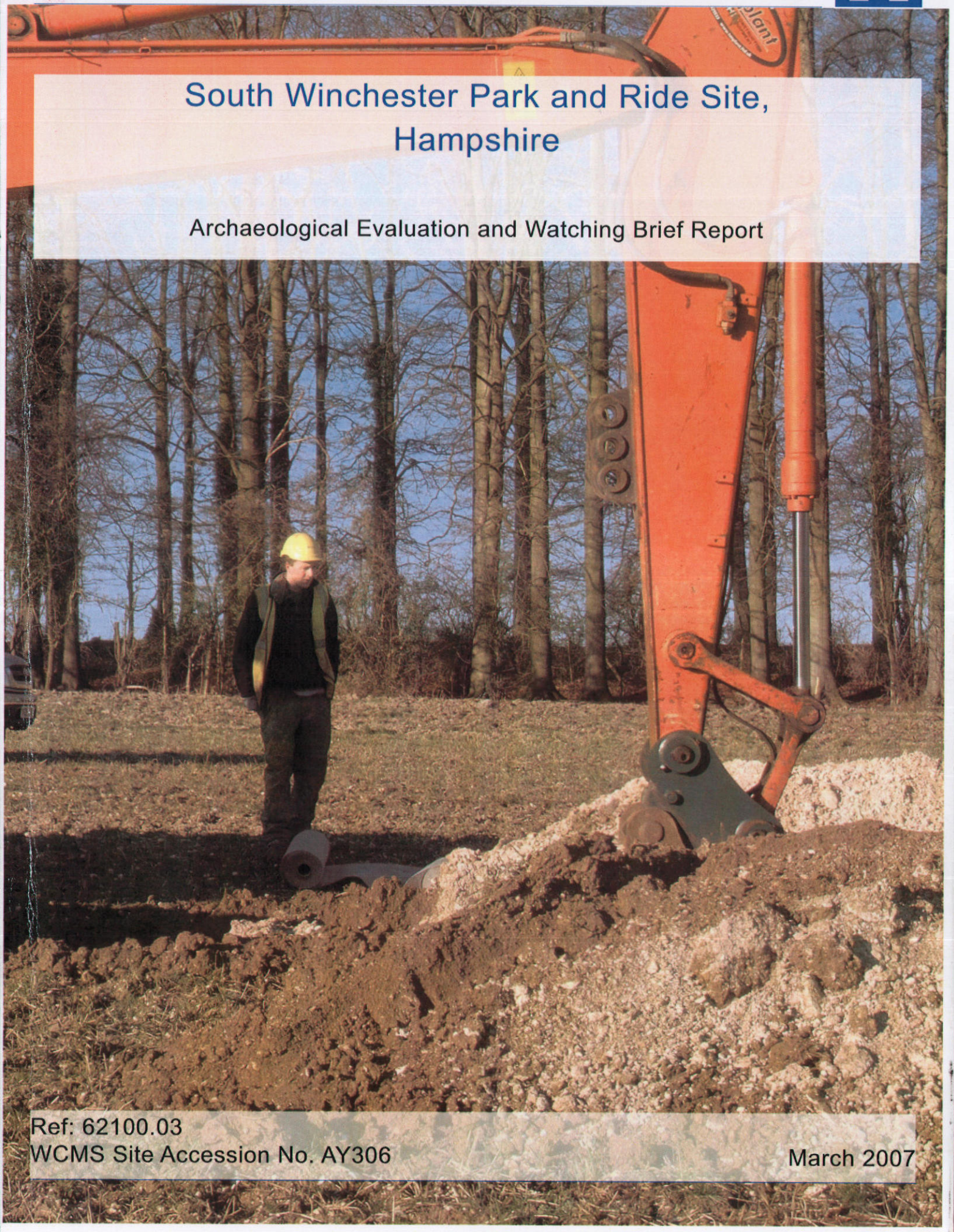
Wessex Archaeology

South Winchester Park and Ride Site, Hampshire

Archaeological Evaluation and Watching Brief Report



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March 2007

SOUTH WINCHESTER PARK AND RIDE SITE, HAMPSHIRE

ARCHAEOLOGICAL EVALUATION AND WATCHING BRIEF REPORT

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ARCHAEOLOGICAL EVALUATION AND WATCHING BRIEF REPORT

Summary

Wessex Archaeology was commissioned by Hampshire County Council to carry out an watching brief of geotechnical test pits and an archaeological evaluation on the proposed site of the South Winchester Park and Ride. The evaluation is required in order to inform an Environmental Statement, which will be submitted in support of a planning application for the scheme. A Written Scheme of Investigation (WSI) for the evaluation was prepared by Wessex Archaeology (2007), and was approved by Hampshire County Council in advance of the commencement of fieldwork. This report details the results of the watching brief and evaluation, which were carried out on the 19th-20th December 2006 and between 22nd January and 2nd February 2007, respectively.

The Site is located *c.* 2.5km south of Winchester city centre, at National Grid reference (NGR) 447200, 126000. It is bounded to the west by the B3057 Otterbourne road. This road is postulated to be on the alignment of the former Roman road from Winchester (Venta Belgarum) to Southampton (Clausentum). The Site is triangular in shape and divided into two fields: a square southern field and a long northern field. The northern field had been the location of a construction compound during the development of the M3 during the 1990s. The aim of the watching brief was to determine the extent of any truncation caused by the construction compound in the north of the Site.

A total of seven geotechnical trial pits were excavated to a depth of between 3m and 4m by a JCB with a 0.8m bucket, four were located in the northern field, three in the southern. A layer of re-deposited chalk up to 1m deep was recorded in the northern four test pits, whilst minimal disturbance beneath the topsoil was recorded in the southern three pits. No archaeological features were revealed.

The evaluation strategy was developed out of the results of the geophysical survey and watching brief. It was intended to target recorded geophysical anomalies to establish the presence, absence, nature and extent of any archaeological deposits. It was also intended to define the extent of the previous deep truncation in the northern part of the site, and the potential for the survival of archaeological features beneath this truncation.

A total of seventeen trial trenches were excavated. Seven of these were located in the north of the Site, with the remainder in the south. The trenches revealed that the extent of truncation in the northern field was not as extensive as anticipated from the geophysical results and postholes and ditches, of late Iron Age- Romano-British date were investigated.

The southern trenches which targeted anomalies from the geophysical survey confirmed the presence of a Romano-British ditched enclosure next to a surfaced routeway at the southern end of the site. Occupation debris recorded from the enclosure ditch suggests settlement activity. Other archaeological features included a possible early Neolithic pit.

SOUTH WINCHESTER PARK AND RIDE SITE, HAMPSHIRE

ARCHAEOLOGICAL EVALUATION AND WATCHING BRIEF REPORT

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The geotechnical watching brief for the geo-technical test pits was undertaken by Neil FitzPatrick. The evaluation was directed by Andrew Armstrong, with assistance from Andrew Baines, Neil FitzPatrick, Darren Baker, Susan Nelson, Jenny Bracewell, Piotr Orczewski and Lucy Parker.

This report was compiled by Andrew Armstrong. and Illustrations were prepared by Linda Coleman, The finds were assessed by Grace Jones, Rachael Seager Smith, Jessica Grimm and Matt Leivers. The environmental assessment was undertaken by Dr. Chris Stevens.

SOUTH WINCHESTER PARK AND RIDE SITE, HAMPSHIRE

ARCHAEOLOGICAL EVALUATION AND WATCHING BRIEF REPORT

1 Introduction

1.1 Project background

1.1.1 Wessex Archaeology has been commissioned by Hampshire County Council to carry out a watching brief of geotechnical test pits and an archaeological evaluation on the proposed South Winchester Park and Ride site (hereafter referred to as 'the Site').

1.1.2 The evaluation was required in order to inform the Environmental Statement for the Site, which will be submitted in support of a planning application for the scheme.

1.1.3 A Written Scheme of Investigation (WSI) for the evaluation was prepared by Wessex Archaeology (2007). The WSI was submitted to, and approved by, Hampshire County Council's Senior Archaeologist in advance of the commencement of fieldwork.

1.1.4 This report details the results of the watching brief and the evaluation, which were carried out on 19 and 20 December 2006 and between the 22 January and 2nd February 2007, respectively.

1.2 Site description, geology and topography

1.2.1 The Site is located *c.* 2.5km south of Winchester city centre, at National Grid reference (NGR) 447200, 126000 (**Figure 1**). It is bounded to the west by the B3057 Otterbourne road. This road is postulated to be on the alignment of the former Roman road from Winchester (Venta Belgarum) to Southampton (Clausentum). The Site is triangular in shape and is currently grazed by cattle. The Site is divided into two fields: a square southern field and a long northern field. The northern field had been the location of a construction compound during the development of the M3 during the 1990s.

1.2.2 The Site lies in the valley of the River Itchen on a gentle slope, rising from east (40m above Ordnance Datum (aOD)) to west (60m aOD). The River Itchen lies some 140m to the south. The British Geological Survey map for the area (1949, Sheet 299, Winchester) shows that the Site is situated on Upper Chalk.

1.3 Archaeological background

1.3.1 Previous archaeological work on the Site comprises a desk-based assessment (Wessex Archaeology 2006) undertaken in April 2006, and a geophysical survey (Bartlett-Clarke Consultancy 2006) undertaken in December 2006.

1.3.2 Based upon transcriptions of aerial photographs within the Hampshire Archaeology and Historic Building Record (AHBR), the desk-based assessment (DBA) established the presence of cropmarks, possible linear earthworks and areas of occupation within the Site, adjacent to the postulated Roman road alignment to the south of Winchester city. The DBA concluded that there was potential for archaeological remains to survive, especially of the Roman period.

1.3.3 The geophysical survey identified potential archaeological features in the southern field but an extensive area of disturbance in the northern field. The interpretation of this survey was that this disturbance was caused by the construction compound in

the north of the Site, which had led to the disturbance of the topsoil and some of the geological deposits in that area, the geophysical survey was therefore unable to detect any features. A band of disturbance crossing the southern part of the Site from southeast to northwest was attributed to a modern water pipe.

2 Methodology

2.1 Aims

2.1.1 The aim of the watching brief was to determine the extent of any truncation caused by the former construction compound in the northern part of the Site.

2.1.2 The evaluation strategy was developed out of the results of the geophysical survey and the watching brief. It was intended to target geophysical anomalies to establish the presence, absence, nature and extent of any archaeological deposits which may survive within the boundaries of the Site. It was also intended to define the extent of the previous truncation, and the potential for the survival of archaeological features within the area affected.

2.1.3 The investigations aimed to clarify the potential impact upon the archaeological resource of any proposed development and seek to aid in the establishment of a mitigation strategy which would take into account the quality, extent and survival of the archaeology as well as the nature of the development.

2.2 Watching brief investigation

2.2.1 A total of seven geo-technical trial pits were excavated to a depth of between 3.0 and 4m by a JCB with a 0.8m wide bucket, four were located in the northern field, three in the southern (**Figure 1**). The excavation of each test pit was observed by an archaeologist and each test pit was recorded once excavation was complete. The test pits were backfilled immediately after archaeological recording.

2.3 Evaluation investigation

2.3.1 A total of seventeen trial trenches were excavated within the Site (**Figure 1**). Seven of these were located in the north of the Site, with the remainder in the south. The WSI had stipulated a total of 14 targeted trial trenches within the Site (Wessex Archaeology 2007).

