less likely to be blown or unintentionally moved around the site (Asouti 2006, 31; Smart & Hoffman 1988, 178-179). Charred wood flecks <4mm diameter have been quantified but not recommended for further analysis unless twigs or roundwood fragments larger than 2mmØ were present.

### **Results**

Charred plant macro-remains were the most frequent items in these samples. Charring occurs when plant material is heated under reducing conditions where oxygen is largely excluded leaving a carbon skeleton resistant to decay (Boardman & Jones 1990, 2; Campbell *et al.* 2011, 17). Only samples <10>, <14>, <15>, <16> and <18> produced flots. These flots consisted of modern rootlets and charcoal. Fragments of identifiable charcoal were present in low (1-10), moderate (11- 100) and abundant (>100) quantities in all samples except <15>. No other charred plant remains were present. Due to the paucity of results no table has been created for these samples. Evidence of possible bioturbation and aeration in the soil was present in the form of modern rootlet fragments.

### **Recommendations**

No further work is recommended on these samples unless it is necessary that the charcoal is identified to select suitable species for radiocarbon dating. Charred plant remains are present at this site so bulk/whole earth soil sampling during future interventions may prove useful.

## **8 Conclusion**

Monitoring at the quarry revealed two Bronze Age pits and a Bronze Age ditch, nine probable prehistoric pits, two post-medieval/modern ditches, two undated pits and a natural feature.

Twelve of the features dated to the prehistoric period. In Phase 3 six undated, but potentially prehistoric, pits were found. Fragments of burnt bone from F83, F84 and F86 could be evidence of burial activity but the presence of burnt flint/stone in all three features, along with animal bone in F86, suggests that these pits are more likely to be domestic in nature. Phase 4 monitoring revealed a Bronze Age pit and three undated pits that are probably also of prehistoric date, and from Phase 5 there was a Bronze Age ditch and pit. These three phases of monitoring show that, while archaeological remains are present in this area of the quarry, they are increasingly sparse, represented by relatively isolated prehistoric and Bronze Age activity.

There were two post-medieval field boundary ditches from Phase 5. None of the ditches are depicted on the first edition OS map of 1874 and they probably formed part of a field system backfilled before the mid 19th century. The discovery of a modern penknife from the surface of

a ditch in Phase 4 would suggest this feature is of modern date, probably associated with the airbase.

## 9 Acknowledgements

CAT thanks Hanson Aggregates for commissioning and funding the work. The project was managed by C Lister, fieldwork was carried out by M Baister, S Carter, B Holloway, B Quinn, A Smith. Figures are by M Baister, B Holloway, E Holloway and C Lister. The project was monitored for ECCPS by Richard Havis

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Note: all CAT reports, except for DBAs, are available online in PDF format at <http://cat.essex.ac.uk>

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## 11 Abbreviations and glossary

Bronze Age	period from c 2500 – 700 BC
CAT	Colchester Archaeological Trust
CHER	Colchester Historic Environment Record
CIfA	Chartered Institute for Archaeologists
context	a single unit of excavation, which is often referred to numerically, and can be any feature, layer or find.
ECC	Essex County Council
ECCHEA	Essex County Council Historic Environment Advisor
ECCPS	Essex County Council Place Services
EHHER	Essex Historic Environment Record
feature (F)	an identifiable thing like a pit, a wall, a drain: can contain 'contexts'
Iron Age	period from 700 BC to Roman invasion of AD 43
layer (L)	distinct or distinguishable deposit (layer) of material
medieval	period from AD 1066 to c 1500
Mesolithic	period from c 10,000 – 4000BC
modern	period from c AD 1800 to the present
natural	geological deposit undisturbed by human activity
Neolithic	period from c 4000 – 2500 BC
NGR	National Grid Reference
OASIS	Online AccesS to the Index of Archaeological InvestigationS, <a href="http://oasis.ac.uk/pages/wiki/Main">http://oasis.ac.uk/pages/wiki/Main</a>
post-medieval	from c AD 1500 to c 1800
prehistoric	pre-Roman
Roman	the period from AD 43 to c AD 410
section	(abbreviation sx or Sx) vertical slice through feature/s or layer/s
ws	written scheme of investigation



## 12 Contents of archive

**Finds:** part of one box (ceramics)

### **Paper record**

One A4 document wallet containing:

The report (CAT Report 1579)

CAT written scheme of investigation

Original site record (section drawings)

Inked section drawings

Site digital photographic thumbnails and log

### **Digital record**

The report (CAT Report 1579)

CAT written scheme of investigation

Site digital photographs, photographic thumbnails and log

Graphics

Site data

Survey data

## 13 Archive deposition

The paper and digital archive is currently held by the Colchester Archaeological Trust at Roman Circus House, Roman Circus Walk, Colchester, Essex CO2 7GZ, but will be permanently deposited with Colchester Museum under project ref. BIBP19.

