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1 SUMMARY

The following report summarises the results of an archaeological excavation undertaken by AOC Archaeology on the 7th September 2004 at Beggarwood Lane, Kempshot Park, Hatch Warren, Basingstoke. The brief was to re-excavate human remains that had been disturbed during the machine excavation of a geotechnical pit on the site. The geotechnical pit in which the remains were found had been partially back-filled. The 'spoil' from the excavated pit was sorted by hand and any human bone found was recovered. The back-filled soil in the pit was then removed by careful mechanical excavation and was hand sorted for human bone. No evidence of in situ human remains or a grave cut were identified. The only finds identified on site was unstratified, disarticulated human bone. The bone underwent osteological analysis and was found to represent the remains of a young adult female.

2 INTRODUCTION

AOC Archaeology was contacted when the excavation of geotechnical pits on site uncovered unexpected human remains. Hampshire Constabulary was initially contacted who then deemed the remains to be archaeological. Under Section 25 of the Burial Act 1857 a licence for the exhumation of human remains was granted by the Home License prior to work on site.

2.1 Site Location (Fig. 1 & 2)

- 2.1.1 The site at Beggarwood Lane, Kempshot Park, Hatch Warren is in the town of Basingstoke and is centred on National Grid Reference (NGR) SU 60081 48139. The site is bound by the lower belt of the Hatch Warren Estate to the north, the M3 to the east, Beggarwood Lane to the south and the Winchester Road (A30) to the west.

2.2 Development Proposals

- 2.2.1 The site is part of an ongoing large development for a proposed scheme of residential accommodation. The scheme proposes to build 28 residential dwellings on the site.

3 ARCHAEOLOGICAL AND HISTORICAL BACKGROUND

3.1 Introduction

- 3.1.1 A number of archaeological investigations have been conducted in the immediate vicinity of the site and there are numerous entries in the Hampshire County Council Archaeology and Historic Building Record for archaeological features or chance finds within 100m of the site. There are no scheduled ancient monuments on the site.

3.2 Geology

- 3.2.1 The site is located directly upon the Upper Chalk formation.

3.3 Prehistoric (before c.AD 43)

- 3.3.1 There is a substantial presence of prehistoric activity in the vicinity. A number of entries are noted in the SMR for prehistoric discoveries within the vicinity of the site. The majority of references in the SMR relate to the Prehistoric period.
- 3.3.2. The local geology in south Basingstoke is chalk, and this provided a constant supply of flint, which could be used to fashion crude tools and weapons and during Palaeolithic times (100,000-12,000 BC).
- 3.3.3 In the Bronze Age two trade routes passed through the Basingstoke area, the first was the Harrow Way which passed close by Stonehenge and still has a road named after it in the town today. The second track to pass into the area is the Ink Pen Ridgeway. Bronze Age activity is represented in the SMR by a round barrow (Ref: 42273) and a crouched beaker burial, (Ref: 54084) located to the east and to the south respectively.
- 3.3.4 During the Iron Age more settlements were established, which would have included hillforts and land enclosures. Ten sites, close to the proposed site contained prehistoric features, mainly ditches representing enclosures, (Ref: 33749, 33855, 33856, 36368, and 36370). Most sites contained associated pits and pottery and all were dated as Iron Age. The SMR Ref 33854 refers to Banjo enclosure that was preserved *in situ* to the north of the current site. Pottery recovered from the site dates it as Iron Age. Two burials containing dog skeletons, dating to the Iron Age were excavated to the south, (Ref: 39658)

3.4 Roman (c. AD 43 - 450)

- 3.4.1 Romans roads were constructed throughout the south of England linking London, Winchester, Salisbury and Cirencester. One of these roads, the Silchester to Winchester road passed close to where Basingstoke is today, part of this road still exists in the town and is still called Roman Road. Only one site that has been excavated close to the excavation was a cremation and associated grave goods including a beaker, flagons, cups and jars (Ref: 42356) on Beggarwood Lane

3.5 Saxon (c.451-1065)

- 3.5.1 No Saxon archaeology has been recorded in this area.

3.6 Medieval (c.1066 - 1485)

- 3.6.1 No medieval archaeology has been excavated in the local area. The bulk of medieval archaeology is located to the far north towards the town.

