

**LAND AT ROSE COTTAGES
ST GEORGE'S, WORLE
NORTH SOMERSET**

ARCHAEOLOGICAL EVALUATION

For

FISHER AND DEAN LIMITED

CA REPORT: 04141

SEPTEMBER 2004

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NORTH SOMERSET

ARCHAEOLOGICAL EVALUATION

CA PROJECT: 1812
CA REPORT: 04141

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SUMMARY

Site Name:	Land at Rose Cottages, St George's
Location:	Worle, North Somerset
NGR:	ST 3724 6273
Type:	Evaluation
Date:	9-16 August 2004
Location of Archive:	To be deposited with North Somerset Museums Service
Accession no.	WESTM 2004.69
Site Code:	RCW 04

An archaeological evaluation was undertaken by Cotswold Archaeology in August 2004 at the request of Fisher and Dean Limited on land at Rose Cottages, St George's, Worle. In compliance with an approved Written Scheme of Investigation (CA 2004), six trenches were excavated across the development area.

Two sections of a possible prehistoric or Roman ditch running across the north-eastern part of site were revealed. Environmental samples taken from the ditch contained the remains of waterlogged seeds, wood, fruit stones, mollusca, fish and insects. These indicate that the ditch contained still or slow moving freshwater, and that the surrounding land was under marsh with areas of disturbed ground and woodland. The abundant fruit stones from the final fill of the ditch may be indicative of human occupation nearby. Samples were retained from this deposit for potential radiocarbon dating at a later date. The infilled ditch was sealed by an alluvial deposit that formed a stable floodplain upon which a burnt clay feature was uncovered. This may relate to features associated with Iron Age and Roman salt workings found during housing development 300m to the north-west. Other features included a V-shaped ditch cutting the prehistoric/Roman ditch and depressions in the overlying alluvial sequence, suggestive of earlier cut features below. These depressions were similar in appearance to those located above further V-shaped drainage ditches uncovered in archaeological work to the north of the site, which are thought to date to around the mid 3rd-century.

The evaluation has characterised the archaeological remains within the study area, and indicates that archaeological features of likely prehistoric to Late Roman date survive at a depth of approximately 1.3m below the modern ground surface, sealed by post-Roman

alluvial deposits. These features are largely represented by infilled ditches, possibly relating to drainage and reclamation of the mudflat/saltmarsh, and are concentrated within the north-eastern part of the site. Modern truncation had removed potential archaeological features across much of the south-western part of the site, however the survival of the alluvial sequence in trench 4 shows that there is limited potential for archaeological features to survive in this area.

1. INTRODUCTION

- 1.1 In August 2004 Cotswold Archaeology (CA) carried out an archaeological evaluation for Fisher and Dean Limited on land at Rose Cottages, St George's (centred on NGR: ST 3724 6273; Fig. 1). The evaluation was undertaken prior to determination of planning consent for the construction of new dwellings and associated services.
- 1.2 The evaluation was carried out in accordance with a brief for archaeological recording prepared by Vince Russett (NSPED 2004), the archaeological advisor to the Local Planning Authority (LPA), and with a subsequent detailed WSI produced by CA (2004) and approved by the LPA acting on the advice of Vince Russett. The fieldwork also followed the *Standard and Guidance for Archaeological Field Evaluation* issued by the Institute of Field Archaeologists (1999), and the *Management of Archaeological Projects II* (EH 1991). It was monitored by Vince Russett, including a site visit on 11 August 2004.

The site

- 1.3 The proposed development area encloses an area of approximately 5000m², and comprises an area of lorry parking south of the Bristol-Weston railway line within the village of St George's (Fig. 2). The site lies at approximately 5.4m AOD.
- 1.4 The underlying geology of the site is recorded as alluvium (Institute of Geological Sciences 1979). The strata belong to the upper portion of the Somerset Levels formation (Haslett et al 2001), which is correlated with the Upper Wentlooge formation (Allen and Rae 1997, Haslett et al 1998). The uppermost portions of the strata show a series of marine regressions and transgression with evidence for the formation of creeks and soil formation (Terra Nova 2001).

Archaeological background

- 1.5 Archaeological interest in the site arises from its position within a known Roman and late prehistoric landscape (CAT 1999). The site lies on the outskirts of the severely shrunken medieval settlement of St George's (SMR 9716).

- 1.6 St George's possessed a sub-circular infield of a type characterised by Rippon (1996, 1997) on many of the medieval settlements of the Northmarsh. These are thought to date to the 9th-10th century, representing the initial phase of re-colonisation of the Northmarsh after the large-scale abandonment at the end of the Roman Period.
- 1.7 Most infields examined so far have yielded evidence of Roman occupation, and evaluation, excavation and watching briefs on new developments and infrastructure works to the north of the site have revealed evidence of Iron Age and Roman activity. Evidence of Iron Age/Roman salt production has been identified at the Persimmon Homes (NGR ST 3750 6335) and Bloor Homes (NGR ST 3753 6337) developments, and during infrastructure works to create a new rhyne and flood plain along the western edge of the St George's development site. This consisted of patches of burnt clay and stone in association with Late Iron Age/early Roman pottery, and cut features (ditches or pits) filled with briquetage. The briquetage assemblage appears to consist of salt processing apparatus such as large clay pedestals for supporting salt pans. A series of V-shaped drainage ditches of probable Roman date were also identified during the infrastructure watching brief (Terra Nova 2001), along with possible enclosure ditches, although these were only seen in section. The majority of the V-shaped ditches and briquetage filled features seen in the construction of a new drainage rhyne appeared to be on a north-west/south-east alignment. These features and a palaeochannel observed in the new drainage rhyne extend in the direction of the proposed development site, which lies 300m to the south-east. Evidence of possible 1st century Romano-British settlement was also found at the Persimmon Homes (NGR ST 3750 6335) development in the form of pits, gullies and ditches immediately to the north-west of the salt making site there.
- 1.8 Roman landscapes have also been recorded on excavations to the south of the site (SMR 40092 and SMR 44926), and to the east (SMR 42876), which may relate to a major Roman villa. A terrace of post-medieval cottages also delineates the site to the east.
- 1.9 Evidence for medieval and post-medieval activity has also been recorded during evaluation and building work at the Prowting development site, including medieval ditches, pits and gullies associated with Grove Farm SMR 40246 (NGR ST 3765 6313) and a building appearing on the Tithe map SMR 40841 (NGR ST 3763 6310)

(CAT 2002). Evaluation on the Bloor development SMR 40839 (NGR ST 3755 6320) also revealed medieval activity in the form of pits and ditches (CAT 2002a). A medieval pit and post-medieval structures were also revealed during evaluation and excavation at Grapevine Farm SMR 40247 (NGR ST 3745 6305; CA 2003).

Archaeological objectives

- 1.10 The objectives of the evaluation were to establish the character, quality, date, significance and extent of any archaeological remains or deposits surviving within the site. This information will assist the Local Planning Authority in making an informed judgement on the likely impact upon the archaeological resource by the proposed development.

Methodology

- 1.11 The fieldwork comprised the excavation of six trenches 1.5m wide, four were 15m in length, and two trenches were 20m in length. The trenches were positioned to give maximum coverage of any features occurring in a north-west/south-east alignment, which is the alignment of previously recorded ditches seen in the new rhyne section (see section 1.7 above). These features were thought likely to extend into the development area.
- 1.12 All trenches were excavated by mechanical excavator equipped with a toothless grading bucket. All machine excavation was undertaken under constant archaeological supervision to the top of the first significant archaeological horizon or the natural substrate, whichever was encountered first. Where archaeological deposits were encountered they were excavated by hand in accordance with the CA Technical Manual 1: *Excavation Recording Manual* (1996).
- 1.13 Deposits were assessed for their palaeoenvironmental potential and, where appropriate, sampled and processed in accordance with the CA Technical Manual 2: *The Taking and Processing of Environmental and Other samples from Archaeological Sites* (2003). All artefacts recovered were processed in accordance with the CA Technical Manual 3: *Treatment of Finds Immediately After Excavation* (1995).

