Archaeological strip, map, record and monitoring at the church of St John the Baptist, Hall Road, Mount Bures, Essex, CO8 5AS

January-February 2019

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commissioned by David Whymark on behalf of Mount Bures PCC

NGR: TL 9045 3247 (centre)
Planning reference: 162733
CAT project ref.: 19/01m
Colchester Museum accession code COLEM: 2019.6
CHER ref: ECC4298
OASIS reference: colchest3-340935

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CAT Report 1454
November 2019

Contents

List of photographs, tables and figures

Cover: working shot

1 Summary

An archaeological strip, map and record project incorporating monitoring was carried out at the church of St John the Baptist, Hall Road, Mount Bures, Essex, during the groundworks for a single-storey extension on the northern side of the church and new service connections. Fifteen inhumation burials were exposed by the groundworks and a quantity of disarticulated human bone was found across the site. The earliest burial dated from the mid 12th to the late 13th century, and the latest were two burial vaults dating from the 18th to the early 19th century.

2 Introduction (Fig 1)

This report presents the results of an archaeological strip, map and record project incorporating monitoring at the church of St John the Baptist, Hall Road, Mount Bures, Essex which was carried out between 29th January to 18th February 2019. The work was commissioned by David Whymark on behalf of Mount Bures PCC and took place during groundworks for a single-storey extensions and new service connections. This work was undertaken by the Colchester Archaeological Trust (CAT).

In response to consultation with Colchester Borough Council Planning Services (CBCPS), the Colchester Borough Council Archaeological Advisor Jess Tipper advised that in order to establish the archaeological implications of this application, the applicant should be required to commission a scheme of archaeological investigation in accordance with the *National Planning Policy Framework* (MHCLG 2018).

All archaeological work was carried out in accordance with a *Brief for Continuous Archaeological Monitoring and Recording*, detailing the required archaeological work, written by Jess Tipper (CBCPS 2017), and a written scheme of investigation (WSI) prepared by CAT in response to the brief and agreed with CBCPS (CAT 2019).

In addition to the brief and WSI, all fieldwork and reporting was done in accordance with English Heritage's *Management of Research Projects in the Historic Environment* (*MoRPHE*) (English Heritage 2006), and with *Standards for field archaeology in the East of England* (EAA **14** and **24**). This report mirrors standards and practices contained in the Institute for Archaeologists' *Standard and guidance for archaeological watching brief* (CIfA 2014a) and *Standard and guidance for the collection, documentation, conservation and research of archaeological materials* (CIfA 2014b).

3 Archaeological background (Fig 2)

The following archaeological background draws on the Colchester Historic Environment Record (accessed via Colchester Heritage Explorer (https://colchesterheritage.co.uk).

The origins of the church of St John the Baptist are thought to lie in the 12th century with later alterations (CHER MCC4468). It is constructed of coursed flint rubble with Roman brick corners (quoins). Dressings are in limestone and clunch (a softer, more chalky limestone) with tiled roofs (CHER MCC7192-3). The church comprises a north vestry, a central tower, short transepts and a nave with a south porch. The church was restored in the 19th century, when the central tower was rebuilt and the north and south transepts and the vestry were added (CHER MCC7194). The proposed extension is to be located at the northern edge of the church within the churchyard (CHER MCC10037).

The churchyard is *c* 50m south of the medieval motte, a scheduled ancient monument (NHLE no. 1012056; CHER MCC7138). It takes the form of a *c* 10m high and *c* 60m diameter mound surrounded by a ditch, and the church may have originally stood within the bailey area. Excavations in 2011 showed that the main medieval use of the motte was as a lookout post during the civil war between King Stephen and Matilda in the mid 12th century.

4 Aim

Archaeological monitoring was undertaken to excavate and record any archaeological deposits and burials exposed by the groundworks.

5 Results (Figs 3-4)

All groundworks were carried out by the contractors under the supervision of a CAT archaeologist.

Service trenching totalling approximately 105.1m long and 0.3-1m wide was excavated to a depth of 0.5-1.05m below current ground level (bcgl). An excavation area measuring 19.8m² was reduced by 0.4m bcgl. Within this excavation area, an area measuring approximately 7m² was reduced by a further 0.7m onto burials exposed by the trenching.

Excavations occurred through modern topsoil (L1, *c* 0.19-0.28m), a layer of imported soil or subsoil (L2, *c* 0.28-0.36m thick) and a layer of buried soil or grave fill (L3, *c* 0.5m thick) onto natural (L4, encountered at a depth of 1m bcgl).

Inhumation burials F1, F2, F3, F4, F5, F6 and F7 were located within the westernmost branch of service trenching. All were aligned east/west, and were encountered at a depth of 0.75-1.05m bcgl. F2-F7 were clustered together, while F1 was situated slightly to the north of this group. None of the burials were fully excavated, as most were partially located outside of the area of the service trench.

Photograph 1 Inhumation burial F2, looking west

Adult males were interred in inhumations F2 and F3, adult ?males in F1, F6 and F7, and a mature adult of unknown sex in F5. The remains of an adult male and an adult female came from inhumation F4 although, as only a small part of this grave was excavated, it is uncertain what remains came from the primary burial and which were residual disarticulated remains from an earlier burial. The residual remains of at least six individuals including males, females and juveniles also came from the backfill of F6.

No dating evidence was recovered from inhumation burials F1, F4, F5, F6 or F7. A fragment of Roman pottery, medieval/post-medieval peg-tile and a piece of broken coffin furniture came from the backfill of F3. Burial in a coffin became common from the late 17th century onwards, so the presence of a piece of coffin furniture in the backfill of this grave may suggest it dates to the post-medieval period. A sample of human bone from inhumation burial F2 was sent for radiocarbon dating, with the results indicating that the burial dates from the early 13th to the early 14th century (see Section 8 below for full details).

Photograph 2 Inhumation burial F3, looking west

Inhumation burial F8 was located in the centre of the excavation area at a depth of *c* 1m bcgl. Aligned east/ west it contained the remains of an adult female who had been buried within a wooden coffin, dating the burial from the late 17th century onwards. The disarticulated remains of an infant skull and juvenile vertebrae were also present.

Burial F8 had cut through earlier inhumations F9, F12 and F13. No human remains were recovered from F12 with only fragmentary remains from F9 and F13, identified as an adult male and adult ?female respectively. There was no dating evidence from F9

or F13, and only one fragment of pottery of 14th to 16th century date came from the backfill of grave F12, although all three inhumations must be earlier in date than F8.

Medieval inhumation burial F10 was uncovered at the northern edge of the excavation area. Aligned east/west it was encountered at a depth of 1m bcgl and contained the remains of an adult female. A sample of human bone from this inhumation was sent for radiocarbon dating, with the results showing that the burial dates from the mid 12th to the late 13th century (see Section 8 below for full details). Inhumation burial F11 was also aligned east/west and cut through the western end of burial F10. The outline of a metal coffin frame was visible at a depth of 1.5m bcgl but, as this was located beneath the maximum dig-depth of the groundworks, the coffin and its associated burial was left *in situ*. Placed within a coffin, this burial likely dates from the late 17th century onwards. Disarticulated human remains from backfilled soil above the coffin of F11 were of an adult and adult female, possibly the same individual.

All of the excavated human remains from burials F1-F13 were sent for specialist analysis (see Section 6) and were subsequently reburied within the graveyard at the church of St John the Baptist, Mount Bures on 16th August 2019.

Burial vaults F14 and F15 were partially exposed during groundworks, at depths of *c* 0.5-0.55m bcgl. Both had been constructed of red unfrogged bricks set into mortar and date from the 18th to the early 19th century. As neither burial vault was due to be disturbed further by the groundworks both burials were left *in situ.* It was also noted that the burial in vault F14 had originally been buried within a metal coffin.

Photograph 3 Excavation area showing inhumation burial F8, looking south.

Photograph 4 Interior of burial vault F14, looking west.

6 Human bone

by Julie Curl

Introduction

A variety of partial inhumations and other disarticulated human remains were recovered during excavations at the church of St John The Baptist. These were from a mixed group of adults and some children, many showing health problems. Two skeletons showed some indications of mixed ethnicity.

Methodology

The human remains were recorded and analysed following modified guidelines produced by English Heritage (Mays 2004) and the IFA (Brickley and McKinley 2004). All of the bones were quantified by skeleton number or context and an estimate of the minimum number of individuals was recorded based on counts of the most frequent elements recorded, estimation of sex and ages of those present. Bones were scanned for any pathologies, genetic traits and modifications which were recorded. Fusion of bone and tooth eruption and wear were noted when possible to allow estimation of ages following Brothwell (1981). Where complete and suitable elements were present, these were recorded as elements that could provide measurements for estimation of stature using the regression formulae of Trotter and Gleser (1952 and 1958).

All of the information for this report was recorded as a paper record and then inputted into an Excel database for analysis. Summary tables of results are provided in this report and the full data, including additional counts, is available in the digital archive.

The assemblage – quantification, provenance and preservation

A total of 16,148g of bone, consisting of 1579 elements (or fragments of), was recovered from excavations at this site. The assemblage consists of a variety of articulated inhumation remains, with partial skeletons; there are also several deposits of disarticulated human remains that consist of more than one individual. The assemblage is quantified by feature, weight and count in Table 1 and a summary is presented in Table 2. A full catalogue appears in the appendix.

Context number	Total weight g	Total count
F1	631	198
F2	1045	73
F3	2532	260
F4	556	73
F5	398	23
F6	1903	220
F7	183	22
F8	2725	166
F9	654	51
F10	980	113
F11	850	93
F13	289	8
L1	19	5
L3	1593	130
U/S (finds nos. 24 & 25)	1790	144
Assemblage Totals	***16148***	***1579***

Table 1 Quantification of the bone assemblage by context, weight and count

Context	Finds nos.	MNI	Artic? Disartic?	Age	Sex	Comments
F1	1	1	a	adult	?male	
F2	2	1	a	adult	male	
F3	5, 6	2	a + d	adult	male	Plus disarticulated remains of an adult male
F4	7	2	a	adults	male & female	Remains of 2 individuals
F5	8	1	a	mature	?	
F6	4 + 9	7	a + d	adult	?male	Plus disarticulated remains of up to six males, females and juveniles
F7	11	1	a	adult	?male	
F8	12 + 14	3	a + d	adult	female	Plus disarticulated remains of an infant and juvenile
F9	14	1	a	adult	male	
F10	15	1	a	adult	female	
F11	16 + 17	2?	d	-	-	Plus disarticulated remains of an adult and adult female, possibly one disturbed skeleton
F13	18	1	a	adult	?female	
L1	20	2	d	adult and juvenile	?	Plus disarticulated remains of an adult and juvenile
L3	4, 21 + 22	6	d	adults and juvenile	male, ?female & child	Plus disarticulated remains of ?five adults (including a male and ?female) and a child
U/S	24	2	d	adult and juvenile		Plus disarticulated remains of an adult and juvenile
U/S	25	1	d	adult	?	Plus disarticulated remains of an adult
MNI		***32?***	***Total weight and count***			***Total count of bones:1579 Total Weight:16,148g***

Table 2 Summary of the bone assemblage by context

A range of adults and juveniles were found, including remains of a young child of around 2 to 3 years old. The minimum number of individuals (MNI) is difficult to fully determine with the number of disarticulated remains, but there may be remains from as many as 32 individuals in this assemblage, although there is the possibility that some are from other burials recorded.

The condition of the bone in this assemblage varies, with some in a good and robust state and with complete measurable elements, while other remains are fragmentary and showing erosion. Rodent gnawing was seen on a juvenile skull from F6, finds no. 9, with gnawing around the cranium and frontal bone. Such gnawing is most likely to occur sometime after burial and decay, with the rodent gnawing to wear its teeth or even to obtain calcium from the bone. Rodents are known to access graves and coffins and even nest and breed in them, so rodent gnawing is not uncommon.

Several bones are sufficiently well preserved to take measurements following Trotter and Gleser (1952 and 1958) to estimate stature and determine sex and this is estimated for as many remains as possible to try and determine if any disarticulated remains may be connected to partial inhumations.