3.7 Post medieval (1485 – 1900)

- 3.7.1 No Post medieval archaeology has been recorded in the SMR.

4 AIMS OF THE INVESTIGATION

4.1 The primary aim of the investigation was to retrieve and record the previously disturbed human remains and to record and carefully remove any associated grave goods that may have accompanied the burial. Other aims were:

- Is there any indication that this burial may be part of a wider cemetery?
- Is it possible to securely date the inhumation?
- Are there any other archaeological remains within the previously disturbed pit?

4.2 The aims of this investigation may be modified in the light of the on-going results of the excavations.

5 STRATEGY

- 5.1 Prior to work on site a unique site code was obtained from Hampshire County Council (A2004.44). Under Section 25 of the Burial Act 1857 a licence for the exhumation of human remains was granted by the Home Office.
- 5.2 On arrival at the site it was discovered that the geotechnical pit in which the remains were found had been partially back-filled. The 'spoil' from the excavated pit was sorted by hand and any human bone found was recovered. The back-filled soil in the pit was then removed by careful mechanical excavation and this was also hand sorted for human bone. The back-fill was removed to a depth of 2.20m (164.87m OD) where the base was identified. The sides and base of the pit were cleaned in order to identify any evidence of a grave. However, no evidence of *in situ* human remains or a grave cut were identified. On the request of the Senior Archaeologist for Hampshire County Council, Stephen Appleby, the ground surrounding the pit was then reduced (Fig. 2). This was reduced to a depth of 0.74m where undisturbed, natural chalk deposits were identified. No other grave cuts or archaeological features were identified. Three dimensional recording of the pit and the reduced area was employed through photography and survey.
- 5.3 All of the work was carried out in line with Archaeological Guidance Paper (AGP): 3, Standards and Practices in Archaeological Fieldwork (English Heritage June 1998). The work was monitored by Stephen Appleby (Senior Archaeologist, Hampshire County Council). All work was undertaken according to the Health and Safety requirements of the main contractor and CDM regulations.
- 5.4 The human bone from the site was retained and cleaned at the AOC Archaeology offices. The remains then underwent full osteological analysis (Appendix A).
- 5.5 The site archive was prepared in accordance with the Hampshire County Council guidelines. The whole archive will be stored under suitable conditions as arranged by AOC Archaeology until deposition with an appropriate local museum.

6 RESULTS

6.1 The Archaeology

- 6.1.1 No archaeological features were identified on site. The section revealed a reddish brown topsoil (001), overlying a 0.46m layer of clay with occasional flints (002). Below this was a 0.28m layer of mixed chalk and soil (003) that was probably the result of ploughing. Underlying this was the natural chalk deposits (004). The human bone (005) was disarticulated and had been removed from its primary context; it was observed that the soil adhering to the bone appeared to be from a chalky matrix. It is believed the excavation of the geotechnical pit removed the grave in its entirety.

6.2 Finds

- 6.2.1 The only finds identified on site was unstratified, disarticulated human bone (005). The details of the osteological analysis of this material can be found in Appendix A.

7 CONCLUSIONS

- 7.1 No archaeological features were recorded on site. The fact that the majority of the inhumation was present does suggest that this was an *in situ* burial, rather than disarticulated human remains lying with the ploughsoil. It seems that during the excavation of the geotechnical pit the machine cut right into natural chalk therefore removing all evidence of any grave cut.

8 RECOMENDATIONS

- 8.1 The fact that the remains were unstratified with no associated dating evidence significantly reduces the potential of the remains. Bronze Age, Iron Age and Roman burials have been identified in the locality of the site. It is recommended that Accelerator Mass Spectrometry (AMS) radiocarbon dating be carried out on the material in order to date the remains. If carried out an osteologist should be consulted to make sampling recommendations.
- 8.2 The only finds to be retained were the human remains; it is recommended that they be archived with the site records at the Hampshire County Museums Service.