Five 20m by 2m trenches (Trenches 1-5) were placed in the northern field. Three of the trenches (Trenches 1-3) were located over the location of plotted features recorded from aerial photographs. These trenches would confirm the depth of previous impacts on the location of known archaeological remains (i.e. a deep enclosure or boundary ditch) may survive, albeit truncated beneath existing disturbance. Two of the trenches (Trenches 1 and 2) were located on the western side of the field where the more substantial 'cut' construction is proposed to take place. Trenches 4 and 5 were placed where no features have been identified from aerial photographs or from the geophysical survey in order to confirm the absence of archaeological features where the construction on the site will involve cutting and levelling of the site.

Ten 2m wide trenches (Trenches 6 to 14) were placed in the southern field: five of these trenches (Trenches 6, 8, 9 and 12 to 14) were 30m long while trenches 10, 11 and 15 were 20m long, with trench 7 being 50m long. This would represent a 2-3% sample of the field. Four of the 30m trenches (Trenches 5 to 8) were located over potential archaeological features identified by the geophysical survey, which include possible linear and pit features. Two trenches (Trenches 9 to 11) were located outside the geophysics area but in areas which would be impacted by the construction of the scheme, with Trench 10 placed in the location of the proposed

soakaway and Trench 11 placed in the location of the proposed foul sewer pipe. Trenches 12 and 13 were placed over the known cropmark which extends into the southern field. Trench 14 were placed in a geophysical blank area to confirm that there are definitely no features in these areas (Wessex Archaeology 2007).

2.3.2 At the request of the Hampshire County Council Senior Archaeologist three further trenches were opened, two in the north to establish the extent of the disturbance (Trenches 15 and 16), and one in the south in order to confirm the continuation of a possible Roman routeway (Trench 17). In order to ascertain the extent of previous truncation within the Site Trench 5 was extended *c.*30m to the north.

2.3.3 The trenches were excavated under constant archaeological supervision by a tracked 360-degree excavator with a 2m wide bladed ditching bucket. The excavation proceeded until the topsoil and subsoil (and any made ground) had been removed and the underlying geological deposits had been revealed. Trenches were cleaned by hand to ensure the machine-stripped surface was as clear as possible to allow confident identification of archaeological remains.

2.3.4 All archaeological features were investigated by hand.

2.4 Recording

2.4.1 Archaeological recording was undertaken in accordance with Standards and Guidance for an archaeological watching brief as approved by the Institute of Field Archaeologists (IFA 1999, revised 2001), and Standards and Guidance for archaeological field evaluation (IFA 1994, revised 2001) both of which seek to define best practice for the execution of an archaeological watching brief and evaluation respectively.

2.4.2 Written recording was undertaken using Wessex Archaeology *pro-forma* recording sheets. Representative sections of trial trenches and trial pits were recorded at a scale of 1:10. Any archaeological features were recorded at 1:10 in section and 1:20 in plan. During the evaluation, the Site was surveyed using a GPS. The spot height of all principal features and levels were calculated in metres relative to Ordnance Datum, correct to two decimal places. Plans, sections and elevations were annotated with spot heights as appropriate. The geotechnical pits were located by the contractor.

2.4.3 A unique number was issued for each feature and deposit, relating to the trench in which it was found. For instance the second recorded deposit in Trench 3 would be numbered 302. A separate number system was used during the watching brief, relating to the geo-technical test pit number, both numbering system are shown in **Appendixes 1** and **2.**

2.4.4 A photographic record in colour, monochrome and digital format was also produced for the evaluation, only digital photographs were taken during the watching brief.

2.5 Finds collection

2.5.1 Objects relating to human exploitation of the area that were exposed in the course of the evaluation were recovered or, where recovery was impracticable, recorded. All finds were recorded by context and significant objects recorded in three dimensions.

2.5.2 All recovered objects were retained unless they were undoubtedly of modern or recent origin. The presence of modern objects was, however, noted on context records.

2.6 Environmental sampling

2.6.1 Environmental sampling strategy followed the guidance set out in English Heritage's *Environmental Archaeology: a guide to the theory and practice of methods, from sampling and recovery to post-excavation (2002)*. Bulk environmental soil samples were taken only from sealed archaeological features for plant macrofossils, small animal bones and small artefacts. Two 10 litres environmental samples were recovered.

3 Results

3.1 Introduction

3.1.1 In total, seven geo-technical trial pits were observed and seventeen trial trenches were excavated. *In situ* archaeological deposits were recorded in 11 trenches, the remaining trenches and all of the test pits contained no archaeological features or finds.

3.1.2 Those trenches in which archaeological features and deposits were revealed are described by period, and have been assigned to the Neolithic, Iron Age and Roman periods, based upon artefacts recovered. Any features not containing datable evidence will be assigned as undated, unless interpreted as being part of a dated feature or group of features.

3.2 Soils and geological

3.2.1 The topsoil in the north-east of the Site was entirely removed in the early 1990s for the construction of a site compound for the M3. A proportion of the natural Upper chalk was also excavated from this area as part of the levelling of the compound. Both topsoil and geological deposits have since been re-instated.

3.2.2 Throughout the remainder of the Site the topsoil is generally between 0.25m and 0.3m deep. The profile throughout the Site consists predominantly of topsoil directly overlying the natural chalk. Orange clay with flint geological deposit was noted in a minority of trenches.

3.2.3 Further south the solid geological deposits change to orange gravels overlying the Upper chalk, in a layer of between 0.3m and 1m thick.

3.2.4 The water table was not encountered within any of the excavated trenches or features.

3.2.5 Two modern pipe trenches were discovered during the evaluation. A probable land drain that noted aligned east-west across **Trench 1**. In the south of the Site, a pipe supplying a water trough was recorded in **Trench 7**. This pipe had been previously noted in the geophysical survey (Bartlett-Clarke Consultancy 2006).

3.2.6 Despite the shallow nature of the topsoil ploughing does not appear to have caused any significant truncation to any of the *in situ* archaeological deposits. Plough marks were noted only in **Trench 5**.

3.3 Watching brief of trial pit results

3.3.1 In total, seven geo-technical trial pits (TP) were excavated within the Site (**Figure 1**). No archaeological features or finds were recorded. Descriptions of the test pits are listed in **Appendix 1**.

3.3.2 Investigations in the northern half of the Site (**TP 102, 104, 106** and **107**), revealed a layer of redeposited chalk lying directly beneath the topsoil. This deposit was on

average 0.45m deep, with a maximum depth below ground level of *c.*1.0m. This deposit has been interpreted as part of the reinstatement of the northern part of the Site, following the removal of the M3 construction compound.

3.3.3 The southern test pits (**TP101**, **103**, **105**) showed no evidence of similar truncation. Topsoil was found to be present to a depth of on average 0.3m, overlying an orange clay with flint geological deposits which in turn overlay natural Upper chalk.

3.4 Trial trench results

3.4.1 Seventeen trial trenches were excavated within the Site. This total includes three trenches (**15**, **16** and **17**) that were requested by the HCC Senior Archaeologist during visits to the Site, in addition to those proposed in the WSI. Descriptions of trial trenches are listed in **Appendix 2**.

3.4.2 In the northern part of the Site a number of trenches (**1**, **2**, **4** and **16**) found evidence of the redeposited chalk layer identified during the watching brief (**Section 3.3**).

3.4.3 The deposit did not extend throughout the northern part of the Site, as presumed from the geophysical survey, as trenches **3**, **5** and **15** were undisturbed and contained *in situ* archaeological deposits. Trenches **5** and **15** were extended until the redeposited chalk layer was identified. This has enabled the approximate extent of truncation to be projected (shown in yellow on **Figure 1**).

3.4.4 A single archaeological feature was recorded within the area of truncation **104** below the redepoisted chalk layer. This clearly illustrates the potential for deeper archaeological features to survive within the area, despite the construction of the compound and any reinstatement work. The depth of the truncation is in places only 0.4m, by comparison with the rest of the Site one could expect the base of deeply cut features to survive in this area. More discrete features such as post holes would not be anticipated.

3.4.5 No evidence of truncation was recorded in the ten trenches located in the southern field. Of these trenches, seven contained archaeological features.

4 Results by period

4.1 Neolithic (4000-2400 BC)

4.1.1 An oval pit (**1204**) located at the western end of **Trench 12** was the only feature securely dated to the Neolithic period (**Figure 2**). Pit **1204** was over 1m in diameter and with irregular stepped sides and a flat base (**Plate 1**). Three fragments of probable early Neolithic pottery were recovered from the upper fill of the feature **1206**, which also contained charcoal flecks. The upper fill of the feature was a red brown clayish loam, containing few inclusions, the lower a paler grey brown colour, containing frequent chalk fragments. Apart from a number of undated residual worked flints, no other diagnostic early prehistoric features or finds were noted during the investigation.

4.2 Late Iron Age and Roman (100BC-AD 410)

4.2.1 The majority of the features within the Site have been dated to the Late Iron Age and Roman periods. Most significant was the surfaced road or holloway that runs north-south across the length of the Site from **Trench 8,** through **Trench 7,** as far as **Trench 17**. In the south of the Site the road consists of a cobbled surface **808** within a shallow cut 0.15m deep and 2.35m wide (**Plate 2**). The cobbles appear to have been hammered into a layer of redeposited chalk. Four fragments of Roman pottery were recovered from above the cobbled surface, a coin was also recovered directly from the surface of the road which showed evidence of possible wheel-ruts.

4.2.2 Further north the road passes through **Trench 7**, lying within a deeper cut of 0.4m depth, which increases to 0.84m at **Trench 17**. The fill of the roads cut contained a single fragment of late Iron Age pottery in **Trench 7**, no datable evidence was recovered from **Trench 17**.

4.2.3 It is noticeable also that no cobbled surface is visible within the road cut where it passes through **Trench 17**. The section indicates that a thin layer of cobbles may have originally been present within the cut. Two possible wheel ruts where noted within this northern most section of the road (**Plate 3**).

4.2.4 A probable roadside ditch is located over 4m west of the road in **Trenches 8** and **7** (**Figure 2, Plate 4**). In both cases Roman pottery was recovered, the ditch does not extend as far as **Trench 17**.

4.2.5 The main focus of Roman period activity was located in the southwest corner of the Site in **Trench 8** (**Figure 2**). This trench was targeted to intersect a number of geophysical anomalies. These include the road and ditch discussed above. The geophysical survey had indicated the presence of a possible ditched enclosure and discrete feature, the existence of these features was confirmed by the evaluation. The enclosure ditch **813** was v-shaped in section and over a metre deep (**Plate 5**). A total of 89 Roman pottery fragments and 9 CBM fragments were recovered from 1m wide intervention, predominantly from a probable dumped deposit **815**. This deposit also contained 41 oyster shells, and 23 fragments of animal bone. A bulk environmental sample indicated some evidence for settlement activity in the vicinity (**see Section 5**).

4.2.6 Limited excavation to a depth of 0.6m indicated a very high occurrence of pottery fragments (56 sherds, predominantly Roman) as well as iron objects within the discrete feature **804**. The feature is sub-circular and approximately 1m in diameter. The sides of the cut drop away steeply and the deposition of the fills may indicate that the feature extends to a considerable depth, it may perhaps be a rubbish pit or well. Artefacts derived from this feature included a fragment of box flue tile and a lock lift (**Section 4**).

4.2.7 During the course of the evaluation, three further linear features **303**, **1008** and **1405**, were excavated containing late Iron Age or Roman pottery (**Figure 2**). In each case finds were comparatively sparse with little animal bone present.

4.2.8 A line of three postholes in **Trench 5** produced a single fragment of Roman pottery, the post holes are aligned roughly east west, possibly orientated at right angles to the routeway detected in the southern trenches (**Plate 6**).

4.3 Undated

4.3.1 A cluster of three undated features were located in the north of the Site in **Trenches 1** and **15** (**Figure 2**). **Trench 15** contained two possible linear features; the first was a shallow potential gully terminus **1505** aligned roughly north-south. The second **1507**, was a much more substantial feature, possibly a ditch terminus. Both showed signs of animal disturbance.