Articulated inhumations (some with disarticulated bone in backfill)
Eleven features produced articulated inhumations, although most were only partially excavated. These are summarised below:

F1 (finds no. 1)
Age: Adult
Sex: ?Male
Elements: Skull, mandible, cervical vertebrae, thoracic and lumbar vertebrae, humerus, radius, ulna, scapula, misc fragments
Estimated height: Unknown
Pathologies/Comments: Sutures not fully fused. Teeth worn, caries in lower left M2, some infection in jaw around lower left M1 and M2.

F2 (2)
Age: Adult
Sex: Male
Elements: Femurs, tibia, calcaneus, pelvis fragments, radius, metacarpals, phalanges, humerus fragments.
Estimated height: Five feet, six inches.
Pathologies/Comments: One leg larger and stronger than other – possible occupational differences – using foot pedal?

F3 (6)
Age: Adult
Sex: Male
Elements: Skull fragments, isolated teeth, femur head, metatarsals, sacrum, pelvis, humeri, radii, ulnas, carpals, phalanges, vertebrae, ribs.
Estimated height: Approximately 178cm / 5 feet, 6 inches, robust build.
Pathologies/Comments: Robust male. Arthritis in pelvis and on femur head. Healed fracture on radius. Degenerative wear on all vertebrae. Healed fracture on rib. Upper jaw shows abscesses and infections.
Associated bone (finds nos 5): Skull fragments, fragments of pelvis, tibia, femur and vertebrae from an adult male. Skull with huge and irregular (lumpy) muscle attachments at rear of neck (very strong neck), sutures fully fused.

F4 (7)
Age: Adult
Sex: Male and female
Elements: Female mandible, male skull, cervical vertebrae, misc teeth, clavicle
Pathologies/Comments: Female mandible incisors have very worn surfaces, premolars missing, loss of teeth and healing of jaws, abscesses. The male skull has strong muscle attachments and very strong brow ridge and there appears to be some healed damage to skull from ?blows. Robust clavicle with healed break. Cervical vertebrae with severe arthritis and some remodelling.

F5 (8)
Age: Mature adult
Sex: ?
Elements: Skull fragments, mandible, cervical vertebrae.
Pathologies/Comments: Mandible has no teeth and the bone has healed over the lost teeth. Skull has fully-fused sutures.

F6 (4)
Age: Adult
Sex: ?Male
Elements: Upper body elements from one skeleton, additional individuals added.
Estimated height: One femur approximately 5 feet tall.
Pathologies/Comments: Strong muscle attachments on right arm, less so on left arm probably due to occupational activity. Degenerative wear on main body vertebrae. Healed fracture on clavicle and rib.
Associated bone (finds no. 4): 1) Adult male, mature mandible with most teeth lost and bone healed over with one molar and one premolar surviving and mandible remodelled and distorted and chin jutting out. His upper maxilla has lost most teeth and shows inflammation and infection. Possibly mixed race, some African characteristics with skull shape, very wide maxilla and flaring at rear of mandible. 2) Adult female, mandible with slightly worn teeth, her first molar is very worn which suggests occupation wear and perhaps thread cutting with teeth, some calculus and mild gum infection. 3) Juvenile skill, thin and fragile, estimated under ten years at death.
Associated bone (finds no. 9): Juvenile skull with orbits and frontal bone; older juvenile fragments; juvenile mandible; adult skull and tibia fragments. Heavy rodent gnawing on the juvenile skull with two knife cuts suggesting and autopsy or operation.

F7 (11)
Age: Adult
Sex: ?Male
Elements: Femur head, pelvic fragments, tibia fragments
Pathologies/Comments: Femur head of 46mm diameter, so intermediate male/female, but probably male.

F8 (14)
Age: Adult
Sex: Female
Elements: Both arms and legs, central fragments including skull and mandible and fragments of pelvis.
Estimated height: Approximately five feet, two inches to five feet three inches.
Pathologies/Comments: Most teeth clean and in good condition, upper right M2 and M3 with calculus deposits. Upper front teeth lost but not through decay, some sloping to skull, flat face, edge to edge bite, sutures partly-fused. No thickening of the brow ridge. Possible mixed-race with oriental? Little muscle attachments, delicate build. Degenerative wear on vertebrae, exostoses on lower thoracic and lumbar vertebrae. Healed fracture on clavicle.
Associated bone (finds no.12): Fragment of infant skull, fragments of juvenile cervical vertebrae and other vertebrae fragments, metatarsal, phalange.

F9 (13)
Age: Adult
Sex: Male
Elements: Left femur, tibia, fibula fragments, calcaneus, carpals, tarsal, phalanges.
Estimated height: Five feet, seven inches approx.
Pathologies/Comments: Slight arthritic problems in femur, light build but strong muscle attachments.

F10 (15)
Age: Adult
Sex: Female
Elements: Right radius, metacarpals, phalanges; right foot with calcaneus, tarsals, phalanges, metacarpals, phalanges, carpals; left foot with calcaneus, tarsals, metatarsals, phalanges; left femur, tibia and fibia; right femur, tibia, fibia and patella, pelvic fragments, sacrum, vertebrae fragments.
Pathologies/Comments: Femur head measurements 41.8mm and 42mm. Small female. Spina bifida, arthritic problems with hand and foot phlanages with exotoses.

Disarticulated remains (16 and 17) from the backfill F11 which was left in situ
Find no. 16
Age: Adult
Sex: ?
Elements: Tibia, vertebrae, metatarsals, metacarpals, calcaneus, radius, rib fragments.
Find no. 17
Age: Adult
Sex: Female
Elements: Humerus, femur, radius, ulna, metatarsal, fragments of pelvis, rib and skull.
Pathologies/Comments: Small humerus has arthritic changes in distal end with some exostoses. The humerus also has strong muscle attachments.

F13 (18)
Age: Adult
Sex: ?Female
Elements: Right tibia and fibula, left tibia and fibula.
Pathologies/comments: Small adult.

Disarticulated human remains
A summary of the disarticulated material not from grave fills is presented in Table 3. The disarticulated material contained remains of adults and juveniles.

Context	Finds no.	Ages	MNI	Type	Elements	Comments
L1	20	Juvenile & adult	2	mix	Juvenile skull fragments, adult rib	-
L3	4	Adult & infant	2	mix	Infant skull fragments and femur, adult tibia, femur, skull fragments, sacrum, lumbar vertebrae	Infant estimated age is 2-3 years
L3	21	Adult	2	mix	Femur, skull fragments, metatarsals, metacarpals, ribs, humerus, pelvic fragments	One rib has a healed break, another rib has an infection (? TB)
L3	22	Adult	2	mix	Femur, humerus, tibia, rib fragments, metatarsal	One femur shaft has a severe infection (? osteomyelitis) and there are knife cuts that show there was

						some human intervention with the infection.
U/S	24	Juvenile & adult	2	mix	Adult: tibia, vertebrae, mandible fragments, skull fragments. Juvenile: skull and vertebrae fragments.	Adult tibia has large exostoses at proximal rear. Vertebrae have degenerative wear. Mandible fragment has an abscess and healed bone. Adult skull sutures partly fused.
U/S	25	Adult	1	mix	Mandible with loss of teeth, skull fragments, humerus and tibia fragments	Mandible shows healing after loss of teeth

Table 3 Summary of the disarticulated bone assemblage

Ages summary
The assemblage largely consisted of adult remains, with these varying from young adults to mature individuals that had lost all teeth and the jaws had healed over. Some skull sutures showed little fusion, which others had fully fused.

Juveniles are present as residual disarticulated remains. One infant was approximately 2 to 3 years at death.

Stature summary
Height estimations showed male heights of 5'6" (F3), 5', 7" (F9) and possible males at 5', 2/3" (F8), all of which were average heights. There is one ?male in F6 that was a shorter individual at approximately 5 feet tall, but quite robust.

Ethnicity
The female skull from F8 (14) showed some features suggesting mixed race. There was a notable sloping of the left and right sides of the skull to a central point and a very flat face, which suggested possible Mongaloid/mixed white ethnicity.

The male skull from F6 (4) showed sloping sides to the skull, flaring of the rear of the mandible, and a very wide maxilla, which would suggest African/mixed white ethnicity.

Other skulls are presumed of white origins.

Pathologies summary
The most common bone problems were arthritis and degenerative wear on vertebrae, which is related to age and occupational wear. More general arthritic problems were seen on hip joints, fingers and toes, all common sites for age and stress-related arthritis. One female showed arthritis in her elbow, perhaps from carrying children or occupational wear.

Dental problems were seen. Calculus deposits were seen on some teeth, which suggests sugars and carbohydrate rich foods. Some caries were noted and infections, including more severe abscesses in some cases. A male jaw from F6 (4), had lost most teeth and the bone had healed over. Similarly, a female mandible from F4 (7), had also lost many teeth and the bone had healed. Some tooth wear was seen that would have occurred from gritty foods, such as breads that included some millstone grit.

One female (F6) had healthy teeth, but a lot of wear on one molar, which would suggest occupational wear, perhaps from cutting thread with her teeth.

Spina bifida occulta was recorded on one small female from F10 (15). She also had arthritic problems in her hands and feet.

Several healed fractures of ribs and clavicles were seen, which are common and do not always suggest trauma. It is possible to fracture and break clavicles and ribs with sneezing and coughing.

Infections
A rib from L3 (21) showed possible tuberculosis.

One femur shaft from L3 (22) had a severe infection suggesting osteomyelitis, a bacteria infection that can enter the body at any location and travel through the blood, appearing at another location. The infection and accumulation of pus in the bone can lead to the bone being destroyed or new and irregular bone growth forming, often a combination of the two. This infection would have been debilitating and painful, probably resulting in sepsis and most likely to have resulted in the death of the individual.

Trauma
A child skull from F6 showed small cuts that suggested an operation or perhaps an autopsy.

A male skull from F4 (7) showed some damage and irregularity to the surface of the skull suggesting a healed blow. This particular male showed heavy brow ridges and other fractures that had healed, perhaps suggesting a violent individual?

Discussion
The assemblage from this excavation shows a mixed group with a range of adults and children. There is a missing group evident in this assemblage, with no part-fused limb bones from teenagers or young adults seen, with the oldest child estimated at approximately ten years or younger.

Most adults were reasonably healthy other than showing probable age-related wear and arthritic problems (although none severe) and a high level of tooth problems. The tooth problems would suggest a rich diet with carbohydrates and sugars.

Some of the men in the assemblage did not show strong muscle attachments that are often noted with manual workers, perhaps indicating more sedentary lifestyles for some. However, none of the skeletons showed any suggestion of excess weight problems, such as severe arthritic problems.

The *Spina bifida* seen was not severe and may have gone largely or completely unnoticed. This less significant *spina bifida* would not have affected mobility or childbirth and indeed may have been passed to her children as it has a genetic basis (Roberts & Manchester, 1995).

The number of juveniles suggested in the assemblage is not surprising as many died young from infections such as tuberculosis.

7 Finds

7.1 Pottery and ceramics
by Dr Matthew Loughton

The watching brief uncovered a small quantity of medieval pottery and ceramic building material (henceforth CBM) with 10 sherds with a weight of 143g. This material was recovered from three features and one layer:

F3 inhumation burial: one worn sherd of Roman imbrex (42g) and one small piece of medieval/post-medieval peg-tile with a weight of 12g.

F8 inhumation burial: six sherds of early medieval sandy wares (fabric F13) with a weight of 47g, dating from *c* AD 1025/1050-1225 (*CAR* **7**, 40-41). Four of these sherds have traces of black sooting on their exterior surfaces.

F12 grave cut: one small sherd of 'Tudor Green' ware (fabric F41) with a weight of 2g dating to the period from the14th to the16th century (*ibid*, 184).

F14 burial vault: one complete unfrogged brick with dimensions of 230 mm x 116 mm x 65 mm, 18th to early 19th century Red brick (?) according to Ryan's Essex brick typology (1996, 95).

F15 burial vault: one complete unfrogged brick with dimensions of 230 mm x 109 mm x 63 mm, 18th to early 19th century Red brick (?) according to Ryan's Essex brick typology (*ibid*, 95).

