



**Archaeological investigation, recording
and analysis on land at Newhaven,
Pickworth Road, Great Casterton, Rutland
September 2015**

Report No 17/31

Authors: Chris Chinnock and Tim Sharman

Illustrator: Olly Dindol



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| PROJECT DETAILS | | OASIS No: molanort 1 280931 | |
|---------------------------|---|--|--|
| Project title | Archaeological investigation, recording and analysis on land at Newhaven, Pickworth Road, Great Casterton, Rutland September 2015 | | |
| Short description | An archaeological watching brief was undertaken on land at Newhaven, Pickworth Road, Great Casterton, Rutland in September 2015, following the discovery of human remains two months previously by the developer, during excavation work for the installation of a conservatory extension. One male adult human skeleton was recovered, with a pair of iron fetters secured with a lock fastened around his ankles, buried in a probable ditch. Iron hobnails present around the feet of the individual. Some sherds of 4th century Roman period pottery and fragments of animal bone were also recovered. The individual appeared to have been buried in a ditch, though restrictions on the limit of excavation and some modern truncation precluded any certainty on the method of burial. | | |
| Project type | Archaeological watching brief | | |
| Site Status | Gardens | | |
| Previous work | Excavation of foundation trenches July 2015; Watching brief (Hull 2013) | | |
| Current land use | Domestic garden | | |
| Future work | unknown | | |
| Monument type/period | Roman burial | | |
| Significant finds | Adult male skeleton with <i>in situ</i> iron fetters and hobnails, Romano-British pottery | | |
| PROJECT LOCATION | | | |
| County | Leicestershire (Rutland) | | |
| Site address | Newhaven, Pickworth Road, Great Casterton, Rutland | | |
| Post code | -- | | |
| OS co-ordinates | SK 99953 09244 | | |
| Area (sq m/ha) | 6sqm | | |
| Height aOD | 50.07m aOD | | |
| PROJECT CREATORS | | | |
| Organisation | MOLA Northampton | | |
| Project brief originator | Principal Planning Archaeologist, Leicestershire County Council | | |
| Project Design originator | MOLA Northampton | | |
| Director/Supervisor | T Sharman (MOLA) | | |
| Project Manager | M Holmes (MOLA) | | |
| Sponsor or funding body | Ross Thain & Co | | |
| PROJECT DATE | | | |
| Start date | 21/09/2015 | | |
| End date | 22/09/2015 | | |
| ARCHIVES | Location (Accession no.) | Contents | |
| Physical | OAKRM.2015.12 | 1 skeleton, 1 set of iron shackles and padlock, hobnails, animal bone and pottery. | |
| Paper | | Site records (1 small archive box) | |
| Digital | | Client report PDF | |
| BIBLIOGRAPHY | | | |
| | Journal/monograph, published or forthcoming, or unpublished client report (MOLA report) | | |
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| Author(s) | Chris Chinnock, Tim Sharman | | |

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Abstract

An archaeological watching brief was undertaken on land at Newhaven, Pickworth Road, Great Casterton, Rutland in September 2015, following the discovery of human remains two months previously by the developer, during excavation work for the installation of a conservatory extension. One male adult human skeleton was recovered, with a pair of iron fetters secured with a lock fastened around his ankles, buried in a probable ditch. Iron hobnails present around the feet of the individual. Some sherds of 4th century Roman period pottery and fragments of animal bone were also recovered. The individual appeared to have been buried in a ditch, though restrictions on the limit of excavation and some modern truncation precluded any certainty on the method of burial.

1 INTRODUCTION

Planning permission had been granted to Ross Thain, acting on behalf of their clients, for the construction of a new conservatory to the rear of a domestic home 'Newhaven', Pickworth Road, Great Casterton, Rutland (NGR: SK 99953 09244).

No archaeological requirements were stipulated as part of this development after previous work had determined low archaeological potential for the site (Hall 2013). After disturbing human remains during the excavation of foundation trenches, the developers contacted the police. MOLA (Museum of London Archaeology) were then called in to excavate the remains.

The archaeological monitoring works were to ensure that any archaeological remains within the area of the groundworks were appropriately located, defined, characterised, and recorded. Work was undertaken in accordance with the Chartered Institute for Archaeologists' *Standard and guidance for an archaeological watching brief* (CIfA 2014a).

MOLA is a Chartered Institute for Archaeologists (CIfA) registered organisation. This report has been prepared in accordance with the current best archaeological practice as defined in the Chartered Institute for Archaeologists' *Standard and guidance for archaeological watching briefs* (CIfA 2014a) and the Historic England (HE) procedural document *Management of Research Projects in the Historic Environment (MoRPHE)* (HE 2015). The work complied with a Written Scheme of Investigation prepared by MOLA (2015) and discussed as approved by the Principal Planning Archaeologist for Leicestershire.

2 BACKGROUND

2.1 Topography and geology

The village of Great Casterton lies approximately 4km to the north-west of Stamford in the county of Rutland. The investigation area is located on level ground to the rear of Newhaven on the west side of Pickworth Road within the core of the present village.

The underlying geology has been mapped by the British Geological Survey as comprising Blisworth Limestone Formation Limestone (BGS Geotitles <http://www.bgs.ac.uk/geotitles>).

2.2 Historical and archaeological background

The site lies within an area of particular archaeological interest and within the core of the present village of Great Casterton on the west side of Pickworth Road.

Close-by to the east, lies the site of a small walled Roman town (Historic Environment No: MLE5294) and Claudian auxiliary fort (MLE 5293). The site has been the focus of research and excavation for many decades. Elements of the Roman town including parts of the extant defensive earthworks and a villa site were excavated throughout the 1950s (Corder, 1954 and 1961).

In 1995 building work adjacent to Ryhall Road revealed a section of the rampart of the urban defences of the Roman town (Pollard 1995). In 1996 a watching brief undertaken during development at Strawson's Farm, close to the centre of the Roman walled town, immediately to the east of Ermine Street, revealed truncated Roman features. This included four pits containing domestic rubbish and a cess pit. Traces of walling, probably from the post-medieval period, were also recorded (Challands 1997).

To the east at Ryhall Road a double ditched feature was recorded during the course of a watching brief (Derrick and Warren 2001). This has been interpreted as being associated with the Roman earthworks.