- 1.14 The archive and artefacts from the evaluation are currently held by CA at their offices in Kemble. Subject to the agreement of the legal landowner the site archive (including artefacts) will be deposited with North Somerset Museums Service under accession number WESTM 2004.69.

2. RESULTS (FIGS 2 & 3)

- 2.1 This section provides an overview of the evaluation results; detailed summaries of the recorded contexts, finds and environmental samples (biological and geoarchaeological evidence) are to be found in appendices 1, 2 and 3 respectively. Details of the relative heights of the principal deposits and features expressed as metres Above Ordnance Datum (m AOD) appear in Appendix 4.
- 2.2 Trenches 6 and 5 contained no archaeological features and were heavily disturbed by modern activity.

Trench 1

- 2.3 The earliest feature located within this trench was a large northeast/southwest aligned ditch 111. It was approximately 2m in width and over 1m in depth (the base could not be excavated due to health and safety reasons). Three fills with a high organic content were noted 107, 109 and 110 (Fig. 3). These were sampled for palaeoenvironmental assessment (see Appendix 3), and were found to contain the remains of waterlogged seeds, wood, fruit stones, mollusca, fish and insects but no dateable artefacts. Two samples for potential future radiocarbon dating were retrieved from the upper fill (107). This upper fill may have been within a later re-cut (108) section of ditch 111.
- 2.4 A sequence of alluvial layers was recorded in this trench, and a monolith sample (sample 4; Section 1, Fig. 3) was taken through the sequence to examine the processes behind deposit formation here (see Appendix 3). Ditch 111 was sealed by dark bluish grey alluvium, 106, which partially filled a depression left by the ditch so that the upper fill of the ditch was only visible at the outer edges.

- 2.5 Further to the north in trench 1, the alluvial layer 106 was covered by a small spread of burnt orange clay, 105, which was also sampled within monolith 4 (see Appendix 3). This deposit was 0.03m in depth and was noted only in section. A further bluish alluvial layer, 104, sealed this deposit.
- 2.6 A thin layer, 112, sealed deposit 104 and was approximately level throughout the northern part of the trench, other than in a small depression to the north, which appeared suggestive of a cut feature beneath (Section 1, Fig. 3). However, excavation in this part of the trench to a depth of 0.5m below deposit 104 did not reveal any features. It is possible that a ditch exists here that was not visible due to the ground conditions, and which could be contemporary with the burnt clay feature 105.
- 2.7 No features of archaeological interest were noted cut into the upper alluvial layers (103, and 112). The brown alluvial deposit 103 was sealed by approximately 0.2m of made ground and modern surfacing.

Trenches 2a and 2b

- 2.8 Although on slightly different alignment, ditch 111 was recorded in trench 2 as ditch 206. The fill characteristics and form of the two ditches were almost identical, although only the upper fill (207) of ditch 206 could be recorded in section (Section 2, Fig. 3) owing to health and safety constraints. A V-shaped ditch, 208, was also recorded cutting across 206 at right angles on a north-west/south-east alignment (Fig. 2), although again health and safety constraints prevented recording of the relationship with 206 in section. The orientation of ditch 208 was similar to the V-shaped ditches recorded to the north-west (see 1.7 above), and may relate to Roman reclamation of the floodplain around the mid 3rd-century. Both ditches were partially sealed by alluvial layer 205, which appeared to be the same deposit as 104 in trench 1 (Section 2, Fig. 3). Above this level a similar sequence of alluvial deposits was noted as in trench 1.

Trench 3

- 2.9 A similar alluvial sequence was again recorded in this trench to that seen in trenches 1 and 2. A similar depression to that seen in 112 (see 2.6 above) was also noted in

deposit 305 (the same as alluvial layer 112; Section 3, Fig. 3). However, another deposit had formed in this depression, layer 306. This was a dark grey deposit that appeared linear in plan, filling a possible ditch (308; Fig. 2, 3). Alternatively it may simply have formed due to the presence of a negative feature below. Again further investigation could not ultimately determine the presence or otherwise of a ditch here.

Trench 4

- 2.10 Trench 4 revealed no archaeological features although a similar alluvial sequence was recorded as seen in trenches 1-3 (Section 4, Fig. 3). A monolith sample (sample 6) was taken through this sequence for comparison with the sequence within the sample from trench 1 (sample 6: Appendix 3).

Trench 5

- 2.11 Trench 5 was heavily disturbed to a depth of over 2.5m below the present ground level. This is in all likelihood due to the presence of deep buried services (gas and water mains are known to cross this area), which are likely to have destroyed any potential archaeological deposits.

Trench 6

- 2.12 Trench 6 also contained no archaeological deposits and had also been heavily disturbed by modern activity, primarily by the construction of the nearby railway line, but also through modern garden features and landscaping. The ground was disturbed to a depth of over 1.6m below ground level.

The Finds

- 2.13 No dateable artefacts were retrieved during the course of the evaluation, although clear-glazed Whiteware pottery was noted in context 406 in the geoarchaeological assessment.

The Biological and Geoarchaeological Evidence

- 2.14 Three 10-litre bulk samples (Sample nos 1-3) were taken from the organic-rich fills of ditch 111 for assessment of archaeobotanical and zooarchaeological remains, and two monolith samples were taken (4 and 6) for geoarchaeological, pollen, foraminifera and diatom assessment. Two further samples (7 and 8) were taken from the top and bottom of the upper fill (107) of ditch 111, and retained for potential radiocarbon dating at a later time. A further small bulk sample (5) was retrieved from deposit 105, but contained insufficient material for a meaningful assessment to be made. However, the characteristics of this deposit are described in the geoarchaeological assessment (Appendix 3).
- 2.15 Sample 3 (ditch fill 110) provided a moderate assemblage of waterlogged seeds including common spike-rush, buttercup and alder. Occasional seeds of possible pondweed were also present, as were remains of occasional charcoal, waterlogged wood and Mollusca. The Mollusca represented included a mixed assemblage of freshwater species and land snails, including *Valvata cristata*, *Lymnaea truncatula*, *Planorbis planorbis*, *Pisidium nitidum*, *Carychium minimum* and *Trichia hispida*.
- 2.16 Sample 2 (ditch fill 109) presented a smaller and less diverse assemblage of seeds, with occasional seeds of rush. There was also occasional charcoal, waterlogged wood and Mollusca. The Mollusca included a mixed assemblage of freshwater species and land snails, including *Valvata cristata*, *Planorbis planorbis*, *Anisus vortex*, *Pisidium obtusale*, *Pisidium nitidum*, *Carychium minimum*, *Vallonia pulchella*, *Discus rotundatus* and *Vitrea crystalline*.
- 2.17 Sample 1 (ditch fill 107) provided a large, diverse and well-preserved assemblage of waterlogged plant remains. Waterlogged fruit stones were abundant, including seeds of bramble and plum. Seeds from the goosefoot family, and of common nettle were frequent. In addition, there were frequent Mollusca, and the enlarged dermal denticles of fish belonging to the ray family. The Mollusca included a large, diverse and well-preserved assemblage of freshwater and land Mollusca, including *Valvata cristata*, *Valvata piscinalis*, *Bithynia tentaculata*, *Lymnaea truncatula*, *Lymnaea peregra*, *Planorbis planorbis*, *Anisus vortex*, *Pisidium nitidum*, *Carychium minimum*, *Vallonia pulchella*, *Discus rotundatus*, *Vitrea crystalline* and *Trichia hispida*. Occasional insect remains were also identified, but were badly damaged by drying following flotation.