4.3.2 A large post-hole or pit **104** survives beneath a layer of made ground near the northern end of **Trench 1**. The feature was 0.88m deep and included a smaller post-hole or stake hole at its base. No finds of any kind were recovered from this feature, the fills were predominantly pale and unlike those found in features investigated the Site, which often consisted of a darker, orange colour.

4.3.3 A linear feature **306** (noted from transcriptions of aerial photographs) was investigated in **Trench 3**. No finds were recovered, the feature itself appeared to contain a number of modern intrusive deposits near the top, which may indicate a late or post-medieval date.

4.3.4 A possible ditch terminus or pit **511** was excavated adjacent to a line of post holes in **Trench 5**. While no dating evidence was recovered from within the feature, the fills were similar to the Roman period post holes (**Plate 5**).

4.3.5 A shallow gully terminus **604** was discovered in the south of **Trench 6** aligned east-west. The base of the feature contained a line of stake holes, perhaps indicating a fence line or wattle and daub structure. While no dating evidence was recovered from the feature, the fill is similar to features containing Iron Age and Roman period artefacts.

4.3.6 **Trenches 10** and **14** both contained a number of undated linear and discrete features **1004**, **1006**, **1401**, **1403** and **1416**. An undated metalled surface **1412** was also present in **Trench 14**.

5 Finds

5.1 Assessment

5.1.1 A relatively small quantity of finds was recovered during the evaluation, from 24 contexts. These have been quantified by material type within each context, and the results are presented in **Appendix 3**. The assemblage comprises pottery, ceramic building material, flint, burnt flint, stone, copper alloy, iron, lead, animal bone and shell. The date range of the material is early Neolithic to Roman.

5.2 Pottery

5.2.1 A total of 170 sherds of pottery, weighing 2153g, were recovered. Three sherds in a poorly sorted flint-tempered fabric, including a plain rim fragment, are of possible Early Neolithic date (context **1206**). The remainder of the assemblage is predominantly Romano-British in date, with four possible Late Iron Age or Early Roman sherds. Local coarsewares in grey and sandy fabrics dominate the assemblage, with smaller quantities of grog-tempered wares, oxidised wares and flint-tempered fabrics. Five sherds of south-east Dorset Black Burnished Ware were present in context **807** (fill of the pit or well **804**), displaying late surface treatments. Regional finewares comprise colour-coated wares and parchment wares from the Oxfordshire and New Forest industries, including a Young (1977) C45 bowl. Imported material is represented by a single fragment of samian.

5.3 Ceramic building material

5.3.1 The ceramic building material was dominated by undiagnostic fragments without surfaces and plain, flat pieces. Identifiable fragments include part of a box flue tile (context **805,** in pit **804**) and corners from two bricks from contexts **805** and **814** (fill of ditch **813**). The fabrics of all fragments suggest a Romano-British date for the assemblage.

5.4 Metalwork

5.4.1 One fragment of copper alloy was present on the surface of the Roman routeway **808** (object 1), this appears to be part of a coin. The iron work consists of fittings and miscellaneous objects, recovered from contexts throughout **Trench 8.** Identifiable objects include a hobnail (object 7), a tumbler lock lift key of Iron Age to Roman date (object 3, Manning 1985 type 1), nails of Manning (1985) type 1 and 2/3, and a collar or ferrule (object 5), the majority of these came from the upper fills of the pit feature **804**. Context **809** also produced a piece of lead waste.

5.5 Stone

5.5.1 A tiny fragment (1g) of Niedermendig Lava quern was recovered from context **805** in pit **804**.

5.6 Flint

5.6.1 13 flakes were recovered from **304**, **809**, **512** and **1705**. All are probably hard-hammer struck and likely to post-date the middle Neolithic. All appear to be residual finds, redeposited into later features.

5.7 Animal bone

5.7.1 The 34 bones recovered from the excavation were poor to fair preserved and were affected by root etching. All bone likely dates to the Roman period. Of these 34 pieces, one belonged to horse, six cattle, seven sheep/goat, four pig and one dog. Fifteen pieces could not be identified to species. Because of the poor preservation, only two bones were seen with gnawing marks and a further two with cut marks: a small mammal rib and a cattle mandible. Four pieces were burnt. Three bones could be measures and four bones could be aged. The right mandible of a medium sized dog was found in context **814** fill of the boundary ditch **813**.

5.8 Shell

5.8.1 A single Oyster shells was recovered from the pit feature **804**. The enclosure ditch **813** produced a far more substantial number with 2 shells in context **814** and 29 in context **815**. Although dominated by left valves (29 shells), right valves are also present (13 shells), indicating on-site preparation as well as consumption. Two mussel shells were also recovered from context **815**.

5.9 Significance and potential of the material

5.9.1 The bulk of this small finds assemblage dates to the Roman period. A little abraded possible early Neolithic pottery and the few undiagnostic post-middle Neolithic flints may indicate some prehistoric activity in the area. However given the paucity of the material the nature of this activity is uncertain. The bulk of the assemblage is of Romano-British date with a little possible Late Iron Age or Early Roman pottery. The assemblage is essentially of a domestic character, the CBM may indicate a Roman building in the vicinity. The animal bone and oyster shell suggest probable domestic waste.

5.9.2 The material provides dating evidence for the site and has shed some light on the activities undertaken. However given the small size of the assemblage the potential for further analysis is limited. It is recommended that the results of this assessment be included in any future publication but no further work is recommended.

6 Environmental

6.1 Introduction

6.1.1 Two bulk samples were taken from Romano-British deposits comprising a dump of material **815** from ditch **813** and from deposit **1407** in ditch **1405**.

6.2 Charred plant remains and charcoals

6.2.1 The bulk samples were processed by standard flotation methods; the flot retained on a 0.5 mm mesh, residues fractionated into 5.6 mm, 2mm and 1mm fractions and dried. Coarse fractions (>5.6 mm) were sorted, weighed and discarded. Flots were

scanned under a x10 – x40 stereo-binocular microscope and the presence of charred remains quantified (**Table E1**).

6.2.2 The flots were generally small and extremely rooty, with high numbers of modern seeds, and shells of the burrowing snail (*Cecilioides acicula*), while charred material was poorly preserved. These elements can be seen as indicative of stratigraphic movement, possible reworking and contamination by later intrusive elements.

6.2.3 Neither feature was rich in charred plant remains or charcoal. The low quantity of wood charcoal and poor preservation of the charred plant remains can be attributed to the location of the sampled deposits within the active soil horizon.

6.2.4 Deposit **1407** contained a single fragment of unidentified cereal grain and a single fragment of wood charcoal. Given the amount of roots and presence of *Cecilioides acicula* this material could be intrusive. There was no good indication of date, occupation or proximity to occupation within this feature.

6.2.5 Deposit **815** contained several poorly preserved cereal grains and a single glume base of emmer/spelt (*Triticum dicoccum/spelta*). It also contained a well preserved seed of sedge (*Carex* sp.). Wood charcoal, however, was scarce consisting of only a few fragments. While the high presence of roots and modern seeds in this sample raises the possibility that such material may be intrusive, hulled wheats and hulled wheat chaff are mainly recorded from Later Bronze Age, Iron Age and Romano-British deposits in Hampshire (Campbell 2001), and as such in keeping with the Romano-British date of the feature.

6.2.6 The small amount of remains from ditch **813** can be related to domestic activity and settlement of Romano-British date. The low quantity of material may be due to the proximity of the deposit to the active soil horizon. However it may reflect that the feature lay on the edge of where charred material was dumped.

6.3 Land and fresh/brackish water molluscs

6.3.1 The approximate abundance of mollusc shells was recorded and dominant species identified where possible within both the samples **Table E1**, following the nomenclature of Kerney (1999). Given the amount of rooting within the samples there is a possibility that some of these shells may be intrusive.

6.3.2 The sample from the ditch **813** had several shells, comprising a single shell of *Cepea hortensis/nemoralis* and several of *Discus rotundatus* and *Vallonia* sp.. The species represented within ditch **813** were mainly shade loving species, *Discus rotundatus* and *Oxychilus/Aegopinella* sp.

Table E1. Assessment of the charred plant remains and charcoal

										Residue	
Feature type/no	Context	Sample	size litres	flot size ml	Grain	Chaff	seeds charred	Charcoal 4/2 mm	Other	Charcoal >5.6mm	analysis
Trench 14			LIA/ERB ditch								
ditch 1405	1407	1	10	5 [80]	C	-	-	0/0.1ml	moll-t (A)	-	
Trench 8			Romano-British ditch								
Ditch 813	815	2	8	20 [90]	B	C	C	0/0.2ml	moll- (B)	-	

KEY: A** = exceptional, A* = 30+ items, A = ≥10 items, B = 9 - 5 items, C = < 5 items, (h) = hazelnuts, smb = small mammal bones; Moll-t = terrestrial molluscs Moll-f = freshwater molluscs; Analysis: C = charcoal, P = plant, M = molluscs, C14 = radiocarbon suggestions

NOTE: [1]flot is total, but flot in superscript = % of rooty material.

7 Discussion

7.1 Introduction

7.1.1 The evaluation has confirmed the archaeological potential of the Site as indicated by previous archaeological work. Archaeological features are not restricted to distinct area of the Site, although a concentration of more 'significant' archaeological deposits in the southwest has been identified.

7.1.2 Archaeological features have been shown to survive in the north and east of the Site, despite the previous truncation caused by the construction of the motorway compound. A projected outline of the truncated area is shown in **Figure 1**. It should be noted that the extent of truncation within the affected area is not uniform, the whole area should be assumed to have the potential for surviving archaeological deposits beneath the disturbed layers as indicated by the presence of the pit like feature in **Trench 1**.

7.1.3 The majority of the archaeological features have been assigned to the Late Iron Age and Roman periods, with a single Neolithic discrete feature and a number of undated features.

7.2 Neolithic

7.2.1 The pit **1204** containing pottery and charcoal may potentially indicate further *contemporary archaeological* features within the Site. *In situ* early Neolithic deposits are comparatively rare in Hampshire (Gardiner 2006) and the presence of further associated features could possibly be of some significance.

7.3 Iron Age and Roman

7.3.1 The Late Iron Age/ Roman period has a potential span of approximately 100BC – 410AD, and likely includes a number of different phases of activity which should become evident if further archaeological investigation is undertaken.

7.3.2 Evidence from both **Trench 8** and the geophysical survey appears to indicate a well-defined settlement area enclosed by a ditch adjacent to a cobbled routeway in the south west corner of the Site. The high occurrence of pottery, CBM (including a box-flue tile), oyster shells, animal bone and iron objects in this area of the Site argues strongly for settlement activity and, potentially, structures in this part of the Site.

7.3.3 The routeway with associated road-side ditch appears to cross the length of the southern half of the Site. At this time it is uncertain whether or not the feature survives in the northern truncated part of the Site, but it is considered unlikely. The absence of cobbles in **Trench 17** may be due to a number of factors;

- The surface may have been eroded away by continual use before final abandonment.
- The routeway may not have been cobbled in the northern part of the Site due to the absence of natural gravels in that area (the geology in the northern half of the Site consisting of only upper Chalk, there would be no readily available stones to use for the cobbling).
- The routeway is likely to be heading away from the more densely settled area and cobbling may not have been considered necessary. Certainly the lack of cobbling in Trench 17 may explain the increased depth of the routeway, an uncobbled road would be more quickly eroded.