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### **Distribution list:**

Hanson Aggregates

Richard Havis, ECC Place Services Historic Environment Advisor

Essex Historic Environment Record, Essex County Council



### **Colchester Archaeological Trust**

Roman Circus House,

Roman Circus Walk,

Colchester,

Essex, CO2 7GZ

tel.: 01206 501785

email: [eh2@catuk.org](mailto:eh2@catuk.org)

Checked by: Philip Crummy

Date: 23.11.2020

## Appendix 1 Context list

Context	Finds no.	Feature / layer type	Description	Date
L1	-	Ploughsoil	Dark brown sandy-silt	Modern
L2	-	Natural	Yellow clay with common chalk inclusions / medium brown silty-clay	Post-glacial
F83	52	Pit	Firm/hard, dry dark grey/black clayey-silt with charcoal flecks	Undated (probably Prehistoric)
F84	53	Pit	Firm, dry dark black clayey-silt with charcoal flecks	Undated (probably Prehistoric)
F85	-	Pit	Firm, dry dark brown/black clayey-silt with charcoal flecks	Undated (probably Prehistoric)
F86	54	Pit	Firm, dry dark brown/black clayey-silt with charcoal flecks	Undated (probably Prehistoric)
F87	55	Pit	Firm, dry medium brown/black clayey-silt with charcoal flecks	Undated (probably Prehistoric)
F88	-	Pit	Firm, dry medium yellow/brown clayey-silt with charcoal flecks	Undated (probably Prehistoric)
F89	-	Pit	Hard, dry medium grey/brown silty-clay with charcoal flecks	Undated (probably Prehistoric)
F90	56	Pit	Hard, dry medium grey/brown silty-clay with charcoal flecks	Bronze Age
F91	59	Ditch	Firm, dry dark brown silty-clay	Modern
F92	58	Pit	Hard, dry medium orange/brown silty-clay with charcoal flecks	Undated (probably Prehistoric)
F93	60	Pit	Hard, dry dark brown/black silty-clay with charcoal flecks	Undated (probably Prehistoric)
F94	61, 63, 65	Ditch	Firm, moist medium/dark grey/brown clay	Post-medieval
F95	62	Ditch	Firm, light grey silty-clay	Bronze Age
F96	-	Pit	Firm, light grey silty-clay	Undated
F97	64	Pit	Firm, medium/dark grey/black silty-clay with charcoal flecks	Bronze Age
F98	-	?Natural feature	Firm, moist dark orange/grey/brown clay	Undated
F99	-	Pit	Fill A: firm, dark grey silty-clay with charcoal flecks Fill B: firm, medium grey silty-clay Fill C: hard yellow clay Fill D: hard, very dark grey/black silty-clay with frequent charcoal flecks	Undated
F100	67	Ditch	Mid grey silty-clay with patches of light grey/orange silty-clay	Post-medieval

## Appendix 2 Pottery and CBM catalogue

### Pottery catalogue

Cxt	Feature type	Find no.	TR	NR	GR	M SW	Discard	Rim	Handle	Base	Dec.	Stamp	Graf Pre-F	Graf Post-F	Wind	Soot	Burn	Overfired	Residue	Abraded	Modif.	Mark	Repair hole	Hole	Disc.	Polishing	Fabric Grp	Typology	Vessel function	EVE	Diam.	Vessel H.	Comments	Date
F090	Pit	56		1	6	0																				HMF						BROWN/ORANGE, COMMON FLINT	Prehistoric	
F095	Linear	62		1	3	3																				HMF						ORANGE, COMMON FLINT	Prehistoric	
F097	Fire pit	64		1	4	4											X									HMF						ORANGE, DARKER SURFACE, FREQ FLINT	Prehistoric	
F100	Ditch	67		1	1	1														X						DZ								
L001	Top soil	57		2	26	13		1	0	0																GTW	Lid	0.08	210					
L001	Top soil	57		1	4	4														X						DJ								