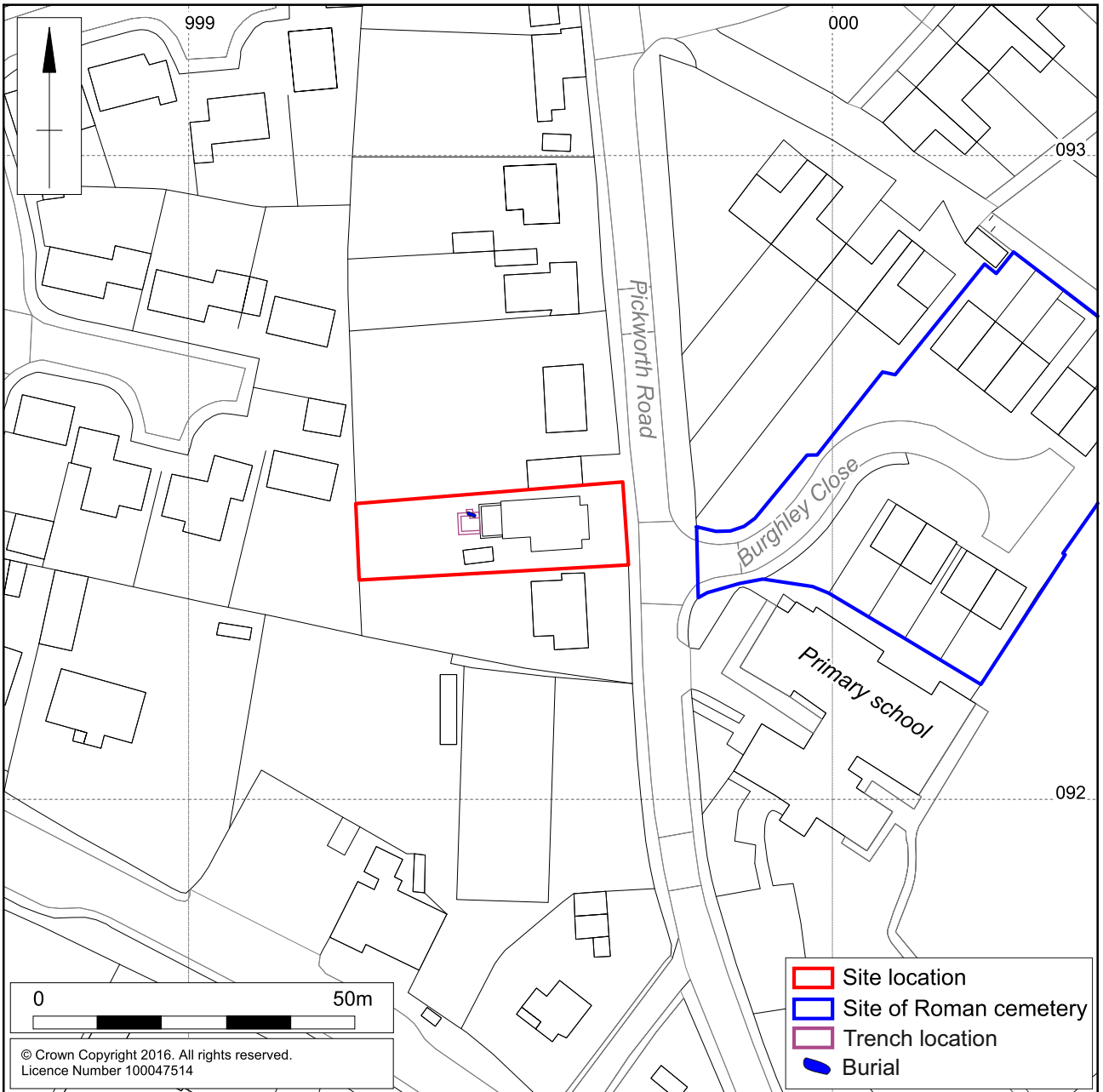
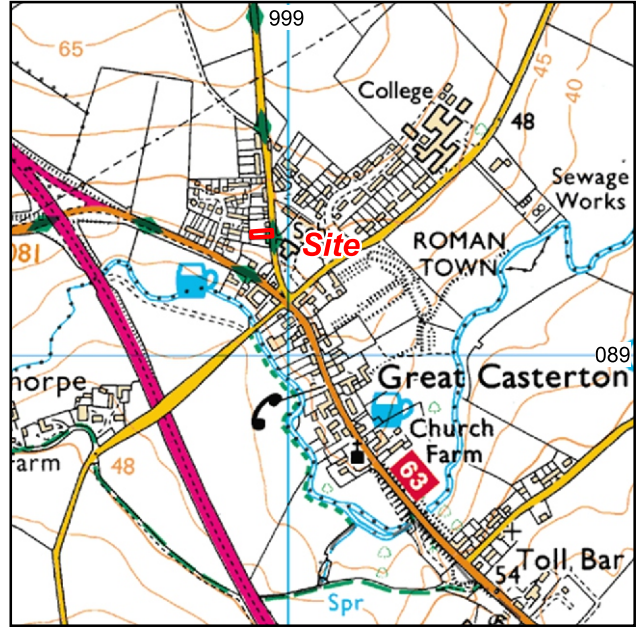
Great Casterton Primary School lies adjacent to the site on the opposite side of Pickworth Road. During the course of the school's construction, in 1959, Roman burials and two pottery kilns were recorded (Corder 1961, 50). Between August 2004 and January 2005 an open-area excavation at the school revealed the north-west corner of a 3rd to 4th century inhumation cemetery which appeared to have been formally planned with the graves arranged in rows. The cemetery contained 133 graves, mostly aligned north-east to south-west with the skulls facing south-west. Three of the burials had been placed within coffins. A small number contained grave goods. Three crouched inhumations dating to the late Iron Age or early Roman period were recorded. The excavations also revealed three pottery kilns dating to the 2nd century and two corn-driers dating to the 3rd to 4th centuries (McConnell & Grassam 2005).

A subsequent evaluation undertaken in 2011, on the Primary School site, revealed a pottery kiln with large quantities of pottery dating from the late 2nd to the early 3rd centuries (Hunt 2011).

Up to the present application the investigation area has comprised an area of the private garden belonging to 'Newhaven'. Previous archaeological investigation within the development area has comprised an archaeological watching brief (Hall 2013)

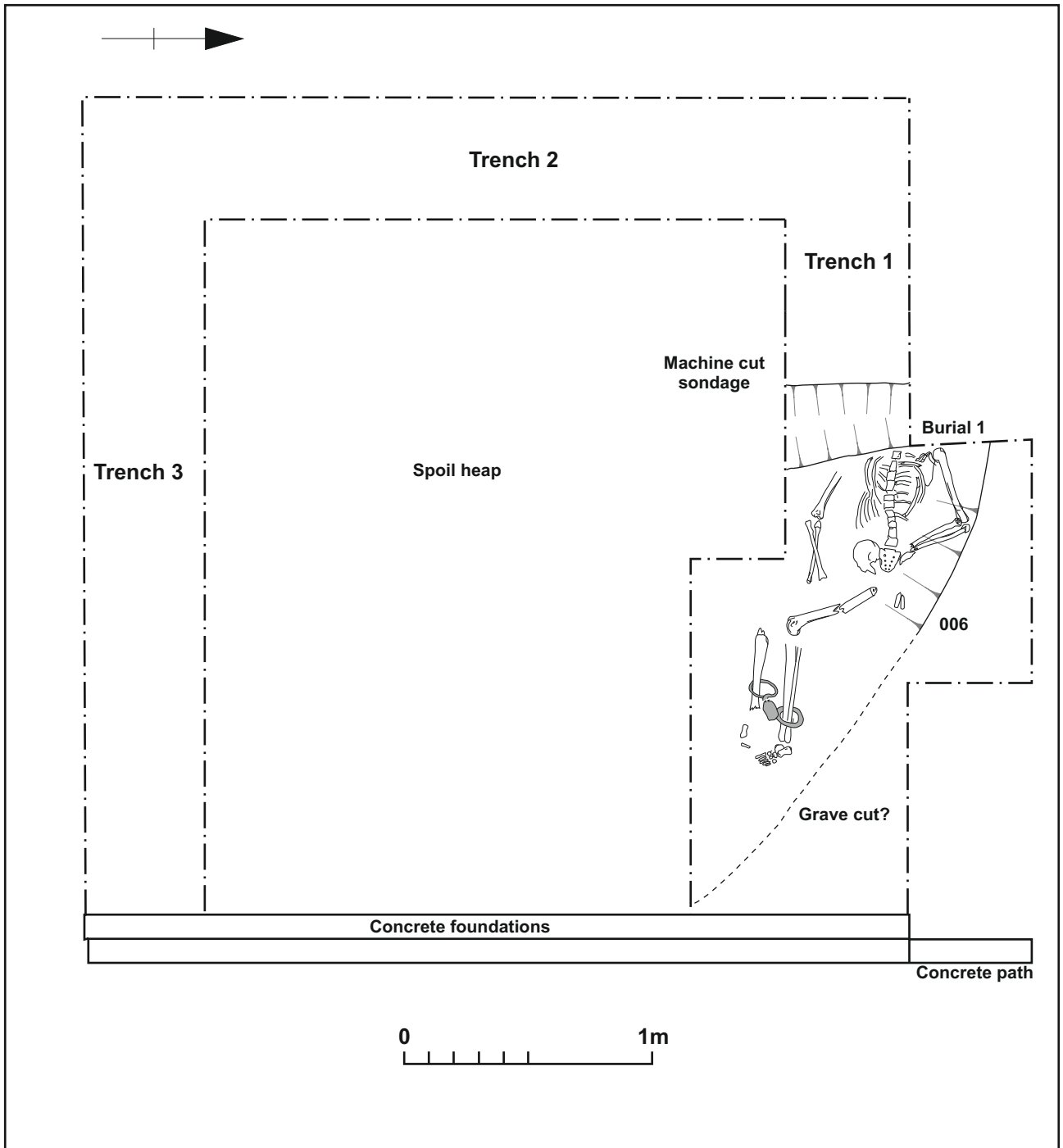
during the construction of front and rear extensions to the property, which recorded a pit of possible Romano-British date overlain by plough-soil containing potsherds datable to the 12th and 14th centuries.

The present archaeological work is as a result of the granting of planning permission for the construction of a new conservatory to the rear of the property. As the results of the previous archaeological investigation undertaken on the site indicated a low archaeological potential no archaeological condition was required, however during the course of the present groundworks, human remains were encountered which have been dated to the Romano-British period.



Scale 1:1000

Site location Fig 1



Scale 1:25

Area of archaeological observation Fig 2

3 OBJECTIVES AND METHODOLOGY

3.1 Objectives

In order to examine the archaeological resource within the proposed development area the objectives of the archaeological work were to:

- Determine and record the date, extent, character, state of preservation and depth of burial of any archaeological deposits;
- Create a permanent archive and record of the archaeological information collected during the course of the fieldwork and analysis.
- Established the relationship of any remains found to the surrounding contemporary landscapes;
- Recovered artefacts to assist in the development of type series within the region;
- Recovering palaeo-environmental remains to determine local environmental conditions as an intrinsic part of the investigation.