7.3.4 The substantial number of Roman and Iron Age linears to both the west and east of the road suggests at least a field system or systems, and potentially further settlement, especially in the west of the Site. A number of currently undated features may also be Roman in date. The presence of the possible fence line in **Trench 6** and the line of post holes in **Trench 5** may both indicate boundaries aligned at right-angles to the Roman routeway. Whether these boundaries enclose settlement or agriculture remains unclear. Clearly defined property boundaries, often lying at right angles to routeways, have been identified on Roman-British road-side settlements such as Neatham in Hampshire (Millet and Graham 1986).

7.3.5 The Roman linears in **Trenches 10** and **14**, and the associated metalled surface could potentially indicate that a network of property or field boundaries extend throughout the majority of the Site. At this time, and with the currently available information, it is not possible to establish the nature and extent of these deposits. By comparing with other known contemporary roadside sites it is possible to postulate a network of rectilinear enclosures situated on both sides of the road (Smith 1987). These enclosures may perform a variety of functions from demarcating property boundaries, containing livestock or for agricultural reasons (such as drainage). They should not all be taken to indicate the presence of settlement activity.

7.4 Undated features

7.4.1 As mentioned above, the majority of undated features investigated during the evaluation may be largely contemporary with the general Late Iron Age and Roman phases of the Site (this observation is based solely on a comparison of the fills of these features).

7.4.2 The field system noted in aerial photography was located only in Trench 3, and did not survive either further south or to the north in the truncated area. It is most likely to represent a post-medieval field boundary.

7.5 Geophysical data

7.5.1 In the light of the evaluation, a re-examination of the geophysical data seems to indicate, with hindsight, the Roman road crossing the site from north to south and the westernmost road side ditch (**Figure 2**).

7.5.2 It is also possible to postulate an eastern road side ditch running just outside the area of **Trenches 7** and **8** (marked on **Figure 2**).

7.5.3 The particular clusters of anomalies in the southwest of the Site are, by comparison with the excavation of the pit **812**, all likely to represent archaeological features/deposits. They may possibly represent settlement activity, for instance pits, within the substantial boundary ditch which shows clearly on the geophysical data (**Figure 2**).

7.5.4 The evaluation uncovered a substantial number of features not visible in the geophysical survey, some of them quite substantial. This is likely to have been caused by the fact that these features were predominantly filled with secondary chalky or gravel deposits derived from the underlying geology. Such deposits are likely to have been more difficult to detect as they would have retained the majority of the characteristics of the surround gravel or chalk.

7.6 Conclusion

7.6.1 Archaeological features dating from the Neolithic to the Roman periods have been shown to survive throughout the Site.

7.6.2 The extent of truncation in the northern part of the Site has been better defined and the potential for *in situ* archaeological deposits to survive beneath the layer of redeposited chalk is indicated by the pit in Tr1.

7.6.3 There is substantial evidence for a Roman period settlement in the southwest corner of the Site. A Roman routeway has been shown to pass through the centre of the Site aligned north to south. A number of associated linear and discrete features have been identified. These may form a network of enclosures associated with settlement along the routeway.

7.6.4 The modern linear features evident from the geo-physical survey have been identified as water-pipes supplying the cattle trough in the centre of the Site.

8 Archive storage and curation

8.1 Archive storage

8.1.1 The project archive is currently held at the offices of Wessex Archaeology at Old Sarum, Salisbury, Wiltshire under the project code 62100 (With the Winchester Museum Service number AY306). It intended that the project archive will be deposited with the appropriate museum at a future date.

8.2 Copyright

8.2.1 The full copyright of the written/illustrative archive relating to the site will be retained by Wessex Archaeology Ltd under the Copyright, Designs and Patents Act 1988 with all rights reserved. The Museum, however, will be granted an exclusive licence for the use of the archive for educational purposes, including academic research, providing that such use shall be non-profitmaking, and conforms to the Copyright and Related Rights regulations 2003.

8.3 Security copy

8.3.1 In line with current best practice, on completion of the project a security copy of the paper records will be prepared, in the form of microfilm. The master jackets and one diazo copy of the microfilm will be submitted to the National Monuments Record Centre (Swindon), a second diazo copy will be deposited with the paper records at the Museum, and a third diazo copy will be retained by Wessex Archaeology.

9 References

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Appendix 1: Geo-technical trial pit summaries

It should be noted that the depths below ground levels are approximate. The conditions of the geo-technical watching brief did not allow exact recording.

Trial Pit 101	**Max depth: 3.0m**	**Length: 3.0m**	**Width: 0.80m**
Context no.	**Description**	**Comments**	**Depth below ground level (M)**
10100	Dark grey brown silty clay, common flint pebbles, sub angular and angular	Topsoil	0-0.25m
10101	Mid orange brown silty clay, quite common flint pebbles sub rounded and sub angular	Subsoil	0.25-0.70m
10102	Pale Natural chalk	Natural -	0.70+

Trial Pit 102	**Max depth: 3.0m**	**Length: 3.0m**	**Width: 0.80m**
Context no.	**Description**	**Comments**	**Depth below ground level (M)**
10200	Dark grey brown silty clay, common flint pebbles, sub angular and angular. Reinstated topsoil.	Topsoil	0-0.30m
10201	Redeposited chalk, pale off white	Made ground	0.30-0.70m
10202	Pale Natural chalk	Natural -	0.70+

Trial Pit 103	**Max depth: 4.0m**	**Length: 3.0m**	**Width: 0.80m**
Context no.	**Description**	**Comments**	**Depth below ground level (M)**
10300	Dark grey brown silty clay, common flint pebbles, sub angular and angular.	Topsoil	0-0.26m
10301	Mid orange brown silty clay, quite common flint pebbles sub rounded and sub angular	Subsoil	0.26-0.60m
10302	Pale Natural chalk	Natural -	0.60+

Trial Pit 104	Max depth: 3.0m	Length: 3.0m	Width: 0.80m
Context no.	**Description**	**Comments**	**Depth below ground level (M)**
10400	Dark grey brown silty clay, common flint pebbles, sub angular and angular.	Topsoil	0-0.30m
10401	Redeposited chalk, pale off white	Made ground	0.30-0.70m
10402	Pale Natural chalk	Natural -	0.70+

Trial Pit 105	Max depth: 3.0m	Length: 3.0m	Width: 0.80m
Context no.	**Description**	**Comments**	**Depth below ground level (M)**
10500	Dark grey brown silty clay, common flint pebbles, sub angular and angular.	Topsoil	0-0.25m
10501	Mid orange brown silty clay, quite common flint pebbles sub rounded and sub angular	Subsoil	0.25-0.70m
10502	Pale Natural chalk	Natural -	0.70+

Trial Pit 106	Max depth: 4.0m	Length: 3.0m	Width: 0.80m
Context no.	**Description**	**Comments**	**Depth below ground level (M)**
10600	Dark grey brown silty clay, common flint pebbles, sub angular and angular. Reinstated topsoil.	Topsoil	0-0.30m
10601	Redeposited chalk, pale off white	Made Ground	0.25-0.80m
10602	Pale Natural chalk	Natural -	0.80+

Trial Pit 107	Max depth: 4.0m	Length: 3.0m	Width: 0.80m
Context no.	**Description**	**Comments**	**Depth below ground level (M)**
10700	Dark grey brown silty clay, common flint pebbles, sub angular and angular. Reinstated topsoil.	Topsoil	0-0.35m
10701	Redeposited chalk, pale off white	Made Ground	0.35-1.00m
10702	Pale Natural chalk	Natural -	1.00+

Appendix 2: Trench Summaries

Evaluation Trench 1	Max depth: 1.73m	Length: 19.5m	Width: 2.24m
Context No.	**Type**	**Description:**	**Depth: (m)**
101	Topsoil	Mid grey brown sandy loam, 2% chalk inclusions 0.5-2cm, 2% flint inclusions 0.5-2cm	0.30m
102	Subsoil	Mid red brown sandy clay, 20% chalk inclusions 1-3cm	0.36m
103	Redeposited natural	Mid pale grey white, firm crushed chalk, sub angular flint inclusions 5-10cm	0.29m
104	Cut	Circular pit or posthole feature with steep almost vertical sides and an almost flat base with a possible stake hole in the base	0.82m
105	Fill	Mid-pale greyish brown moderately compact chalky clay, frequent small angular chalk fragments occasional small to medium sub-rounded flints .Lowest fill of pit or posthole	0.35m
106	Fill	Light grey brown moderately compact silty clay, abundant small chalk fragments and frequent small sub angular flints. Fill of pit/posthole	0.25m
107	Fill	Medium pinkish brown moderately compact silty clay, frequent fine chalk fragments and occasional larger fragments and occasional small to medium sub angular flints. Fill of pit/posthole	0.45m
108	Cut	Modern pipe cut	Unexc.
109	Fill	Fill of modern pipe trench	Unexc.
110	Natural	Natural chalk	Unexc.

Evaluation Trench 2	Max depth: 0.79m	Length: 20.4m	Width: 2.25m
Context No.	**Type**	**Description:**	**Depth: (m)**
201	Topsoil	Topsoil, Dark grey brown sandy loam, 5% chalk inclusions 0.1-3cm and 2% flint inclusions	0.35m
202	redeposited natural	Redeposited natural, mid pale grey white, firm crushed chalk(dirty mixed)	0.33m
203	Natural	Natural chalk	Unexc.

Evaluation Trench 3	Max depth: 0.75m	Length: 20.1m	Width: 2.20m
Context No.	**Type**	**Description:**	**Depth: (m)**
301	Topsoil	Topsoil, Mid greyish brown moderately compact clayish loam, occasional small angular flint inclusions	0.42m

302	Natural	Natural chalk	Unexc.
303	Cut	Possible Iron Age ditch, cut of curved ditch/linear with sharp edges	0.58
304	Fill	Primary? Fill of ditch, naturally deposited. Mid greyish brown firm clayish loam, very common small to medium chalk fragments, rare small flints fragments.	0.33
305	Fill	Primary? Fill of ditch, medium light brownish grey firm clayish loam, very common small chalk fragments, rare medium angular flints	0.52
306	Cut	Linear noted from aerial photographs, possible post medieval field boundary. Shallow concave cut, over cut by machine	0.85
307	Fill	Fill of probable post medieval linear. Medium grey brown firm clayish loam with rare small to medium flint and chalk fragments.	0.85
308	Modern disturbance	Modern dumped rubbish, dark grey-black dump of burnt material	Unexc.
309	Modern disturbance	Modern rubbish, Light-medium grey deposit with very common chalk inclusions	Unexc.

Evaluation Trench 4	**Max depth: 1.10m**	**Length: 20.1m**	**Width: 2.3m**
Context No.	**Type**	**Description:**	**Depth: (m)**
401	Topsoil	Topsoil, medium greyish brown moderately compact clayish loam, rare small to medium flint and chalk fragments	0.25
402	Redeposited natural	Redeposited natural, mid pale brown white firm crushed chalk	0.37
403	Natural	Natural chalk	Unexc.