### CBM catalogue

Cxt	Feature type	Find no.	Trench	NR	GR	MSW	Discard	Typology	Sub-type	FL CORN	MNI	FL H.	FL W.	FL TH.	LCA	LCA L	UCA	UCA L	Stamp	Sign.	Tally	Graf PF	Animal	Shoe	Scored	Comb.	Roller	Circ. Vt.	Rect. Vt.	Bl. vt.	PHR	PH SQ	2 Plus	Blind	L	BR.	TH.	Mortar	Burnt	Overfired	Abraded	Modif.	Comments	Date
F091	Linear	59		1	24	24	X	PT		0	0																																Medieval-Post Medieval	
F092	Pit	58		5	19	4		Baked clay		0	0																																?	
F094	Pit	63		2	17	9	X	PT		0	0																																Medieval-Post Medieval	
F094	Pit	65		1	66	60	X	PT		0	0																															Medieval-Post Medieval		
F100	Ditch	67		1	349	340		RFT		0	0														X																		Roman	
F100	Ditch	67		1	76	78	X	BR		0	0																															19th-20th century		
F100	Ditch	67		3	25	8	X	PANT		0	0																															17th century>		
L001	Top soil	57		3	210	70	X	RT		0	0																															Roman		
L001	Top soil	57		3	36	12	X	RT		0	0																									X						Roman		



**Appendix 3 Summary catalogue of the bone from Phase 3**

Sample number	Finds No	Type	>10mm	5-9mm	2-4mm	<1mm	Level	Warped	Cracked	Condition	Max	T.Qty	T. Wt (g)	HSR	Faunal Species	MNI	Element range	Comments
8	F83	Pit	3	11	17	0	Brown, grey, white	*	*	Heavily fragmented	11mm	31	2.2	?				Four fragments unburnt. No identifiable pieces. All mammal bone, may be human or animal.
9	F84	Pit	2	6	0	0	All fully oxidised and white	*	*	Heavily fragmented	10mm	8	1	?				No identifiable pieces. All mammal bone, may be human or animal.
10	F86	Pit	93	54	12	0	Most unburnt, some grey-white	*	*	Heavily fragmented	31mm	159	30.3	?	3 frags cattle, 1 pig	2	Limb frags, foot bone	32 fragments burnt black, grey and white. 127 fragments unburnt.  The unburnt bone included cattle metapodial fragments x 3, pig/boar intermediate phalange x1.