- 2.18 Pollen and diatoms were generally poorly preserved or absent in monolith 4, although high concentrations of badly preserved (broken) pennate diatoms from context 104 suggest that the site was situated in a freshwater environment at this time. Forams were absent, and are therefore not reported upon. The presence of microscopic charred particles throughout the sedimentary sequence recovered in monolith sample 4 indicates burning of the local vegetation cover and/or long-distance transportation of particles within the alluvial sediments. The former interpretation is supported by the occurrence of macroscopic charcoal in contexts (105) and (103), and therefore the results may indicate human activity at the site throughout the period of sediment deposition.
- 2.19 The geoarchaeological assessment of monolith samples (4 and 6) showed these were broadly similar in character. The mineral sediments recorded throughout the sequence were undoubtedly deposited on the margins of a river channel during intermittent flood events, with the fine-grained sediments deposited in a virtually stationary ('low-energy') water body. The mineral deposits have occasional fragments of organic detritus, which may represent either long-distance transportation of organic matter or *in situ* deposition of detritus from plants growing on the floodplain surface. The presence of well-developed root channel networks indicates that the floodplain surface was relatively stable and therefore highly suitable for human exploitation/occupation throughout the period of sediment deposition (e.g. an alluvial flood meadow, high marsh or pasture).

3. DISCUSSION

Introduction

- 3.1 Two undated ditches were recorded in the north-eastern part of the development area (111/206 and 208) at around 1.5m below the modern ground surface, along with depressions in the alluvium which may give away the location of further ditches masked by alluvium at the base of the evaluation trenches. Chronology is a problem owing to the absence of any ceramic dating evidence. However, comparison with

other sites at St George's and Banwell suggests the majority of features range in date from prehistoric to Late Roman at the latest.

Prehistoric/Roman

3.2 Undated ditch 111/206 clearly pre-dates alluvial deposit 106 and burnt clay feature 105, of which the latter is broadly similar in character to some of the features observed during infrastructure works to create a new rhyne and flood plain and roads along the western and eastern edges of the St George's development site (see 1.7 above). These burnt patches may be associated with salt production in the Late Iron Age/Early Roman period when the area lay within saltmarsh at the margin of the intertidal zone. However, molluscs from ditch 111 suggest an entirely freshwater environment existed here prior to the deposition of alluvium 106. In trench 2 ditch 111/206, is cut by a later V-shaped ditch comparable with those seen at the St George's development site (see 1.7 above), and which is possibly contemporary with the mid 3rd-century reclamation suggested by Rippon (Rippon 2000, 192). Therefore ditch 111/206 appears likely to at least pre-date Rippon's putative mid 3rd-century reclamation of the saltmarsh, and possibly also pre-dates the earlier phase of salt production in the Late Iron Age/Early Roman period.

3.3 Radiocarbon dating of the ditch is therefore of primary importance in resolving whether this is a freshwater channel cut across the Late Iron Age/Early Roman saltmarsh, or a much earlier Iron Age, Bronze Age or even earlier drainage feature. If the former, could the ditch be an indication of a successful piece of localised Roman reclamation pre-dating the putative mid 3rd-century reclamation? Could this explain why context 104 was also deposited in an apparently freshwater environment (see Appendix 3, Diatom assessment), or was this more a factor of the mid 3rd-century reclamation represented by the V-shaped ditches (e.g. 208)? It is certainly tempting to see context 106 as the surface of the Late Iron Age saltmarsh, upon which evidence of transient human activity in the form of burnt patch 105 is found, which would push the dating of ditch 111 back into the earlier Iron Age or earlier.

Late Roman to Modern

3.4 Alluvial deposits 112/204/305/404 compare with a thin blanket of alluvium observed sealing the upper fills of the V-shaped ditches seen at the St George's development

site (see 1.7 above). This has been identified as a possible buried soil horizon through geoarchaeological assessment elsewhere at St George's (Terra Nova 2001), and although geoarchaeological assessment here could not conclusively establish soil development within these deposits this is not uncommon on alluvial floodplains where a developed soil horizon may have been removed or altered through post-depositional processes (N. Branch pers. comm.). A similar sequence was observed at Banwell, where a thin buried soil horizon sealed the upper fills of the Late Roman ditches (Rippon 2000, 77 -80) and was subsequently sealed by a thin band of alluvium. This suggests that towards the end of the Roman period the drainage system and sea defences were allowed to lapse, and the landscape as a whole was used less intensively (Rippon 2000, 195). The overlying deposits such as 103/203/304/406 appear to represent a return to intertidal conditions, with the deposition of a thick band of alluvium free from anthropogenic material in the lower part of these deposits indicated by the geoarchaeological assessment (Appendix 3), whilst there are strong indications of human occupation near the top. This is again consistent with evidence for the recolonisation of the Northmarsh in the medieval and later periods as seen at the St George's development site (see 1.9 above).

Conclusions

- 3.5 The evaluation demonstrates that the broad sequence of prehistoric and Roman archaeological deposits and alluvial layers identified elsewhere at St George's and at Banwell is again present at Rose Cottage's in the north-eastern part of the development area (trenches 1-3), with significant archaeological deposits occurring from around 0.8-1m below the existing ground level (4.8-5m AOD). In the south-eastern part of the site modern construction and services have severely truncated much of this sequence, although in trench 4 undisturbed alluvial deposits comparable to those in trenches 1-3 survived from about 0.55m below existing levels (5.1m AOD). Owing to the difficulties in reaching the base of any of the archaeological features, and the absence of ceramic dating evidence, the chronology of these deposits, and therefore their full potential, cannot be fully understood at present. However, the organic-rich deposits from within ditch 111/206 are suitable for radiocarbon dating and further palaeoenvironmental analysis, and offer the potential to enhance our understanding of the environment surrounding prehistoric and Roman St George's.

4. CA PROJECT TEAM

Fieldwork was undertaken by Kate Cullen, assisted by Ben Powell and Andrew Loader. The report was written by Kate Cullen and Simon Cox. The illustrations were prepared by Lorna Gray. The archive has been compiled by Kate Cullen, and prepared for deposition by Ed McSloy. The project was managed for CA by Simon Cox.

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APPENDIX 1: CONTEXT DESCRIPTIONS

Trench 1

101	Modern make-up layer
102	Topsoil
103	Brown silty clay
104	Pale blue/grey silty clay
105	Reddish brown burnt clay
106	Mid blue/grey clay
107	Fill of 108. Dark grey/born silty clay with abundant organic inclusions
108	Possible re-cut of ditch 111
109	Upper fill of ditch 111. Light blue/grey silty clay.
110	Lowest recorded fill of ditch 111. Mid brown/grey silty clay with organic inclusions
111	Ditch. Steep, almost vertical sides. Aligned NE/SW. Not fully excavated
112	Light blue/grey silty clay
113	Blue/grey silty clay at base of trench

Trench 2

201	As 101
202	As 102
203	As 103
204	As 112
205	As 104
206	Ditch. Steep, almost vertical sides. Aligned SSW/NNE. Similar to 111. Not fully excavated
207	Upper fill of 206. Mid grey silty clay with organic inclusions
208	Ditch. V-shaped. Aligned NW/SE
209	Fill of 208. Light blue/grey silty clay with organic inclusions
210	Lowest recorded fill of 206. Mid grey/brown silty clay with organic inclusions

Trench 3

301	Modern gravel surface
302	As 101
303	Topsoil
304	Brown silty clay
305	Light blue/grey silty clay
306	Fill of depression or ditch 308. Mid blue/grey silty clay

307	Dark blue/grey silty clay
308	Ditch or depression within 305. Aligned N/S.

Trench 4

401	Modern tarmac surface
402	As 101
403	Modern levelling deposit
404	Blue/grey silty clay
405	Mottled blue/brown silty clay
406	Mid brown/grey silty clay

Trench 5

501	Modern tarmac surface
502	As 101
503	Modern levelling deposit
504	Re-deposited silty clays. Fills of water and gas main excavations

Trench 6

601	Topsoil
602	Modern levelling deposit
603	Modern levelling deposit? from railway construction
604	Blue/grey silty clay

APPENDIX 2: THE FINDS

No dateable artefacts were retrieved during hand-excavation, although clear-glazed Whiteware pottery was noted in context 406 in the geoarchaeological assessment of monolith sample 6.