Evaluation Trench 5	**Max depth: 0.40m**	**Length: 27.5m by 20.2m**	**Width: 2.2m**
Context No.	**Type**	**Description:**	**Depth: (m)**
501	Topsoil	Topsoil, dark grey brown moderately compact sandy loam, 5% small chalk fragments, 10% medium angular flints	0.30m
502	Natural	Natural chalk	Unexc.
503	Cut	Probable Romano-British post-hole. A shallow concave round post-hole cut. One of a line of three running roughly east-west across the trench	0.16m
504	Fill	Fill of probable RB posthole. Pale orange brown firm silty clay, common chalk and flint inclusions (angular small to medium).	0.16m
505	Cut	Cut of probable RB posthole. Steep-sided concave post-hole feature, oval in plan. One of a line of three running roughly east-west	0.22m
506	Fill	Fill of probable RB posthole. Mid-pale orange brown firm silty clay, common small to medium chalk fragments, rare small to medium angular flint	0.22m

		fragments.	
507	Cut	Cut of probable RB post-hole. Sub circular, steep sided, post-hole with a shallow concave base. One of a line of three running roughly east-west across the trench	0.20m
508	Fill	Fill of probable RB post-hole. Pale orange brown firm silty clay, very common small chalk fragments, occasional small angular flints fragments	0.20m
509	Cut	Cut of probable tree throw, not fully excavated	Unexc.
510	Fill	Mid brown orange very chalky fill of probable tree throw	Unexc.
511	Cut	Steep-sided, flat-bottomed feature, upper profile hard to determine initially due to redeposited chalk. May represent the terminal of a ditch or a pit.	0.48m
512	Fill	Pale pinkish brown lose friable chalk and clay mix (rare small sub rounded flints). Possible primary fill of ditch terminus.	0.06m
513	Fill	Mid red brown firm silty clay. Very common small to medium chalk fragments, occasional small sub rounded flints. Possible primary fill of ditch.	0.35m
514	Fill	Mid red brown firm silty clay, occasional small angular chalk and flint fragments. Naturally occurring final fill of possible ditch terminus	0.25m
515	Cut	Cut of possible post-hole, not excavated	Unexc.
516	Fill	Mid red brown firm silty clay, fill of possible post-hole (not excavated)	Unexc.

Evaluation Trench 6	**Max depth: 0.47m**	**Length: 30.0m**	**Width: 2.28m**
Context No.	**Type**	***Description:***	**Depth: (m)**
601	Topsoil	Dark brownish grey clayish loam. Moderately sorted and mixed. Regular chalk and flint inclusions <40mm. Horizon is clear	0.26m
602	Natural	Natural degraded chalk with orange brown clay periglacial scarring	Unexc.
603	Fill	Dark reddish brown firm silty clay with common small flint fragments. Only fill of ditch terminus 604, no artifacts recovered	0.21m
604	Cut	Cut of linear gully/ditch terminus, with medium concave sides and base. Containing a number of stake holes cut into the base of the ditch. Boundary ditch with possible fence line or wattle and daub structure constructed along base	0.21m
605	Fill	Dark reddish brown firm silty clay, no inclusions, fill of stake hole 606	0.16m
606	Cut	Cut of stake hole, not fully excavated lies 0.1m to the east of an identical feature, both located on the base of 604	0.16m

Evaluation Trench 7	Max depth: 0.47m	Length: 49.30m	Width: 2.20m
Context No.	**Type**	**Description:**	**Depth: (m)**
701	Topsoil	Mid brownish grey, moderately compact clayish loam, very few inclusions; rare small angular flint and chalk fragments.	0.26m
702	Natural	Light brownish white periglacial chalk at NW end of trench , becoming mid reddish brown silty clay with gravel at SE end	Unexc.
703	Fill	Dark reddish brown firm clayish silt, quite common small to medium rounded flint fragments. Fill of hollow way 705 silting event following disuse of metalled hollow way	0.40m
704	Surface	Metalled surface contained in hollow way, depth of layer is unknown as it remains unexcavated. Consists of natural rounded flints from the local geology	Unexc.
705	Cut	Cut of hollow way, running roughly n-s across trench. A very shallow concave cut, not completely excavated, contains a flint metalled surface 704 and a tertiary disuse layer 703. Possible relates to ditch 706 which runs parallel approx 0.5m to the west	0.40m
706	Cut	Cut of ditch, with medium concave sides and a shallow concave base. May be related to the hollow way 705 which lies 0.5m to the east. Possible roadside ditch.	0.60m
707	Fill	Mid red brown firm silty clay, common small to medium angular flint fragments, occasional small chalk fragments. Fill of ditch 706	0.44m
708	Fill	Mid yellowish brown firm sandy clay common small and medium rounded and sub angular flints. Primary fill of probable road side ditch	0.16m

Evaluation Trench 8	Max depth: 0.46m	Length: 29.5m	Width: 2.20m
Context No.	**Type**	**Description:**	**Depth: (m)**
801	Topsoil	Mid grey brown moderately compact clayish loam occasional small to medium angular flint and chalk fragments	0.32m
802	Cut	Linear running approx nw-se across trench. Medium sides, rounded concave base, may be a road-side ditch associated with the road 809	0.31m
803	Fill	Fill of ditch 802. Dark orange brown firm silty clay, common rounded and sub-angular flint gravel (small to medium)	0.31m
804	Cut	Cut of possible pit or well feature, noted in geo-physical survey, roughly circular in plan, with steep sides, sharp edges, only excavated to a depth of 0.61 m	0.61m+
805	Fill	Last fill of possible pit feature 804, medium dark grayish brown moderately compact clayish loam, containing very rare small flint and chalk fragments. Very steep edge with context 806, this may indicate slumping inside the feature, or that the feature is very deep.	0.61m+
806	Fill	Fill of possible pit or well 804, mid orange brown moderately compact clayish loam, rare small flint and chalk fragments: may be a dumped backfill	0.46m
807	Fill	Fill of possible pit or well 804, mid orange brown firm clayish loam, common small to medium angular chalk inclusions, occasional large angular flint, may be a dumped deposit, some indication of tip lines	0.61m+

808	Surface	Metalled surface of road, depth of layer is unknown as it remains unexcavated. No mortar present, a deep (10cm) wheel rut or small gully runs along the feature, which is constructed from natural flint gravel from the local geology.	Unexc.
809	Fill	Mid grey brown soft silty loam, occasional small sub-rounded flints, deposit directly overlying the metalled surface 808, probably represents naturally occurring silting after abandonment of feature	0.15m
810	Subsoil	Mid reddish brown moderately compact silty loam with occasional small rounded flints	0.25m
812	Fill	Mid grey brown firm clayish loam, rare small angular flint and chalk fragments	0.56m
813	Cut	Cut of large V-shaped probable enclosure ditch. Steep, uneven sides, slightly stepped on the west side. Noted in geo physical survey may form part of enclosure	1.17m
814	Fill	Top fill of ditch, mid greyish brown moderately compact clayish loam, common small to medium angular flints, occasional small chalk fragments. Possible dumped deposit, or tertiary fill containing a large proportion of finds	0.40m
815	Dump layer	Fill of ditch 813. Mid black brown moderately compact clayish silt, occasional small chalk flecks, common small to medium angular and rounded flints. Dumped occupation rubbish, deposited from the west of the ditch	0.60m
816	Primary fill	Mid red brown firm silty clay, primary fill of ditch 813, washed in from the east	1.18m
817	Primary fill	Fill of 813. Mid grey brown firm sandy clay, very common small and medium rounded flint gravel, common chalk fragments	0.75m
818	Natural	Mid orange brown gravel overlying chalk	Unexc.

Evaluation Trench 9	**Max depth: 0.24m**	**Length: 31.1m**	**Width: 2.15m**
Context No.	**Type**	**Description:**	**Depth: (m)**
901	Topsoil	Dark black grey friable silty loam, rare, poorly sorted small chalk and flint fragments	0.24m
902	Natural	Light white brown silty clay matrix binding broken up, degraded chalk natural. Also includes periglacial scarring and geological hollows filled with a dark reddish brown clay	Unexc.

Evaluation Trench 10	**Max depth: 0.38m**	**Length: 22.8m**	**Width: 2.2m**
Context No.	**Type**	**Description:**	**Depth: (m)**
1001	Topsoil	Topsoil, mid grey brown friable clayish loam, occasional small chalk and flint fragments	0.35m
1002	Natural	Mid red brown firm natural gravel, rounded flints, natural	0.30m

1003	Natural	White firm natural chalk	Unexc.
1004	Cut	Cut of NE-SW running ditch, medium angled sides with a shallow concave base	0.54m
1005	Fill	Dark reddish brown firm silty clay, very common, small to medium rounded flint gravel, rare small chalk fragments. Fill of ditch 1004, possible back filled deposit.	0.54m
1006	Cut	Cut of possible pit feature, irregular oval in plan, base and sides are shallow irregular and concave. My represent a tree throw or natural feature, edges not sharp	0.19m
1007	Fill	Fill of possible pit feature 1006, mid reddish brown firm sandy clay with occasional small sub rounded flints and common sub angular flints	0.19m
1008	Cut	Cut of linear, very steep convex sides, shallow concave base. Probably represents a ditch running n-s across the trench	0.90m
1009	Tertiary deposit	Topmost fill of ditch, Dark reddish brown firm silty clay, occasional small to medium rounded and sub-angular flints perhaps represents the final back filling of the feature	0.24m
1010	Secondary fill	Dark grey brown firm silty clay, very common small and medium rounded and sub angular flints, secondary fill of ditch	0.17m
1011	Primary fill	Dark grey brown firm silty clay, common small sub-rounded flint gravel	0.44m

Evaluation Trench 11	**Max depth: 0.49m**	**Length: 21.65m**	**Width: 2.21m**
Context No.	**Type**	**Description:**	**Depth: (m)**
1101	Topsoil	Mid grey brown friable sandy silt, common sub angular and sub rounded flints	0.39m
1102	Natural	Natural chalk, interspaced with orange gravelly clay	Unexc.

Evaluation Trench 12	**Max depth: 0.34m**	**Length: 30.7m**	**Width: 2.2m**
Context No.	**Type**	**Description:**	**Depth: (m)**
1201	Topsoil	Dark grey brown friable clayish loam, common small to medium rounded and sub-angular flint fragments	0.25m
1202	Subsoil	Medium red brown firm silty clay, rare small to medium angular flints, common small chalk fragments	0.09m
1203	Natural	Natural chalk	Unexc.
1204	Cut	Irregular oval cut with medium/steep sloping concave sides and a shallow concave base.	0.50m
1205	Fill	Mid grey brown friable silty loam, common small to medium sub angular and rounded flints, common small to medium angular chalk fragments. Possible post packing?	0.28m

1206	Fill	Mid red brown soft silty loam, occasional small angular flints fragments and chalk flecks, possible post pipe?	0.28m

Evaluation Trench 13	**Max depth: 0.43m**	**Length: 31.1m**	**Width: 2.45m**
Context No.	**Type**	**Description:**	**Depth: (m)**
1301	Topsoil	Topsoil, mid grey brown friable clayish silt, rare flint fragments	0.30m
1302	Natural	Natural, red brown silty clay mottled with stripes of chalk	Unexc.