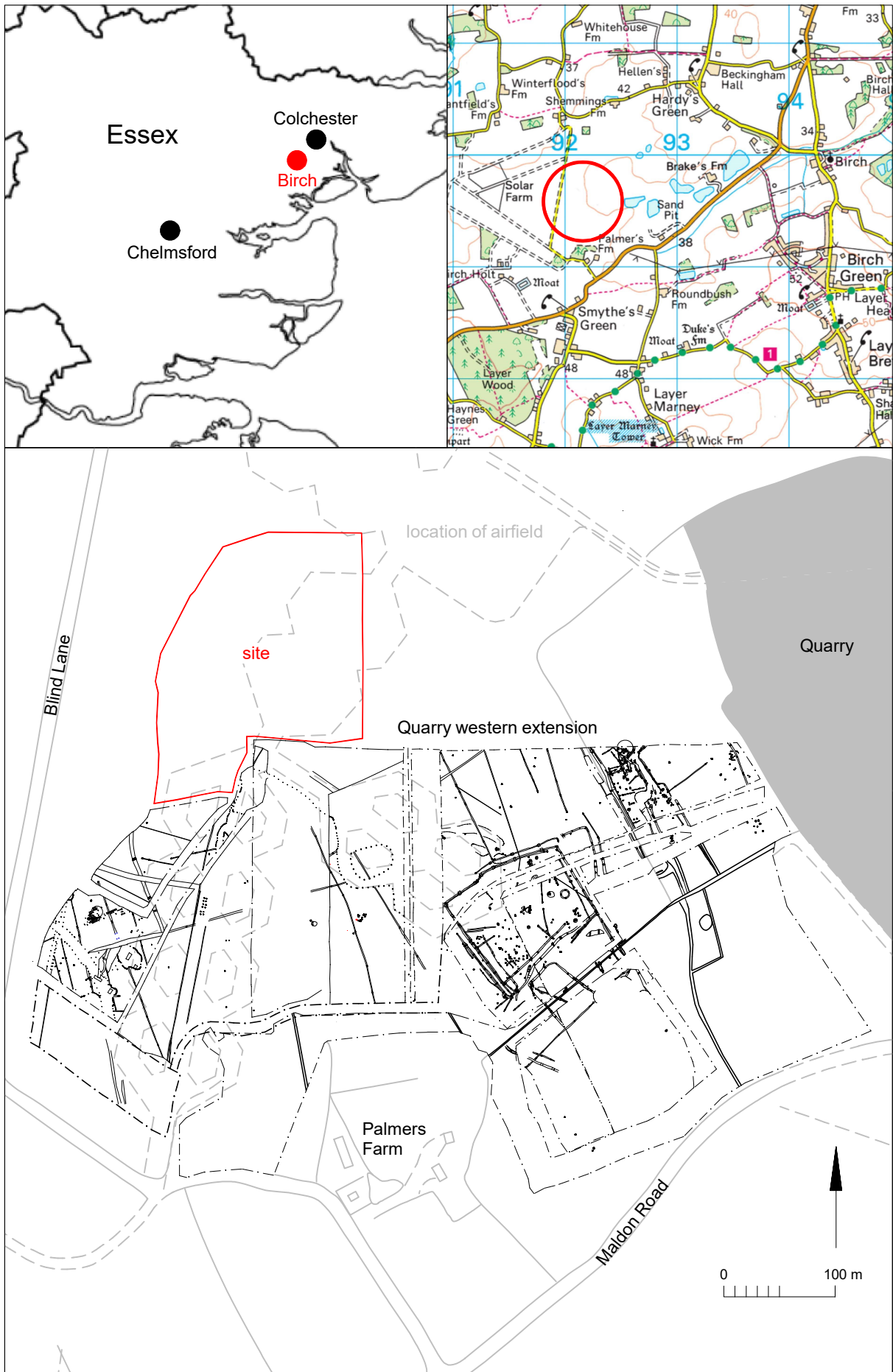


Fig 1 Site location.