APPENDIX 3: THE BIOLOGICAL AND GEOARCHAEOLOGICAL EVIDENCE

ARCHAEOBOTANICAL ASSESSMENT N.P. Branch, A. Vaughan-Williams and G.E. Swindle

INTRODUCTION

This report summarises the findings arising out of the archaeobotanical assessment undertaken by *ArchaeoScape* at Rose Cottages, Worle, North Somerset (Site code: RCW04; National Grid Reference: ST 3724 6273). During recent excavations by Cotswold Archaeology, a prehistoric/Roman ditch was discovered in Trench 1 (ditch [111]) that contained three fills, namely contexts (110), (109) and (107), although the latter may represent the fill of a re-cut section of the ditch (ditch [108]). Three bulk samples of 10 litres were taken from these fills for the recovery of waterlogged plant macrofossils. The aim of the plant macrofossil assessment was to establish the potential of the samples to provide detailed information on the local environment, and the economy and diet of the site's inhabitants. Alluvial deposits (contexts (106), (105), (104) and (103)) containing charcoal and materials of anthropogenic origin covered ditch [111], and a monolith sample was obtained from these deposits (sample <4>, Trench 1, 4.28-5.50m AOD) with the aim of recovering sub-fossil pollen and diatoms, and assessing their potential for reconstructing the Late Holocene environmental history of the site.

METHODS

Plant macrofossil assessment

The bulk samples (sample <3>, context (110); sample <2>, context (109); sample <1>, context (107)) were processed by flotation using a 250 and a 500-micron mesh. The waterlogged flots and residues were re-processed by *ArchaeoScape* by wet sieving, and scanned using a low-power zoom-stereo microscope. Recommendations for further analysis were based on the diversity, concentration and standard of preservation of the waterlogged remains. Plant nomenclature follows Stace (1997). The results are summarised in Table 1.

Diatom assessment

Four diatom samples were extracted from monolith sample <4>, one from each of the main contexts: (106) (4.23-4.24m AOD), (105) (4.54-4.55m AOD), (104) (4.79-4.80m AOD) and (103) (5.15-5.16m AOD). The diatom preparation involved the following procedures:

- Treatment of the sub-sample (0.2g) with Hydrogen peroxide (30%) to remove organic material and Hydrochloric acid (50%) to remove remaining carbonates
- Centrifuging the sub-sample at 1200 for 5 minutes and washing with distilled water (4 washes)
- Removal of clay from the sub-samples in the last wash by adding a few drops of Ammonia (1%)
- Two slides prepared, each of a different concentration of the cleaned solution, were fixed in mounting medium of suitable refractive index for diatoms (Naphrax)

The slides were systematically scanned to assess the preservation and concentration of diatoms. The results are shown in Table 2.

Pollen assessment

Four pollen samples were extracted from monolith sample <4>, one from each of the main contexts: (106) (4.23-4.24m AOD), (105) (4.54-4.55m AOD), (104) (4.79-4.80m AOD) and (103) (5.15-5.16m AOD). The pollen was extracted as follows:

- Sampling a standard volume of sediment (5ml)
- Deflocculation of the sample in 1% Sodium pyrophosphate
- Sieving of the sample to remove coarse mineral and organic fractions (>125 μ)
- Removal of finer minerogenic fraction using Sodium polytungstate (specific gravity of 2.0g/cm³)
- Mounting of the sample in glycerol jelly

Each stage of the procedure is preceded and followed by thorough sample cleaning in filtered distilled water. Quality control is maintained by periodic checking of residues, and assembling sample batches from various depths to test for systematic laboratory effects. Pollen grains and spores were identified using the Royal Holloway (University of London) pollen type collection and the following sources of keys and photographs: Moore *et al* (1991); Reille (1992). Plant nomenclature follows the Flora Europaea as summarised in Stace (1997). The assessment procedure consisted of scanning the prepared slides at 2mm intervals along the whole length of the cover slip and recording the concentration and state of preservation of pollen grains and spores, and the principal pollen taxa. The results are summarised in Table 2.

RESULTS OF THE PLANT MACROFOSSIL ASSESSMENT

Sample <3> (ditch fill (110)) provided a moderate assemblage of waterlogged seeds including common spike-rush (*Eleocharis palustris*), buttercup (*Ranunculus* sp.) and alder (*Alnus* sp.) seeds. Occasional seeds of possible pondweed (*Potamogeton* sp.) were also present. Charcoal, waterlogged wood and Mollusca were occasional.

Sample <2> (ditch fill (109)) presented a smaller and less diverse assemblage of seeds, with occasional seeds of rush (*Juncus* sp.). There was also occasional charcoal, waterlogged wood and Mollusca.

Sample <1> (ditch fill (107)) provided a large, diverse and well-preserved assemblage of waterlogged plant remains. Waterlogged fruit stones were abundant, including seeds of bramble (*Rubus* sp.) and plum (*Prunus* sp.). Seeds from the goosefoot family (Chenopodiaceae spp.), and of common nettle (*Urtica dioica*) were frequent.

RESULTS OF THE DIATOM ASSESSMENT

Diatoms were not preserved in context (106) (4.23-4.24m AOD).

Diatoms were not preserved in context (105) (4.54-4.55m AOD).

High concentrations of badly preserved (broken) pennate diatoms were present in context (104) (4.79-4.80m AOD).

Diatoms were not preserved in context (103) (5.15-5.16m AOD).

RESULTS OF THE POLLEN ASSESSMENT

Context (106) (4.23-4.24m AOD) contained low concentrations of badly preserved pollen grains and spores. The principal taxa were *Polypodium* (polypody fern), Poaceae (grass family), *Pinus* (pine) and *Osmunda* (royal fern). Microscopic charred particles and scalariform perforation plates were also present.

Context (105) (4.54-4.55m AOD) contained low concentrations of badly preserved pollen grains and spores. The principal taxa were *Polypodium* (polypody fern) and Poaceae (grass family). Microscopic charred and waterlogged wood particles were also present.

Context (104) (4.79-4.80m AOD) contained only low concentrations of badly preserved pre-Quaternary spores. Microscopic charred particles were also present.

Context (103) (5.15-5.16m AOD) contained low concentrations of badly preserved pollen grains and spores. The principal taxa were *Polypodium* (polypody fern) and Filicales (ferns), and occasional pre-Quaternary spores. Microscopic charred particles were also present.

INTERPRETATION AND DISCUSSION OF THE RESULTS

The plant macrofossil assemblages within samples <3> and <2> indicate the presence of open water and damp ground. The latter is represented by woodland (alder), herbaceous (buttercup) and aquatic (common spiked rush, pondweed and rush species) plant taxa. In contrast, sample <1> has provided evidence not only for damp ground, but also shrubland (bramble), disturbed ground (nettle and the goosefoot family) and possible human utilisation of fruit (blackberry and plum). Based upon the assumption that many of the plant macrofossils are representative of the local vegetation cover, as well as local economic and dietary practices, and are not present as a consequence of either long-distance transportation by fluvial (alluvial) processes or re-deposition from older sediments, the results indicate that:

- The ditch (or ditches) probably contained standing water, with free-floating macrophytes such as pondweed, and marginal aquatics such as rush.
- The nearby ground surface was probably occupied by woodland (alder), shrubland (bramble) and herbaceous (buttercup) vegetation commonly found on damp substrates, such as the edges of open water (e.g. streams and creeks), seasonally wet ground and marshland.
- The local inhabitants probably occupied a relatively stable, albeit damp, land-surface and may have utilised fruit from trees that were growing locally.

Unfortunately the results of the pollen and diatom assessments were disappointing, and hence provide very little information on the local environment or land-use during the period following abandonment of the ditch (or ditches). The poor preservation and concentration may be attributed to one or more of the following factors:

- Chemical composition of the water-lain alluvial sediments e.g. high pH, resulting in the oxidation of pollen and dissolution of diatoms.
- Post-depositional oxidation of pollen and dissolution of diatoms due to changes in chemistry of the alluvial sediments e.g. increase in pH.
- Post-depositional oxidation of pollen and dissolution of diatoms due to weathering of the ground surface following each successive phase of alluvial sediment deposition.
- Rapid sedimentation rates resulting in a naturally low pollen and diatom concentration.

