

The Manor, Old Windsor, Berkshire

An Archaeological Watching Brief

For Mr Michael Smith

by Danielle Milbank and Jo Pine

Thames Valley Archaeological Services Ltd

Site Code MOW 01/63

March 2007

Summary

Site name: The Manor, Old Windsor, Berkshire

Grid reference: SU 993 747

Site activity: Watching Brief

Date and duration of project: 27th March to 25th April 2006

Project manager: Steve Ford

Site supervisors: Sarah Coles, Steve Hammond, Richard Oram and Sean Wallis

Site code: MOW 01/63

Summary of results: Disarticulated human bone was recovered from a mass grave or charnel pit, probably medieval. Two undated pits were also present

Location and reference of archive: The archive is presently held at Thames Valley Archaeological Services, Reading and will be deposited at Reading Museum in due course.

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Report 01/63

Introduction

This report documents the results of an archaeological watching brief carried out at The Manor, Old Windsor, Berkshire (SU 993748) (Fig. 1). The work was commissioned by Mr Pasquale Nicosia of Pinders Ltd, 911A Leek New Road, Badderley Green, Stoke-on-Trent, Staffordshire, ST2 7HQ on behalf of Mr Michael Smith, The Manor, Old Windsor, Berkshire, SL4 2JW.

Planning consent (473434) has been granted by the Royal Borough of Windsor and Maidenhead for the demolition of the existing late Victorian building and the construction of a new nursing home and associated parking. The consent is subject to a condition relating to archaeology and as the site lies within a Scheduled Ancient Monument the relevant consent (SMC746/01) was also obtained from the Secretary of State. An excavation had previously taken place on the site when an area of the designated flood plain was encroached upon by the proposed footprint of the new nursing home (Ford and Hindmarch 2005). An area of higher ground was terraced in front of the footprint of the new build to compensate for this loss of flood plain. Due to the presence of medieval deposits together with pottery of Saxon date within this excavated area, a watching brief was subsequently required during the excavation of the footings of the new nursing home and the service runs.

This is in accordance with the *Scheduled Monuments and Archaeological Areas Act* (1979), the Department of the Environment's Planning Policy Guidance, *Archaeology and Planning* (PPG16 1990), and the Royal Borough's policies on archaeology. The field investigation was carried out to a specification approved by Mr Rob Perrin of English Heritage (advising the Secretary of State) and comprises the final phase of archaeological work on the site covered by the Scheduled Monument consent and planning consent. This phase of fieldwork took place between the 24th March and 25th April 2006, and the site code is MOW 01/63.

The archive is presently held at Thames Valley Archaeological Services, Reading and will be deposited at Reading Museum in due course (accn. Code REDMG:2002.1).

Location, topography and geology

The site is located in Old Windsor, which lies 3km to the south-east of Windsor (Fig. 1). The River Thames flows south, to the immediate east of the site, and Windsor Great Park stands to the south-west. The site lies at

the north-eastern outskirts of the settlement, on flood plain gravel of the River Thames (BGS 1981), at c.18m above Ordnance Datum. The site is bounded by fields to the north and north-west, a river channel or possible mill leat to the east and south-east and Church Road to the west and south-west (Fig. 2). The site was occupied in part by the remains of the demolished large Victorian detached house, formerly a nursing home. The remainder of the site comprises the grounds of the house, driveways and fairly flat lawn areas.

Archaeological background

Old Windsor, now a village, was an important settlement in Saxon times and the site of the late Saxon royal palace of Edward the Confessor which was also maintained under the early Norman kings, and is documented between AD1061 and 1107 (Astill 1978). Kings William I and Henry I both held courts in Windsor (particularly, it seems, at Christmas) according to the Anglo-Saxon Chronicles (Swanton 2000, *passim*). Excavations carried out between 1953 and 1958 in an area to the south of the church revealed considerable information about the nature and development of the settlement but only an interim summary has yet appeared in print (Wilson 1958).

The development site itself has undergone previous archaeological excavation; this background section draws mainly on the report for that work (Ford and Hindmarch 2005). An area of ground was terraced in front of the proposed footprint of the new nursing home to compensate for a loss of part of the Thames Valley flood plain and within this area an excavation was undertaken by Thames Valley Archaeological Services. An area of c.1900sq m was stripped to the formation levels for the flood compensation area. These levels were reached in a substantial part of the area without removal of the subsoil but limited excavation took place at the far north and south of the stripped area (Fig. 3). The area directly adjacent to the demolished manor contained evidence of medieval activity in the form of pits and chalk wall structures and a small number of pits were recorded at the southern end of the excavation area. The majority of the features can be related to 18th and 19th century buildings shown on the First Edition Ordnance Survey Map of 1863-71.

Other archaeological work has been undertaken in the near vicinity. Roman pottery and building materials have been revealed in an area to the south-east of the church and within the churchyard itself (Wilson 1958) suggesting the presence of a Roman settlement in this area. Reused tile and stray finds of pottery are recorded from various locations. Early Saxon deposits are also present with occupation remains located to the south-west of the church and stray finds of Saxon pottery from within the graveyard (Ford 1993). Watching briefs and trial trenches to the south revealed little and a series of recent watching briefs along Church Road to the west of the church and within the churchyard have also been negative (Coles 2003; Hardy, 2002; Hull 1999; Pine and

Jenkins 2004; Pollinger 1997; Saunders 1998, Wallis 2003). However, a small evaluation within the graveyard revealed 22 sherds of unstratified medieval pottery (Ford 1993) while a watching brief at Priory Cottage located unstratified sherds of late Saxon/early medieval pottery in addition to an undated male skeleton in a shallow grave (Drewett 1972). Further burials have been located to the north of Church Road suggesting that this area was within the graveyard, before it was licensed in 1225 to be enclosed, and the old road (to the south-west of the church) was diverted to its present location, north of the graveyard (Church Road) (Astill 1978, 71). Of more significance however, are the results of an evaluation and excavation further to the west in The Paddock, adjacent to Church Road, which revealed a complex of medieval deposits including ditches, gullies, pits, postholes and layers indicating medieval occupation, including iron working in the 12th century (Mudd 1987).