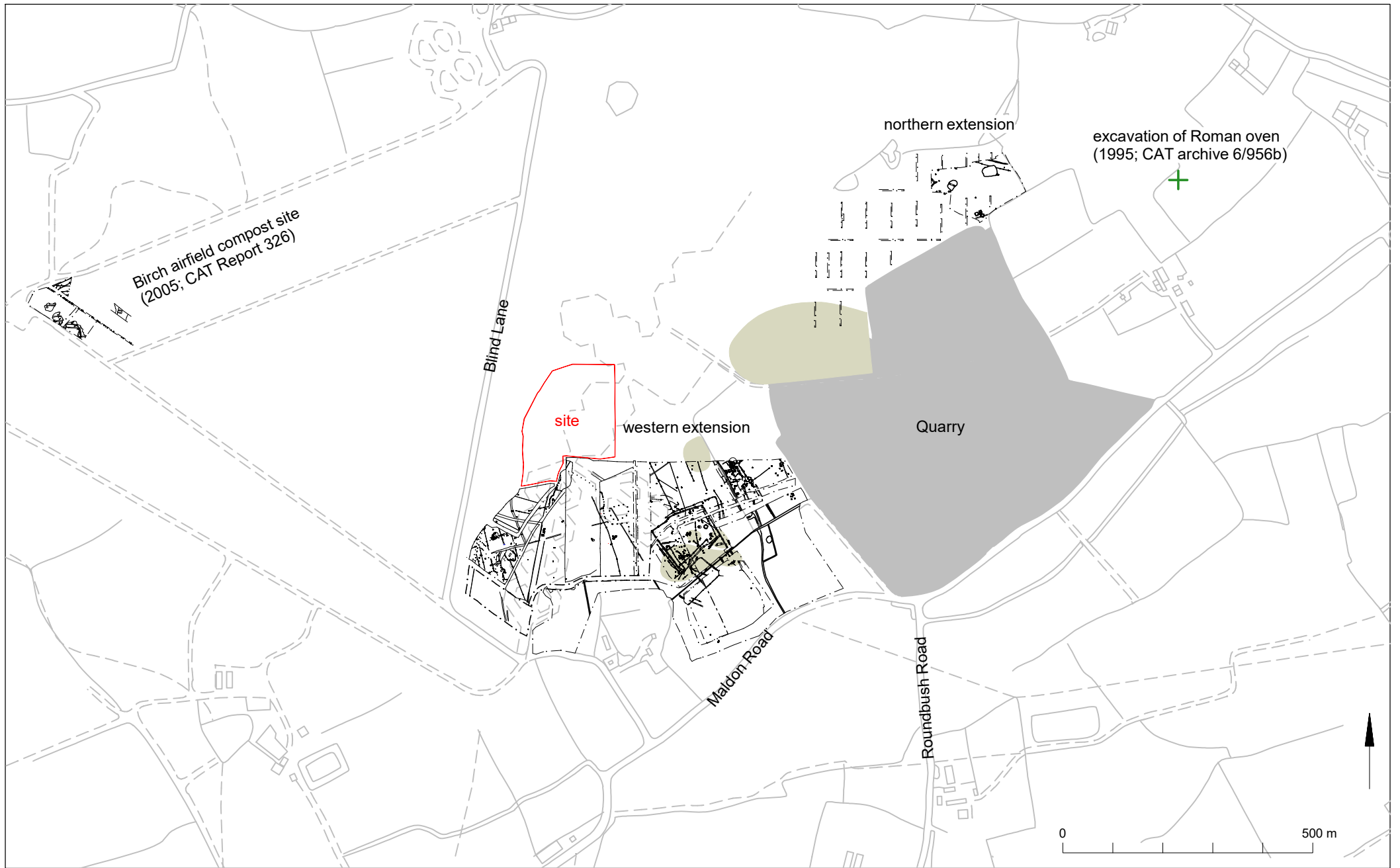



Fig 2 Plan showing previous archaeological work at the quarry and the surrounding area.

 = concentrations of Roman surface finds (CAT Report 8)