Finally, one sherd of medieval/post-medieval peg-tile, with a weight of 40g, was recovered from buried soil L3 (21).

7.2 Small finds

by Laura Pooley

All of the small finds and iron nails from the church of St John the Baptist were of post-medieval date and most were coffin furniture. They came from inhumation burials F3, F8 and F11, from buried soil or grave fill L3 (presumably from truncated burials), and as an unstratified find from the spoil.

Burial in a coffin became common from the late 17th century onwards with coffin decoration becoming increasingly more elaborate by the early 18th century (Webb & Norton 2009, 173). Metal coffin fittings could include handles (also known as grips), handle plates (grip plates), upholstery studs, breastplates, headplates and footplates. The only fittings recovered during the current archaeological work were coffin nails, handles and fragments of possible handle plates.

Inhumation burial F3

A triangular fragment of iron (SF4) is possibly part of a handle plate or similar attachment. There was no evidence that the body had been buried in a coffin so this is probably a residual find.

SF4 F3 (6), iron fragment.
Triangular fragment of iron, possibly part of a coffin plate or similar attachment, 47mm long, 23mm wide (max), 12.9g.

Inhumation burial F8

Fourteen iron coffin nails came from this grave. Most had flattened shanks with mineralised wood adhering and, where it was possible to determine, flat rectangular heads. A possible nail or fragment of drop handle was too corroded to accurately identify but did not have any traces of mineralised wood suggesting that it was not a nail.

F8 (12), 14 iron nails and a nail or handle fragment.
1) ?Complete (head obscured in corrosion with pebble adhering), flattened shank with mineralised wood, *c* 82mm long, 25.2g. Longer than the rest of the nails.
2-9) Eight complete or almost complete nails with tip missing, flattened shanks with mineralised wood adhering, flat heads of narrow rectangular shape, largest (complete): 67mm long, head 13mm by 8mm, 6.4g, smallest (incomplete): 29mm long, 4g. Total 42.2g.

10-12) Three incomplete iron nails, all with tips missing, corrosion obscures shapes of shanks and heads, mineralised wood adhering, 23.5g, 37mm, 38mm and 45mm long.
13-14) Two iron nail shanks, 6.8g, 25mm and 40mm long.
15) Largely obscured by corrosion, could be an iron nail or a fragment of drop handle, 51mm long, 11.3g.

Inhumation burial F11

Two different types of iron nail were present. Four with round cross-sections and small flat round heads had mineralised wood adhering and were probably coffin nails. A fifth nail was considerably smaller with rectangular cross-section and rectangular-shaped head.

F11 (16), iron nail
Complete, shank of rectangular cross-section clenched at 45°, head of narrow rectangular shape, 48mm long, 3.2g.

F11 (17), four iron nails
All complete, shanks of round cross-section with mineralised wood adhering, small flat round heads, 61mm & 14g, 56mm long & 6.9g, 55mm long & 6.2g, 54mm long & 5.7g.

Buried soil or grave fill L3

Three iron coffin handles came from L3 (see Fig 5). Two (SF2) were of similar size and shape and were probably originally from the same coffin. They were simple drop handles, U-shaped with short horizontal terminals similar to Type 2a handles recorded at Spitalfields and dated from 1763-1837 (Reeve & Adams 1993, 144, illustrated in microfiche). One of the handles included the remains of looped attachments around the terminals which would have fixed the handle to the coffin. Two thin fragments of iron sheet with mineralised wood on the reverse and a small iron rivet were possibly from handle plates.

The third handle (SF3) was also a drop handle but very different in design. It was of elongated H-shape with a long cross-bar projecting either side of two short ends. The cross-bar has two rounded terminals, the short ends have a rounded terminal at the bottom and a projecting right-angled terminal at the top. A clenched iron staple has been looped around both right-angled terminals. The staple would have been driven through the wooden coffin with the ends turned-out effectively fixing/clamping the staple, and therefore the handle, in place.

These handles would have been placed at intervals around the outside of the coffin, normally three to each side and one at each end for an adult-sized coffin or two per side for a child-sized coffin (Webb & Norton 2009, 83). Given the size of the handles and the weight of the coffin with occupant, most handles were likely to be purely decorative. Handles were commonly fixed to the coffin by a decorative backing plate (or grip plate). Two fragments of iron sheet found with the handles from L3 may represent the remains of a plate(s) but the looped attachment and staples found on two of the handles may suggest these particular coffins did not have plates. Made from iron, the handles were also in the cheapest metal available (*ibid*, 159).

SF2 L3 (23), post-medieval iron coffin handles
Fig 5.1 1) Complete iron drop handle, circular in cross-section, U-shaped with short horizontal terminals. Around both terminals are a looped attachment, one is incomplete and broken close to the loop, the other is rectangular in cross-section with tip-missing and mineralised wood on the surface. These attachments would have been used to fix the handle into the wooden coffin. Handle: 86mm long, 5mm diameter. Attachment: 34mm long, 5mm wide. 13.5g.
2) As above but incomplete, one terminal survives, no looped attachments survive. 72mm long, 5mm diameter, 9.9g.
3) Two thin fragments of iron sheet with mineralised wood on the reverse and one small iron rivet surviving, possibly part of a grip/handle plate, 2.5g.

SF3 L3 (10), post-medieval iron coffin handle, **Fig 5.2**
Complete iron drop handle, moulded to the front, flat to the rear, of elongated H-shape with long cross-bar (85mm long) projecting either side of two short ends, the cross-bar has two rounded terminals, the short ends (42mm long) have a rounded terminal at the bottom and a projecting right-angled terminal at the top with round cross-section. A iron staple has been looped around both right-angled terminals, the staples are made of a flat strip of iron 4mm wide, they have two long straight arms which have then been turned-out half way along, effectively clenching the staple and fixing it in place (presumably through the wooden coffin). Handle: 85mm long, 42mm wide, 6mm thick. Staples: 31mm long (to clench), loop 8mm diameter, 4mm wide, projects 18mm from the handle to the clench, length of arms after clench 37mm. 53g.

Unstratified
A post-medieval jeton was found in spoil.

SF1 U/S (28), post-medieval jeton.
Virtually illegible, probably the Imperial orb within a double tressure of three arches and three angles on the reverse, 23mm diameter, 1.1g.

8 Radiocarbon dates

Samples of human bone from inhumation burials F2 and F10 were submitted for radiocarbon dating at SUERC Radiocarbon Laboratory (SUERC-90175 and SUERC-90176; see Appendix 3). The purpose of submitting the samples was to date the inhumation burials, which were devoid of finds.

Inhumation burial F2 (SUERC-90175)
A 2-sigma calibrated date (at 95.4% confidence) of 1210 to 1390 AD was produced. On the basis of this 2-sigma calibrated date (at 95.4% confidence), there is an 88.6% chance that the date lies between 1210 to 1330 BC. Therefore, this burial likely dates to somewhere from the early 13th to the early 14th century.

Inhumation burial F10 (SUERC-90176)
A 2-sigma calibrated date (at 95.4% confidence) of 1059 to 1285 AD was produced. On the basis of this 2-sigma calibrated date (at 95.4% confidence), there is a 93.8% chance that the date lies between 1153 to 1285 BC. Therefore, this burial likely dates to somewhere from the mid 12th to the late 13th century.

9 Conclusion

Groundworks around the church of St John the Baptist exposed the remains of 15 inhumation burials along with the disarticulated remains of several more individuals from earlier truncated burials. Where analysis took place on the remains, all of the articulated inhumations were of adults, with three males, three possible males, two females and a possible female present. Disarticulated bone came from adult males and females, juveniles and an infant. The high instance of intercutting burials and the number of disarticulated bones recovered show that the cemetery had been in use over a long period of time and that the earlier graves were unlikely to have been marked. The earliest dated burials ranged from the mid 12th to the early 14th century (F2 and F10), with the coffin burials dating from the late 17th century onwards and the vault burials from the 18th to early 19th century. Most of the burials are clustered along the western/northwestern side of the church, with the two burial vaults located on the eastern side.

Most of the adults appeared to have been in good health, although several exhibited age-related wearing of teeth and vertebrae, arthritis and evidence of tooth loss and jaw infections. The disarticulated rib of one adult showed evidence of tuberculosis infection, while another disarticulated adult femur indicated that this individual had died of osteomyelitis. One adult female was affected by *spina bifida* also, although this may not have been noticeable during life. A number of the adults had the strong muscle

attachments and noticeably larger and stronger limbs which are indicative of manual labour. Other adults, however, did not exhibit these strong muscle attachments, suggesting that they were employed in less physically-demanding occupations. One adult male may have been of mixed African and European ancestry, while an adult female was possibly of mixed Oriental and European heritage.

10 Acknowledgements

CAT thanks David Whymark and Mount Bures PCC for commissioning and funding the work. The project was managed by C Lister and carried out by M Baister and R Mathieson. Figures were prepared by C Lister, M Baister and E Holloway. The project was monitored for CBCPS by Jess Tipper.

11 References

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

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12 Abbreviations and glossary

CAT	Colchester Archaeological Trust
CBCAA	Colchester Borough Council Archaeological Advisor
CBCPS	Colchester Borough Council Planning Services
CHER	Colchester Historic Environment Record
CIfA	Chartered Institute for Archaeologists
context	specific location of finds on an archaeological site
feature (F)	an identifiable thing like a pit, a wall, a drain: can contain 'contexts'
layer (L)	distinct or distinguishable deposit (layer) of material
medieval	period from AD 1066 to *c* 1500
modern	period from *c* AD 1800 to the present
natural	geological deposit undisturbed by human activity
NGR	National Grid Reference
OASIS	**O**nline **A**cces**S** to the **I**ndex of Archaeological Investigation**S**, http://oasis.ac.uk/pages/wiki/Main
post-medieval	from *c* AD 1500 to *c* 1800
Roman	the period from AD 43 to *c* AD 410
section	(abbreviation sx or Sx) vertical slice through feature/s or layer/s
wsi	written scheme of investigation

13 Contents of archive

Finds: one box (all human bone reburied)

Paper record

One A4 document wallet containing:
The report (CAT Report 1454)
CBC evaluation brief, CAT written scheme of investigation
Original site record (feature and layer sheets, finds record, sections)
Site digital photos and log

Digital record

The report (CAT Report 1454)
CBC evaluation brief, CAT written scheme of investigation
Site digital photographs, thumbnails and log
Graphic files
Survey data

14 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 the accession number COLEM: 2019.6.