Objectives and methodology

The purpose of the watching brief was to record the presence/absence, extent, condition, character, quality and date of any archaeological deposits affected by the development. This was to involve monitoring ground reduction and the excavation of test pits, footings and service trenches. Test pits were to be excavated by machine under archaeological supervision. Features revealed by footing trenches were to be hand cleaned and if necessary, excavated sufficiently to establish their character, date and significance. Service trenches were to be excavated by machine under archaeological supervision, however a portion was excavated without an archaeologist present and human remains were discovered (see below). These were moved only when the relevant licence had been granted by the Home Office. All spoilheaps were monitored for finds.

Results

Service Trenches (Fig 3)

Two stretches of service trench were excavated originating from the same junction. The primary stretch (A) entered the property 0.2m north of the electricity substation on the south border of the site and extended for 37m NNW. It was 0.8m wide and was up to 0.95m deep in places. It then branched with the primary stretch extending for 80m to the north east. This stretch was 0.5m wide, and was up to 0.7m deep in places. The second stretch (B) extend for c. 65m to the east and partly traversed the previous excavation area. The stratigraphy varied within the different segments of the trench. Within stretch A, for the first 10m the stratigraphy was complicated by the presence of cut features and is described in detail below. For the remainder of stretch A, the stratigraphy comprised topsoil/Tarmac c.0.20m deep overlying bands of made ground but with no natural

geology encountered. For stretch B the stratigraphy was typically turf/topsoil 0.2m thick overlying black/brown silt with some brick rubble up to 0.5m thick in places but shallower to the east. Again no natural geology was encountered. Somewhat surprisingly no archaeological features or deposits were observed in this service trench and this may be a result of the trench lying further south than the location of the main excavated features. It is known from the previous fieldwork work on the site that following the ground reduction which precipitated the excavation the area was then raised by the creation of the new lawn and it is also possible that the cable trench was founded within this redeposited layer.

As discussed above, within the first 10m of stretch A, the stratigraphy was complicated by the presence of cut features and that of a feature considered a mass grave cut, 1000. The stratigraphy observed comprised topsoil 0.1m thick, which overlay a layer of made ground (1050) 0.4m thick (Fig. 5). This sealed a possible pit 1002 filled with pale yellow chalky silt (1054) which contained chalk nodules, some human bone fragments but no dateable finds. A old service cut 1003 was also observed at the eastern end of the trench. Below 1003 at 1.85m from the south end, a semi-circular treebole or possible pit 1001, 0.8m in diameter, was cut into the gravel geology (Fig. 4). It was filled with, dark brown silty gravel (1056), but did not contain any finds or dating evidence.

Both features 1002 and 1003 truncated a cut 1000 which contained human bone from within its sandy silt fill matrix (1053). The bone was disarticulated and distributed fairly evenly throughout the deposit but it is possible that there were once articulated skeletons *in situ* prior to disturbance by the excavation of the service run. Further skeletal remains were retrieved from the displaced spoil (1052) initially generated from cut 1000. It is considered that deposits 1052 and 1053 are in fact both the fill of cut 1000 and the finds have been analysed as such. Pottery, iron nails, a coin and fragments of tile were also recovered from contexts (1052 and 1053), however, the majority were from deposit 1052. Cut 1000 measured 4.4m long, cut vertically, and was 0.8m wide as seen in the service trench was at least 0.42m deep but was not bottomed as it was below the formation level for the pipe. No further human bone was observed in the remaining fill. The cut is considered to be a mass grave yet given the disarticulation of the bones a charnal pit is also possible. At the south end of the trench on the west side, cut 1000 truncated a layer (1055), which comprised grey clay silt with frequent small flint pebbles, and was 3.2m long in section and 0.24m thick. This layer overlay the gravel geology and was only visible in the ENE-facing section, and no finds or dating evidence were recovered but it could have been a buried soil deposit and at least predates the grave cut.

Test Pits

These were excavated within and adjacent to the footprint of the new development. Test pits 1 and 5 were not excavated as originally intended.

Test Pit 2

This measured 0.7m wide, 2.25m long and was 1.76m deep. The stratigraphy observed comprised 0.8m of topsoil and made ground, which overlay demolition rubble with frequent chalk, 0.1m thick. This in turn overlay grey brown silty clay 0.86m thick, which overlay the gravel geology. No archaeological deposits were encountered.

Test Pit 3

This measured 0.7m wide, 2.4m long and was 2.5m deep. The stratigraphy observed comprised topsoil 0.3m thick, which overlay a rubble layer with frequent brick and tile fragments, 0.2m thick. This overlay grey brown clay silt, possible alluvial, 2m thick. This in turn overlay the gravel geology. No archaeological deposits were encountered.

Test Pit 4

This measured 0.7m wide, 2.3m long and was 3.5m deep. The stratigraphy observed comprised demolition rubble 0.4m thick overlying light grey brown clay silt 0.4m thick. This overlay grey and brown clay and silt layers 1.3m thick which, due to the depth and instability of the surrounding ground, could not be closely observed but were thought to be alluvial deposits. These overlay peat and alluvial silts and clays 1.4m thick. No archaeological deposits were encountered.

Test Pit 6

This measured 0.7m wide, 2.2m long and was 2.3m deep. The stratigraphy observed comprised made ground and topsoil 0.3m thick, which overlay demolition rubble 0.16m thick. This in turn overlay grey brown sandy silt, a buried soil, 0.34m thick. This in turn overlay a layer of demolition rubble 0.1m thick, which in turn overlay dark grey brown sandy silt 0.9m thick. This overlay the gravel geology. No archaeological deposits were encountered.

Test Pit 7

This measured 0.7m wide, 2.4m long and was 2.5m deep. The stratigraphy observed comprised topsoil 1.3m thick, which directly overlay the gravel geology. No archaeological deposits were encountered.

Footings Trenches

The majority of the footings were to be dug within the area of the footprint of the recently demolished Victorian building. These were dug by machine in several stages, and 0.35m of overburden/topsoil was removed prior to digging.

In the south-east portion, the footings were 0.8m wide and 0.9m deep overall. The stratigraphy observed here consisted of mid to dark brown/grey silt 0.2m thick, which overlay yellowish/brown sandy gravel 0.4m thick. This in turn overlay dark brown silt with frequent root action to 0.9m. At the centre of the south side, a portion of the footings was excavated to 1.3m, which showed 0.4m of the gravel below the brown silt.