Specific research objectives were drawn from national and regional research frameworks documents (EH 1991; Knight *et al* 2012) as relevant.

3.2 Methodology

All works were conducted in accordance with the procedural documents *The Management of Archaeological Projects* (EH 1991), *Management of Research Projects in the Historic Environment (MoRPHE)* (HE 2015), the Chartered Institute for Archaeologists' *Standard and Guidance for an archaeological watching brief* (CIfA 2014a) and *Code of Conduct* (CIfA 2014b).

The groundwork areas had been cleaned sufficiently to enable the identification and definition of archaeological features, where present. The fieldwork took place in generally good weather on one occasion in August and in wet weather conditions on two consecutive days in September

Recording followed standard MOLA procedures as described in the *Fieldwork Manual* (MOLA 2014). Deposits were described on *pro-forma* sheets to include measured and descriptive details of the context, its relationships, interpretation and a checklist of associated finds. The photographic record comprised 35mm black and white film and digital images at 12 megapixels.

All records were compiled during fieldwork into a comprehensive and fully cross-referenced site archive.

The developer, in July 2015, started to excavate foundation trenches for a conservatory extension (Fig 2). During machining of Trench 1, a human burial was found and work ceased immediately. Machine excavation of the remaining trenches took place in August 2015. In September Trench 1 was extended by hand to completely excavate the skeleton.



Trenches 1-3 and west elevation of Newhaven, looking north-east Fig 3



Trench 1, prior to excavation of skeleton, looking east Fig 4

4 THE EXCAVATED EVIDENCE

In July 2015, the first of three foundation trenches (Trench 1) was excavated using a mini 360° excavator fitted with 0.6m wide bladed bucket. Trench 1 was 3.5m long by 0.6m wide, c 0.6m deep and aligned east to west. Roughly mid-way along the trench and just above the trench base, part of a human skeleton was discovered *in situ*, causing excavation work to cease. Leicestershire Police were informed who subsequently carried out a site visit. A small quantity of human bone was taken away for analysis and the remains of the skeleton were temporarily covered with a body bag overlain by a protective layer of earth (Figs 4 and 5).



Trench 1, part of the skeleton when first excavated, looking west Fig 5

In August 2015 it was determined that the human remains were of archaeological, rather than modern forensics interest, and work resumed on site. Within Trench 1, no further machine work took place. The two remaining foundation trenches (Trench 2 and Trench 3) were machine excavated to a depth of c 0.6m below the surface (Fig 2, 3 and 4)). Both trenches were 3.5m long by 0.6m wide. Trench 2 was aligned north to south and Trench 3 was aligned east to west. In both trenches, the natural substrate (003) consisted of a compacted light grey-brown limestone 'cornbrash' with frequent small to large-sized limestone fragments. In both trenches, the natural substrate was overlain by a c 0.4m deep layer of dark yellow-brown, sandy clay loam subsoil (002), with numerous small to medium-sized fragments of limestone. Overlying this was a c 0.3m deep layer of loose, dark-grey brown, silty loam topsoil (001), with a few small pebble inclusions. No other archaeological features were recorded, two modern drainage pipes and a modern footing trench associated with adjacent 'Newhaven' were noted (Figs 2 and 8).

On 21st and 22nd of September 2015, following the receipt of a 'Licence for the Removal of Human Remains' (Licence 15-0239) from the Ministry of Justice, excavation resumed, under archaeological conditions, within Trench 1 to fully expose and excavate the human skeleton.

Within Trench 1 the natural substrate, subsoil and topsoil appeared to be identical to those recorded in Trench 2 adjacent. The natural substrate (003) consisted of a compacted light grey-brown limestone 'cornbrash' with frequent small to large-sized limestone fragments. The natural substrate was overlain by a c 0.4m deep layer of dark yellow-brown, sandy clay loam subsoil with numerous small to medium-sized fragments of limestone (002). Overlying this was a c 0.3m deep layer of loose, dark-grey brown, silty loam topsoil (001) with a few small pebble inclusions.

4.1 The possible ditch

Whilst it was difficult to identify within the limits of the foundation trench, the skeleton appeared to be lying within a linear feature [006] aligned north-west to south-east (Figs 6 and 8). It was not possible to ascertain the exact size and shape of the feature due to the limitations of the excavation area (Figs 2 and 8). The skeleton was overlain by a fill layer (004) c 0.4m deep, consisting of a dark yellow-brown sandy clay loam with numerous small to medium-sized fragments of limestone. Several sherds of Romano-British pottery and some animal bones were recovered from this fill. The skeleton itself was lying in a dark yellow-brown sandy clay loam (006) fill layer, which appeared similar to layer (004) above. No other finds were recorded from this layer. This feature has been interpreted as a possible linear ditch into which the individual was either buried or deposited.

4.2 The human burial

The skeleton appeared to be aligned roughly north-west to south east with the feet to the north-west (Figs 2 and 8). One femur, most of the right arm, part of the pelvic girdle, most of the vertebrae and ribs were visible within Trench 1 as originally excavated. The neck and skull of the individual appear to have been truncated by machine excavation, possibly during initial excavation of the foundation trenches but more likely by a narrow modern trench which appeared to have cut across the top of the skeleton (Figs 2, 6 and 8). This trench was aligned north to south and had been backfilled with topsoil (001) containing fragments of plastic.

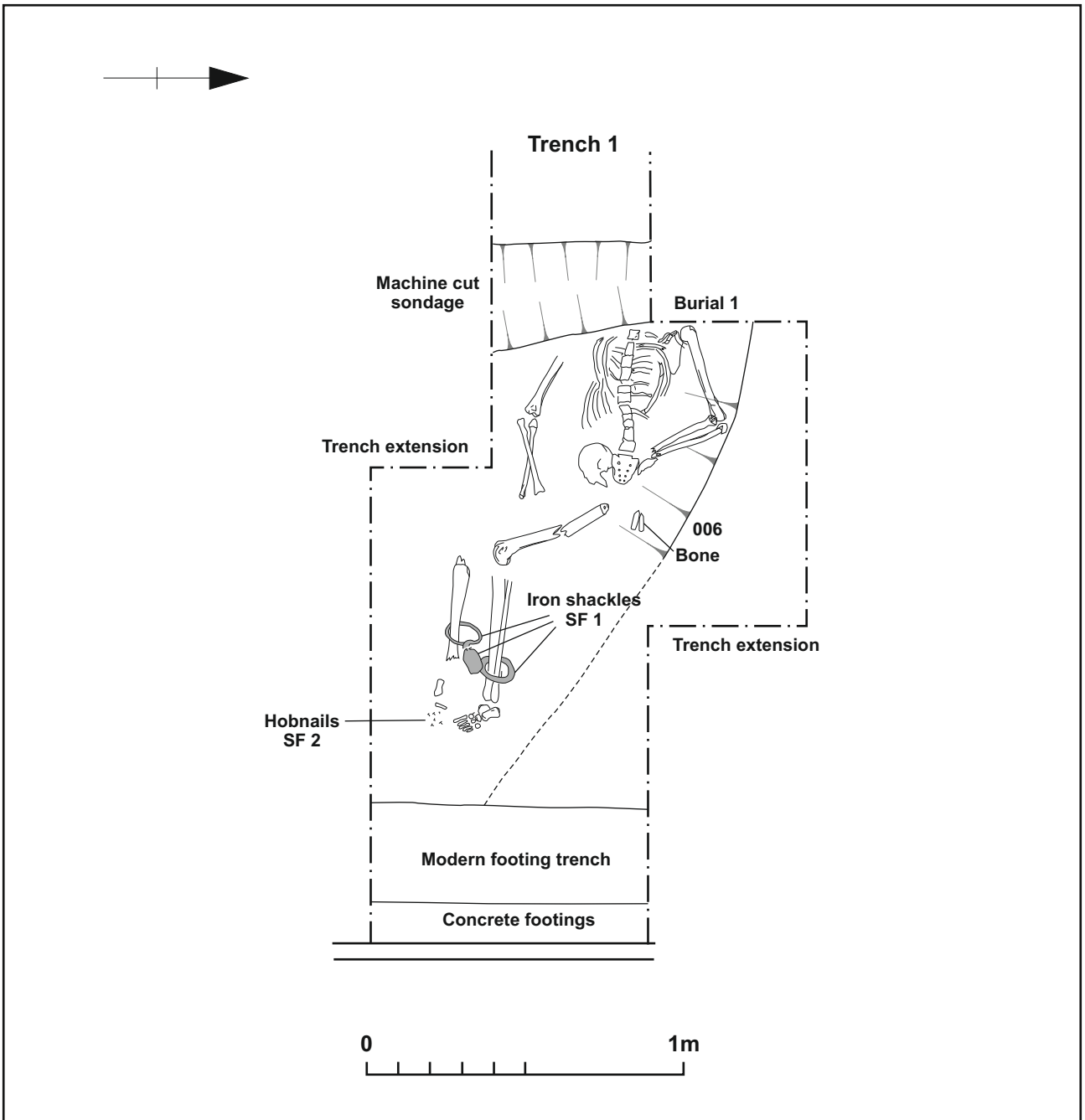


Trench 1, the remains of the skeleton fully uncovered, looking west Fig 6

An extension to the north side of Trench 1 exposed the *in situ* left arm and left scapula of the skeleton. An extension to the south side of Trench 1 found the lower halves of the left and right legs of the skeleton which were also *in situ* and largely complete. The upper parts of the legs appeared to have been truncated and damaged during the machine excavation of the original trench (Figs 3, 6 and 7). Just above the ankles and around the lower parts of the tibiae and fibulae, a set of iron fetters fastened with an iron padlock were present (Fig 7). Additionally, several hob nails were recovered from around the feet of the skeleton.