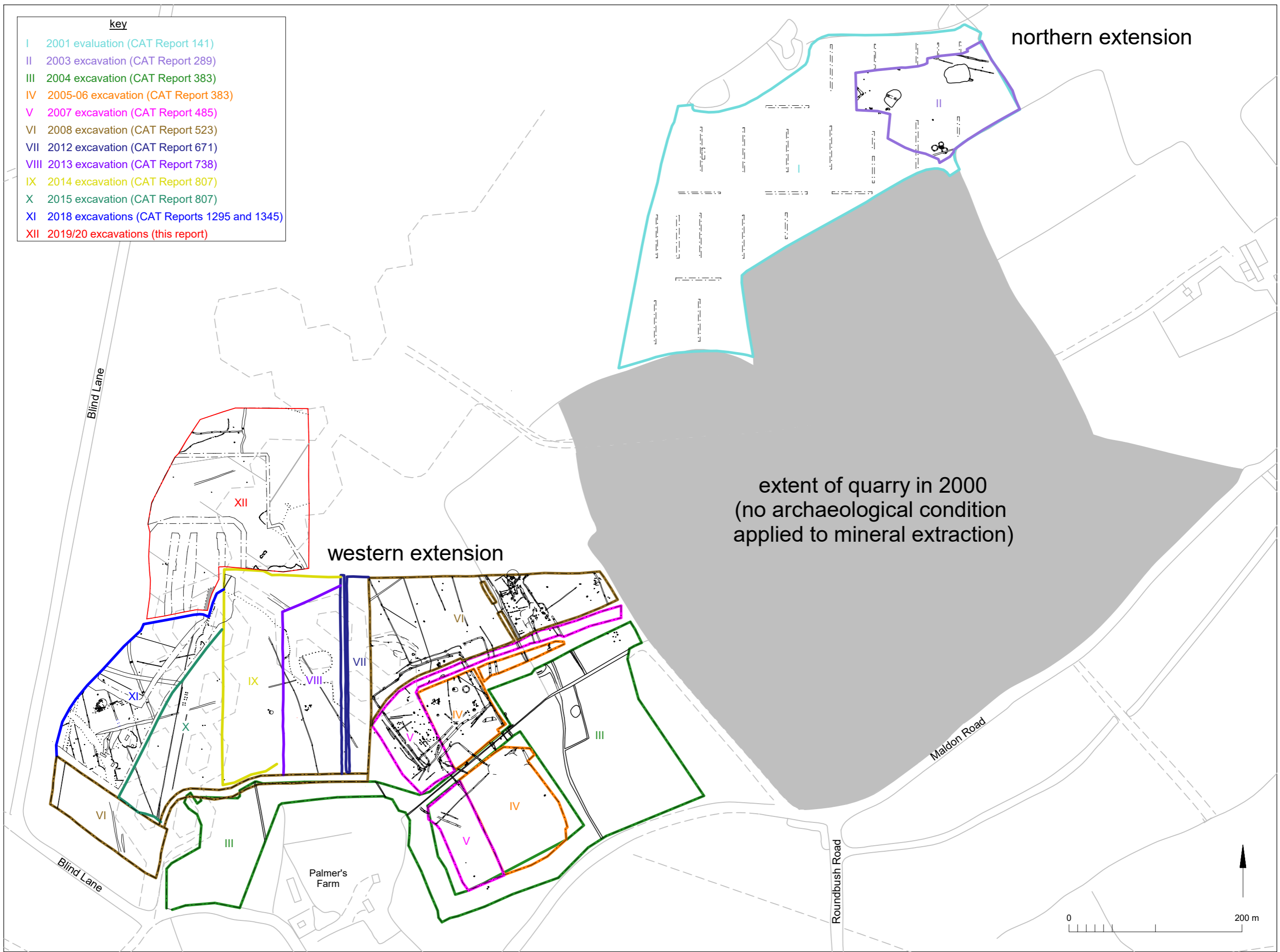


Fig 3 Plan showing phases of archaeological work at the quarry

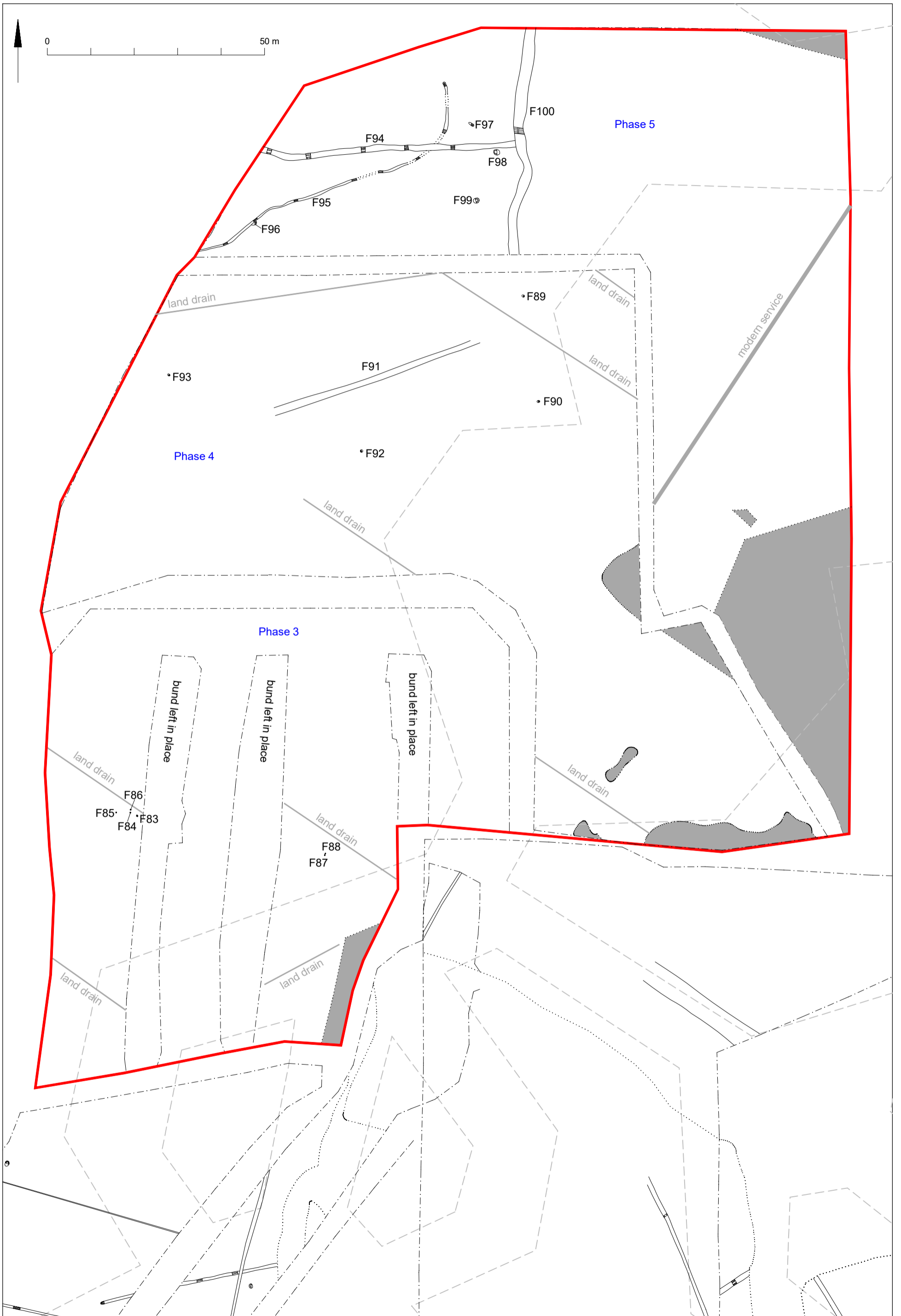