The north-east part of the footing trenches comprised stratigraphy as above, though a 2.5m by 2.5m area was excavated to 3m deep. Here, the dark brown silt layer was 0.8m thick. This overlay a patch of red brick rubble with yellow sandy mortar 0.5m wide in section and 0.4m thick. This in turn overlay dark grey silty clay 1.0m deep, which overlay dark grey (alluvial) clay, to the base at 3.0m. No gravel was observed in this area.

The north-west portion of the site was excavated to a depth of 0.9m, and was 0.8m wide, as before. The stratigraphy observed here was reddish/brown silt 0.2m thick, which overlay dark grey/brown silt with occasional brick rubble, roots and small flint pebbles. At the centre of the north side, the footings were dug to a depth of 1.2m, where demolition rubble 0.4m thick overlay dark grey/brown sandy silt with occasional brick and tile fragments 0.4m thick. This in turn overlay sand and gravel.

The eastern side footings were excavated to 2m deep, and stratigraphy here comprised made ground and demolition rubble 0.8m thick. This overlay dark grey silty clay 0.9m thick, with occasional mortar flecks and brick and tile fragments. This in turn overlay gravel and clay alluvial deposits.

The south-west area of footings was dug to a depth of 2m. Here, the stratigraphy comprised bands of grey/brown silty clay and orange sandy gravel with frequent brick and tile fragments, 0.8m thick. This overlay dark grey/brown silty clay with occasional brick and tile fragments.

Overall, the majority of the footing trenches were excavated through made ground layers and demolition rubble. No archaeological features or deposits were identified in the footing trenches.

The Finds

Pottery by Paul Blinkhorn

The pottery assemblage comprised a mixture of Roman and early medieval wares, 7 sherds with a total weight of 136g. It was all unstratified. The medieval wares were classified utilizing the codes and chronology used by Mephram (1993, 52-3) for pottery from the excavations at Jennings Yard, Windsor, as follows:

Q400: **Medieval Sandy ware**, 11th-14th century? Dense sub-rounded white and clear quartz up to 0.5 mm.

Glazed and unglazed. All the pottery of from this site was unglazed. 2 sherds, 31g

S402: **Shelly ware**, ?early 11th – late 12th century. Sparse shell platelets up to 2 mm, sparse subrounded grey quartz up to 1 mm, rare angular red ironstone up to 1 mm. 11th - 12th century?. Source in the London area,

Museum of London type-series fabric SHEL, which was at its most common in London in the late 11th century (Vince 1985, 37-8). 3 sherds, 31g

The pottery occurrence by number and weight of sherds per context by fabric type is shown in Appendix 1.

Human Remains by Ceri Falys

A substantial amount of co-mingled human skeletal remains was salvaged from the spoil and excavated from feature 1000. The remains are believed to be of medieval date, and originated from a single mass grave cut (1000) and a modern service cut through this (1002). Human remains were still visible in the sections of the dug trench. In addition, some fragments of pot were recovered, along with a few small fragments of animal bone. Osteological analysis was carried out with the goals of identifying: the minimum number of individuals represented; the age and sex of individuals, and if possible, any non-metric and pathological alterations present. Context 1054 contained only a few small human bone fragments identified as a distal humerus, two rib shafts, a piece of cranium, and a portion of the atlas (1st cervical vertebra). These have certainly been disturbed from feature 1000. These elements did not offer any demographic data.

Preservation

Complete skeletons were not present at the time of recovery, however, it is believed that at prior to removal the individuals were indeed articulated. A total of 496 pieces of bone were analysed. The majority of bones were fragmented, with most surfaces showing at least some damage and cortical exfoliation. The minimum number of individuals (MNI) present was 3 adults and 2 sub-adults (Appendix 2, Tables 1 and 2). This was based on the presence of three fully fused left ulnae, three left femora and three left tibiae. The sub-adults were identified based on the identification of numerous unfused elements of an individual under the age of 5 years, as well as elements indicating an older sub-adult around the age of 10 years: thin cranial bones (Brothwell 1972), and a right mandible with erupting teeth (Brothwell 1972, Bass 1995).

Demography

Subadults

Age estimations for the sub-adult individuals were based on the presence of unfused skeletal elements, as well as the degree of dental development in a single right mandible (Table 1 and Table 3). As mentioned previously, several small unfused bones were recovered from spoil context (1052): 36 such elements were identified the remains of an individual approximately aged between 3 and 5 years old. This estimate was determined by overall appearance and length of the longbones and the lack of fusion of the vertebral bodies and the neural arches, which fuse, according to Bass (1995), between the ages of 3 and 7 years. An older juvenile was identified from

the dental development of the right mandible, which indicated an individual approximately 10 years old +/- 30 months (Brothwell 1972, Buikstra and Ubelaker 1994, Bass 1995, van Beek 2002).

It is noted that the presence of unfused epiphyses does not always indicate juvenile individuals. In this instance, two other elements (a vertebral plate, a sternal end of a clavicle) were identified with unfused epiphyses (Table 1 and Table 2). Vertebral plates can remain unfused up until the age of 25 (Bass 1995), while it is reported the sternal end of the clavicle can remain unfused until the age of 23 to 24 (Ferembach *et al.* 1980) or even up to the early 30s (Buikstra and Ubelaker 1994), depending on the sex of the individual.

Sex determination in juvenile skeletons is well known to be less than reliable, and thus was not attempted.

Adults

Skeletal elements providing age indicators were limited due to poor preservation. Age was estimated from dental attrition of a right mandible (Brothwell 1972), and the morphology of the three auricular surfaces of the ilia present (Lovejoy *et al.* 1985), although the latter of the two methods is believed to be less reliable than other skeletal age estimation techniques, other options were absent. Age estimation via assessment of the pubic symphysis morphology (Brooks and Suchey 1990) and sternal rib ends (Iscan and Loth 1986) were not possible, due to absence of the necessary elements and being unable to confidently identify the 4th sternal rib end from a large assemblage of fragmented ribs. The state of fusion of cranial sutures (Meindl and Lovejoy 1985) was also not employable, as large portions of sutures were missing due to fragmentation.