Trench 1, skeleton, close-up of the legs with fetters, looking south (scale 10cm) Fig 7



Scale 1:20

Plan of Burial 1 Fig 8

5 THE FINDS

5.1 The iron fetters by Michael Marshall and Elizabeth Barham

The fetters were found *in situ* around the ankles of a supine skeleton. The ankles and fetters, along with a few iron hobnails that may indicate the deceased wore nailed shoes or, less likely sandals, lay at the south-eastern end with the head at the north-west. Although iron shackles of various sorts are a well-known class of find from the Roman Empire, examples found *in situ* associated with human remains are very rare and are thus of national if not international importance. Frustratingly, due to the unplanned nature of the excavation part of the upper end of the skeleton was truncated and it is not entirely clear if the body lay within a grave cut, as a formal inhumation, or another class of linear feature such as a ditch. Sherds of pottery and animal bone were found but could not be directly associated with the burial. No other grave goods were identified. The site lies immediately adjacent to a known 3rd-4th century AD Roman cemetery. A radiocarbon obtained from the skeleton gave a date range of 226 - 427 AD with 95.4% probability.

Pre-conservation catalogue and typological discussion (Michael Marshall)

Catalogue with notes on minimum requirements for investigative conservation

Complete; Max L 243mm; ext Diam right shackle 92mm; int Diam right shackle 70.5mm; W right shackle section 25.6mm; max Th across right shackle section 12mm; Diam right shackle rings 61.9mm and 60.5mm; Diam sections of right shackle rings 10.5mm and 10.3mm; ext Diam left shackle 96mm; int Diam left shackle 73.7mm; W left shackle section 25mm; Th across left shackle section 12.8mm; Diam left shackle rings 58mm and 60.8mm; Diam sections left shackle rings 11.5mm and 12.6mm; max L padlock 97mm inc bolt; max H padlock 71 inc bolt; L padlock box c 62mm; W padlock box 40.3mm.

The iron ankle shackles/fetters comprise three major elements. The two ankle hoops are penannular rings, each is C-sectioned with the convex face on the interior and a central circular sectioned rib/rod running around the concave middle of the exterior. The two ends of each ankle hoop are forged into closed loops orientated on the same plane. Each terminal loop on the hoops holds a free-pivoting annular iron ring with a sub-square section. The third element is the padlock which has a square sectioned case with a kinked bolt/loop which passes through all four pivoting annular rings. The x-rays clearly indicate some kind of internal frame/strengthening for the case although its exact form is ambiguous and the barb spring is visible within. The apertures are not clearly visible.

Preliminary typological discussion

The basic type represented by this object is well-known. It belongs to Thompson's type Sombernon (1993, 113–7 and 148; see also Manning 1985, 83–4, fig 23, type 7; Henning 1992, 409, abb. 2, type B – 1 and B – 2 for related classifications). These were used as ankle fetters to restrict the movement of human beings. Functionally, the assumption is that the use of such fetters was designed to severely limit speed of movement although if used in isolation they may not have been suitable.

A number of parallels can be cited, mostly from rural sites, from Gaul (Thompson 1993, nos. 55, 56, 57 4th C AD, 58, 59, 60, 61, 62, 63 and 69?) the Rhineland (*ibid*, nos. 117b 3rd century AD) and Britain at Pakenham, Sicklesmere and Debenham, Suffolk (*ibid*, nos. 138, 141, 143) and the fort at Camelton, Central Scotland (*ibid*, no. 153b) where occupation was principally of Flavian and Antonine date. Together these suggest a long currency from at least the mid-2nd century AD until perhaps the

4th century AD. The distinctive form of the hoop cross-section can also be paralleled on other fetters and shackles (as Thompson 1993, illus. 96c) but no systematic survey of the chronological significance of this treatment exists to indicate whether this can assist in refining the dating.

Pre-conservation discussion (Michael Marshall)

Roman burials with shackles

Although not common, shackles are a relatively well-known class of find which are represented in Roman Britain by dozens of examples. They are found in sufficient numbers to suggest that this method of imprisonment was relatively widespread, at least in the south-east of the province and the Roman period marks a notable peak in the chronological distribution of archaeologically attested shackles (Henning 2008, fig 2.5), although in part this may reflect difference in the intensity of research and the quality of the evidence between periods. The Great Casterton shackles join a relatively small number of examples securely dated to late in the Roman period from Britain (*ibid*, fig 2.1) but are comfortably within the assumed date range for their type (above).

The frequency of shackles finds is not reflected in the funerary record, however, as Roman burials with shackles are extremely rare with c 10–16 examples listed from Europe, depending on if uncertain examples are included. These are widely distributed across the continent (see Thompson 1993; Henning 2008, fig 2.2). This total includes the present find and other, as yet unpublished, recent discoveries from Gaul. There are no other confirmed examples of a set of shackles found *in situ* on human remains from Roman Britain although there are a number of possible examples, both older finds of unclear character, and there is a group of burials known from London and York found with heavy rings around their limbs. These are not functional shackles but may represent a related phenomenon.

The first instance of shackles, reported as having been found with human bone is an unusual riveted shackle from the cathedral ambulatory at Old Sarum, Wiltshire noted in Thompson's survey of Iron Age and Roman slave shackles but are not certainly of Roman date (1993, 131–3 and 163, no. 153). This was thought to be a burial disturbed during the 13th century. Other riveted shackles, thought to be Roman in date, have also been identified elsewhere and interestingly this includes a number of examples associated with burials, mostly from eastern Europe (*ibid*; Henning 2008, fig 2.2).

The second possible association is a group of human bones and shackles found in a subterranean structure at Colchester (Thompson 1993; Hull 1958, 107–13). The relationship between the bones and shackles is uncertain as is the interpretation of the structure which was identified tentatively as a Mithraeum but has also convincingly been suggested to represent an underground slave prison (*ergastulum*) of a type referred to in Roman literary sources (Thompson 1993, 74–8; Webster 2005, 166–8). If this is a slave prison then the human remains may represent slaves abandoned and left to die within, rather than slaves buried in their chains *per se*. Another possible candidate for an *ergastulum* found in Britain at Chalk near Gravesend, Kent also produced human remains but not shackles and whether these represent a similar phenomenon is unclear (Webster 2005, 166–8, fig 1). As the Old Sarum and Colchester shackles of different types to those from Great Casterton and as neither can be proven to represent an example of fetters worn in death by skeletons of Roman date their comparative significance is unclear.

The distribution of finds suggests that iron fetters and other forms of shackle were well known in Roman Britain, particularly in those areas where possible shackled burials have been found. However, the scarcity of shackled burials should not surprise us. Iron shackles, large and complicated objects requiring skilled craftsmanship to produce them, may have been relatively expensive. They are likely to have belonged to a slave's owner rather than the slave, themselves, and could easily have been reused after an imprisoned individual who wore them died. Even if the shackles themselves were no longer required, they also represent a substantial weight of iron which was potentially recyclable and which, as a raw material, required a substantial input of time and resources to replace. As the cost of disposal was far from negligible the internment of a body wearing fetters is unlikely to represent a conscious decision unless to do so served some particular purpose. Given that the practical role of fetters, to restrain the movement of the wearer, became redundant at the moment of their death, this would seem likely in most cases to have been symbolic.

The idea of a symbolic dimension to the burial of individuals in shackles is supported by a distinct but perhaps related, group of burials wearing solid iron rings that have recently been identified in Britain in the upper Walbrook cemetery, London and at Driffild Terrace, York. These would not have served as functional shackles and, because they are closed iron rings, would have needed to be forged into shape around the wearer's limbs. As such they were probably added peri- or post-mortem in an act that must have been very violent and probably caused serious damage to soft tissue.