Evaluation Trench 14	**Max depth: 0.35m**	**Length: 30.1m**	**Width: 2.1m**
Context No.	**Type**	***Description:***	**Depth: (m)**
1401	Cut	Nw-se aligned possible linear terminus, slightly diffuse edge, shallow concave	0.19m
1402	Secondary fill	Fill of shallow, undated, possible linear feature. Mid orange grey brown firm silty clay, occasional small rounded flints.	0.19m
1403	Cut	Se-nw aligned possible linear terminus, slightly diffuse edger	0.11m
1404	Secondary fill	Fill of undated possible linear. Mid orange grey brown, firm silty clay, occasional small rounded flints.	0.11m
1405	Cut	Cut of substantial ditch feature, possible enclosure, may be related to the metalled surface. se-nw aligned v-shaped linear. Medium slope sides, slightly convex. Shallow concave base. V-shaped.	1.05m
1406	Fill	Earliest episode of primary deposition within 1405, light orange grey brown firm silty clay occasional small to medium rounded flints	0.16m
1407	Secondary fill	Fill of 1405. Mid darkish grey brown firm silty clay, common large to medium rounded and sub angular flints	0.34m
1408	Secondary fill	Fill of 1405. Light orange grey brown firm silty clay, common small to medium rounded and sub-angular flints. Occasional small to medium angular chalk fragments	0.32m
1409	Tertiary deposit	Fill of 1405. Mid greyish brown firm silty clay common small to medium rounded and sub-angular flints	0.42m
1410	Natural	Chalk geology	Unexc.
1411	Fill	Natural orange brown gravels	Unexc.
1412	Topsoil	Topsoil, mid grey brown friable clayish loam, occasional small angular and rounded flint and chalk fragments	0.30m
1413	Cut	Very shallow, wide cut for possible metalled surface	0.24m

1414	Surface	Possible cobbled surface, containing very common rounded small and medium flint pebbles, perhaps associated with the ditch to the east	0.16m
1415	Fill	Latest episode of possible tertiary deposition overlying possible cobbled surface 1414, mid greyish brown silty clay, occasional quite common small flint pebbles	0.12m
1416	Cut	Roughly circular steep sided concave cut feature, possible post/small pit	0.30m
1417	Fill	Earliest fill of possible pit/post-hole. Mid orange grey brown silty clay common small flint pebbles, occasional charcoal flecks	0.05m
1418	Fill	Final fill of possible pit/posthole. Mid greyish brown firm silty clay, occasional small flint pebbles	0.24m

Evaluation Trench 15	**Max depth: 0.77m**	**Length: 25.3m**	**Width: 2.08m**
Context No.	**Type**	**Description:**	**Depth: (m)**
1501	Topsoil	Mid greyish brown firm silty clay, occasional small flint pebbles	0.38m
1502	Subsoil	Mid grey brown moderately firm clayish loam, rare small chalk and flint fragments	0.16m
1503	Subsoil	Mid red brown moderately compact clayish loam, rare small flints and charcoal flecks	0.11m
1504	Fill	Mid red brown firm clayish loam, occasional small chalk fragments, fill of possible feature 1505	0.25m
1505	Cut	Small irregular shallow flat possible terminus cut	0.25m
1506	Fill	Fill of possible feature 1505, alot of animal disturbance. Dark grey brown moderately compact clayish loam common small angular chalk fragments, and occasional small flints	0.44m
1507	Fill	Possible natural slump within feature 1505, may indicate a bank. Pale brown grey firm silty clay common small to medium sub rounded flints, occasional small chalk fragments	0.42m
1508	Cut	Irregular cut feature, heavily truncated by animal disturbance. Possible linear terminus	0.44m
1509	Natural	Natural chalk and gravel	Unexc.

Evaluation Trench 16	**Max depth: 1.03m**	**Length: 18.0m**	**Width: 2.00m**
Context No.	**Type**	**Description:**	**Depth: (m)**
1601	Topsoil	Topsoil, dark brown friable loam, rare small chalk and flint fragments	0.30m
1602	Redeposited natural	Layer of fractured chalk, very little soil	0.15m

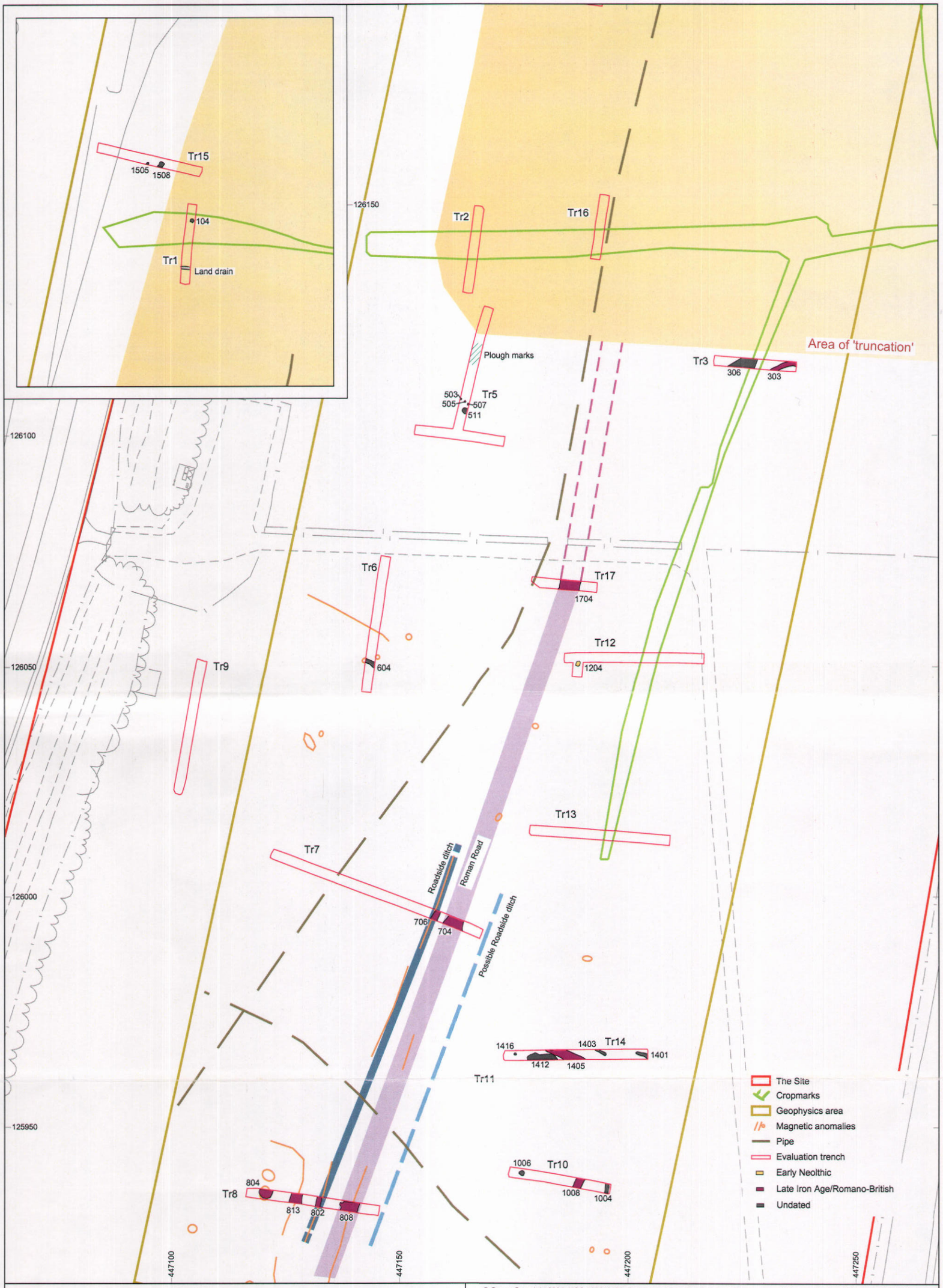
1603	Redeposited natural	Redeposited chalk and soil	0.05m
1604	Redeposited natural	Redeposited natural. Soft chalky subsoil very crumbly	0.25m
1605	Redeposited natural	Redeposited natural, Layer of very crumbly fractured chalk	0.25m
1606	Natural	Natural chalk	0.10m

Evaluation Trench 17	**Max depth: 0.50m**	**Length: 15.0m**	**Width: 2.00m**
Context No.	**Type**	**Description:**	**Depth: (m)**
1701	Topsoil	Dark grey brown moderately compact clayish loam, occasional small flints fragments	0.27m
1702	Subsoil	Mid orange brown firm clayish loam, occasional small chalk fragments	0.18m
1703	Natural	Natural chalk	Unexc.
1704	Cut	Cut of probable hollow way, medium concave sides, shallow base, possibly containing wheel ruts	0.84m
1705	Fill	Fill of probable RB hollow way/road. May be the remains of a road surface visible on the very base of the deposit. Mid orange brown firm clay loam, occasional medium and large angular and sub rounded flints, occasional chalk flecks	0.84m

Appendix 3: All finds by context

CBM=ceramic building material
Cu alloy=copper alloy
Finds are recorded by number and then weight (g)

Context	Pottery	CBM	Flint	Burnt flint	Stone	Cu alloy	Iron	Lead	Animal Bone	Shell
0105			4/24							
0304	1/17		2/9	13/169						
0504	1/10			1/1						
0508				1/43						
0512			10/120							
0703	1/3									
0707	7/84			1/4					7/52	
0803	1/34	1/2								
0805	22/140	10/239			1/1		5/42			
0806	4/59	3/32					5/76			
0807	30/245	3/82					1/26		3/5	1/47
0809	4/14		2/9	2/20		1/1	6/14	1/36	1/1	
0810		2/10								
0814	7/33	7/970							4/30	2/95
0815	82/1460	1/139		1/58			1/2		23/126	41/700
0816									1/16	
1005				1/21						
1009									1/9	
1010	2/1			2/48						
1011									2/9	
1206	3/13									
1406									15/58	
1407	5/40									
1705			4/106							
U/S Tr. 8		1/1		1/93						
Total	170/2153	28/1475	22/268	23/457	1/1	1/1	18/60	1/36	57/306	44/842



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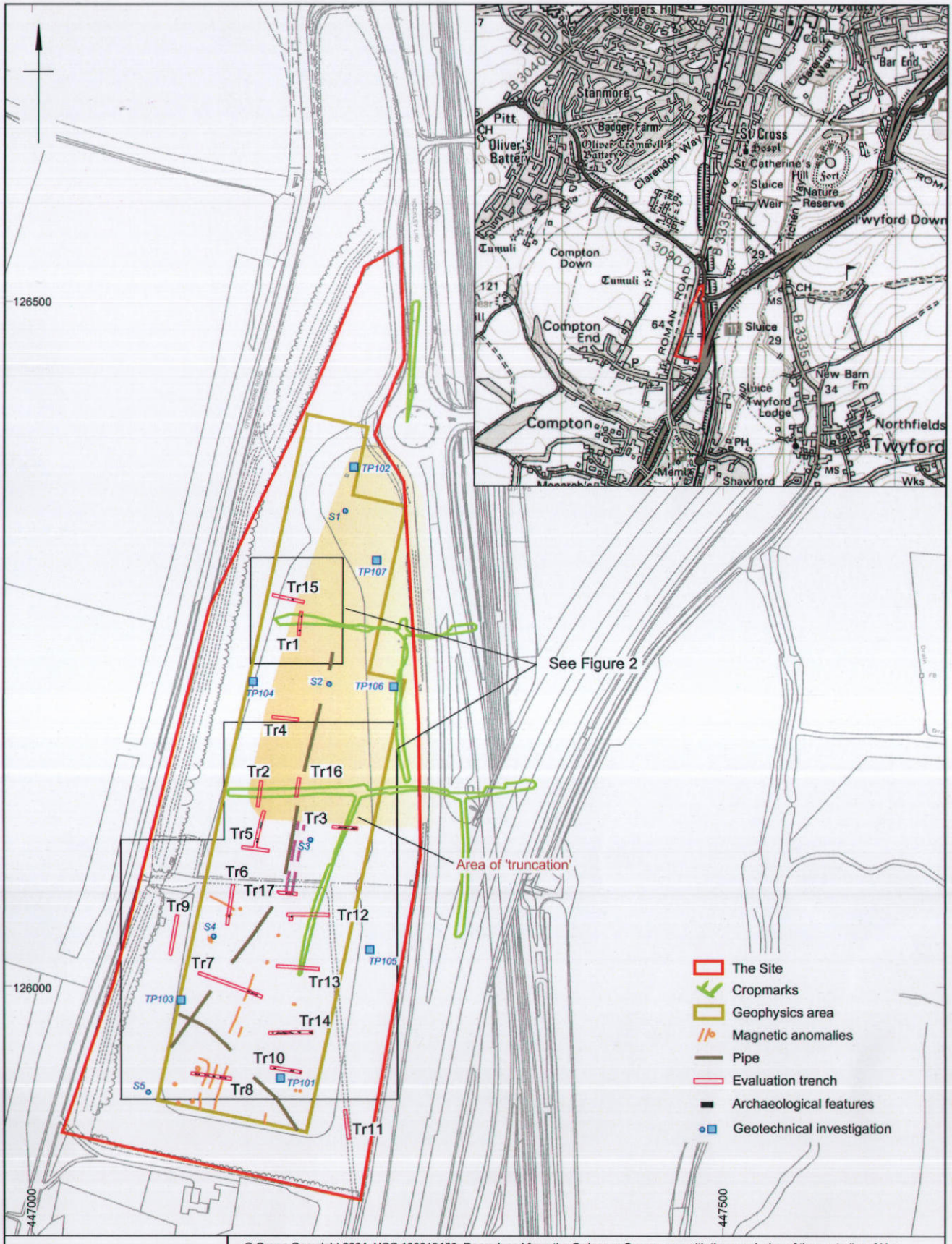
Wessex Archaeology