Dental attrition estimated the age of the individual to be between 35 and 45 years at the time of death (Table 3). Auricular surface ageing was used on 3 of the 4 surfaces present, as one was very damaged (Table 4). The two left auricular surfaces "AS2" and "AS3" produced an age estimation of 40-44 years, while the right auricular surface "AS1" suggested an age of 45-49 years at the time of death.

Sexually dimorphic elements were also limited, as all skulls and os coxae were highly fragmented. Sex was determined using cranial dimorphism following some skull reconstruction (Ferembach *et al.* 1980, Buikstra and Ubelaker 1994; Brothwell 1972). Sex was also *estimated* based on the morphology of the distal humerus (Falys *et al.* 2005). Two crania were able to be reconstructed enough to assess several sexually dimorphic features. As described in Table 5, "Skull 1" was determined to be probably female, while the "Skull 2" was male. A third skull reconstruction was attempted, but too few pieces remained. These bones were very thin, and simply suggested that the individual was young at the time of death (Brothwell 1972).

Assessment of the proposed sexually dimorphic aspects of the distal humerus (Falys *et al.* 2005) was also undertaken to estimate the sex of the two intact distal humeri present in the assemblage. As described in Table 6,

“Humerus 1” indicated a male individual, while “Humerus 2” suggested the individual was probably female. It is noted that this technique was employed as only an estimate of sex, as all other skeletal sex indicators were lacking. Use of this technique has been very limited on archaeological populations, however, it is suggested as a useful method for sex estimation for co-mingled remains and situations in which the cranium and os coxae are highly damaged or absent, as distal humeri are more frequently preserved in the burial environment (Rogers 1999).

Non-metric traits

Non-metric traits were observed on three individual bones. Accessory transverse foramen were observed on a lower cervical vertebra (Bikstka and Ubelaker 1995). The left side foramen was complete, while the right side was partial. Lambdoid ossicles were observed on “Skull 2”. “Humerus 2” had a septal aperture. The presence of a septal aperture has long been *suggested* to indicate a female individual (St. Hoyme and Iscan 1989), but the theory has not yet been substantiated.

“Mandible 2” was missing the third mandibular molar. The remaining teeth had substantial dental attrition, indicating it was indeed an adult mandible. The third molars are the most frequently affected congenitally absent teeth (Bass 1995), and this is more than likely the case in this situation.

Pathology

Several pathological alterations were observed on skeletal elements.

1. Two incisors, a canine, and the first 2 molars were still articulated to “Mandible 2”. All teeth demonstrated some degree of occlusal wear and calculus on the lingual surface. As already mentioned, this attrition was used to help with the estimation of age at death.

Linear horizontal grooves (linear enamel hypoplasia) were also observed on the incisors and canine. This defect of the dental enamel indicates the individual underwent some systemic stress (e.g. malnutrition or a high fever) during the time the tooth crowns were developing (Goodman and Rose 1991, Buikstra and Ubelaker 1994, Ortner 2003).

2. Indicators of osteoarthritis were evident in several elements of the co-mingled remains. Three lower lumbar vertebrae demonstrated large claw-like osteophytic marginal growths. In addition to osteophytes, Schmorl’s Nodes were observed on three lumbar vertebrae and one lower thoracic vertebra. Two such Schmorl’s nodes were located on the inferior surface of the vertebral bodies and each associated with erosive lesions extending to the border of the vertebral foramen. Also, the inferior articular processes of one of the lumbar vertebrae were absent, with modified articulations made in the vertebral arch, just inferior to the spinous process.

An area of non-porous eburation was observed on the lateral aspect of the head of a right first metatarsal, which was also found in association with a large lesion on the medial aspect.

3. Substantial plaque formation was observed on several elements including: a distal left humerus, proximal aspects of both a left and a right femur, two ilia (left and right) on the posterior surface superior to the anterior iliac spine, and the distal half of the sacral vertebral bodies on the pelvic surface. The new bone deposition was discoloured and highly disorganized. As it cannot be confirmed that all skeletal elements originated from the same individual, the distribution of lesions cannot be used to suggest a differential diagnosis.

Other finds by Jo Pine

Metalwork

Seven iron nails were recovered. From 1000 (1053) five nails weighing 28g were recovered. From 1000 (1052) six nails weighing 104g were recovered.

Tile

Nine fragments of tile and brick fragments were recovered from cut 1000. From spoil 1052 a tile fragment weighing 13g and from fill 1053 eight fragments of tile and brick weighing 293g were retrieved.

Coin by Sean Wallis

One coin was recovered from the displaced spoil (1052). It is a badly corroded George III (1760-1820) copper halfpenny. This is from the 3rd issue of coins, issued by the Soho mint, and is dated 1799.

Conclusion

This watching brief uncovered what is considered to be a mass grave (1000) as the grave cut contained multiple individuals and appeared to be one deposit. It is possible that post-medieval and modern activity has affected deeper levels, obscuring separate grave cuts and displaced some of the remains. It is more likely, though, that the burials were contemporary with one another within one large feature. This was truncated by later features and therefore may have covered a considerably larger area, the human bone in 1002 perhaps being a result of this disturbance. Unfortunately no pottery was found directly from the fill 1053 but five sherds, four medieval, were recovered from the nearby spoil (1052). The George III half penny (1799) also from the displaced spoil, probably did not come from the grave.

If medieval in date, the grave location is not surprising given that burials have previously been located to the north of Church Road suggesting that that area, and also this site, were within the original graveyard, before

it was enclosed in 1225. Yet if later medieval or post-medieval in date other factors could determine this location which appears to be just outside the churchyard. Disease epidemics are known to result in a large number of bodies for burial in a short period of time, requiring mass graves or plague pits on unconsecrated ground (though in some cases additional ground was consecrated for the purpose). As the minimum number of individuals was five this explanation appears unlikely in this case. The burial of these remains outside the churchyard is more likely to be due to Church law, for example earlier Church of England law states that those who have committed suicide may not be buried on consecrated ground, but are buried just outside the churchyard walls.