Distribution list
David Whymark
Mount Bures PCC
Jess Tipper, Colchester Borough Council Planning Services
Essex Historic Environment Record

Colchester Archaeological Trust
Roman Circus House,
Roman Circus Walk,
Colchester,
Essex, CO2 7GZ

tel.: 01206 501785
email: eh2@catuk.org

Checked by: Philip Crummy
Date: 28.11.2019

Appendix 1 Context list

Context Number	Finds Number	Feature / layer type	Description	Date
L1	20	Topsoil	Dark brown/black sandy-silt	Modern
L2	-	Subsoil / imported soil	Friable, dry medium/dark brown sandy-silt	?Post-medieval
L3	10, 21, 22, 23,	Buried soil	Medium orange/brown sandy-silt	?Medieval / post-medieval
L4	-	Natural	Firm, dry medium orange/brown sand with frequent stones	Post-glacial
F1	1	Inhumation burial	Friable, firm light grey/brown sandy-silt	Medieval / post-medieval
F2	2	Inhumation burial	Friable, firm light grey/brown sandy-silt	Medieval, 1210-1390 AD
F3	3, 5, 6	Inhumation burial	Friable, firm light brown sandy-silt	?Post-medieval
F4	7	Inhumation burial	Friable, firm light grey/brown sandy-silt	Medieval / post-medieval
F5	8	Inhumation burial	Friable, firm light brown sandy-silt	Medieval / post-medieval
F6	4, 9	Inhumation burial	Friable, firm light brown sandy-silt	Medieval / post-medieval
F7	11	Inhumation burial	Friable, firm light orange/grey/brown sandy-silt	Medieval / post-medieval
F8	12, 14	Inhumation burial	Friable, firm light brown sandy-silt	Post-medieval, late 17th century onwards
F9	13	Inhumation burial	Friable, firm light brown sandy-silt	Medieval / post-medieval
F10	15	Inhumation burial	Friable, firm light brown sandy-silt	Medieval, 1059-1285 AD
F11	16, 17	Inhumation burial	Friable, firm light grey/brown sandy-silt	Post-medieval, late 17th century onwards
F12	19	Inhumation burial	Friable, firm light grey/brown sandy-silt	Medieval / post-medieval
F13	18	Inhumation burial	Friable, firm light orange/grey/brown sandy-silt	Medieval / post-medieval
F14	26	Burial vault	Vault constructed of unfrogged red bricks bound in mortar	Post-medieval, 18th to early 19th century
F15	27	Burial vault	Vault constructed of unfrogged red bricks bound in mortar	Post-medieval, 18th to early 19th century

Appendix 2 Ceramic and pottery list

Context	Feature type	Find no.	Find Type	Fabric Group	Discard	No.	Weight g	Rim	Handle	Base	Form	Comments	Date
L3	Buried soil	21	CBM	-	X	1	40				PT		Medieval / post-medieval
F8	Inhumation burial	12	Pottery	F13	-	2	16						AD 1025/1050-1225
F8	Inhumation burial	12	Pottery	F13	-	4	31					Black sooting on exterior	AD 1025/1050-1225
F3	Inhumation burial	6	CBM	-	X	1	12				PT		Medieval / post-medieval
F3	Inhumation burial	6	CBM	-	-	1	42				RI		Roman
F12	Inhumation burial	19	Pottery	F41	-	1	2					?	14th-16th century
F14	Burial vault	26	CBM			1	3,189				BR	230 x 116 x 65, no frog	18th-early 19th century
F15	Burial vault	27	CBM			1	2,655				BR	230 x 109 x 63, no frog	18th-early 19th century

Appendix 3 Summary catalogue of the human remains

Con-text	Finds no.	Qt.	Wt (g)	Artic/ Disart	M/F	Ad/J/N/P	MNI	Side	Elements	Measure	Size in mm	Est. Height/ sex	Comments
F1	1	22	410	a	?m	ad		c	skull, mandible, cervical vertebrae				sutures not fully fused, teeth worn, caries in rear of lower left M2, some infection around M1 and M2 on left lower
F1	1	135	118	a	?m	ad		c	vertebrae, ribs, sternum fragments				
F1	1	12	57	a	?m	young ad		r	humerus, radius, ulna, scapula				humerus shows fusion line at distal end
F1	1	29	46		?m	ad		l	humerus head and misc frags				
F2	2	2	285	?	m	ad	1	l	femur	femur	head 50, GL=440	male	average male
F2	2	12	542	a	m	ad	1	l	femur, tibia, calcaneus	femur	GL=450, head=46.9	male	
F2	2	32	22	a	m	ad		c	pelvis fragments				
F2	2	6	52	a	m	ad		r	radius, metacarpal, proximal phalange				
F2	2	19	55	a	m	ad			phalanges, humerus fragments				
F2	2	2	89	d	m	ad			pelvic fragments				
F3	5	43	576	a	m	ad		c	Skull, fragments of pelvis, femur, tibia and vertebrae.				skull with huge and irregular (lumpy) muscle attachments at rear of neck - very strong neck. Sutures fully fused.
F3	6	27	485	a	m	ad	1	c	pelvis, sacrum, femur head, metatarsal	fe head	53.3	large male	large adult male, arthritic changes in pelvis, femur head has exostoses and patches of extra growth
F3	6	13	270	a	m	ad		l	humerus, radius, ulna, metacarpals, p/i/d phalanges, carpals	hu	Gl350, Bd69	male	muscle attachments not very strong
F3	6	9	258	a	m	ad		r, c	humerus, radius, ulna, metacarpals, i and p phalanges, vert frags				healed fracture on radius
F3	6	141	756	a	m	ad		c	vertebrae, ribs				healed fracture on rib, degenerative wear on vertebrae
F3	6	27	187	a	m	ad		c	fragments of vertebrae, skull, teeth, upper maxilla fragment				upper maxilla shows abscess and severe infection
F4	7	73	556	?	m + f	ads		mix	female mandible, male skull, cervical vertebrae, misc teeth, clavicle				female mandible incisors have very worn surfaces, premolars missing, loss of teeth and healing of jaws, abscesses. The male skull has strong muscle attachments and very strong brow ridge and there appears to be some healed damage to skull from ? blows. Robust clavicle with healed break. cervical vertebrae with severe arthritis and some remodelling.
F5	8	23	398	?		mature ad	1	c	skull fragments, mandible, cervical vertebrae				mandible has no teeth and the bone has healed over the lost teeth. Skull has fully fused sutures.
F6	4	82	887	d	mixed	mixed	3	mix	adult male skull and mandible, adult female skull and mandible, juvenile skull frag, adult ear bones included				ADULT MALE mature mandible with most teeth lost and bone healed over with one molar and one premolar surviving and mandible remodelled and distorted and chin jutting out. His upper maxilla has lost most teeth and shows inflammation and infection - his maxilla is very wide. ETHNICITY of adult male - possibly mixed, some African

													characteristics with skull shape, very wide maxilla and flaring at rear of mandible. ADULT FEMALE mandible with slightly worn teeth, her first molar is very worn which suggests occupation wear and perhaps thread cutting with teeth, some calculus deposits and mild gum infection. JUV SKULL thin and fragile, estimated under ten years at death.
F6	4	25	198	a	male?	ad	1	c	thoracic, lumbar and cervical vertebrae				degenerative wear and exostoses on lumbar vertebrae
F6	4	4	165	a	male?	ad		r	humerus, radius, ulna, scapula	humerus	GL=335, Bd66.6	male	strong muscle attachments
F6	4	7	168	a	male?	ad		l	humerus, radius, ulna, scapula, clavicle	humeus	GL=326, Bd=63.2	male	left arm used less than right, occupation?
F6	4	67	248	a	male?	ad		c	rib fragments, vertebrae fragments, clavicle				degenerative wear on vertebrae, esp lumbar, exostoses and wear on cervical vertebrae. Healed fracture on clavicle and rib.
F6	9	35	237	d	mixed	mixed	3	mix	juvenile skull with cranium and frontal bone and orbits, older juvenile frags, juvenile mandible, adult skull and tibia frags	juv skull	left orbit 28mm w, right orbit 29mm w, nasal width 20mm, skull width = 120		heavy rodent gnawing on juvenile skull. Knife cuts suggest operation and possible autopsy
F7	11	22	183	?	?m	ad	1	mix	femur head, pelvic fragments, tibia	fe head	46		femur head size intermediate size, but probably male
F8	12	12	32	d		juv		mix	fragment of infant skull, fragments of juv cervical vertebrae and other vertebra frags, metatarsal, phalange				
F8	14	78	439	a	f	ad	1	c	vertebrae, ribs, clavicle, scapulas				degenerative wear on vertebrae. Exostoses on lower thoracic to lumbar vertebrae. Healed fracture on clavicle.
F8	14	10	189	a	f	ad		r	humerus, radius, ulna, carpals, metacarpals, phalanges	humerus	Gl300	female	little muscle attachments
F8	14	12	479	a	f	ad		r	femur, tibia, fibula, calcaneus, tarsals, phalanges	femur	Gl395/head 41.6	small female	
F8	14	16	532	a	f	ad		c	skull, mandible			female	Most teeth clean and in good condition, upper right M2 and M3 with calculus deposits. Upper front teeth lost but not through decay, some sloping to skull, flat face, edge to edge bite, sutures partly-fused. No thickening of the brow ridge. Possible mixed-race with oriental?
F8	14	15	394	a	?f	ad	1	c	pelvis fragments, fragment of sacrum				
F8	14	12	486	a	f	ad	1		femur, tibia, fibula, calcaneus, metatarsals, phalanges	femur and tibia	femur GL=385, head=41.5; tibia GL=318	female	
F8	14	11	174	a	f	ad			humerus, radius, ulna, phalanges	humerus	GL=293, Bd=55	female	fully fused and delicate build
F9	13	51	654	a	m	ad		l	femur, tibia, fibula, calcaneus, carpals, tarsals, phalanges	femur	GL=430, head = 47	male	slight arthritic problems in femur, light build but strong muscle attachments
F10	15	113	980	a	f	ad	1	l, r, c	right arm and hand - radius, metacarpals, phalanges, right foot with calcaneus, tarsals, phalanges, left metacarpals, phalanges, carpals, left foot calcaneus, tarsals, metatarsals,	fe heads	41.8 and 42	female	small female. Spina bifida, arthritic problems with hand and foot phalanges with exostoses

									phalanges, left femur, tibia/fibia, righ femur/tibia/fibia/patella, pelvic fragments, sacrum, vertebrae frags				
F11	16	14	121	?		ad	1	mix	tibia, vertebrae, metatarsals, metacarpals, calcaneus, radius, rib fragments				
F11	17	79	729	d	f	ad	1	mix	humerus, femur, radius, ulna, metatarsal, pelvic frags, skull frags, rib frags				small humerus has arthritic changes in distal end and exostoses, this bone also has strong muscle attachments at proximal end.
F13	18	8	289	a	?f	ad	1	l+r	Right tibia, fibula, left tibia and fibula				small adult
L1	20	5	19	d		j & ad	2	mix	juvenile skull fragments, adult rib				
L3	4	53	683	d		ad & infant	2	mix	Infant skull fragments and femur, adult tibia, femur, skull fragments, sacrum, lumbar vertebrae				infant estimated age is 2-3 years
L3	21	71	706	d	m + f?	ad	2	mix	femur, skull fragments, metatarsals, metacarpals, ribs, humerus, pelvic fragments	femurs	head 52, one fe Bd = 74, 2nd fe Bd 58	1 male, one ? female	1 rib has a healed break, another rib has an infection (?TB)
L3	22	6	204	d		ad		mix	femur, humerus, tibia, rib frags, metatarsal				one femur shaft has a a severe infection (? osteomyelitis) and there are knife cuts that show there was some human intervention with the infection.
U/S	24	132	1453	d	mixed	j & ad	2	mix	Adult: tibia, vertebrae, mandible fragments, skull fragments. Juvenile skull and vertebrae fragments.	adult tibia	GL405		Adult tibia has large exostoses at proximal rear. Vertebrae have degenerative wear. Mandible fragment has an abscess and healed bone. Adult skull sutures partly fused.
U/S	25	12	337	d		ad	1	mix	mandible with loss of teeth, skull frags, humerus and tibia fragments				mandible shows healing after loss of teeth

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RADIOCARBON DATING CERTIFICATE

20 November 2019

Laboratory Code	SUERC-90175 (GU52956)
Submitter	Laura Pooley Colchester Archaeological Trust Roman Circus House Roman Circus Walk Colchester Essex CO2 7GZ
Site Reference	Mount Bures COLEM: 2019.6
Context Reference	F2 (2)
Sample Reference	1
Material	Human bone (inhumated)
$\delta^{13}C$ relative to VPDB	-19.0 ‰
$\delta^{15}N$ relative to air	13.0 ‰
C/N ratio (Molar)	3.3
Radiocarbon Age BP	820 ± 24

N.B. The above ^{14}C age is quoted in conventional years BP (before 1950 AD) and requires calibration to the calendar timescale. The error, expressed at the one sigma level of confidence, includes components from the counting statistics on the sample, modern reference standard and blank and the random machine error.