Plan of Site showing phase plan of all features

Figure 2



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Wessex Archaeology

Site, geotechnical test pit and evaluation trench location

Figure 1

Plate 1: Possible Early Neolithic pit 1204

Wessex Archaeology	Date:	13/03/07	Illustrator:	LJC
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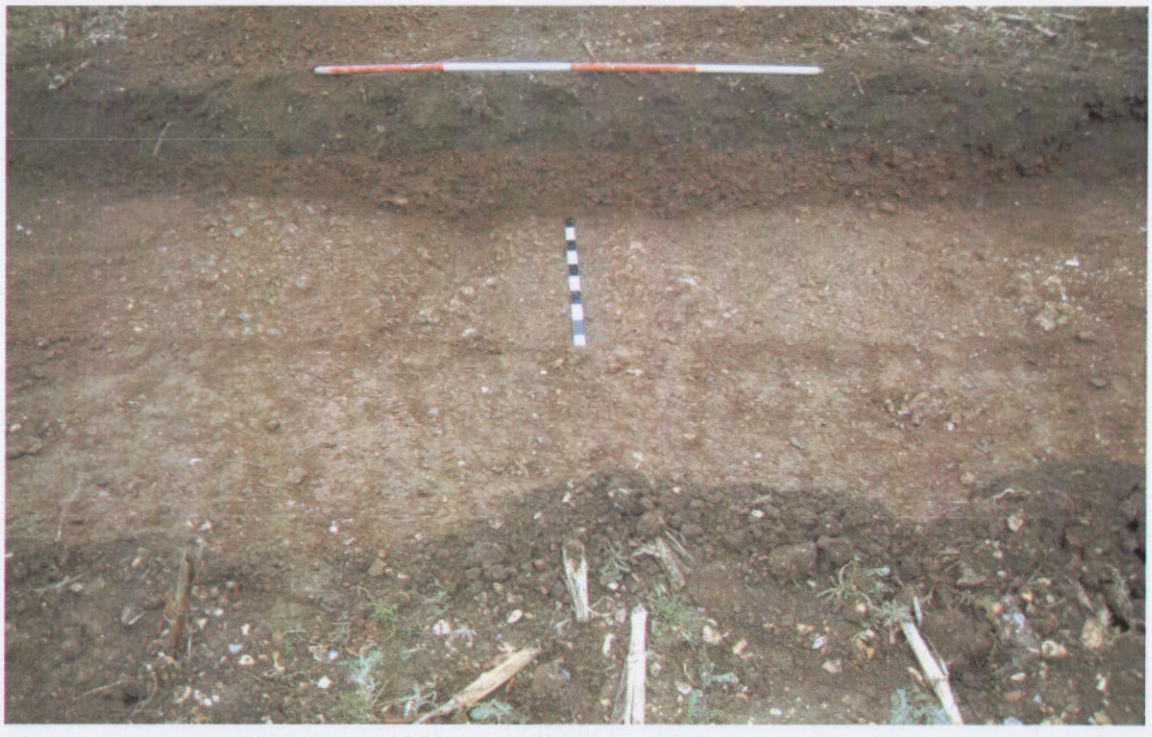

Plate 2: Roman road/hollow way 808 viewed from the north

Plate 3: Roman road/hollow way 1704 viewed from the north

Wessex Archaeology	Date:	13/03/07	Illustrator:	LJC
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Plate 4: Section through probable road side ditch 706 viewed from the north

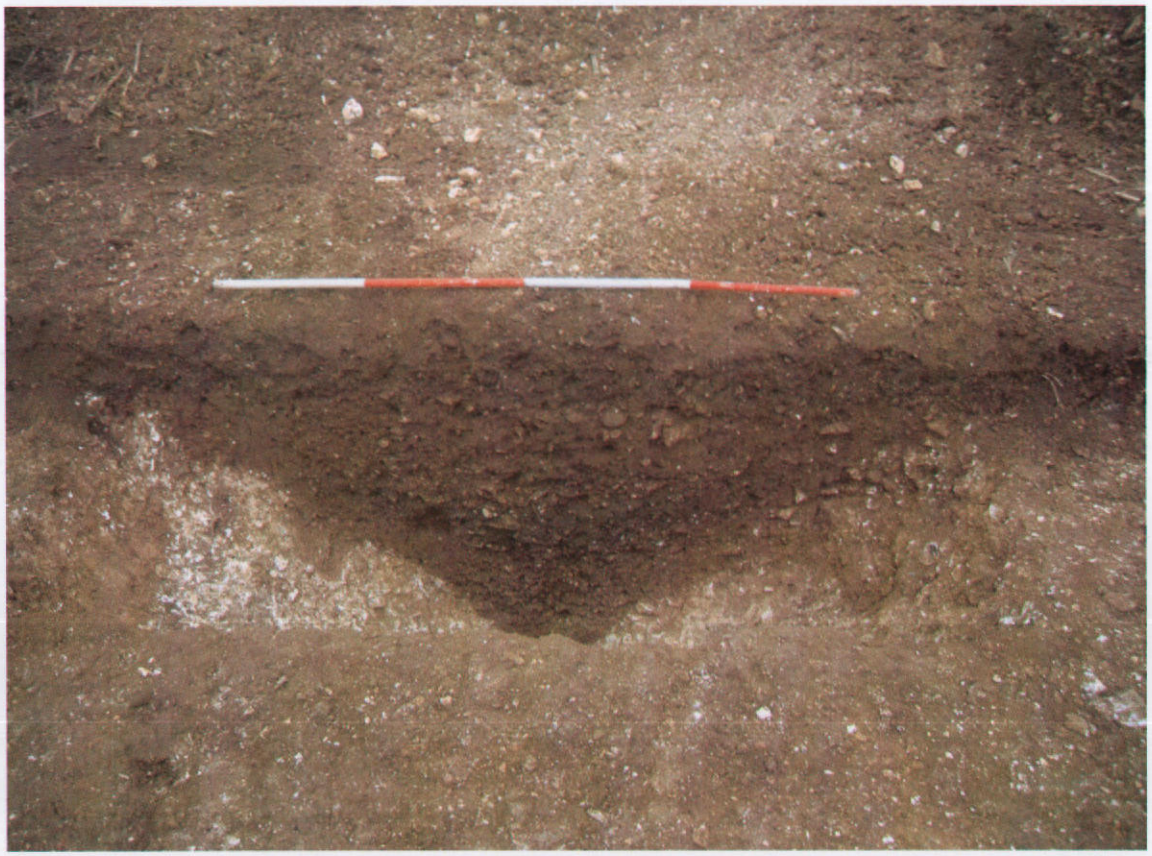

Plate 5: Section across ditch 813, viewed from the north

Wessex Archaeology	Date:	13/03/07	Illustrator:	LJC
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Plate 6: Line of post-holes and possible ditch terminus in Trench 5, viewed from the south

Wessex Archaeology	Date:	13/03/07	Illustrator:	LJC
	Path:	Y:\PROJECTS\62100\Drawing Office\Report Figures\Eval\07_03_08\62100 site3photos.cdr		

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SOUTH WINCHESTER PARK AND RIDE SITE 3

Report on Archaeogeophysical Survey 2006

A.D.H. Bartlett

Surveyed by:

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for:

Wessex Archaeology Ltd
Portway House
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on behalf of:

Hampshire County Council

South Winchester Park and Ride Site 3

Report on Archaeogeophysical Survey 2006

Introduction

This report describes the findings from a magnetometer survey which was commissioned by Wessex Archaeology as part of an archaeological evaluation of the site of a proposed park and ride car park to the south of Winchester. The car park is to occupy some 9.8ha, extending across two fields adjacent to Junction 11 of the M3. These fields are located to the north of Appleshaw House, and centred at NGR SU 472261. The survey covered some 5ha arranged as specified as a block centred within the boundaries of the proposed development.

The site is of potential archaeological concern for reasons which include the presence of a Roman road, which runs alongside the western boundary of the site (the present Otterbourne Road). Other nearby archaeological features include a barrow indicated on the 1:10000 OS map some 200m NE of the northern end of the survey. The site is located in an area of chalk bedrock, which usually provides ground conditions which are favourable for the magnetic detection of archaeological features.

Initial plans of the survey findings were supplied following completion of the fieldwork, which was done between 6 and 8 December 2006. The data plots have now been combined with more detailed background mapping for inclusion in this report.

Survey Procedure

The survey was carried out by means of a full recorded magnetometer survey covering the area as indicated by the red outline on the location plan (figure 5).

The magnetometer survey followed standard procedures for work of this kind with readings collected along transects 1m apart using Bartington 1m fluxgate magnetometers. The results of the survey are shown as a grey scale plot at 1:2000 scale in figure 1, and as graphical (x-y trace) plots at 1:1000 in two sections (figures 2-3). An interpretation of the findings is shown superimposed on figures 2-3, and is reproduced separately to provide a summary of the findings on the final plan (figure 5).

The survey plots show the magnetometer readings after standard treatments which include adjustment for irregularities in line spacing caused by variations in the instrument zero setting, and slight linear smoothing. Additional 2D low pass filtering has been applied to the grey scale plot to reduce background noise levels.

The survey grid was set out and located at the required national grid co-ordinates by means of a sub-1m accuracy differential GPS system. OS co-ordinates of map locations can be read from the AutoCAD (.dwg) version of the plans which can be supplied with this report. The survey plans which are included in this report are based on a digital site plan supplied to us by the client.

The magnetometer survey was supplemented by a background magnetic susceptibility survey with readings taken at 15m intervals using a Bartington MS2 meter and field sensor loop. Two versions of the results are presented as plots of shaded squares of density proportional to the readings in figure 4. The second of the two plots shows the readings after treatment with a median filter. This emphasises broad trends in the data, and is used as the basis for the contoured outline indicating areas of high readings, which are shown in blue on the interpretative plan (figure 5).

Susceptibility surveying provides a useful complement to a magnetometer survey, and indicates the strength of response which is likely to be obtained. It can also be used to provide a broad indication of previously occupied or disturbed areas in which burning associated with past human occupation has enhanced the magnetic susceptibility of the topsoil, although the readings may be affected by a number of non-archaeological factors, including geology and recent land use.

The magnetometer responds to cut features such as ditches and pits when they are silted with topsoil, which usually has a higher magnetic susceptibility than the underlying natural subsoil. It also detects the thermoremanent magnetism of fired materials, notably baked clay structures such as kilns or hearths, and so responds preferentially to the presence of ancient settlement or industrial remains.