The area of the site previously occupied by the Victorian house did not reveal any archaeology when the footing trenches and service runs were excavated which for one of the service trenches is somewhat surprising given the previous work in the area (Ford and Hindmarch 2005). For the new building the majority of the footing trenches were excavated through Victorian demolition rubble onto alluvial deposits or natural gravel and this stratigraphy suggests the construction of the Victorian building probably removed any traces of previous deposits that might have existed in this area.

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APPENDIX 1: Pottery occurrence by number and weight (in g) of sherds per context by fabric type

<i>Context</i>	<i>Roman</i>		<i>S402</i>		<i>Q400</i>	
	<i>No</i>	<i>Wt</i>	<i>No</i>	<i>Wt</i>	<i>No</i>	<i>Wt</i>
1052	1	29	3	31	1	9
15 - 25m spoil heap A	1	46			1	21
Total	2	75	3	31	2	30

APPENDIX 2: Human remains

Table 1 – Sub-Adult Skeletal Inventory (MNI)

Element	Side		Fusion		Demographic Data	Notes
	L	R	P	D		
Cranial	n/a					
Mandible		1			Approx. 10 years	
Ribs	22		U		Approx. <5 years	
Vertebra	2		U		Approx. <5 years	bodies only
- epiphyseal plate	1		U		<25 years	
Cervical	1		U		Approx. <5 years	anterior arch
Thoracic	n/a					
Lumbar	n/a					
Sacrum	n/a					
Ilium		1		U	Approx. <5 years	
Ischium						
Pubis						
Sternum	1		U	U	Approx. <5 years	
Scapula		1				very thin
Clavicle	1		U		Approx. <5 years	sternal end = unfused
Humerus	1		U	U	Approx. <5 years	
Radius	1		U	U	Approx. <5 years	
Ulna	1	1	U	U	Approx. <5 years	
Carpals						
Metacarpals						
Phalanges						
Femur	1	1	U	U	Approx. <5 years	R side = distal only
Tibia						
Fibula						
Patella						
Tarsals						
Metatarsals						
Unidentified	2					
MNI			2		Approx. <5 years, Approx. 10years, and <25 yrs	

Legend: P = Proximal articulation
 F = Fused
 L = Left

D = Distal articulation
 U = Unfused
 R = Right

APPENDIX 2: Human remains (cont'd)

Table 2 - Adult skeletal inventory (MNI)

Element	Side (No. Frags)		No. Frags	Demographic Data	Notes
	L	R			
Cranial	n/a				
Mandible		1		* Pathology, *Age, *NMT	* M3 missing, Calculus, attrition, linear enamel lines
Ribs	-		84		
Vertebra					
Cervical	n/a		4	* NMT	* non metric trait
Thoracic	n/a		9	* Pathology	* Schmorl's node
Lumbar	n/a		13	* Pathology	* osteophytes * Schmorl's nodes
Sacrum	n/a		2	* Pathology	* Schmorl's node
Ilium	2	2		* Age	* 3x auricular surfaces
Ischium					
Pubis					
Sternum	n/a				
Scapula	2	2			
Clavicle	2	2		* Age	* 2x unfused sternal ends
Humerus	2	1		* NMT, *Pathology	* 1x perforated septum * 1x enthesophyte (?)
Radius	2	-			
Ulna	3	-			
Carpals					
Metacarpals			16		
Phalanges	-	-	15		
Femur	3	2		* Pathological	* 2x prox plaque
Tibia	3	1			
Fibula					
Patella					
Tarsals					
Metatarsals			10 total		* eburnation MT1
MNI	3				

Legend: * = pathology or nonmetric trait (NMT).

APPENDIX 2: Human remains (cont'd)

Table 3 – Dental Age estimation (Brothwell 1972, Buikstra and Ubelaker 1994, Bass 1995, van Beek 2002)

Feature	“Mandible 1”	“Mandible 2”
Side	Right	Right
M3 Present?	No (sub-adult)	No (congenitally absent?)
Observations	No pathology	Linear enamel hypoplasia
Attrition	No	Yes Age estimate: 35-45years
Age Estimate	10 years +/- 30 months	35 – 45 years

Table 4 – Age estimation using Auricular Surface (AS) (Lovejoy *et al.* 1985)

Element	Suggested Phase	Age Estimate
“AS 1” (right)	6	45 - 49 years
“AS 2” (left)	5	40 – 44 years
“AS 3” (left)	5	40 – 44 years