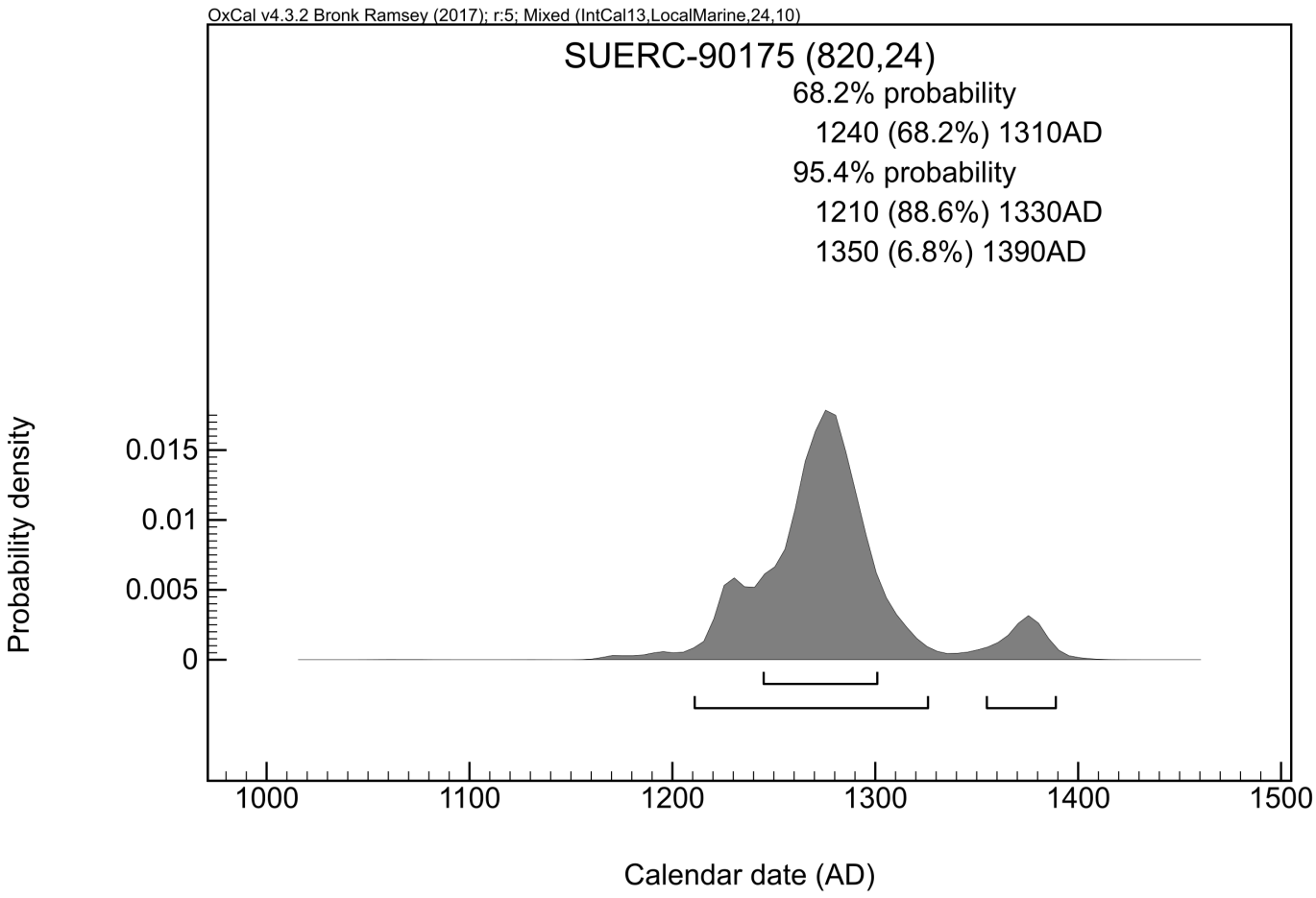
Samples with a SUERC coding are measured at the Scottish Universities Environmental Research Centre AMS Laboratory and should be quoted as such in any reports within the scientific literature. The laboratory GU coding should also be given in parentheses after the SUERC code.

Detailed descriptions of the methods employed by the SUERC Radiocarbon Laboratory can be found in Dunbar et al. (2016) *Radiocarbon 58(1) pp.9-23.*

For any queries relating to this certificate, the laboratory can be contacted at suerc-c14lab@glasgow.ac.uk.

Conventional age and calibration age ranges calculated by :

Checked and signed off by : E. Dunbar



The radiocarbon age given overleaf is calibrated to the calendar timescale using the Oxford Radiocarbon Accelerator Unit calibration program OxCal 4.*

The above date ranges have been calibrated using a mix of the IntCal13 and Marine13 calibration curves. †

Human bone collagen with a $\delta^{13}C$ value above -20‰, accompanied by a raised $\delta^{15}N$ value, is taken to indicate a marine component in the diet. The percentage contribution of this marine component is calculated using end-members of -21.0‰ (fully terrestrial) and -12.5‰ (fully marine) with an uncertainty of 10% applied.

The $\delta^{13}C$ value of -19.0‰ gives a 24% marine contribution (±10%).

A regional marine offset (ΔR) of 0 ± 50 years has been used in the calibration.

Please contact the laboratory if you wish to discuss this further.

* Bronk Ramsey (2009) *Radiocarbon 51(1) pp.337-60*
† Reimer et al. (2013) *Radiocarbon 55(4) pp.1869-87*

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RADIOCARBON DATING CERTIFICATE

20 November 2019

Laboratory Code	SUERC-90176 (GU52957)
Submitter	Laura Pooley Colchester Archaeological Trust Roman Circus House Roman Circus Walk Colchester Essex CO2 7GZ
Site Reference	Mount Bures COLEM: 2019.6
Context Reference	F10 (5)
Sample Reference	2
Material	Human bone (inhumated)
$\delta^{13}C$ relative to VPDB	-19.3 ‰
$\delta^{15}N$ relative to air	11.5 ‰
C/N ratio (Molar)	3.2
Radiocarbon Age BP	885 ± 24

N.B. The above ^{14}C age is quoted in conventional years BP (before 1950 AD) and requires calibration to the calendar timescale. The error, expressed at the one sigma level of confidence, includes components from the counting statistics on the sample, modern reference standard and blank and the random machine error.

Samples with a SUERC coding are measured at the Scottish Universities Environmental Research Centre AMS Laboratory and should be quoted as such in any reports within the scientific literature. The laboratory GU coding should also be given in parentheses after the SUERC code.

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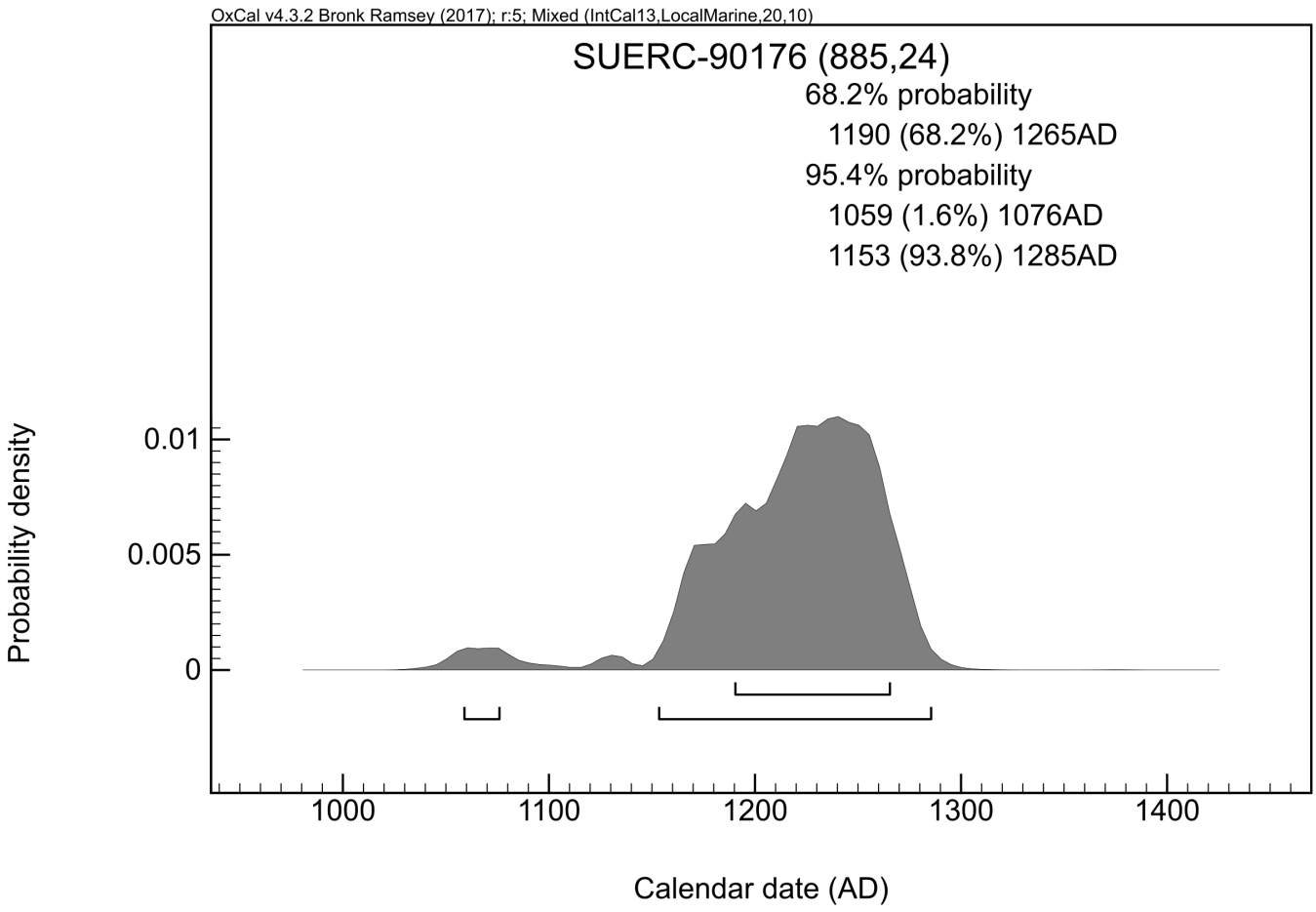
For any queries relating to this certificate, the laboratory can be contacted at suerc-c14lab@glasgow.ac.uk.

Conventional age and calibration age ranges calculated by :

Checked and signed off by : E. Dunbar



The radiocarbon age given overleaf is calibrated to the calendar timescale using the Oxford Radiocarbon Accelerator Unit calibration program OxCal 4.*

The above date ranges have been calibrated using a mix of the IntCal13 and Marine13 calibration curves. †

Human bone collagen with a $\delta^{13}C$ value above -20‰, accompanied by a raised $\delta^{15}N$ value, is taken to indicate a marine component in the diet. The percentage contribution of this marine component is calculated using end-members of -21.0‰ (fully terrestrial) and -12.5‰ (fully marine) with an uncertainty of 10% applied.

The $\delta^{13}C$ value of -19.3‰ gives a 20% marine contribution (±10%).

A regional marine offset (ΔR) of 0 ± 50 years has been used in the calibration.

Please contact the laboratory if you wish to discuss this further.