Nevertheless, based upon the assumption that the pollen grains and spores provide some indication of local vegetation cover, and are not present as a consequence of either long-distance transportation by fluvial (alluvial) processes or re-deposition from older sediments, the results indicate:

- Contexts (106) and (105): the possible presence of damp ground (polypody and royal ferns) and grassland. The possible presence of deciduous woodland is suggested by the occurrence of scalariform perforation plates (anatomical structures within wood). The presence of pine pollen in low concentration probably indicates aeolian transportation from a source distal to the site rather than local pine woodland.
- Context (104): the presence of pre-Quaternary spores is of interest because they indicate that the alluvial sediments are probably derived from a pre-Quaternary geological source.
- Context (103): the possible presence of damp ground (polypody fern) and alluvial sediments derived from a pre-Quaternary geological source.

The presence of microscopic charred particles throughout the sedimentary sequence recovered in monolith sample <4> indicates burning of the local vegetation cover and/or long-distance transportation of particles within the alluvial sediments. The former interpretation is supported by the occurrence of macroscopic charcoal in contexts (105) and (103) (Green, 2004), and therefore the results may indicate human activity at the site throughout the period of sediment deposition.

The presence of pennate diatoms in context (104) is interesting because they are predominately associated with freshwater environments, although species identification during the analysis phase will be required to confirm this interpretation. Therefore, their presence probably indicates that during the deposition of context (104) the site was located in a freshwater environment. The reason for diatom preservation in context (104), and not in contexts (106), (105) and (103), is unknown but may be elucidated by further analysis.

STATEMENT OF POTENTIAL

The results of the archaeobotanical assessment indicate that during the infilling of a prehistoric/Roman ditch (or ditches) at Rose Cottages, the local vegetation cover probably consisted of woodland, shrubland and herbaceous vegetation commonly found on damp substrates, such as the edges of open water (e.g. streams and creeks), seasonally wet ground and marshland. The local inhabitants probably occupied a relatively stable, albeit damp, land-surface and may also have utilised fruit from trees that were growing locally. This preliminary interpretation is based upon the results of the assessment and will require confirmation by detailed analysis. Therefore, it is recommended that the three bulk samples be subject to quantitative plant macrofossil analysis to provide a record of the local environment, and the economy and diet of the local inhabitants. It is also recommended that waterlogged wood recovered from sample <1> (ditch fill (107)) be sent for wood species identification. Based upon the assumption that the wood represents trees or shrubs growing locally, the identification will help to establish the composition of vegetation growing on-site.

The results of the pollen and diatom assessments of monolith sample <4> were very disappointing, but they have confirmed the continued presence of damp ground and woodland at Rose Cottages during this period, as well as localised burning of vegetation. The only context that is recommended for analysis is context (104) because of the preservation of diatoms. Analysis will provide a more precise picture of the local, possibly freshwater, environment during this time.

The results of the plant macrofossil and diatom analysis, and pollen assessment, will permit a comparison to be made with the environmental archaeological records for North Somerset compiled by Rippon et al (2000), and results suitable for publication in a suitable peer-reviewed monograph or journal.

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Table 1: Results of the Plant Macrofossil Assessment from Rose Cottages, Worle, North Somerset (Site code: RCW04)

Context	Sample	Feature	Sample Vol. (l)	Flot Vol. (ml)	Waterlogged Seeds		Wood		Mollusca	Main Taxa Identified
					Content Concentration	Preservation	Charcoal	Waterlogged		
110	3	Ditch [111]	10	50	**	++	O1	O1	O	<i>Eleocharis palustris</i> <i>Ranunculus</i> sp. <i>Alnus</i> sp. <i>Potamogeton</i> sp.
109	2	Ditch [111]	10	50	*	++	O1	O1	O	<i>Juncus</i> sp.
107	1	Ditch [108]	10	200	***	+++		A2	F	<i>Rubus</i> sp. <i>Prunus</i> sp. <i>Urtica dioica</i> Chenopodiaceae spp.

Key:

Concentration

- - absent
* - occasional
** - frequent
*** - abundant

Preservation

+ - poor
++ - moderate
+++ - good

Wood Concentration

O - occasional
F - frequent
A - abundant

Suitability of Wood for Identification

1 - unidentifiable
2 - some identifiable
3 - identifiable

Table 2: Results of the Pollen and Diatom Assessment from Rose Cottages, Worle, North Somerset (Site code: RCW04)

Context	Sample	Pollen Content		Diatom Content		Main Taxa Identified
		Concentration	Preservation	Concentration	Preservation	
106	4	*	+	-		<i>Polypodium</i> (polypody fern) Poaceae (grass family) <i>Pinus</i> (pine) <i>Osmunda</i> (royal fern)
105	4	*		-		<i>Polypodium</i> (polypody fern) Poaceae (grass family)
104	4	-	+	**	+	Pre-Quaternary spores Pennate diatoms
103	4	*	+	-		<i>Polypodium</i> (polypody fern) Filicales (ferns) Pre-Quaternary spores

Key:

Concentration

- - absent
* - occasional
** - frequent

Preservation

+ - poor
++ - moderate
+++ - abundant

ZOOARCHAEOLOGICAL ASSESSMENT D. Keen

INTRODUCTION

This report summarises the findings arising out of the zooarchaeological assessment undertaken by *ArchaeoScape* at Rose Cottages, Worle, North Somerset (Site code: RCW04; National Grid Reference: ST 3724 6273). During recent excavations by Cotswold Archaeology, a prehistoric/Roman ditch was discovered in Trench 1 (ditch [111]) that contained three fills, namely contexts (110), (109) and (107), although the latter may represent the fill of a re-cut section of the ditch (ditch [108]). Three bulk samples of 10 litres were taken from these fills for the recovery of fossilised zoological remains. The aim of the assessment was to establish the potential of the samples to provide detailed information on the local environment, and the economy and diet of the site's inhabitants.

METHODS

The bulk samples were processed by flotation using a 250 and a 500-micron mesh. The waterlogged flots and residues were re-processed by *ArchaeoScape* by wet sieving, and scanned using a low-power zoom-stereo microscope. Recommendations for further analysis were based on the diversity, concentration and standard of preservation of the remains. The taxonomic nomenclature used follows Kerney (1999). The results are summarised in Table 1.

RESULTS OF THE ASSESSMENT

Sample <3> (ditch fill (110)) provided a mixed assemblage of freshwater species and land snails, including *Valvata cristata*, *Lymnaea truncatula*, *Planorbis planorbis*, *Pisidium nitidum*, *Carychium minimum* and *Trichia hispida*.

Sample <2> (ditch fill (109)) provided a mixed assemblage of freshwater species and land snails, including *Valvata cristata*, *Planorbis planorbis*, *Anisus vortex* (Linné, 1758), *Pisidium obtusale*, *Pisidium nitidum*, *Carychium minimum*, *Vallonia pulchella*, *Discus rotundatus* and *Vitrea crystalline*.

Sample <1> (ditch fill (107)) provided a large, diverse and well-preserved assemblage of freshwater and land Mollusca, including *Valvata cristata*, *Valvata piscinalis*, *Bithynia tentaculata*, *Lymnaea truncatula*, *Lymnaea peregra*, *Planorbis planorbis*, *Anisus vortex*, *Pisidium nitidum*, *Carychium minimum*, *Vallonia pulchella*, *Discus rotundatus*, *Vitrea crystalline* and *Trichia hispida*. In addition, there were enlarged dermal denticles of fish belonging to the ray family (*Raja* sp.) (S. Warman, pers. comm.).

INTERPRETATION

The Mollusca assemblages in samples <3>, <2> and <1> indicate the presence of a small slowly moving or still water body. There is evidence for considerable macrophytic vegetation in the water-body of the ditch (or ditches) and the surrounding land was clearly under marsh, with areas of disturbed ground and shaded environments (tall grassland, woodland or shrubland). The presence of dermal denticles of fish may be associated with dietary practices of the local inhabitants i.e. discarded domestic waste.