At York this was an adult male decapitated inhumation, probably of 2nd-century or later date, aged between 26 and 35 years old, whose skeleton suggested he had led a hard life afflicted by injuries and illness. He was buried with two iron rings around his ankles (Cool 2015). These rings were closed and non-removable, having overlapping but not welded ends. In the London upper Walbrook cemetery three individuals have been identified with similarly large iron rings. In two instances, both from adult inhumations found to the west of the Walbrook stream, these were leg rings (Harward *et al* 2015). The first was a male inhumation, aged 18 – 25. The second adult inhumation had been eroded by the Walbrook stream and only the leg bones and one iron ring survive, but can be assumed to have originally formed a pair. These burials are dated to the mid-later 2nd century AD. More recently another inhumation burial with an iron ring discovered as part of another group of burials short distance to the east was discovered, probably of similar date. This was again a decapitated adult male, aged 26–35, in this case wearing an iron ring on his right wrist. He was buried with his two wrists close together as if bound but the left wrists and perhaps a second iron ring had been partially removed by post-Roman truncation (Walker in Ranieri and Telfer *forthcoming*).

In the case of the iron rings I have suggested elsewhere (Marshall in Ranieri and Telfer *forthcoming*) that they may have been symbolic shackles, serving in lieu of real ones, designed to emphasise some negative aspect of an individual's identity associated with imprisonment in death or to sustain it within the afterlife. Another suggestion made by Wardle (2015) and Cool (2015) is that they may have served to stop the dead from walking or imprison them within their grave. However, that at least some of these burials had been provided with shoes in death, necessary for the journey to the afterlife would argue against this interpretation (Cool 2015). The Great Casterton fettered burial may also have worn nailed shoes or sandals to judge by a few scattered hobnails recovered from around the feet. The more recent Crossrail Broadgate iron ring find which is around the wrist rather than the ankle again implies that the connotations that are important are those of imprisonment and the loss of

freedom rather than specifically those of immobility. In order to better understand the meaning of such shackles, real or symbolic, however, we need to better understand what their significance was in life.

The wearing of shackles in the Roman world and the implications for the identity of the buried individual

Chains and shackles of various forms were used to restrain human beings in the Roman world in a range of social contexts that encompassed the taking of prisoners in a military or judicial context as well as the imprisonment or punishment of slaves (Thompson 1993). The imprisonment of military prisoners and criminals, however, seems to have rarely been designed to represent a long term solution and the purpose of prisons seems to have been principally to house the accused whilst awaiting trial and sentencing. However, related punishments such as exile and forced residence which served to limit the movement of the criminal and to physically remove them from society were utilised to varying extents (Olson 2008; Hillner 2015). An exception, however, was those individuals condemned to hard physical labour as in the Imperial mines and quarries, environments in the condemned could not choose to leave and in which shackles are known to have been used (Millar 1984).

Thompson has discussed the probable function of different types of shackles in detail based upon their physical properties, distribution and iconographic evidence (1993), the results suggests that gang chains worn around the neck were particularly associated with the slave trade while manacles for the hands may have been very commonly, but not exclusively, used in a military context (ibid, 99–110 and 145–7). Quite a number of fetters come from the area of the German limes, including actual fort sites (ibid, 159–61) but they are notably rare in the military north of Britain with the exception of examples from sites with forts or fortresses at Corbridge and Chester, which were also urban centres, and Camelon (ibid, nos. 151–2 and 153b). Furthermore the context of the Great Casterton burial does not obviously lend itself to that of a military captive. The Roman fort at Great Casterton was a Claudian foundation (Todd 1968) long abandoned before the period implied by the most likely typological dating of the shackle, the radiocarbon dating of the skeleton and the overall range of dates for the cemetery to which the burial may belong.

In fact fetters have a rather different overall distribution, seemingly very well represented on areas of good agricultural land, (Thompson 1993, 148, fig 116). In Britain this is most pronounced in East Anglia with clusters extending into central southern England and the midlands. The Great Casterton examples come from the outskirts of a small town but sits near the edge of this same core distribution with other nearby examples from Ledbourne, Lutterworth and Melton-Mowbray (ibid, nos 147–9). It has been generally assumed that this pattern reflects their association with agriculture and perhaps particularly with villa estates and other economic models that relied on forced labour (Henning 2008; Thompson 1993).

While it was rare for a free person to receive long-term physical imprisonment, it was not uncommon for individuals to spend their entire lives in slavery, an institution which limited their freedom of choice and movement and made it subject that of their owners. While freedom could be granted by their masters it is clear that many freedmen also continued to work for their former owners after manumission.

The circumstances of slavery varied dramatically between individuals, however, ranging from imperial slaves who ranged widely, probably in comfort, and exercised considerable power on behalf of the emperor, through to individuals forced to undertake hard physical labour in dreadful conditions. The clearest evidence for the life of individual slaves in Roman Britain is epigraphic, although, as literacy and the

epigraphic habit was strongly skewed towards the upper ranks of society slaves are rarely attested and then might not be regarded as a representative samples. Birley (1979, 148–50) has surveyed the epigraphic evidence for the occupations of certain freed-men which is likely to have included merchants, potters, glass blowers and lead mining contractors; as freed-men often continued to work for their masters after manumission, it is possible that they had earlier worked as slaves in some capacity within these same industries. Writing tablets from London provide other perspectives on slavery, revealing the presence of imperial slaves, who themselves owned slaves (Tomlin 2004) and obviously held a comfortable station in life but also the equation of human life with property as seen clearly in a letter with instructions to turn a slave girl “into cash” (Richmond 1953, 208).

While no slave will have had true free movement, chaining and physical imprisonment was not, therefore, an inevitable result of enslavement and not all slaves would have been counted amongst the *servi vincti* (chained slaves). That chained slaves were well-known, however, and regarded as in some sense a distinct category is suggested in a wide range of literary sources which mention their use in rural environments associated with hard physical labour as in agriculture and viticulture, although their contrasts with other types of slaves in such sources suggests that not all slaves in such environments were chained (Bodel 2011; Roth 2011, 72–3 for a survey).

While imprisonment might be considered a preventative measure, aimed at preventing slaves from fleeing or otherwise physically disobeying their masters, it is also clear that was used as a punitive measure (Thompson 1993; Roth 2011; George 2013) and it is not entirely clear how universal such chaining was and whether such slaves were kept permanently chained. Bodel (2011, 330) notes that the chaining and imprisonment of slaves is mentioned so frequently by elite writers of the 1st century AD that it may have been as much a rhetorical device. However, he also suggests that the increased use of chains on country estates might reflect a genuine distinction between the *familia rustica*, slaves who worked in such environments, and the *familia urbana* who worked in their owners homes and thus may have been under more direct supervision, potentially with a different range of punishments and humiliations (ibid).

However, in a recent discussion Roth has suggested that scholars have previously misunderstood the full significance of chaining amongst slaves. She argues that, crucially, the status of *servi vincti* was one that seems to have continued beyond the duration of imprisonment itself and one which would serve to decrease the monetary value of a slave. If chaining had been necessary this was counted as an ongoing permanent defect which it was necessary to report at the point of sale; variously through inscription, public declaration or sale of the slave whilst in chains (ibid, 75–6). This status may therefore be considered as partially analogous to and perhaps partially coincidental with, the tattooing of runaway slaves after they had been caught which served as a permanent reminder of their past crime and status (Jones 1987). Crucially, she notes that Augustan legislation ensured that *servi vincti* could not hope for Roman citizenship after manumission and that therefore it reflected a permanent blight on their status and prospects (Roth 2011, 90).

While many aspects of Roth’s refined interpretation of both the literary connotations and the legal consequences of the term seem both important and reasonable. It is strictly necessary to conclude, as Roth does (2011, 93), that this in turn negates the literary evidence that slaves sometimes also worked the land while physically chained. Literary sources are not the only strand of evidence that supports this connection and an explicit links between agricultural labour and chaining is suggested

by the common iconographic motif of Cupid punished in which he is often depicted chained and carrying hoe (George 2013). Whether chains were worn full-time or simply as short-term punishments, they must have acted as potent means by which the will of a slave was curtailed and that of their masters enforced indeed Augustine writes of slaves chained for years at a time. Early Christian writers not cases of slaves chained for years at a time for relatively minor crimes (Hillner 2015). As the means of such oppression and a symbol of the legal and symbolic implications noted it seems clear that they would have served as potent symbols of control and condemnation.