Fig 4 Results of the Phase 3, 4 and 5 monitoring. Modern disturbance shown in grey.

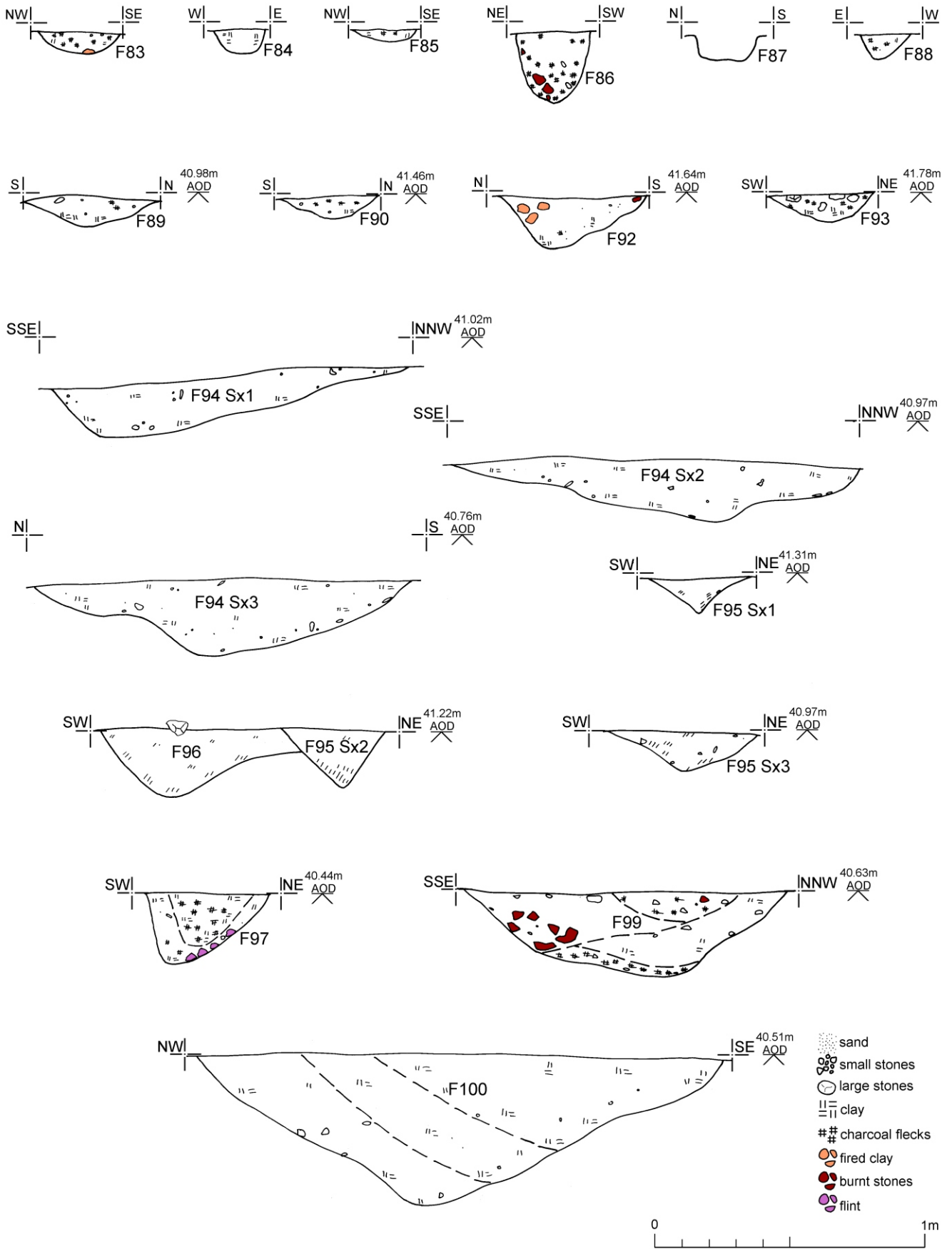


Fig 5 Sections.