STATEMENT OF POTENTIAL

The results of the zooarchaeological assessment indicate the presence of well-preserved assemblages of Mollusca within the contexts studied. These indicate that the land-surface surrounding the ditch (or ditches) was marshland, with areas of disturbed ground and shaded environments. It is recommended that the three bulk samples be subject to quantitative archaeozoological analysis to provide a record of the local environment. The results of the analysis will permit a detailed comparison to be made with the environmental archaeological records for North Somerset compiled by Rippon et al (2000), and results suitable for publication in a suitable peer-reviewed monograph or journal.

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Table 1: Results of the Zooarchaeological Assessment from Rose Cottages, Worle, North Somerset (Site code: RCW04)

Context	Sample	Feature	Sample Vol. (l)	Flot Vol. (ml)	Preservation and Concentration	Main Taxa Identified
110	3	Ditch [111]	10	50	++F	Freshwater species <i>Valvata cristata</i> (Müller, 1774) <i>Valvata piscinalis</i> (Müller, 1774) <i>Lymnaea truncatula</i> (Müller, 1774) <i>Planorbis planorbis</i> (Linné, 1758) <i>Pisidium nitidum</i> Jenyns, 1832 Land species <i>Carychium minimum</i> (Müller, 1774) <i>Vallonia pulchella</i> (Müller, 1774) <i>Trichia hispida</i> (Linné, 1758)
109	2	Ditch [111]	10	50	++F	Freshwater species <i>Valvata cristata</i> (Müller, 1774) <i>Planorbis planorbis</i> (Linné, 1758) <i>Anisus vortex</i> (Linné, 1758) <i>Bathyomphalus contortus</i> (Linné, 1758) <i>Pisidium obtusale</i> (Lamarck, 1818) <i>Pisidium nitidum</i> Jenyns, 1832 Land species <i>Carychium minimum</i> (Müller, 1774) <i>Vallonia pulchella</i> (Müller, 1774) <i>Discus rotundatus</i> (Müller, 1774) <i>Vitrea crystallina</i> (Müller, 1774) <i>Trichia hispida</i> (Linné, 1758)
107	1	Ditch [108]	10	200	+++A	Freshwater species <i>Valvata cristata</i> (Müller, 1774) <i>Valvata piscinalis</i> (Müller, 1774) <i>Bithynia tentaculata</i> (Linné, 1758) <i>Lymnaea truncatula</i> (Müller, 1774) <i>Lymnaea peregra</i> (Müller, 1774) <i>Planorbis planorbis</i> (Linné, 1758) <i>Anisus vortex</i> (Linné, 1758) <i>Bathyomphalus contortus</i> (Linné, 1758) <i>Gyraulus crista</i> (Linné, 1758) <i>Sphaerium corneum</i> (Linné, 1758) <i>Pisidium obtusale</i> (Lamarck, 1818) <i>Pisidium nitidum</i> Jenyns, 1832 Land species <i>Carychium minimum</i> (Müller, 1774) <i>Vallonia pulchella</i> (Müller, 1774)

						<i>Discus rotundatus</i> (Müller, 1774) <i>Vitrea crystallina</i> (Müller, 1774) <i>Trichia hispida</i> (Linné, 1758) Fish species <i>Raja</i> sp
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Key:

Preservation

- + - Poor
- ++ - Good
- +++ - Excellent

Concentration

- O - Occasional
- F - Frequent
- A - Abundant

GEOARCHAEOLOGICAL ASSESSMENT C.P. Green

INTRODUCTION

This report summarises the findings arising out of the geoarchaeological assessment undertaken by *ArchaeoScape* at Rose Cottages, Worle, North Somerset (Site code: RCW04; National Grid Reference: ST 3724 6273). During recent excavations by Cotswold Archaeology, alluvial deposits containing charcoal and materials of anthropogenic origin were discovered in Trenches 1 and 4 overlying a prehistoric/Roman ditch (ditch [111]). Monolith samples were obtained from these alluvial deposits (sample <4>, Trench 1 and sample <6>, Trench 4) with the aim of recording the general site formation processes and, in particular, establishing (1) whether there is evidence for spatial variation in the sedimentary history of the site, and (2) whether the burning event and phases of human activity were associated with fully terrestrial conditions (i.e. soil formation).

METHODS

The sedimentary sequences captured within monolith samples <4> and <6> were described using standard procedures for recording unconsolidated sediment, noting the physical properties (colour), composition (gravel, sand, clay, silt and organic matter), context (unit) boundaries and inclusions (e.g. charcoal). All the descriptions are based on examination of the sediments in the laboratory. The sediments are described from the bottom (m AOD) upward. The descriptions are summarised in Tables 1 and 2.

RESULTS OF THE ASSESSMENT

Monolith sample <4>

Between 4.28-4.50m AOD (context (106)), the sedimentary sequence consists of grey clayey silt with common root channels. Overlying this context, from 4.50-4.57m AOD (context (105)), there is a thin horizon visibly distinguished by its colour (strong brown), the presence of small particles of charcoal and by slight aggregation of the alluvial clayey silt. Above context (105), between 4.57-4.99m AOD (contexts (104) and (103)), grey clayey silt with common root channels, identical to context (106), is present. Context (112), noted during the field investigations, was not recorded during the laboratory assessment. There is a progressive increase upward in the density of the root channel network, which remains effectively constant between 4.28-4.99m AOD (contexts (106), (105), (104) and (103)). Between 4.99-5.18m AOD (context (103)), the sequence is characterised by compacted stoneless, clayey silt, free from visible anthropogenic contaminants and with no faunal remains present. Between 5.18-5.43m AOD (context (103)), the sequence is composed of dark coloured sandy and gritty silt containing large amounts of anthropogenic material.

Monolith sample <6>

Between 4.15-4.64m AOD (context (405)), the sedimentary sequence consists of grey and dark grey clayey silt with common root channels. Between 4.64-4.88m AOD (contexts (405) and (404)), the sequence is characterised by natural alluvium comprising stoneless, clayey silt, free from visible anthropogenic contaminants. Broken molluscan shell is present in small amounts at all levels and a few complete gastropod shells and ostracod valves were also noted. There is a progressive increase upward in the density of the root channel network to 4.88m AOD, which remains effectively constant between 4.15-4.88m AOD (contexts (405) and (404)). Between 4.88-5.01m AOD, the sequence is composed of clayey silt with Mollusca (context (404)). Between 5.01-5.08m AOD (context (406)), dark coloured sandy and gritty silt containing anthropogenic material (the amount of material increases upward), including a fragment of clear-glazed, whiteware pottery, is present. The uppermost context, between 5.08-5.26m AOD (context (406)), is occupied by dark coloured sandy and gritty silt, containing large amounts of anthropogenic material, including particles of coal, charcoal and slag together with small pieces of wood, angular particles of limestone and fragments of mollusc shell.

INTERPRETATION

The results of the geoarchaeological assessment indicate that the two monolith samples examined are broadly similar in character, suggesting that there is very little spatial variation in the sedimentary sequence across the site. The mineral sediments recorded throughout the sequence were undoubtedly deposited on the margins of a river channel during intermittent flood events, with the fine-grained sediments deposited in a virtually stationary ('low-energy') water body. The mineral deposits have occasional fragments of organic detritus, which may represent long-distance transportation of organic matter and/or *in situ* deposition of detritus from plants growing on the floodplain surface. The presence of well-developed root channel networks indicates that the floodplain surface was relatively stable and therefore highly suitable for human occupation throughout the period of sediment deposition (e.g. an alluvial flood meadow, high marsh or pasture).

In monolith sample <4> at a depth of 4.50-4.57m AOD (context (105)) there is a thin discoloured horizon with associated charcoal. This almost certainly represents evidence of a fire, which may or may not be associated with human occupation. However, in contrast with the situation at the top of both monolith samples there is no substantial contamination of the alluvium immediately below this level or loss of structure in the alluvium. Thus if human occupation is indicated here, it seems likely to have been of a very transitory nature. There is no

geoarchaeological evidence for soil formation during the period in which this event was taking place. However, there is unequivocal evidence to suggest that the floodplain surface was relatively stable and suitable for human activities, being subject to only intermittent low energy flood events.