* Bronk Ramsey (2009) *Radiocarbon 51(1) pp.337-60*
† Reimer et al. (2013) *Radiocarbon 55(4) pp.1869-87*

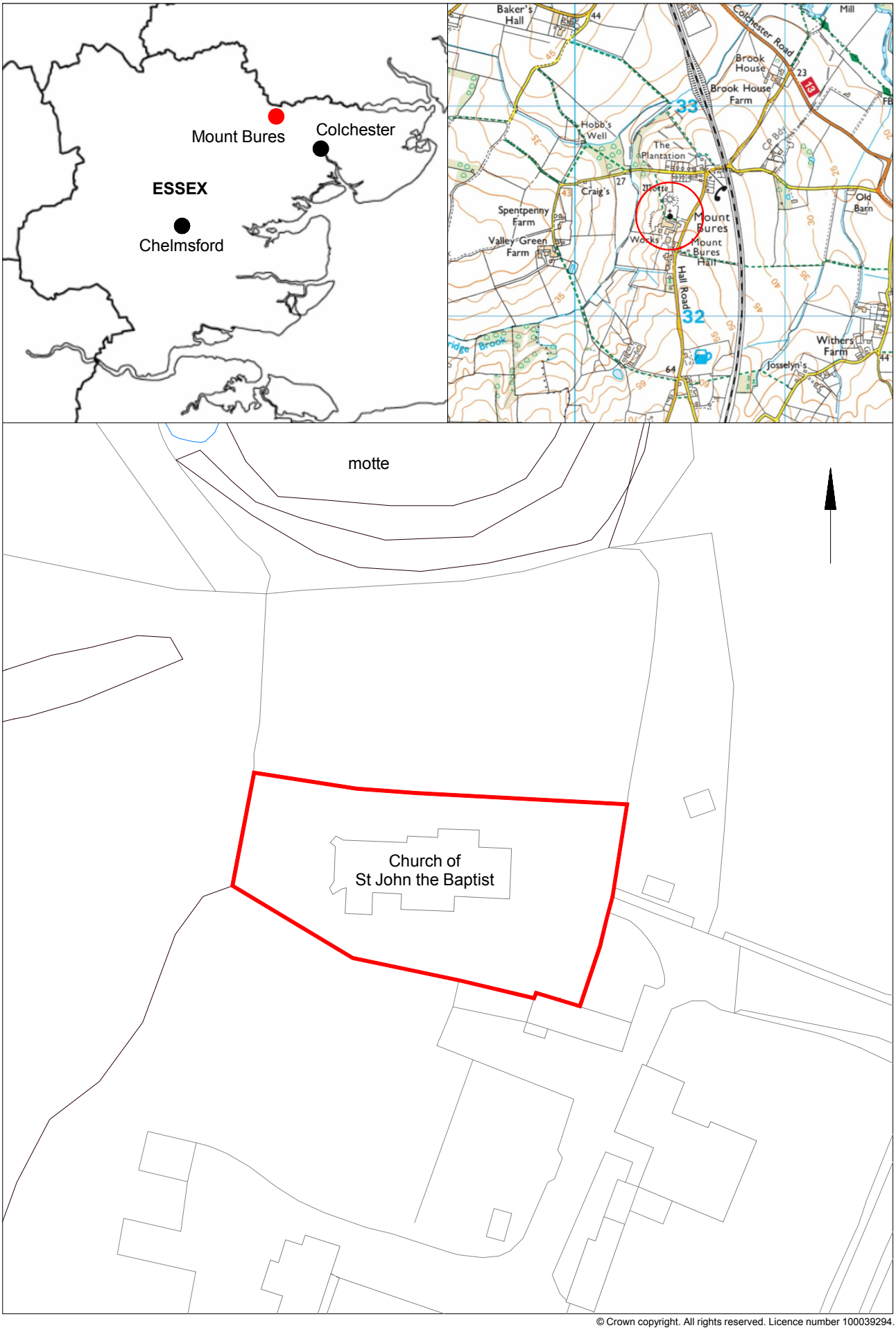


Fig 1 Site location.

0 50 m

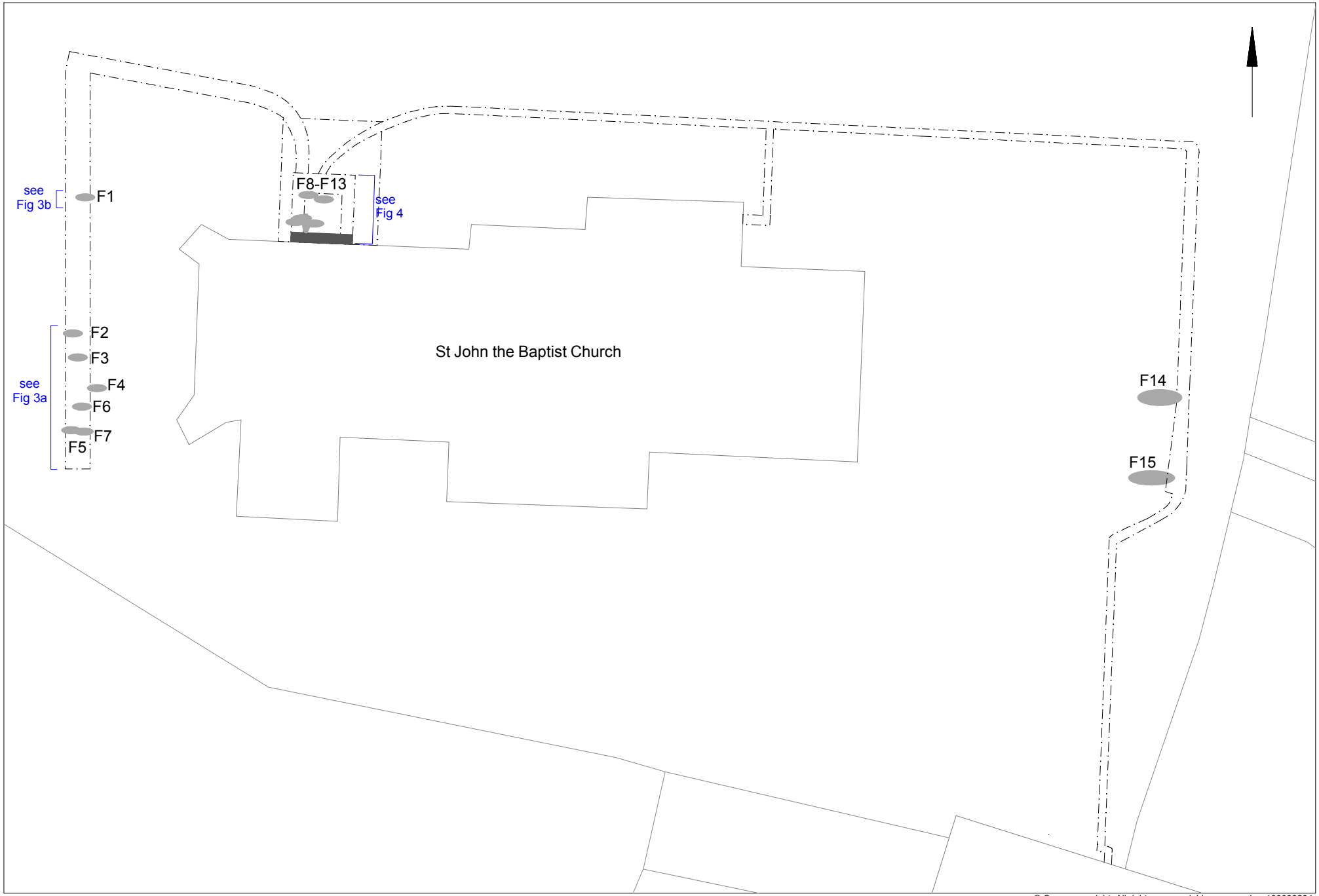


Fig 2 Results.

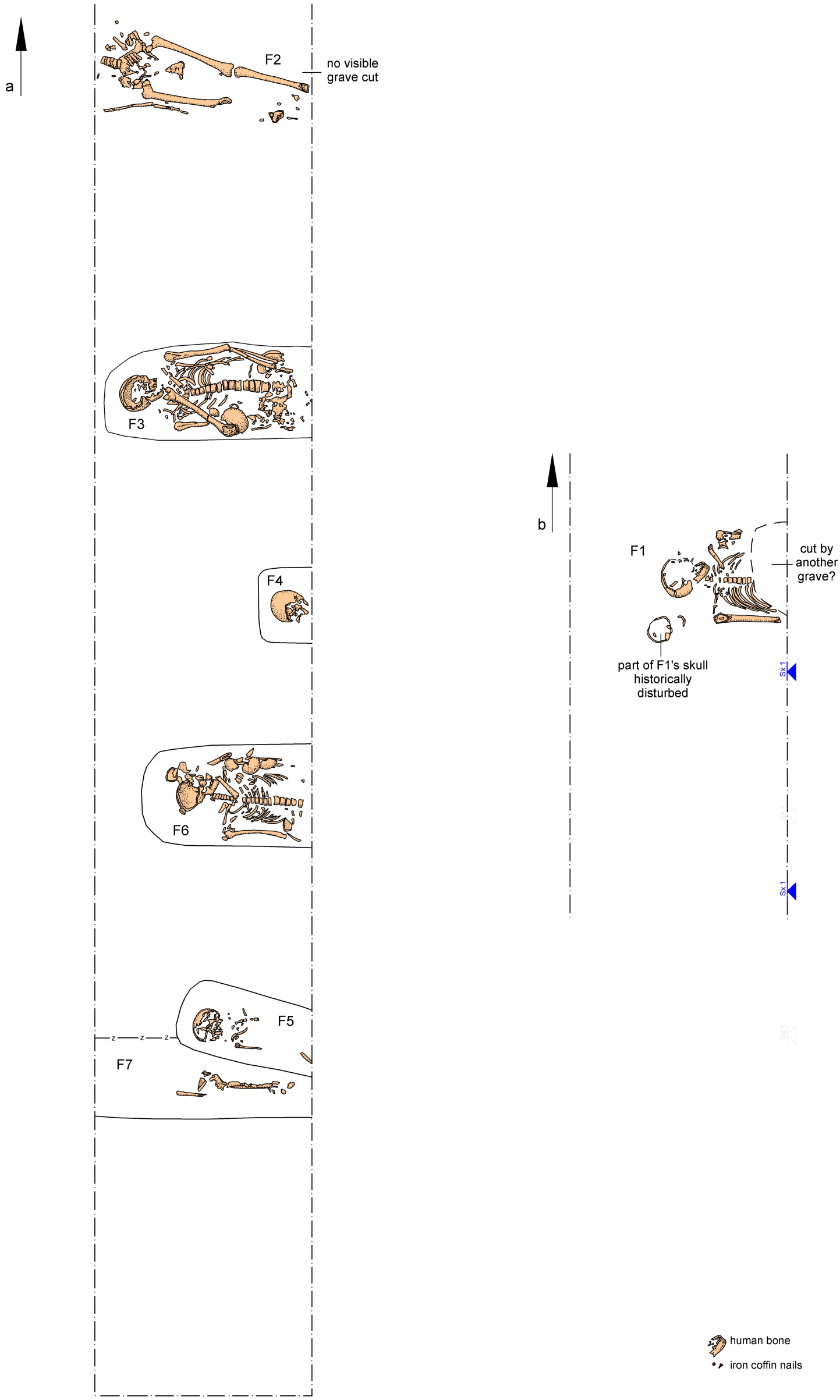


Fig 3 Detailed plans of burials within the pipe trench.

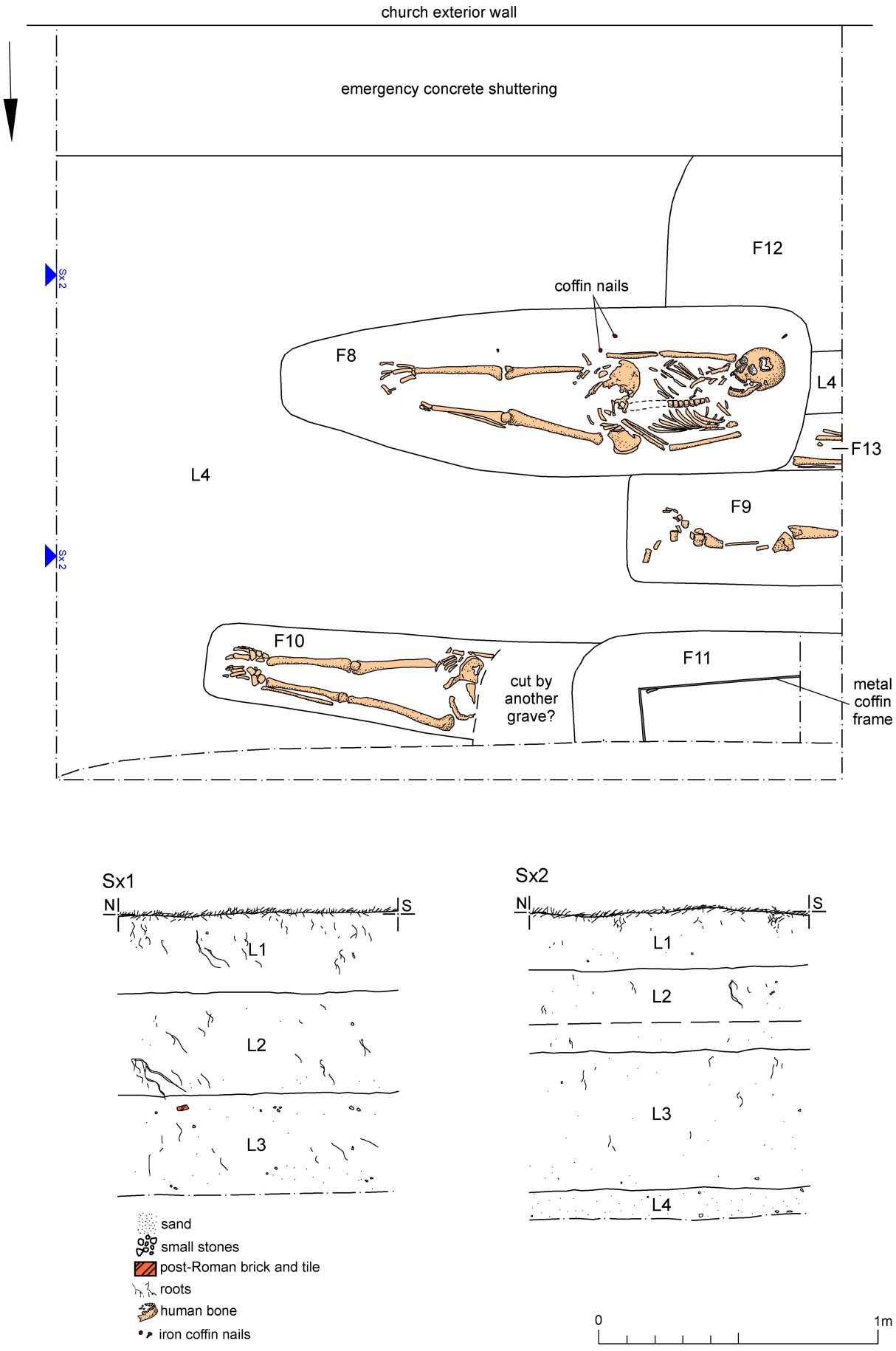


Fig 4 Detailed plan of the extension area and representative sections.