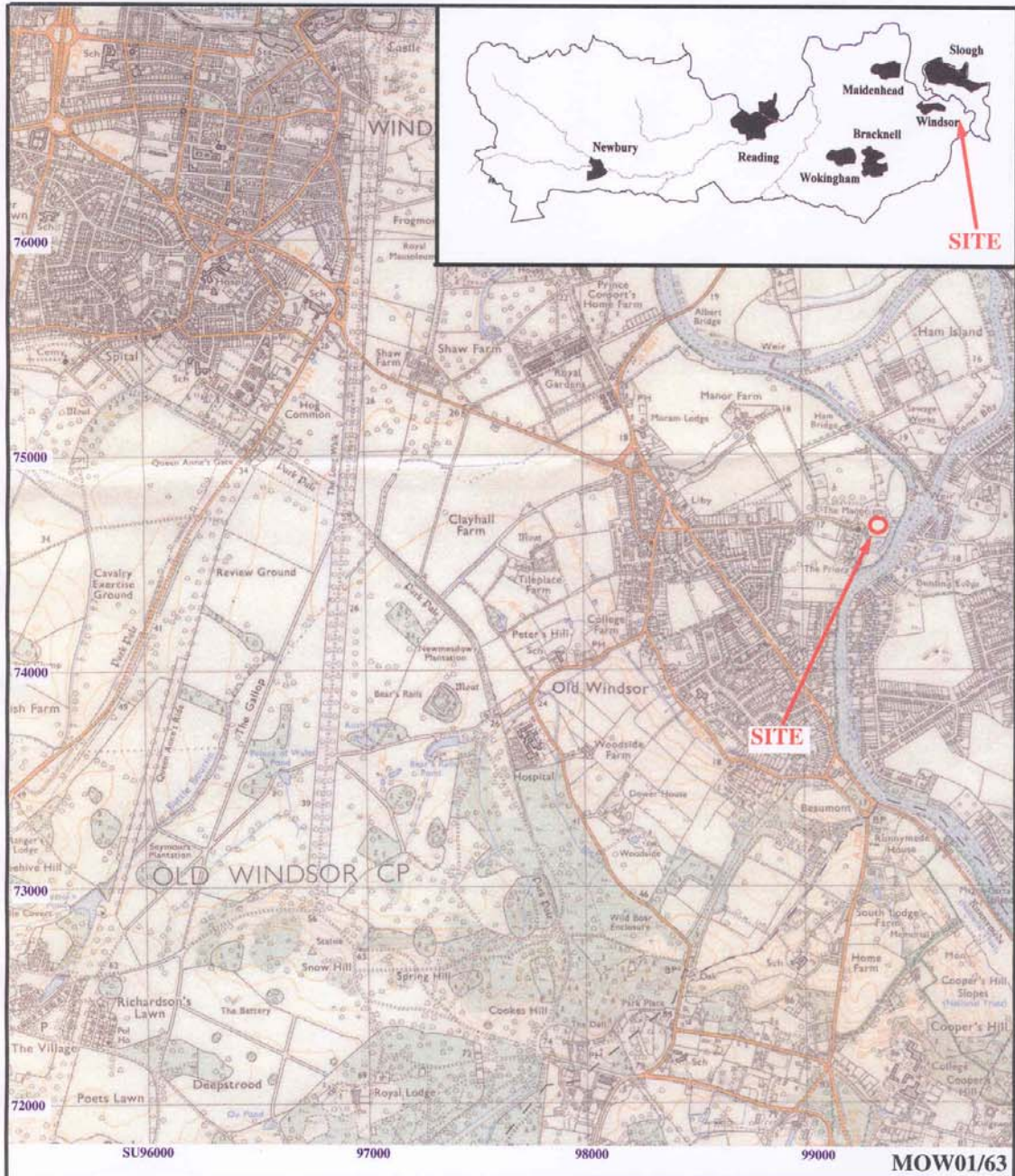
Table 5 – Sexual dimorphism of skulls (Buikstra and Ubelaker 1994)

Sexually Dimorphic Feature	“Skull 1”	“Skull 2”	“Skull 3”
General Size	Small: ♀	Robust: ♂	Small
Architecture	Moderate muscle markings: Indeterminate sex	Strong muscle markings: ♂	Very thin bones
Nuchal Crest*	Intermediate projection: Indeterminate sex	Large projection: ♂	N/A
Mastoid Process*	Small: ♀	Large: ♂	N/A
Supraorbital Margin*	Sharp: ♀	Rounded: ♂	N/A
Mental Eminence*	N/A	N/A	N/A
Glabella*	Intermediate prominence: Indeterminate sex	N/A	N/A
Frontal Eminence	Small: ♀	N/A	Quite pronounced
Sex Estimate	Probable female	Male	Indeterminate

* Compared with diagrams from Buikstra and Ubelaker (1994)

Table 6 – Sex Estimation based on the distal Humerus (Falys *et al.* 2005)

Morphological Feature	“Humerus 1”	“Humerus 2”
Trochlear Constriction	Less Constricted = ♂	More Constricted = ♀
Trochlear Symmetry	Asymmetrical = ♂	Asymmetrical = ♂
Olecranon Fossa Shape	Triangular = ♂ Deep = ♀	Oval = ♀ Deep = ♀
Angle of Medial Epicondyle	Flat = ♂	Distinctly raised = ♀
Other Features	N/A	Septal Aperture
Sex Estimation	Male	Probable Female