In the upper 0.25m, both monoliths display characteristics associated with sustained or intense human occupation, probably on a surface at or only slightly above the level of the top of the monolith (contexts (102), (103), (403) and (406)). Anthropogenic material is very common in the uppermost few centimetres of the monoliths and decreases progressively downward, resulting in a gradual transition to undisturbed natural alluvium free from anthropogenic material noted above (contexts (103), (104), (106), (404) and (405)). However, in both monoliths the natural structure of the alluvium is affected to a depth of c.0.25m from the top of the monoliths, as indicated by the partial destruction of the network of root pores above this level. There is no geoarchaeological evidence for soil formation during the period in which these activities were taking place. However, there is unequivocal evidence to suggest that the floodplain surface was relatively stable and suitable for human activities, being subject to only intermittent low energy flood events.

STATEMENT OF POTENTIAL

The results of the geoarchaeological assessment indicate that following a period of prehistoric/Roman ditch construction (ditch [111], contexts (110) and (109)), alluvial sediments were deposited across the site forming a relatively stable floodplain surface (e.g. an alluvial flood meadow, high marsh or pasture). The suitability of this environment for human occupation is indicated by the plethora of archaeological evidence in the uppermost part of the sequence, signifying a sustained or intensive period of human occupation, the 'temporary' event recorded by context (105), and the ditch associated with context (112). Although there is no geoarchaeological evidence for soil formation during the period in which these events/activities were taking place, the data suggest that the floodplain surface was relatively stable, being subject to only intermittent low energy flood events.

This interpretation is consistent with other records from the North Somerset levels, which have provided evidence for ditch construction and domestic occupation during the prehistoric/Roman periods associated with alluvial sedimentation, set against a background of fluctuations in the height of relative sea level (Rippon et al., 2000). These records provide a complex picture of Late Holocene changes in the environmental history of North Somerset, and the relationship between human activities and changes in the biophysical environment. To compare the record from Rose Cottages with these data from North Somerset requires some zooarchaeological and archaeobotanical analysis, since these will provide a useful insight into the hydrology, vegetation cover and land-use at Rose Cottages during the Late Holocene (see Keen, 2004, and Branch et al., 2004, for detailed recommendations). No further geoarchaeological analysis is recommended for Rose Cottages, but the results would usefully form part of a publication text submitted to a peer-reviewed journal or monograph.

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Table 1: Lithostratigraphic description of monolith sample <4>, Trench 1, Section 1, Rose Cottages, Worle, North Somerset (Site code: RCW04)

Depth (m AOD)	Context Number	Description
4.28-4.50	106	10YR 5/1 grey with 10YR 4/3 brown mottles; clayey silt; very well sorted; common root channels; clay lining; few roots; weak acid reaction becoming stronger towards base; gradual contact
4.50-4.57	105	10YR 5/1 grey with layer of 7.5 YR 5/6 strong brown clayey silt; very well sorted; common root channels; clay lining; charcoal; gradual contact
4.57-4.99	104/103	10YR 5/1 grey with 10YR 4/3 brown mottles; clayey silt; very well sorted; common root channels; clay lining; few roots; weak acid reaction becoming stronger downwards; well marked contact
4.99-5.18	103	2.5Y 4/4 olive brown clayey silt; very well sorted; common root channels; few roots; patchy weak/no acid reaction; gradual contact
5.18-5.30	103	10YR 4/3 brown slightly gritty clayey silt; moderately sorted; few root channels; worm granules; charcoal; brick; coal; slag; limestone particles; moderate acid reaction; gradual contact
5.30-5.43	103	10YR 4/2 dark greyish brown gritty and sandy clayey silt; very poorly sorted; few root channels; charcoal; brick; slag; limestone particles; strong acid reaction
5.43-5.50	-	Void

Table 2: Lithostratigraphic description of monolith sample <6>, Trench 4, Section 4, Rose Cottages, Worle, North Somerset (Site code: RCW04)

Depth (m AOD)	Context Number	Description
4.15-4.64	405	5Y 5/1 grey with 10YR 5/4 mottling slightly clayey silt; very well sorted; common root channels; thin clay lining; few Mollusca; strong acid reaction; gradual contact
4.64-4.88	405/404	5Y 4/1 dark grey clayey silt; very well sorted; common root channels; few roots; few Mollusca; ostracods; moderate acid reaction; gradual contact
4.88-5.01	404	5Y 4/1 dark grey slightly gritty clayey silt; well sorted; few root channels; few Mollusca; moderate acid reaction; gradual contact
5.01-5.08	406	5Y 3/1 very dark grey sandy and gritty silt; poorly sorted; few root channels; few roots; few Mollusca; charcoal; brick; pottery; coal; moderate acid reaction; well marked
5.08-5.26	406	5Y 2/1 very dark grey-black sandy and gritty silt; poorly sorted; few roots; few plant remains; few Mollusca; charcoal; coal; limestone grit; slag; moderate acid reaction
5.26-5.35	-	Void

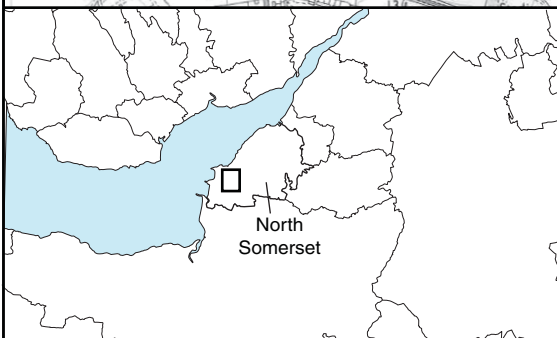
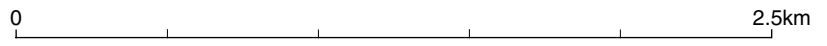
APPENDIX 4: LEVELS OF PRINCIPAL DEPOSITS AND STRUCTURES


Levels are expressed as metres below current ground level and as metres Above Ordnance Datum (AOD), calculated using the benchmark located on the railway bridge adjacent to the north-east corner of the site (6.36m AOD).