Results

The survey has produced a number of findings of potential archaeological significance, but these are visible only in the southern of the two fields. The magnetometer response in the northern field is entirely dominated by modern magnetic disturbances, most of which must relate to the use of the site as a construction camp during the building of the nearby M3 motorway. Installations within the field at that time (as mentioned to the survey field team by the farmer) included portacabins, a temporary north-south road in the centre of the field, and a cement mixing plant. The extent of the consequent magnetic disturbance is indicated approximately by cross hatching in figure 5. This extends across the greater part of the survey, with only a few relatively quiet areas near the edges.

Much of the disturbance probably indicates a spread of rubble or hardcore used for temporary foundations and hard standing. This material may be present only in a superficial layer within the topsoil, and so the strongly disturbed magnetic response does not exclude the possibility that archaeological features may survive beneath the modern

debris.

It is difficult to identify any significant details within the survey data from the northern field. An iron pipe (which was detected clearly in the south field) appears to follow a north-south course in the centre of this field (marked by a blue broken line on figure 5) , perhaps with a branch to the west, but neither alignment can be seen with much clarity.

Some other approximately linear sequences of magnetic anomalies in the northern field are indicated by orange outlines, but these are more likely to relate to modern services (pipes or cables) than to archaeological features.

The southern field has clearly not been subjected to recent interference of the kind seen in the north field. There are again strong linear magnetic disturbances, probably indicating pipes (as noted above in the north field), and a line of strong magnetic anomalies corresponding to an extant track (light blue outlines on figure 5). The field is otherwise free of substantial magnetic disturbances, other than a number of potential archaeological features (as approximately indicated by broken red lines and red outlines on figure 5). The main finding is a broken linear anomaly which may indicate that part of an enclosure has been detected in the SW corner of the survey (labelled A on figure 5). The linear features enclose a number of individual magnetic anomalies, suggesting the presence of silted pits, or other features potentially associated with settlement remains. An extension of the survey to the field boundaries (or trenching in this part of the site) would perhaps indicate whether these findings indicate an enclosure extending to the Roman road.

Other linear features were detected to the east of the anomalies at A. A clearly defined linear magnetic anomaly at the southern end of the survey (B) becomes less distinct to the north (C). Two parallel linear features may be present at C, suggesting a road or track.

Other magnetic anomalies which could represent scattered pit-like or linear features are outlined (e.g. at D, E, F). These are unlikely to represent dense concentrations of archaeological disturbances, but suggest there could be a spread of potentially significant features to the north and east of the probable enclosure in the SW corner.

A number of cropmarks indicating enclosures or a field system have previously been recorded at the site, and are reproduced (from background mapping supplied to us) in green on figure 5. These are located mainly in the northern field, where any associated magnetic response is obscured by modern interference. There is not, however, any distinct magnetic response on the line of one cropmark which extends into the southern field, and there are no cropmarks to correspond to the enclosure and other features detected in the magnetometer survey. The survey findings appear, therefore, to be complementary to the cropmarks, which may well provide only an incomplete indication of the archaeological features which are likely to be present.

Two alternative presentations of the magnetic susceptibility readings are shown, as previously noted, on figure 4. Overall trends in the data can be seen most clearly in the median filtered plot, and are indicated approximately by the blue contours in figure 5. (The contours enclose areas of above-average readings.) There is an area of high

readings in the northern field, which again is likely to be associated with modern disturbances, but there are also raised values in the western half of the southern field. This part of the site contains most of the potential archaeological features identified in the magnetometer survey. Enhanced susceptibility values would be consistent with the presence of settlement features in this area.

Conclusions

The magnetic response from the northern field is heavily disturbed because of the former use of this field as a motorway construction site, but magnetic anomalies of potential archaeological significance were detected in the southern field. These include part of a possible enclosure in the SW corner of the survey, and linear and other features extending further to the north. These findings could be consistent with the presence of a roadside settlement alongside the Roman road.

Report by:

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01865 200864

19 February 2006

S. Brown and C. Oatley carried out the fieldwork for this project.

447000E

126000N

N

OTTERBOURNE ROAD

HOCKLEY LINK

fig 2

fig 3

magnetic anomalies

magnetic anomalies (recent / non-archaeological ?)

magnetically disturbed area

disturbance on line of track

pipe

susceptibility > 26 SI

cropmarks

A

B

C

D

E

F

approximate extent of magnetometer survey

area proposed for survey

location of 1:1000 figures (2-3)

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South Winchester Park and Ride Site 3
Geophysical Survey 2006

Figure 5: Magnetometer survey (summary of findings)

0 1:2000 100m

magnetic anomalies

magnetic anomalies (recent / non-archaeological ?)

magnetically disturbed area

disturbance on line of track

pipe

45 nT

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MP 75

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Figure 2: Magnetometer survey (N) with interpretation

1:1000

0 50m

magnetic anomalies

magnetic anomalies (recent / non-archaeological ?)

magnetically disturbed area

disturbance on line of track

pipe

45 nT

South Winchester Park and Ride Site 3

Geophysical Survey 2006

Figure 3: Magnetometer survey (S) with interpretation

0 1:1000 50m

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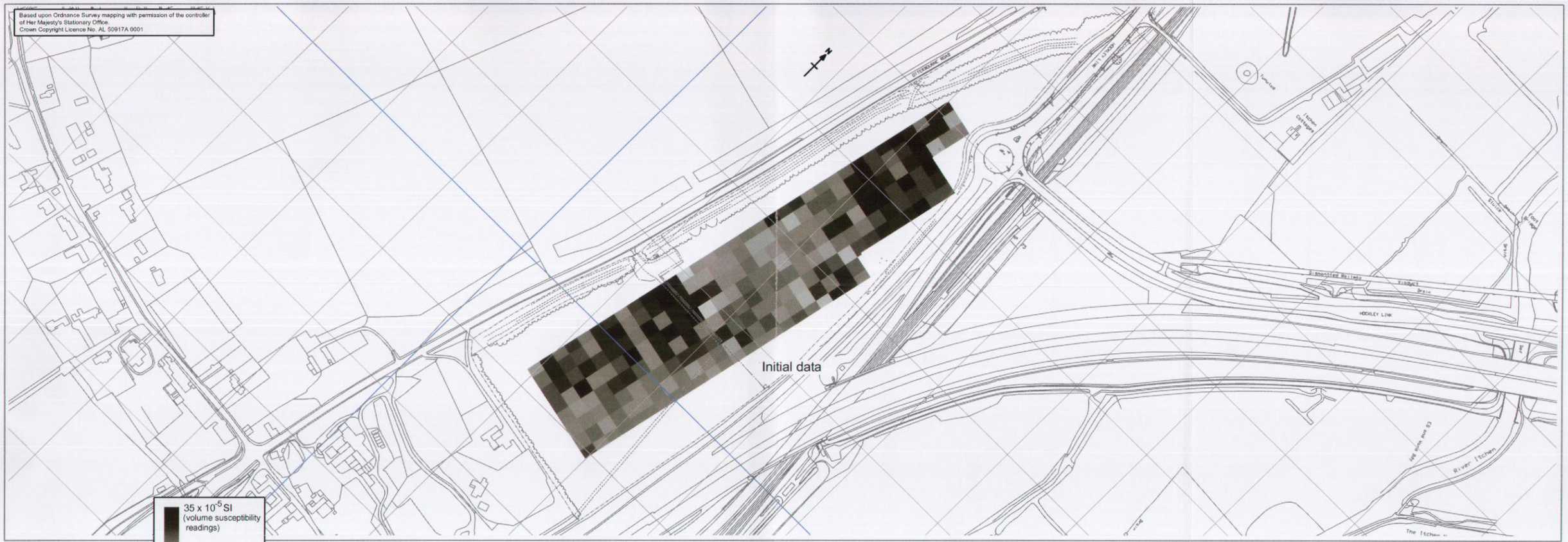

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Figure 4: Magnetic susceptibility survey (grey scale plots)

0 1:4000 200m

447000E

126000N

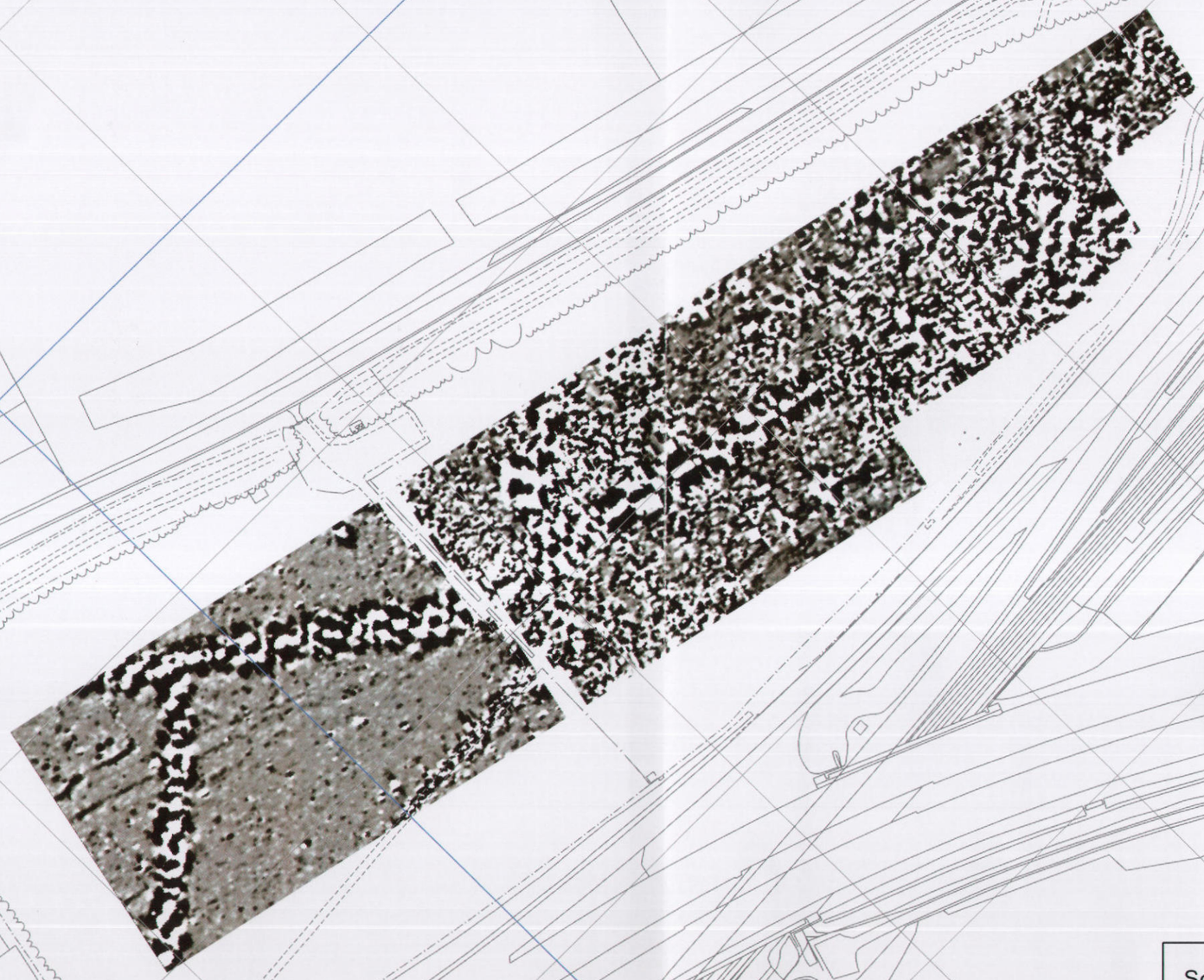
N

OTTERBOURNE ROAD

HOCKLEY LINK

1.6 nT/m

-1.4 nT/m



447000E

126000N

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South Winchester Park and Ride Site 3

Geophysical Survey 2006

Figure 1: Magnetometer survey
(grey scale plot)

0 1:2000 100m