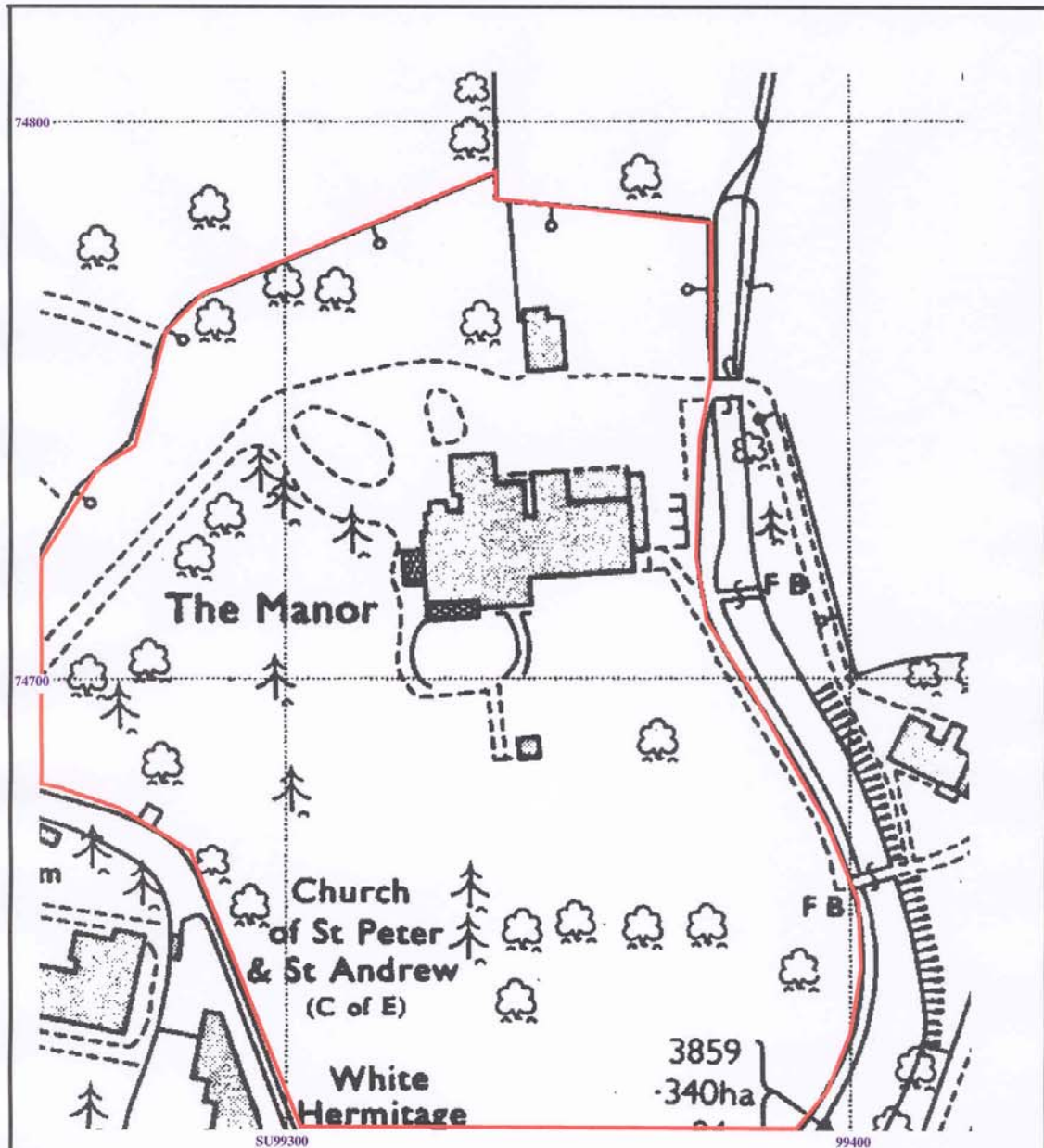


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Figure 1. Location of site within Old Windsor and Berkshire.

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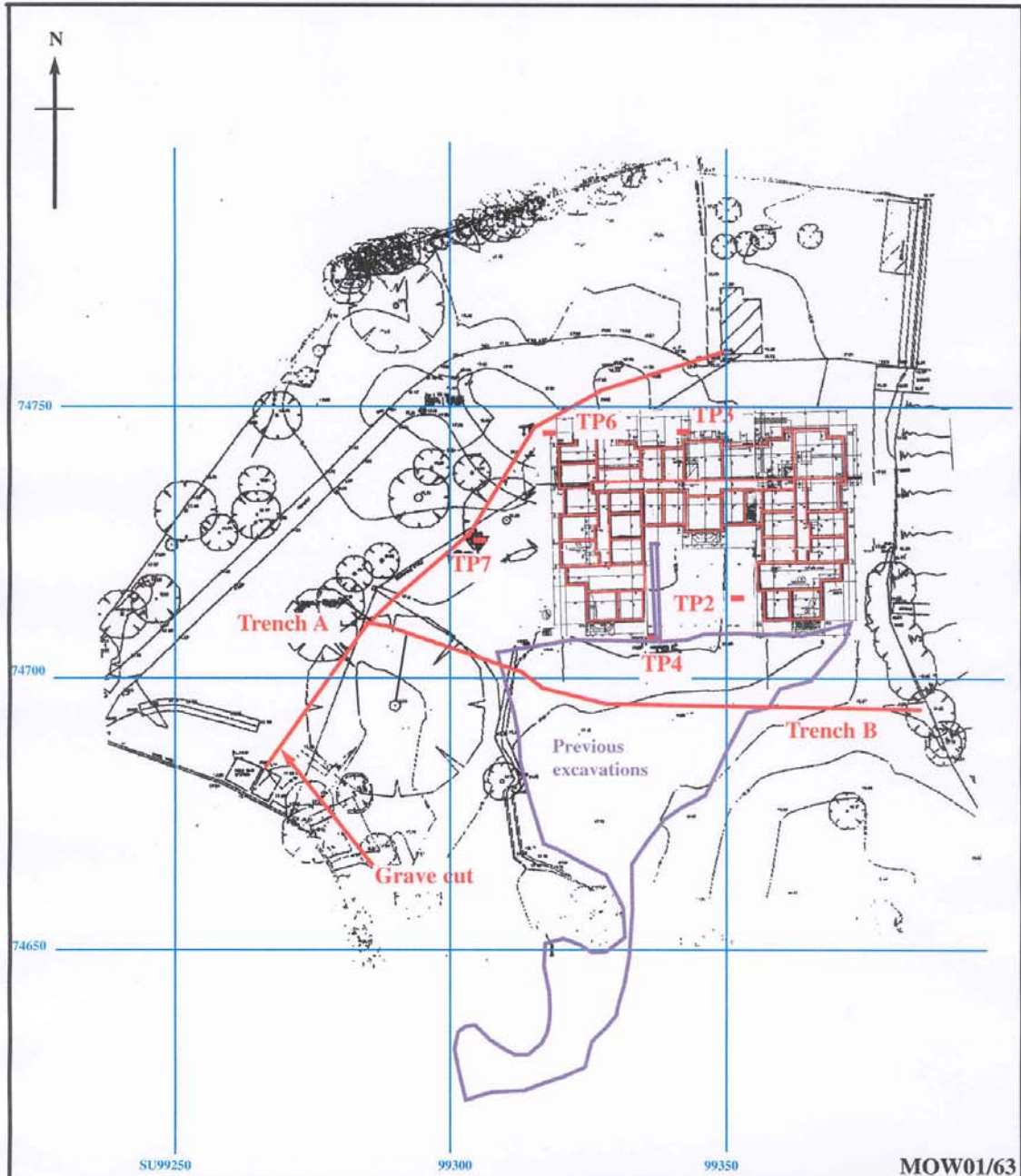
Figure 2. Location of site within Old Windsor.

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Figure 3. Locations of footings, test pits, service trenches and grave cut.