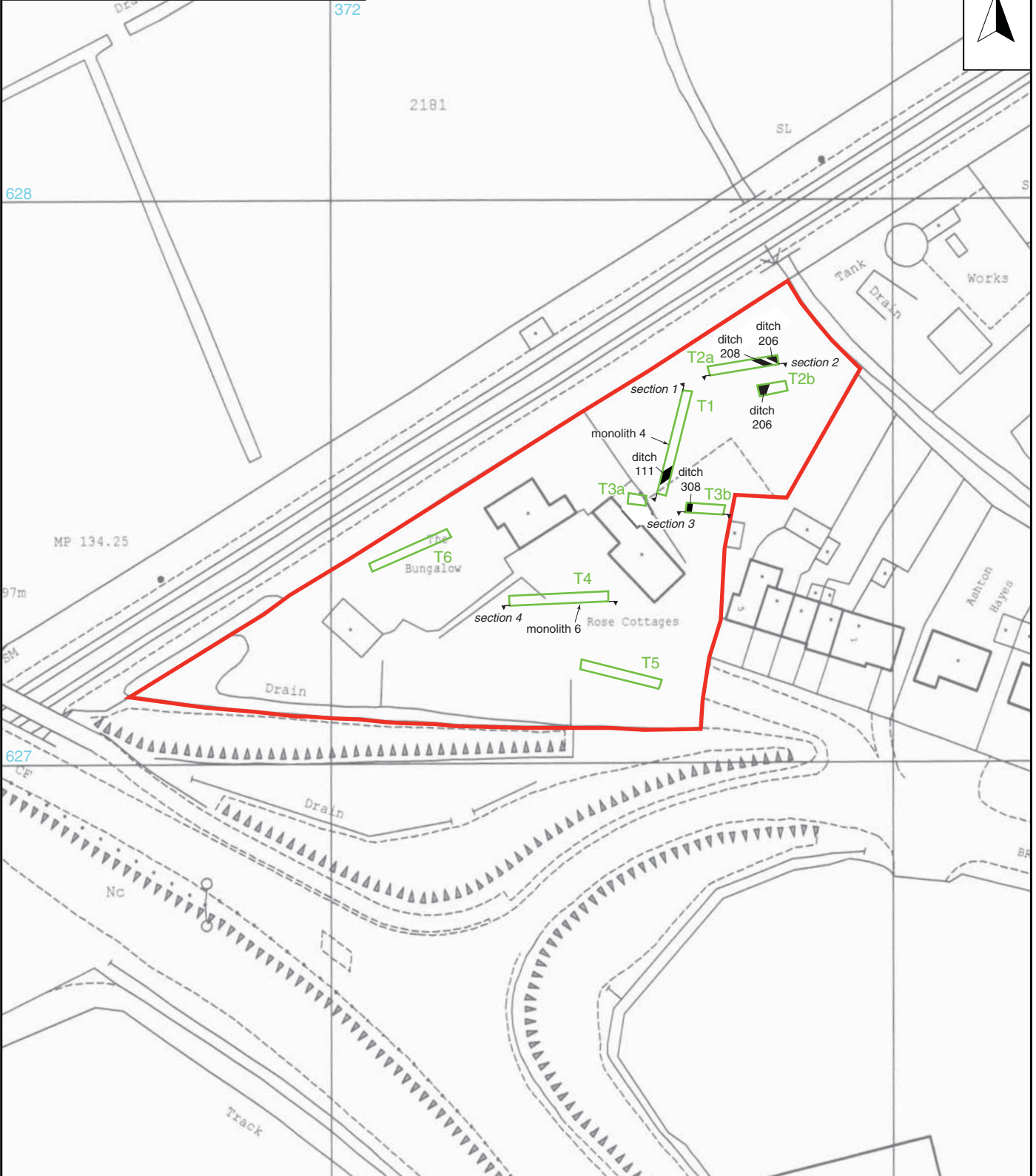
	Trench 1	Trench 2	Trench 3	Trench 4	Trench 5	Trench 6
Current ground level	0.00m (5.9m)	0.00m (5.7m)	0.00m (5.7m)	0.00m (5.6m)	0.00m 5.4m	0.00m 5.4m
Top of ?Roman buried soil 112/204/305/404	0.8m (5m)	0.85m (4.65m)	0.95m (4.65m)	0.55m (5.1m)	-	-
Top of significant archaeological features	1m (4.8m)	1.6m (3.9m)	1m (4.5m)	-	-	-
Limit of excavation	2.4m (3.35m)	2m (3.5m)	1.5m (4.15m)	1.5m (4.15m)	1.6m (3.8m)	2.5m (2.9m)

Upper figures are depth below modern ground level, lower figures in parentheses are metres AOD.

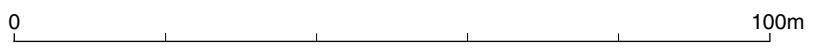
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 COTSWOLD ARCHAEOLOGY		
PROJECT TITLE Land at Rose Cottages, St Georges, Worle, North Somerset		
FIGURE TITLE Site location plan		
SCALE	PROJECT NO.	FIGURE NO.
1:25,000@A4	1812	1



ST



- site
- evaluation trench
- archaeological features



COTSWOLD ARCHAEOLOGY

PROJECT TITLE

Land at Rose Cottages, St Georges, Worle, North Somerset

FIGURE TITLE

Trench location plan showing archaeological features

SCALE

1:1000@A4

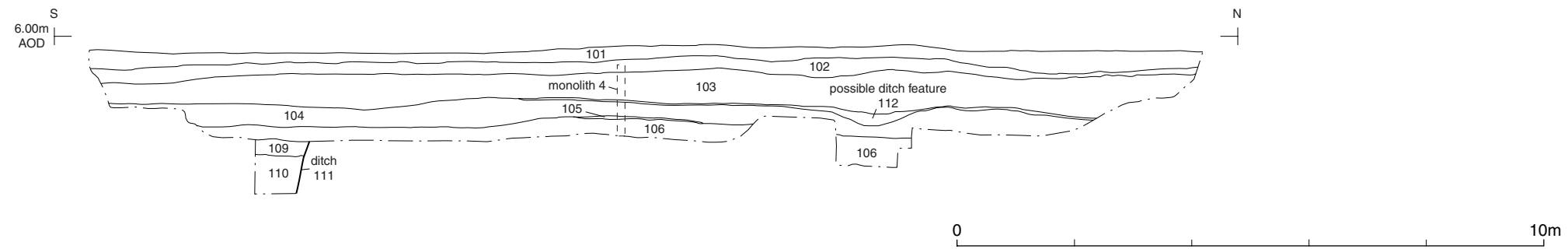
PROJECT NO.

1812

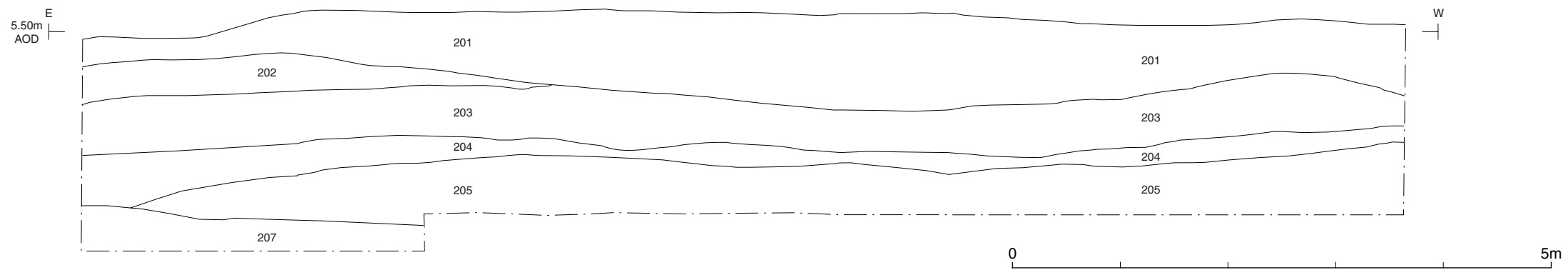
FIGURE NO.

2

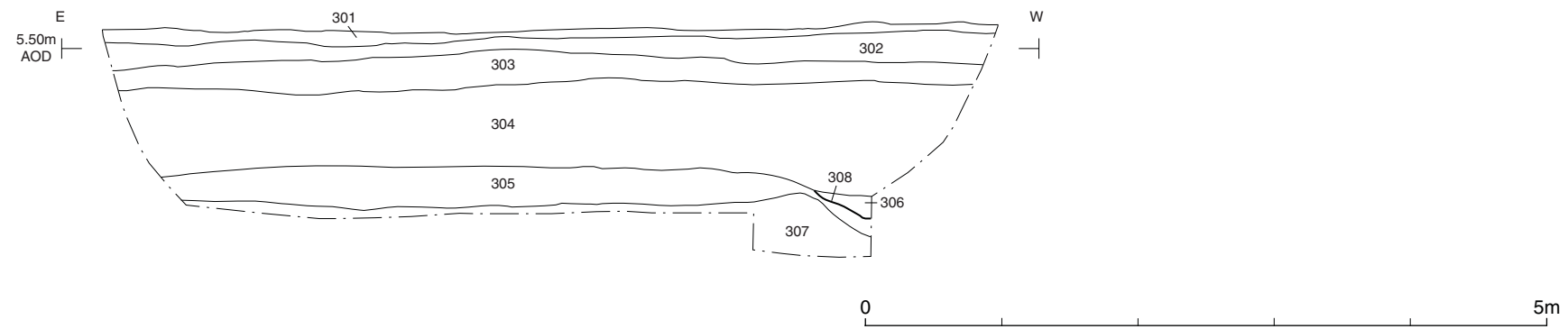
Trench 1: Section 1 (1:100)



Trench 2: Section 2 (1:50)



Trench 3: Section 3 (1:50)



Trench 4: Section 4 (1:50)