Given the location and date of the burial and the presence of the fetters it seems most probable that the Great Casterton burial represents the burial either of one of the *servi vincti* or another individual for whom they were meant to act as a symbol of imprisonment or punishment. In either case, it is probable that this exceptional inclusion of the fetters would reflect ill will towards the deceased by those who buried them. If the individual had worn the fetters in life the purpose may have been to prevent their escape to freedom in death and to sustain the physical and social oppression into the afterlife. This may be due to some ill will felt towards them or from a desire by the prisoner or owner to retain control over them beyond the grave. Alternatively, if the deceased had never experienced chaining then their application may have been a symbolic way of asserting this indignity upon the deceased.

Conservation (Elizabeth Barham)

Condition

The object is encrusted with iron corrosion and soil but appears to be stable. It is packed in a sealed storer with silica gel. The Xray image supplied suggests there may be some vulnerable areas – hairline cracks and corrosion through to the core. There may also be some areas of good metal survival based on the weight of the padlock in particular. The bone has been separated from the object.

Some Xradiography has been attempted, however the object is difficult to image through conventional Xray as the parts have corroded together, so most are necessarily some way from the Xray plate which can make them indistinct on the image. The weight of the object suggests there may also be some dense areas of surviving metal and this could be difficult to penetrate with a standard Xray unit. Some of the hoop and ring elements also obstruct others on the image. The object is weaker in some orientations as the padlock is heavy and the attachments are thin which restricts the Xray views that can be taken without some risk to the object.

The finds specialist has identified the following aims for conservation work to support publication of the shackles:

- Clarify shape and construction of ankle hoops
- Clarify direction of bend and quality of weld of closed loop ends
- Clarify the shape of the section of the pivoting annular ring
- Clarify any indication of the frame/strengthening and form of the padlock box and its key/bolt perforations.

Given the above, there are two possible approaches to the conservation of the object for publication, as follows. A third option is provided to support display, if this becomes a consideration:

Option 1: CT scanning of the object, selective follow-up investigative cleaning if necessary.

MOLA Conservation take a minimally interventive approach to treatment of objects where possible as removing corrosion layers increases the risk of further corrosion by exposure of metal surfaces to the air and can weaken corroded surfaces by removing some of their remaining structure. Application of a corrosion inhibitor and other coatings, support-fills etc can help to mitigate these effects but investigative cleaning makes an irreversible change to an object. Therefore, if it may be possible to answer the necessary research questions through Xradiographic images, and to inform illustration and provide easily interpretable images for publication purposes by this means, this would be preferable to investigative cleaning, and may either make cleaning unnecessary or reduce the amount required.

This could also be beneficial to the object record by enabling detailed examination of the structure in the long term, even if there was to be deterioration of the ironwork in storage over time, since archaeological iron with some metal survival is particularly sensitive to its environment and can continue to corrode slowly, even under very dry conditions.

Therefore, it is recommended that if it is possible to image these shackles Xradiographically this would be preferable for the record and for the good of the object to reduce or avoid the necessity for investigative cleaning.

In the case of this object, conventional Xradiography has limitations, as discussed above. In contrast, CT scanning should lend itself very well to the imaging of these shackles. CT (Computed tomography) is able to show features three dimensionally to enable the viewer to rotate the object virtually, to look at features of its structure from different angles. It can show these in the manner of an Xray image and colour/textured rendering can also be applied through the viewing software, if this helps to show certain surface features more clearly. Imaging of all the features is not guaranteed, for example it may not show some finer surface details, and dense metal may still be hard to penetrate, so further investigative cleaning could still be needed to look at surface detail of selected areas but this should be much reduced if some information has already been supplied by the CT work. The images can be supplied digitally as video rotations in horizontal and vertical orientations, and as selected still images with measurements as required in a format viewable on a PC.

MOLA Conservation have worked with the Paul Strickland Scanner Centre (PSSC) in Middlesex on a number of similar projects in recent years. The Centre have an up-to-date Siemens CT scanner (new in 2016) and a consultant radiologist and radiographer willing to undertake this work. Scanning is done in conjunction with a conservator for object handling and guidance on the views required. It requires time for a MOLA conservator and driver to take the object to Middlesex by van and return it, and for a MOLA Conservator to work with the radiologist at the Centre workstations for a session of post-scan processing of images. The scanning and processing work usually has to be done out of hours as medical cases take priority. The PSSC would charge a fee for the use of the facility and the radiologist's time for scanning and post-scan image processing.

Option 2: Selective investigative cleaning and one further X-ray view - for publication

To address the finds specialist's research questions, the alternative to CT imaging is to go ahead with selective investigative cleaning of the shackles only. One further conventional X-ray view could also be taken in advance of the cleaning, if this has not

been done already, to try to assist with looking at obscure parts of the lock mechanism/bracing. As discussed, conventional X-ray views beyond this would not be safe for the object as the weight of the padlock would be held up by the thinner and more corroded hoops and rings and also too many parts would be off the plate to provide a useful image.

The investigative cleaning work would be done by air abrasion of surface corrosion, followed by surface treatment with corrosion inhibitor (brushing with tannic acid solution and a thin, unobtrusively matt acrylic lacquer). The finds specialist has suggested the following areas would be the minimum necessary:

- Clean to clarify shape and construction of ankle hoops
- Clean one closed loop end to clarify direction of bend and quality of weld
- Clean a strip of the pivoting annular ring to clarify the shape of its section
- Clean padlock box, at least two of the four sides and either end to examine the key/bolt perforation and any indication of the frame/strengthening

Option 3: Full cleaning to support display of the shackles in addition to publication.

The above options provide for conservation work to facilitate the publication of these shackles. They are an exceptional rare survival and as such, a museum may also be interested in displaying them.

For display, it may be decided for interpretation purposes that soil and obscuring corrosion should be removed from all elements strong enough to withstand this, followed by surface treatment to inhibit corrosion and provide an even, homogenous surface. If a museum were keen at an early stage for this to happen, full cleaning rather than selective cleaning may be a preferred approach from the start. Investigative cleaning of the whole object (bar any particularly vulnerable areas), any support-fills or consolidation necessary as a result of full cleaning and surface treatment with treatment record, would involve up to 3 days of conservation work.

Alternatively, if CT scanning had been carried out this may give a museum the option not to undertake further cleaning of the object, or only selective details necessary for publication. It could otherwise be displayed untouched, alongside interactive CT images which can be moved virtually to show the external structure and potentially the internal structure of the padlock.

It should be noted that display of the object would require an environmentally controlled case (well-sealed with integral active desiccant) suited to the display of archaeological ironwork, for which funding may additionally be needed.

5.2 The iron hob nails by Tora Hylton

Five complete and five incomplete hob nails, presumably originating from the sole of a leather boot or sandal were recovered from soil deposits adjacent to the feet. The complete examples have clenched terminals, indicating that they had been used and the incomplete examples comprised the head with a vestige of the shank remaining. The nails have domed heads ranging from 8-10mm in diameter and square-sectioned shanks measuring from 12-18mm in length; typologically they equate to Mannings Type 10 (1985, fig 32).

5.3 The pottery by Tora Hylton

In total five sherds with a combined weight of 0.169kg were recovered. With the exception of an unstratified rim sherd from topsoil (001), all the pottery was recovered

from (004). This small assemblage was recorded by context and broad fabric group and quantified by sherd count and weight (Table 1). Where possible the codings of the National Roman Fabric Reference Collection (Tomber and Dore 1998) have been applied.

The assemblage comprises locally produced coarsewares and fine wares in shell-gritted, greyware and colour coated fabrics. The overall condition of the pottery is good and the sherds do not display signs of excessive abrasion. Diagnostic sherds are represented by a rim and two body sherds from a wide mouth jar in Nene Valley Colour Coat which dates to the 4th century (cf. Howe *et al* 1996, fig 7, 75) and a rim sherd from a large storage jar in a shell-gritted fabric.

Table 1: Roman pottery assemblage

| FABRIC TYPE | TRENCH/CONTEXT NUMBER | | | |
|-------------------------------------|-----------------------|-----|--------------|----|
| | 001 No/Wg | | 004 No/Wg | |
| Roman Pottery | | | | |
| Greyware | | | 1 | 2 |
| Shell-gritted | 1 | 136 | | |
| Nene Valley Colour Coat (LNV CC) | | | 3 | 31 |
| Total | 1 | 136 | 4 | 33 |

A single fragment of ceramic tile weighing 16g was recovered from (004). The fragment is undiagnostic and may be Roman in date.

5.4 The animal bone by Becky Gordon

Seven animal bone fragments (125g) were recovered from Great Casterton (Table 2). Four were identified as cattle and one was identified as dog. Two fragments could not be identified to species or element.