Fig 5 Iron coffin handles.

Essex Historic Environment Record/
Essex Archaeology and History

Summary sheet

Address: **Church of St John the Baptist, Hall Road, Mount Bures, Essex, CO8 5AS**	
Parish: Colchester	***District:*** Colchester
NGR: TL 9045 3247 (centre)	***Site code:*** CAT project ref.: 19/01m CHER ref: ECC4298 OASIS ref: colchest3-340935
Type of work: Strip, map and record project and monitoring	***Site director/group:*** Colchester Archaeological Trust
Date of work: 29th January to 18th February 2019	***Size of area investigated:*** 0.01ha
Location of curating museum: Colchester museum accession code COLEM: 2019.6	**Funding source:** Owner
Further seasons anticipated? no	***Related CHER/SMR number:*** MCC4468, MCC7138, MCC7192, MCC7193, MCC7194, MCC10037; Scheduled Ancient Monument no. 1012056
Final report: CAT Report 1454	
Periods represented: Medieval, post-medieval	
Summary of fieldwork results: An archaeological strip, map and record project incorporating monitoring was carried out at the church of St John the Baptist, Hall Road, Mount Bures, Essex, during the groundworks for a single-storey extension on the northern side of the church and new service connections. Fifteen inhumation burials were exposed by the groundworks and a quantity of disarticulated human bone was found across the site. The earliest burial dated from the mid 12th to the late 13th century, and the latest were two burial vaults dating from the 18th to the early 19th century.	
Previous summaries/reports: none	
CBC monitor: Jess Tipper	
Keywords: inhumation burial, burial vault, radiocarbon dating	***Significance:*** *
Author of summary: Dr Elliott Hicks	***Date of summary:*** November 2019

Written Scheme of Investigation (WSI) for archaeological excavation (strip, map and record), incorporating monitoring and recording at the church of St. John the Baptist, Hall Road, Mount Bures, Essex, CO8 5AS.

NGR: TL 9045 3247 (centre)

Planning references: 162733

Commissioned by: David Whymark
On behalf of: Mount Bures PCC

Curating museum: Colchester
Museum accession code: tbc
CHER number: ECC4298
CAT project code: 2019/01m
OASIS project number: colchest3-340935

Site manager: Chris Lister
CBC monitor: Jess Tipper

This WSI written: 25/01/2019

COLCHESTER ARCHAEOLOGICAL TRUST,
Roman Circus House,
Roman Circus Walk,
Colchester,
Essex, CO2 7GZ

tel: 01206 501785
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Site location and description

The proposed development site lies in the village of Mount Bures, Approximately 11.7km northwest of Colchester Town Centre at the Church of St. John the Baptist, Hall Road, Mount Bures, Essex, CO8 5AS (Fig 1). Site centre is NGR TL 9045 3247.

Proposed work

The development comprises the erection of a single storey extension (for an accessible toilet) on the northern side of the church, opposite the south porch, new service connections and any associated groundworks.

Archaeological background

The following archaeological background draws on the Colchester Historic Environment Record (accessed via Colchester Heritage Explorer (https://colchesterheritage.co.uk).

The church is thought to originate in the 12th century with later alterations (MCC4468). The church is constructed out of courses of flint rubble with Roman brick corners (quoins). Dressings are in limestone and clunch (softer, more chalky limestone). The roofs are tiled (CHER MCC7192-3). The church comprises of a north vestry, a central tower, short transepts and a nave with a south porch. The church was restored in the 19th century when the central tower was rebuilt and the north and south transepts and the vestry were added (CHER MCC7194). The proposed work is located abutting the northern edge of the church within the churchyard (CHER MCC10037).

The churchyard is located *c* 50m south of Bures Mount. The *c* 35ft high mound and surrounding ditch form a medieval motté, which is a Scheduled Ancient Monument (no. 1012056). The CHER tells us that the church may have originally stood within the bailey area (CHER MCC7138).

Planning background

A planning application was made to Colchester Borough Council in October 2016 (application No.162733) proposing *erection of single storey extension to church with associated drainage and services*.

As the site lies within an area highlighted by the CHER as having a high potential for archaeological deposits, an archaeological condition was recommended by the Colchester Borough Council Archaeological Advisor (CBCAA). The recommended archaeological condition is based on the guidance given in the *National Planning Policy Framework* (MHCLG 2018.

Requirement for work

The required work is for an archaeological excavation (strip, map and record), incorporating monitoring and recording to be carried out in advance of any groundworks. Details are given in a Project Brief written by CBCAA (CBC 2017).

Specifically, a controlled strip, map and sample excavation will take place within the area of the proposed extension measuring 2.83m long by 2.32m wide, unless it can be demonstrated that the base of the foundation is above the level of in situ structural archaeological remains, for example articulated burials and/or in situ structural remains. In the latter case, ground works and also the upcast soil, are to be closely monitored during and after excavation. Services connecting to the new extension will be monitored.

If unexpected or unusual remains are encountered the CBCAA will be informed immediately, and who may decided that amendments to the brief, and this wsi, are required to ensure adequate provision for archaeological recording.

General methodology

All work carried out by CAT will be in accordance with:

- professional standards of the Chartered Institute for Archaeologists, including its *Code of Conduct* (CIfA 2014a, b)
- Standards and Frameworks published by East Anglian Archaeology (Gurney 2003, Medlycott 2011)
- relevant Health & Safety guidelines and requirements (CAT 2018)
- the Project Brief issued by the CBCAA (CBC 2017).

Professional CAT field archaeologists will undertake all specified archaeological work, for which they will be suitably experienced and qualified.

Notification of the supervisor/project manager's name and the start date for the project will be provided to CBCAA one week before start of work.

Unless it is the responsibility of other site contractors, CAT will study mains service locations and avoid damage to these.

At the start of work (immediately before fieldwork commences) an OASIS online record http:// ads.ahds.ac.uk/project/oasis/ will be initiated and key fields completed on Details, Location and Creators forms. At the end of the project all parts of the OASIS online form will be completed for submission to Essex Historic Environment Record (EHER). This will include an uploaded .PDF version of the entire report.

A unique HER event number will be obtained from the CBCAA prior to the commencement of fieldwork alongside a project or site code from the curating museum. This code will be used to identify the project archive when it is deposited at the curating museum.

Staffing

The number of field staff for this project is estimated as follows: one archaeologists for duration.

Excavation methodology

Where appropriate, modern overburden and any topsoil stripping/levelling will be performed using a mechanical excavator equipped with a toothless ditching bucket under the supervision and to the satisfaction of a professional archaeologist. If no archaeologically significant deposits are exposed, machine excavation will continue until natural subsoil is reached.

Where necessary, areas will be cleaned by hand to ensure the visibility of archaeological deposits.

If archaeological features or deposits are uncovered, time will be allowed for these to be excavated, planned and recorded.

There will be sufficient excavation to give clear evidence for the period, depth and nature of any archaeological deposit. For linear features 1m wide sections will be excavated across their width to a total of 10% of the overall length. Discrete features, such as pits, will have 50% of their fills excavated, although certain features may be fully excavated. Complex archaeological structures such as walls, kilns, ovens or burials will be carefully cleaned, planned and fully recorded, but where possible left *in situ*. Only if it can be demonstrated that the complex structure/feature is likely to be destroyed by groundworks, and only then after discussion with the CBCAA, will it be removed.

Fast hand-excavation techniques involving (for instance) picks, forks and mattocks will not be used on complex stratigraphy.

Trained CAT staff will use a metal detector to scan all areas of the strip and map both before and during excavation. All features and spoil heaps will be scanned and finds recovered.

Individual records of excavated contexts, layers, features or deposits will be entered on proforma record sheets. Registers will be compiled of finds, small finds and soil samples.

All features and layers or other significant deposits will be planned, and their profiles or sections recorded. A representative section will be drawn to include ground level and the depth of machining. The normal scale will be site plans at 1:20 and sections at 1:10, unless circumstances indicate that other scales would be appropriate.

The photographic record will consist of general site shots, and shots of all archaeological features and deposits. A photographic scale (including north arrow) shall be included in the case of detailed photographs. Standard “record” shots of contexts will be taken on a digital camera. A photographic register will accompany the photographic record. This will detail as a minimum feature number, location, and direction of shot.

Monitoring methodology

There will be sufficient on-site attendance by CAT staff to maintain a watch on all contractors’ ground works to record, excavate or sample (as necessary) any archaeological features or deposits.

All topsoil removal and ground reduction will be done with a toothless bucket.
If archaeological features or deposits are uncovered, time will be allowed for these to be planned and recorded.

If any features or deposits uncovered are to be destroyed by the proposed development, time will be allowed for these features to be excavated by hand. This includes a 50% sample of discrete features (pits, etc), 10% of linear features (ditches, etc) and 100% of all complex features and burials (see Human Remains policy below).

Fast hand-excavation techniques involving (for instance) picks, forks and mattocks will not be used on complex stratigraphy.

A metal detector will be used to examine spoil heaps, and the finds recovered.

Individual records of excavated contexts, layers, features or deposits will be entered on proforma record sheets. Registers will be compiled of finds, small finds and soil samples.

Site surveying

Normal scale for archaeological site plans and sections is 1:20 and 1:10 respectively, unless circumstances indicate that other scales would be more appropriate.

The site grid will be tied into the National Grid. Corners of excavation areas and trenches will be located by NGR coordinates.

Environmental sampling policy

CAT has an arrangement with Val Fryer/Lisa Gray whereby any potentially rich environmental layers or features will be appropriately sampled as a matter of course, but only if they are datable. Any processing and reporting will be done by VF/LG. If any complex or outstanding deposits are encountered, VF/LG will be asked onto site to advise. EH Regional Adviser is available for further advice.

Human remains

CAT follows the policy of leaving human remains *in situ* unless there is a clear indication that the remains are in danger of being compromised as a result of their exposure. If circumstances indicated it were prudent or necessary to remove remains from the site during the monitoring, the following criteria would be applied; if it is clear from their position, context, depth, or other factors that the remains are ancient, then normal procedure is to apply to the Department of Justice for a licence to remove them. In that case, conditions laid down by the license will be followed. If it seems that the remains are not ancient, then the coroner, the client, and CBCAA will be informed, and any advice and/or instruction from the coroner will be followed. The human osteologist specialist should be available to advise on recovery, recording and processing of ancient human remains. Any human remains disturbed by the project will be presented to the parish authorities for re-interment within the churchyard.