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**OASIS ID: colchest3-408669**

## Project details

Project name	Archaeological monitoring at Hanson Quarry, Maldon Road, Birch, Essex, CO5 9XE
Short description of the project	Three phases (Phases 3, 4 and 5) of archaeological monitoring and excavation took place at Hanson Quarry, Maldon Road, Birch, Essex in September 2019, June 2020 and September to October 2020 prior to the commencement of mineral extraction. Archaeological investigations have been carried out at the quarry since 1992 with significant remains including a Bronze Age barrow cemetery, Late Bronze Age/Early Iron Age pits, Late Iron Age and Roman enclosures, Roman cremation burials and ovens, and post-medieval field boundaries. Phase 3, 4 and 5 monitoring revealed twelve prehistoric features, two post-medieval boundary ditches and a modern ditch, along with two undated features and a natural feature. The prehistoric features included two Bronze Age pits and a ditch. Finds were scarce but included a small quantity of Bronze Age pottery, burnt (heat-altered) stone, animal bone and burnt bone.
Project dates	Start: 20-09-2019 End: 02-10-2020
Previous/future work	Yes / Not known
Any associated project reference codes	19.09g - Contracting Unit No.
Any associated project reference codes	BIBP19 - HER event no.
Type of project	Recording project
Site status	None
Current Land use	Cultivated Land 4 - Character Undetermined
Monument type	PITS Late Prehistoric
Monument type	PITS Bronze Age
Monument type	DITCH Bronze Age
Monument type	DITCHES Post Medieval
Monument type	DITCH Modern
Significant Finds	POTTERY Bronze Age
Significant Finds	POTTERY Late Iron Age
Significant Finds	POTTERY Roman
Significant Finds	CERAMIC BUILDING MATERIAL Roman
Significant Finds	CERAMIC BUILDING MATERIAL Post Medieval
Investigation type	"Watching Brief"
Prompt	Planning condition

## Project location

Country	England
Site location	ESSEX COLCHESTER BIRCH Hanson Quarry, Maldon Road
Postcode	CO5 9XE
Study area	3.43 Hectares
Site coordinates	TL 92059 19552 51.840972716901 0.788298713629 51 50 27 N 000 47 17 E Point
Height OD / Depth	Min: 40.3m Max: 41.8m

## Project creators

Name of Organisation	Colchester Archaeological Trust
Project brief originator	none
Project design originator	none
Project director/manager	Chris Lister
Project supervisor	Ben Holloway
Type of sponsor/funding body	Landowner

## Project archives

Physical Archive recipient	Colchester Museum
----------------------------	-------------------

Physical Contents	"Animal Bones","Ceramics"
Digital Archive recipient	Colchester Museum
Digital Contents	"other"
Digital Media available	"Images raster / digital photography","Survey","Text"
Paper Archive recipient	Colchester Museum
Paper Contents	"other"
Paper Media available	"Miscellaneous Material","Photograph","Report","Section"

### Project bibliography 1

Publication type	Grey literature (unpublished document/manuscript)
Title	Phases 3, 4 and 5 of archaeological monitoring and excavation at Hanson Quarry, Maldon Road, Birch, Essex, CO5 9XE: September 2019, June and September-October 2020
Author(s)/Editor(s)	Hicks, E.
Author(s)/Editor(s)	Pooley, L.
Other bibliographic details	CAT Report 1579
Date	2020
Issuer or publisher	Colchester Archaeological Trust
Place of issue or publication	Colchester
Description	A4 ring-bound loose leaf
URL	<a href="http://cat.essex.ac.uk/all-reports.html">http://cat.essex.ac.uk/all-reports.html</a>
Entered by	Laura Pooley (lp@catuk.org)
Entered on	25 November 2020