Table 2: Number of animal bones by context

| Fill/cut | Cattle | Dog | Unidet. LM | Total |
|--------------|----------|----------|---------------|----------|
| 004/005 | 2 | 1 | 2 | 5 |
| Burial #1 | 2 | | | 2 |
| Total | 4 | 1 | 2 | 7 |

Key: Unidet. LM = Unidentifiable large mammal

6 The human remains by Chris Chinnock

This report contains the results of the complete osteological analysis and discussion of the human bone assemblage. Analysis was limited by the small sample size and incomplete nature of the remains. Nevertheless, this assemblage serves to add to the corpus of information for funerary practices within the Roman period in Britain.

Nature of Sample

The context from which the skeleton was recovered is not fully understood though it has been suggested that the individual was deposited into a ditch, [6], rather than a formal grave. The individual was laid in a roughly supine position and orientated north-west to south-east with the head at north-west end. The legs were slightly flexed with both knees pointing toward the south-west. The right arm lay extended by the right side and the left arm was flexed and raised slightly. There was no evidence to suggest that the individual was held within a coffin or wrapped in a shroud.

The burial was sealed by the upper fill of the ditch, (4), which was overlain by subsoil, (2), and modern garden soil, (1).

Preservation and completeness

The skeletal remains were assessed for overall bone preservation and scored on a three point scale from good to poor (Connell and Rauxloh 2007). Despite the truncated nature of the skeleton, the surviving elements remained largely intact. The elements displayed good levels of preservation with limited erosion of the bone and surface details clearly visible. Some root impressions, which have damaged the cortical bone, were present on several of the long bones.

Approximately 75% of the individual is represented by the surviving skeletal elements with the skull and cervical vertebrae absent. The partial nature of the burial limited the amount of osteological data available at analysis.

The distal shafts of the tibiae and fibulae displayed red-brown staining and concretions resulting from contact with an iron object. In this case the object was a pair of iron fetters fastened with a lock (Fig 1). Further red-brown iron staining was present on the mid-shaft of the right fifth metacarpal though no associated artefact was recovered.

Methods

All skeletal remains were recorded onto an Oracle 9i (v9.2.0) relational database following Museum of London methodology (Connell and Rauxloh 2007; Powers 2008). This provided a full catalogue of the bones and teeth present, estimates of age and sex, measurements of cranial and post-cranial elements and observations of no-metric traits.

In the absence of observable dimorphic features of the skull, sex estimates were made using observations of the pelvic morphology supplemented by metric measurements of the long bones following Bass (1987). Where long bones were present and sufficiently intact, stature calculations were conducted using Trotter (1970) and skeletal indices according to Brothwell (1981).

Pathological bone changes were recorded onto the database and supplemented by digital photographs when necessary. Crude prevalence rates by individual and true prevalence rates by bones or joint were calculated where appropriate. Full details of pathology locations, measurements and all other osteological data can be found in the site archive.

Results

Demographic Data

Demographic analysis identified one adult male individual. Despite the absence of the skull, it was possible to determine the sex of the individual from observations of pelvic morphology. This was supplemented by measurements of femoral circumference and femoral head diameter (Bass 1987, 219).

The skeleton was estimated to have been aged between 26 and 35 years at the time of death, using aging methods developed for observations of the auricular surface of the ilium (Lovejoy *et al* 1985) and the costochondral phases of the sternal rib ends (İşcan *et al* 1984). An absence of other elements used for aging skeletal remains prevented further age assessment.

Metric Data

Stature

Stature calculations were possible from two bones; the left humerus (167.42 - 175.52cm) and the right radius (171.08 - 179.72cm). This compares well with the average height for a male during this period which is given as 169cm (Roberts and Cox 2003, 163). It should be noted that the available limb bones are not the most accurate for calculating stature and were used only in the absence of more reliable elements.

Indices

The degree of femoral anteroposterior flattening (Platymeric index) was calculated. The individual displayed a eurymeric (moderate) femoral shape. Differences in the general shape of the bone have sometimes been noted between various populations (Brothwell 1981, 88).

The platycnemic index was also calculated for the individual. The degree of transverse flattening was calculated for both left and right tibiae. Both tibiae had a eurycnemic (broad, wide) shape.

Non-metric traits

The only observable trait on the individual from Great Casteron was bilateral calcaneal double facets.

Palaeopathology

Non-specific infectious bone changes were present on the tibiae. These resulted from periostitis, the inflammation of the periosteum overlying the outer surfaces of the bone. The individual displayed dense plaques of striated lamellar bone on the medial

mid-shaft and anterior part of the distal diaphysis on both tibiae, indicating well healed long standing inflammation (Fig 9). The slower blood circulation and lack of soft tissue covering make the tibiae more vulnerable to inflammation and infection (Roberts 2000, 148).

A small bony spur on the left femur, measuring approximately 15mm, extends anteriorly from the inferior edge of the lesser trochanter. The location, size and form of the lesion suggested traumatic myositis ossificans, where muscular soft tissue had ossified following an injury (Ortner 2003 in Walker 2012, 146). The spur is located at the insertion point for the *psoas major* and *iliacus* muscles, which work to flex the thigh at the hip joint (Stone and Stone 2000, 183).



Striated lamellar bone and iron staining
on the anterior aspect of the lower leg bones (scale 10cm) Fig 9

Discussion

The skeleton showed good levels of preservation although the incomplete nature of the burial has impacted the amount of data that could be recovered during osteological analysis.

Radiocarbon dating of the burial has indicated that the individual died during the Roman period, between the early 3rd and early 5th centuries BC, at 95% confidence,

with a date in the 4th century AD the most likely option (GU-38555; Cook 2015). Specifically, the report concluded that:

'Radiocarbon analysis of the human femoral head (Exhibit reference SH3; Analysis Code: SUERC-62058) produced an F14C value of 0.8008 ± 0.0034 which is significantly less than 1 and immediately indicates that this person did not die during the nuclear era. Allowing for a marine component in the diet, the result calibrated to 226 to 427 AD with 95.4% probability. Therefore, this person died at some point between the early-3rd and early-5th century AD.'

The presence of healed signs of inflammation, particularly on the anterior aspect of the distal tibiae, appear to parallel the location of the iron fetters. It is possible that the inflammation may have been a direct result of having been placed in the fetters or as a result of prolonged use. However, as has already been noted, the tibiae are particularly vulnerable to infection and inflammation due to the lack of soft tissue coverage and slower blood circulation (Roberts 2000, 148). Consequently, the palaeopathological lesions present on the individual do not constitute sufficient evidence to infer slavery.

A bony spur indicative of traumatic myositis ossificans was present on the left femur and may indicate a traumatic event, perhaps a fall or blow to the hip. Conversely the injury may reflect excessive movement or a repetitive activity (Walker 2012, 148). Injuries such as these, in modern clinical literature, are most commonly observed in individuals who take part in heavy contact sports (Sokumbi et al 2010). This condition is often asymptomatic, although it can cause localised pain, tenderness and depending on location can affect joint function (*ibid*).

The fetters fastened around the ankles of this individual suggest that the person may have been a slave and/or criminal. However, it has been noted that the daily lives, standards of living and thus the palaeopathological evidence associated with the enslaved may have been broadly comparable with those of the contemporary poor and bonded labourers, many of whom may have been working in the same areas and undertaking the same tasks (Redfern forthcoming). Understanding the 'osteobiographies' of the enslaved is yet further complicated by the varied roles and positions occupied by those individuals during the Roman period, which may have impacted the extent to which their enslaved status translated to the bioarchaeological record. Elite households divided the enslaved into *familia urbana* and *familia rustica* (household and rural), these roles were often arbitrary and overlapping, though more physically demanding tasks are often linked with the *familia rustica*.

The presence of *in situ* iron fetters around the ankles of this individual marks it out from the normal burial practices of the period and may form part of a 'deviant' burial tradition. Taylor (2008, 100) remarks that 'Roman prone, headless, bound and secure burials are found in small numbers within many third and fourth century cemeteries'. Additionally, those individuals which have been discovered beyond the limits of formal cemeteries are often described as outcasts or those marginalised by society.

The burial from Great Casterton is differentiated from the norm for a number of reasons; the shackles around the ankles mark it out as a 'secure' burial (Taylor 2008) and the possibility of the individual having been buried within a ditch further distinguishes it from those individuals interred in the nearby formal cemetery. Much of the area around the skull had been disturbed by earlier machine excavation and it was not possible to determine whether or not the skull had been truncated or decapitated as has been seen in many other such 'deviant' burials. An adult male, aged 26-35, found at Driffield Terrace, York had been interred with an iron ring around each ankle and had been decapitated (Caffell and Holst 2011).