Scale: 1:1000

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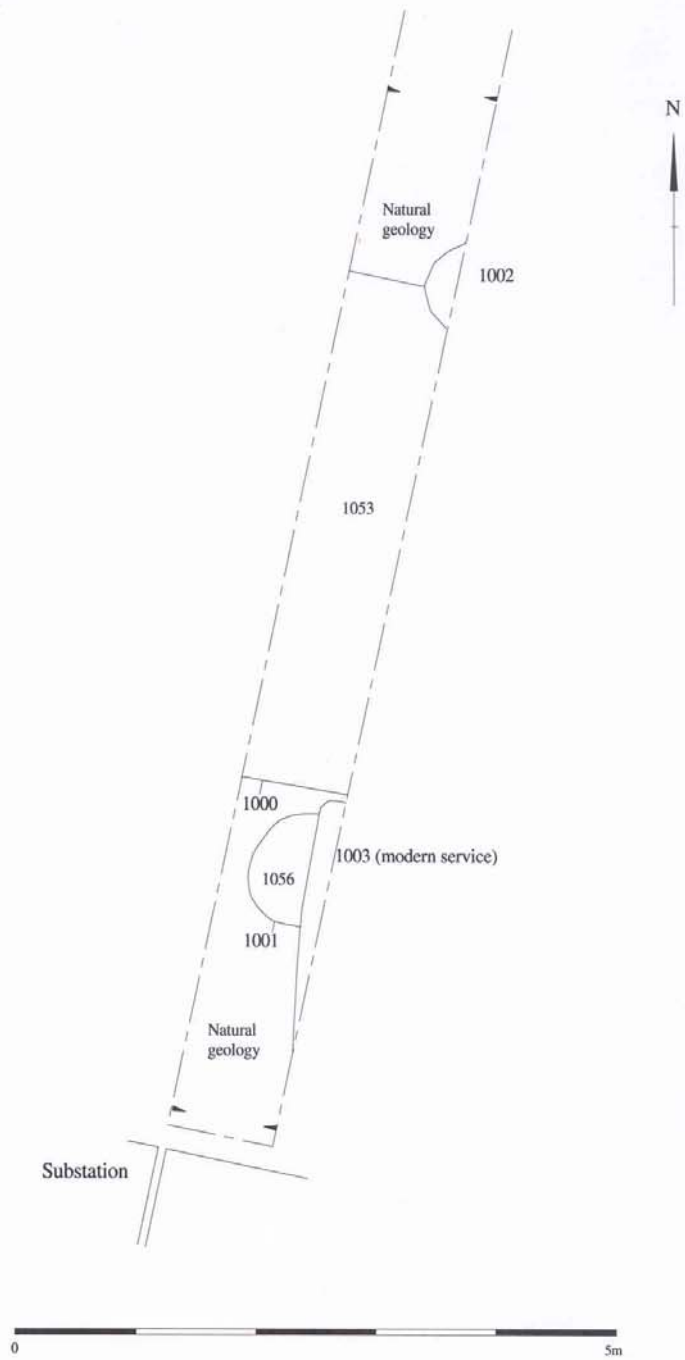


Figure 4: Plan of service trench

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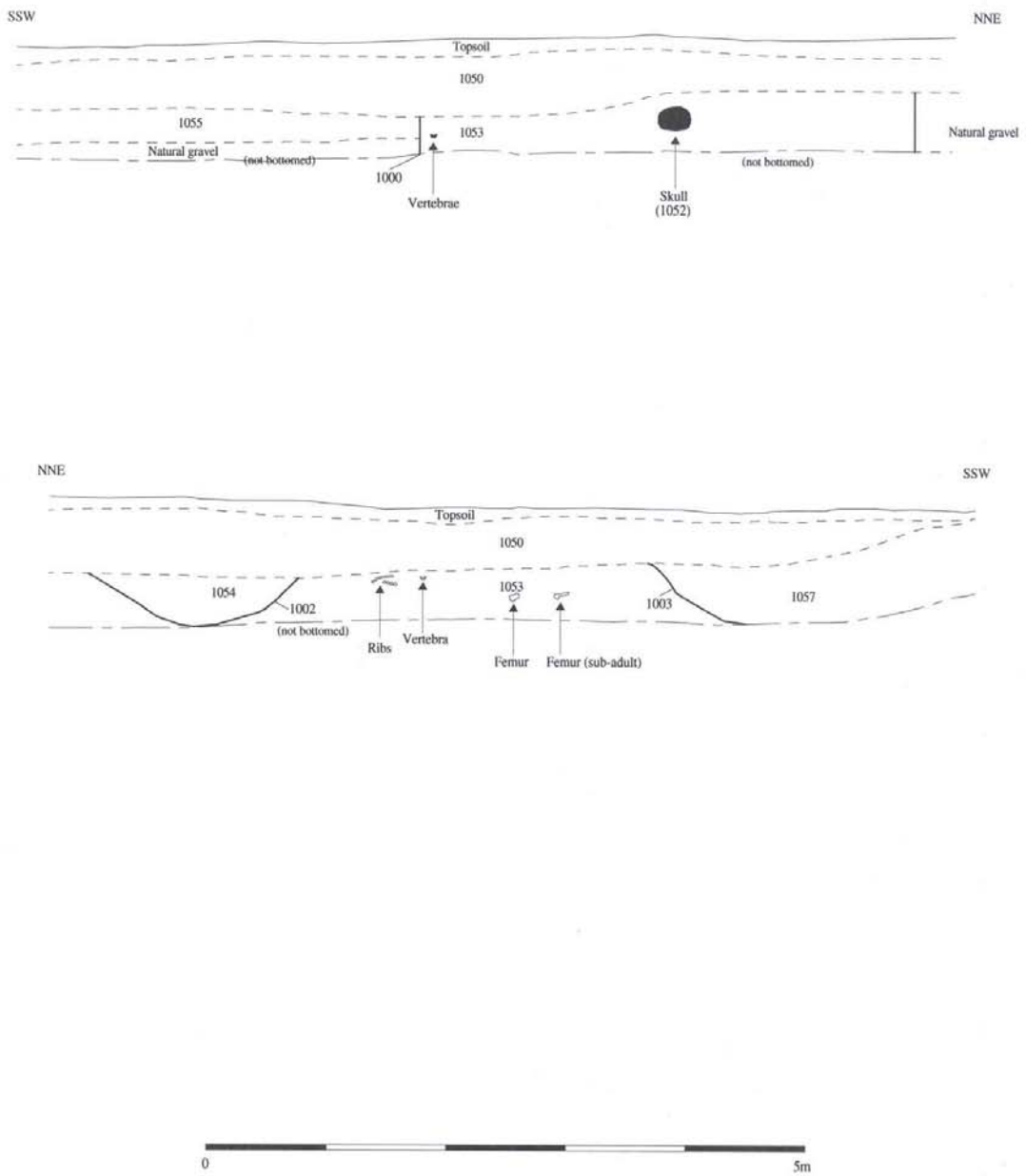


Figure 5: Selected Sections

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