Photographic record

Will include both general and feature-specific photographs, the latter with scale and north arrow. A photo register giving context number, details, and direction of shot will be prepared on site, and included in site archive.

Finds

All significant finds will be retained.

All finds, where appropriate, will be washed and marked with site code and context number.

Matthew Loughton (CAT) normally writes our finds reports. Some categories of finds are automatically referred to other CAT specialists:

small finds, metalwork, coins, etc: Laura Pooley
animal bones (small groups): Alec Wade / Adam Wightman
flints: Adam Wightman

or to outside specialists:

animal bones (large groups) and human remains: Julie Curl (*Sylvanus*)
environmental processing and reporting: Val Fryer / Lisa Gray
conservation of finds: staff at Colchester Museum / Laura Ratcliffe (LR Conservation)

Other specialists whose opinion can be sought on large or complex groups include:

Roman brick/tile: Ernest Black / Ian Betts (MOLA)
Roman glass: Hilary Cool
Prehistoric pottery: Stephen Benfield / Paul Sealey / Nigel Brown
Other: EH Regional Adviser in Archaeological Science (East of England).

All finds of potential treasure will be removed to a safe place, and the coroner informed immediately, in accordance with the rules of the Treasure Act 1996. The definition of treasure is given in pages 3-5 of the Code of Practice of the above act. This refers primarily to gold or silver objects.

Requirements for conservation and storage of finds will be agreed with the appropriate museum prior to the start of work, and confirmed to CBCAA.

Results

Notification will be given to CBCAA when the fieldwork has been completed.

An appropriate archive will be prepared to minimum acceptable standards outlined in *Management of Research Projects in the Historic Environment* (English Heritage 2006).

The report will be submitted within 6 months of the end of fieldwork, with a copy supplied to CBCAA as a PDF.

The report will contain:

- Location plan of the groundworks in relation to the proposed development. At least two corners of the site will be given 10 figure grid references.

- Section/s drawings showing depth of deposits from present ground level with Ordnance Datum, vertical and horizontal scale.
- Archaeological methodology and detailed results including a suitable conclusion and discussion and results referring to Regional Research Frameworks (Medlycott 2011).
- All specialist reports or assessments
- A concise non-technical summary of the project results.

An EHER summary sheet will also be completed within four weeks and supplied to CBCAA.

Results will be published, to at least a summary level (i.e. round-up in *Essex Archaeology & History*) in the year following the archaeological field work. An allowance will be made in the project costs for the report to be published in an adequately peer reviewed journal or monograph series

Archive deposition

It is a policy of Colchester Borough Council that the integrity of the site archive be maintained (i.e. all finds and records should be properly curated by a single organisation), with the archive available for public consultation. To achieve this desired aim it is assumed that the full archive will be deposited in Colchester Museums *unless otherwise agreed in advance*. (A full *copy* of the archive shall in any case be deposited).

By accepting this WSI, the client agrees to deposit the archive, including all artefacts, at Colchester & Ipswich Museum.

The requirements for archive storage will be agreed with the curating museum.

If the finds are to remain with the landowner, a full copy of the archive will be housed with the curating museum and provision must be made for additional recording (e.g. photography, illustration and analysis) as appropriate.

The archive will be deposited with Colchester & Ipswich Museum or an alternate repository (approved by COLEM and CBCAA) within 3 months of the completion of the final publication report, with a summary of the contents of the archive supplied to CBCAA.

Monitoring

CBCAA will be responsible for monitoring progress and standards throughout the project, and will be kept regularly informed during fieldwork, post-excavation and publication stages.

Notification of the start of work will be given to CBCAA one week in advance of its commencement.

Any variations in this WSI will be agreed with CBCAA prior to them being carried out.

CBCAA will be notified when the fieldwork is complete.

The involvement of CBCAA shall be acknowledged in any report or publication generated by this project.

References

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

Brown, D	2007	*Archaeological Archives: A guide to best practice in creation, compilation, transfer and curation*
CAT	2014	*Health & Safety Policy*
CBCAA	2017	*Brief for Archaeological Excavation (strip, map and record), incorporating Monitoring and Recording at Church of St John the Baptist, Hall Road, Mount Bures.* By J Tipper
CIfA	2014a	*Standard and Guidance for an archaeological watching brief*
CIfA	2014b	*Standard and guidance for the collection, documentation,*

		conservation and research of archaeological materials
English Heritage	2006	*Management of Research Projects in the Historic Environment (MoRPHE)*
Gurney, D	2003	*Standards for field archaeology in the East of England.* East Anglian Archaeology Occasional Papers 14 (EAA **14**).
Medlycott, M	2011	*Research and archaeology revisited: A revised framework for the East of England*. East Anglian Archaeology Occasional Papers 24 (EAA **24**)
MHCLG	2018	*National Planning Policy Framework.* Ministry of Housing, Communities and Local Government.

E Holloway

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CO2 2GZ

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email: eh@catuk.org

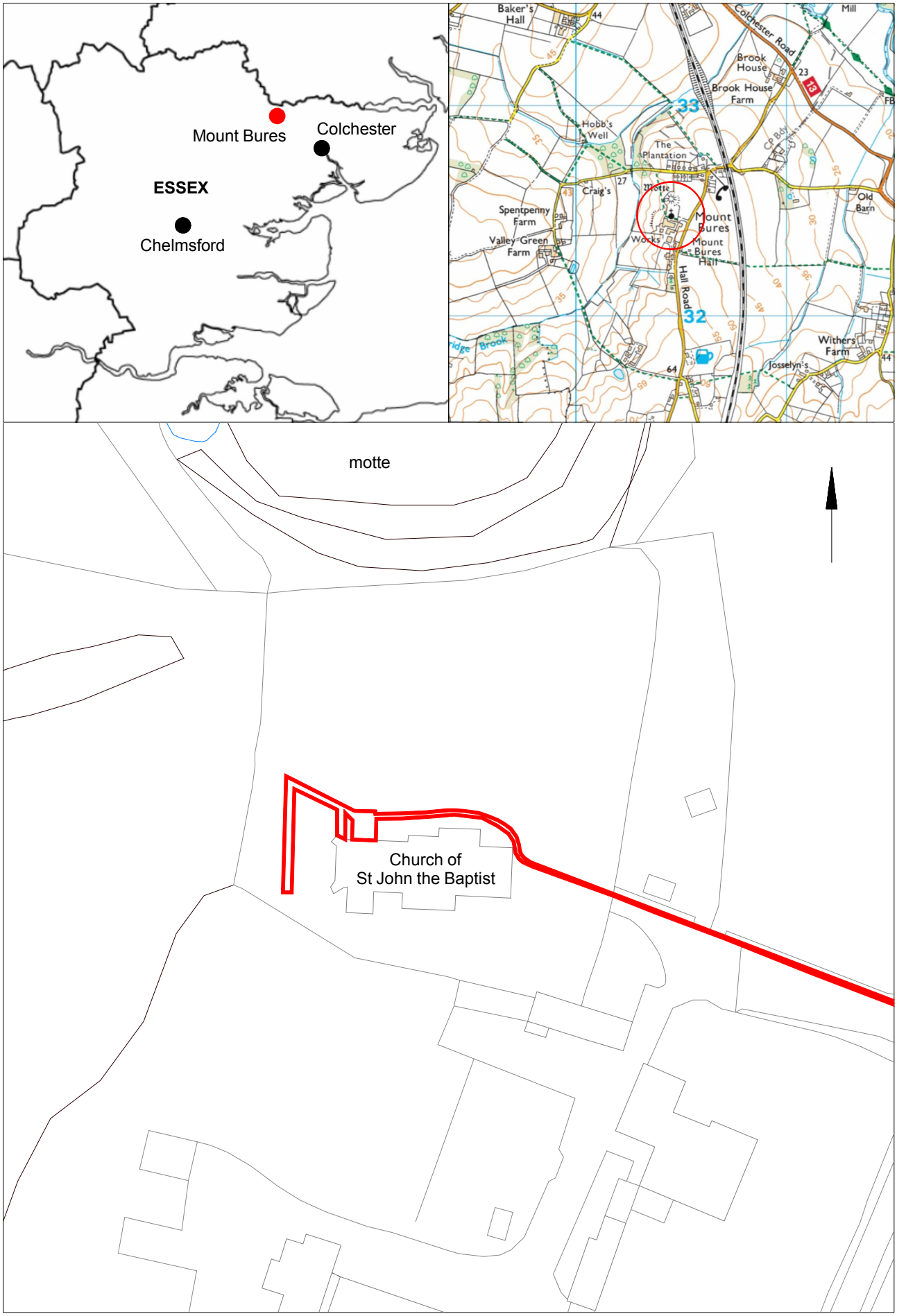

Fig 1 Site location.

OASIS DATA COLLECTION FORM: England

OASIS ID: colchest3-340935

Project details

Project name	Archaeological excavation and monitoring at the church of St. John the Baptist, Hall Road, Mount Bures, Essex, CO8 5AS
Short description of the project	An archaeological strip, map and record project incorporating monitoring was carried out at the church of St John the Baptist, Hall Road, Mount Bures, Essex, during the groundworks for a single-storey extension on the northern side of the church and new service connections. Fifteen inhumation burials were exposed by the groundworks and a quantity of disarticulated human bone was found across the site. The earliest burial dated from the mid 12th to the late 13th century, and the latest were two burial vaults dating from the 18th to the early 19th century.
Project dates	Start: 29-01-2019 End: 18-02-2019
Previous/future work	No / Not known
Any associated project reference codes	2019/01m - Contracting Unit No.
Any associated project reference codes	162733 - Planning Application No.
Any associated project reference codes	COLEM: 2019.6 - Museum accession ID
Any associated project reference codes	ECC4298 - HER event no.
Type of project	Recording project
Site status	None
Current Land use	Other 4 - Churchyard
Monument type	INHUMATION BURIAL Medieval
Monument type	INHUMATION BURIAL Post Medieval
Significant Finds	HUMAN REMAINS Medieval
Significant Finds	HUMAN REMAINS Post Medieval
Significant Finds	COFFIN FURNITURE Post Medieval
Investigation type	"Part Excavation","Watching Brief"
Prompt	Planning condition

Project location

Country	England
Site location	ESSEX COLCHESTER MOUNT BURES Church of St. John the Baptist, Hall Road
Postcode	CO8 5AS
Study area	0.15 Hectares
Site coordinates	TL 9045 3247 51.957546914812 0.772105883272 51 57 27 N 000 46 19 E Point

Project creators

Name of Organisation	Colchester Archaeological Trust
Project brief originator	CBC Archaeological Officer
Project design originator	Emma Holloway
Project director/manager	Chris Lister
Project supervisor	Mark Baister
Type of sponsor/funding body	Parochial Church Council
Name of sponsor/funding body	Mount Bures PCC

Project archives

Physical Archive recipient	Colchester Museum
Physical Archive	COLEM: 2019.6

ID	
Physical Contents	"Ceramics","Metal"
Physical Archive notes	All of the excavated human remains were reburied at the Church of St John the Baptist, Mount Bures on 16th August 2019
Digital Archive recipient	Colchester Museum
Digital Archive ID	COLEM: 2019.6
Digital Contents	"other"
Digital Media available	"Images raster / digital photography","Spreadsheets","Survey","Text"
Paper Archive recipient	Colchester Museum
Paper Archive ID	COLEM: 2019.6
Paper Contents	"other"
Paper Media available	"Context sheet","Miscellaneous Material","Photograph","Report","Section"

Project bibliography 1

Publication type	Grey literature (unpublished document/manuscript)
Title	Archaeological strip, map, record and monitoring at the Church of St John the Baptist, Hall Road, Mount Bures, Essex, CO8 5AS: January-February 2019
Author(s)/Editor(s)	Hicks, E.
Author(s)/Editor(s)	Pooley, L.
Other bibliographic details	CAT Report 1454
Date	2019
Issuer or publisher	Colchester Archaeological Trust
Place of issue or publication	Colchester
Description	A4 ring-bound loose leaf
URL	http://cat.essex.ac.uk/all-reports.html

Entered by	Laura Pooley (lp@catuk.org)
Entered on	27 November 2019