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10 APPENDIX A – HUMAN BONE ANALYSIS

10.1 Methodology

The human bones were analysed in accordance with recommendations by English Heritage (1991 & 2002) and the IFA (Brickley & McKinley 2004). A full inventory of the bones and dentition were created. This was done for each segment of bone; for example long bones were scored for the proximal, mid-shaft and distal portions.

10.1.1 Preservation & completeness

The degree of preservation for the skeleton was assessed and classed as good (1), moderate (2) or poor (3). The percentage completeness of the skeleton was noted. This was calculated on the basis that the skull equated to 20% of the skeleton, the upper limbs 20%, the torso 40%, and the lower limbs 20%.

10.1.2 Age determination

Ageing techniques are based on physiological changes in the skeleton; from these changes a biological age is given. Age determination was based on the morphology of the pubic symphysis (Brooks & Suchey 1990), changes at the auricular surface (Lovejoy *et al* 1985) and dental attrition (Brothwell 1981). An age estimation was established using as many methods as were applicable.

10.1.3 Sex determination

Methods of sex determination are based on the secondary sex characteristics that develop at puberty. An adult female skeleton is generally gracile with a larger pelvic cavity that is modified for childbirth. The male skeleton is generally more robust with a narrower pelvis. The biological sex of the adult skeletons was based on the morphology of the pelvis following (Phenice 1969) and (Buikstra & Ubelaker 1994) and the skull (Acsadi & Nemeskeri 1970). The sex of the individual was based on as many methods as applicable. From this an overall biological sex was assigned to the individual. The individual was then classed into one of the following categories; undetermined sex, female, probable female, intermediate, probable male or male.

10.1.4 Metric and non-metric data (normal variation)

A series of standardised measurements were taken using sliding callipers and an osteometric board. Metrical data was recorded based on the definitions of Brothwell (1981) and Howells (1973). The length measurements of the long

bones are used to calculate stature while certain other dimorphic measurements and indices can be used to determine sex and ethnicity. In this study height was calculated using the formulae of Trotter (1970) and Trotter & Gleser (1952 & 1958). The following indices were also calculated: cephalic, platymeric and platycnemic.

Non metric traits are minor genetically determined variations that occur in the skeleton e.g. the retention of a metopic suture into adulthood. When studied it is thought they can identify the 'biodistance' of one group to another as well as inter-relatedness of individuals within a population. Non-metric traits were recorded following Brothwell (1981) Berry & Berry (1967) and Finnigan (1978).

10.1.5 Pathology

The skeleton was assessed for joint disease, spinal pathology, sites of entheses and dental health. Osteoarthritic changes were recorded following the diagnostic criteria of Rogers *et al* (1987) and Rogers & Waldron (1995). Dental health was recorded following Hillson (1996) and Brothwell (1981). Any pathology was described and diagnosis was based on findings in Aufderheide & Rodriguez-Martin (1997) and Ortner & Putschar (1981).

10.2 Results

The human bone represents the remains of one individual. The remains were in a moderate state of preservation. There was a high level of post mortem damage to the skeleton; with a number of 'fresh' breaks and absent articular surfaces. For many of the skull fragments the cortical bone was eroded exposing the diploe. The remains represented 60% of the skeleton. The relative incompleteness of the remains and lack of articular facts will have implications for the analysis of the material.

The individual was categorised as a young adult female aged between 17-29 years. Stature was calculated based on the right radius; the only intact long bone. This was calculated as $1.52\text{m} \pm 4.43\text{cm}$. The platymeric index was calculated based on the left femur. This gives a figure of 64.7% (platymeric). The platycnemic index; based on the right tibia; was calculated as 71% (eurycnemic). No joint disease or pathology was noted on the skeleton. The individual displayed high levels of calculus and alveolar recession.

10.3 Conclusion

The remains are of a young adult female and are represented by 60% of the skeleton. Stature was calculated as $1.52\text{m} \pm 4.43\text{cm}$. No pathology was observed in the skeleton.

The fact that the remains were unstratified with no associated dating evidence significantly reduces the potential of the remains. Bronze Age, Iron Age and Roman burials have been identified in the locality of the site. It is recommended that Accelerator Mass Spectrometry (AMS) radiocarbon dating be carried out on the material in order to date the remains. If carried out an osteologist should be consulted to make sampling recommendations.

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