The fetters and lock, fastened around the ankles of the individual, suggest perhaps that he had been a slave and/or criminal. However, these items would have been costly and could have easily been recycled or re-used. Leaving the fetters and lock on the individual therefore appears to have held some significance, as part of a funerary rite. Alternatively the burial may have been made in haste with little care or attention given to the location and position of the individual or the valuable ironwork fastened around the legs.

The cemetery immediately to the east of the site was partially excavated in 2004/5 by Archaeological Solutions (McConnell and Grassam 2005). From the 133 excavated burials two had been decapitated with the skulls placed near to or between the feet. Another burial had organic staining around the wrists and knees and it was suggested the individual may have been bound (*ibid*). The two decapitated burials lay immediately adjacent to one another and all three of the 'deviant' burials lay close to the western cemetery boundary.

The most striking feature of the burial at Great Casterton was the pair of iron fetters around the ankles which were secured by a padlock. A number of examples of Iron Age and Roman shackles have been found in Britain and from the rest of Europe (Thompson 1993). However, other examples of the burial of an individual bound in such a way have not yet been identified in Britain. An individual was found at Remedello di Sopra near Brescia (Italy) with fetters and lock around the ankles (Cool 2015; Thompson 1993). A few examples of individuals buried with iron rings around the ankles have been recorded such as the burial at Driffield Terrace, York (Caffell and Holst 2011) and those from the Upper Walbrook cemetery in London (Harward *et al* 2015).

7 DISCUSSION

The discovery of the adult male skeleton on land at 'Newhaven', Pickworth Road, Great Casterton, although unusual was not entirely unexpected, given that a formally planned, extensive Roman cemetery was known to have existed on land adjacent to the Primary School, on the opposite side of the Pickworth Road.

A burial with a set of iron fetters still *in situ* around the ankles of the interred individual is likely to have been a relatively rare occurrence in Roman Britain. The example from 'Newhaven' appears to be the first definitive archaeological case of an individual buried in this manner in the UK, though individuals buried with iron rings around the legs and arms have been identified in York (Caffell and Holst 2012) and London (Harward *et al* 2015; Marshall in Ranieri and Telfer in prep) and may represent a similar funerary practice.

No further human remains were found in the adjacent trenches and unless human remains are revealed in any future investigative work, elsewhere in the rear garden of 'Newhaven' or in the gardens of neighbouring properties, it is likely that the burial represents an isolated example, close to the known Roman cemetery on the opposite side of the Pickworth Road.

The limited opportunity for archaeological excavation meant that it was impossible to determine the full context for the burial. The awkward position of the skeleton with the left arm resting on a sloped surface may suggest that the individual was buried, or perhaps even hastily deposited, toward the base of a linear ditch. The overlying fill, which contained abraded fragments of 4th century Roman pottery and animal bone are also reminiscent of a 'ditch fill'. The close proximity of a large contemporary

Roman cemetery to the eastern side of Pickworth Road is of significance as the burial at 'Newhaven' may lie in, or close to, the cemetery boundary. Excavation of the cemetery identified a number of 'deviant burials', which included decapitated and bound individuals, all of which were close to the western edge of the cemetery (McConnell and Grassam 2005). It is possible that the burial at 'Newhaven' represents another version of these 'deviant' burial practices.

Osteological analysis identified the remains as that of a male individual that had died between the ages of 26 and 35. The estimated stature of the individual was comparable to the average recorded for the period. Healed lesions present on the tibiae indicate periods of localised inflammation or infection. Well healed new bone growth present on the anterior part of the distal tibiae, at first glance, appears to reflect the position of the iron rings, which had been fastened around the ankles. However, lesions such as these are commonly recorded in archaeological populations due to the lack of soft tissue coverage and poor vascularisation around the tibiae (Roberts 2000, 148).

The iron fetters have been identified as belonging to a well-known type, as classified by Thompson (1993). Whilst other similar examples have been found, largely across Europe, the example from Great Casterton is seemingly unique in its funerary context and at this stage appears to be the only example from the UK. The immediate connotations, given the context, are that of slavery and/or imprisonment both of which are well attested during the Roman period from epigraphic and literary sources. However, the limited nature of the excavation at 'Newhaven' precludes any definitive interpretation of the nature of the burial and by extension the significance of the iron fetters.

The description of the iron fetters has drawn comparisons with the iron rings found on individuals buried at York and London. However, unlike these examples, the fetters from Great Casterton were fastened with a padlock and would have been removable, as opposed to the solid rings found at the sites in York and London.

Unlike the iron rings found fastened to individuals at York and London, the iron fetters and padlock fastened to the Great Casterton individual would have restricted movement. Iron rings alone may hold symbolic significance, which may identify the individual in the afterlife as a slave/criminal/outcast. The same may be true for the Great Casterton individual, though another possibility is that the locked fetters would have restricted/prevented passage to the afterlife. This is at odds with the presence of iron hob nails around the feet of the individual, probably from shoes, which are often interpreted as representing footwear the deceased may have needed on their journey to the afterlife. Nevertheless, the two are not mutually exclusive and it merely highlights the complexity of the funerary context.

The iron objects associated with the burial at Great Casterton are complex in design and represent expensive items that are unlikely to have been casually discarded. Despite this, and due to the ambiguity surrounding the burial/deposition of the body, the possibility must be considered that the individual was not buried but rather hastily discarded into a roadside, or boundary, ditch. There are numerous possibilities for the exact motive behind and method of the burial at Great Casterton; the only confident conclusion that can be made is that the individual had been marked out as distinct from the rest of the deceased population interred in the nearby Roman cemetery for an uncertain reason.

Recent work into the role of bioarchaeology in identifying the enslaved of Roman Britain has concluded that an 'osteobiographical' approach can aid in this endeavour

(Redfern forthcoming). It was noted however, that there does not appear to be any specific health and disease patterns specific to slavery and as such the identification of an individual as a slave, on the basis of bioarchaeological evidence alone, is not possible. The role of aDNA and stable isotope analysis in conjunction with more traditional osteological methods was highlighted as of particular importance in future research in this area (*ibid*).

Further work

The updated Regional Research Agenda for the East Midlands (Knight *et al* 2012) has identified some specific areas of research which are relevant to this project.

- What may studies of later Roman inhumation cemeteries teach us about changing burial practices and demography?

The burial from 'Newhaven', taken into context with the late Roman cemetery immediately to the east, directly addresses this part of the research agenda. The fettered individual perhaps represents a first for the Roman period in British archaeology and at the very least represents a remarkable example of alternative burial practices during this period. It exists as an important case study for comparison with other 'deviant burials' both nationally and internationally.

A specific research objective noted in the regional research agenda is:

- To support scientific analysis of human remains.

Whilst radiocarbon analysis has already been undertaken, given the unique nature of the burial, consideration ought to be given to the possibility of undertaking ancient DNA and stable isotope analysis as part of any future research which may take place. Understanding from where in the Roman Empire this individual came from would have important implications on the interpretation of the individual and, by extension, the site.

It is recommended that the burial is reported on as a note in a relevant national publication such as *Britannia*.

The manner in which the remains were discovered at 'Newhaven' is a clear example of how fragile the archaeological resource can be. Thankfully, the full cooperation and understanding provided by the developers and Leicestershire Police allowed for the necessary archaeological works to be undertaken. Due to the significance of the artefacts recovered, questions may now need to be asked about whether or not further conservation work should take place in order to conduct further research or prepare the items for display. This report has set out a number of options for continued conservation of the iron fetters, which will aid in any future discussion about long term curation of the objects.

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APPENDIX 1: CONTEXT INVENTORY

| Trench No | Length, width & alignment | | | |
|------------------|--------------------------------------|--|--|----------------------------|
| T1 | 3.5m x 0.6m E-W | | | |
| Context | Context type | Description | Dimensions | Artefacts |
| 001 | Layer | Dark grey-brown silty loam topsoil with a few small pebble inclusions | 0.3m | Pottery |
| 002 | Layer | Dark yellow-brown sandy clay loam subsoil with frequent small to medium-sized fragments of limestone | c 0.4m deep | - |
| 003 | Layer | Light grey-brown limestone cornbrash natural | Depth unknown | - |
| 004 | Fill of 006 | Dark yellow-brown sandy clay loam with frequent small-medium sized fragments of limestone | 0.4m deep | Pottery, tile, animal bone |
| 005 | Fill of 006 | Dark yellow-brown sandy clay loam with occasional fragments of limestone | Depth unknown | Pottery |
| 006 | Ditch | A linear feature, most likely a ditch, with unclear sides | At least 2m long by at least 1m wide by at least 0.5m deep | - |
| 007 | Skeleton | Adult male skeleton with padlocked iron shackles around the ankles and hobnails around the feet. | - | - |



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