

A303 Stonehenge

Quantification and Assessment of Archaeological Survey Archives

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Summary

A series of 16 archaeological surveys undertaken by Wessex Archaeology between 1992 and 2003 as part of the A303 Stonehenge Improvement scheme comprised fieldwalking; test pitting and watching briefs during geotechnical investigations; auger survey and test pitting in the Till Valley; and archaeological trial trenching. Discoveries made during these surveys have been summarily considered and the results presented in individual unpublished reports. This report draws together the results of these surveys and presents quantifications of the survey archives and an assessment of the potential of the results for further analysis and publication.

The earliest deposits encountered in the surveys comprised a relict forest soil of post-Glacial/Holocene date containing a Late Mesolithic/Early Neolithic flint assemblage in DTA 6, west of Countess Farm. Later Neolithic activity was represented by low density scatters of stone tools across many of the survey areas. Bronze Age lithics were widely distributed across the surveys, if in no great numbers. East of Longbarrow Crossroads in Area P, two Early Bronze Age Beaker burial pits, a pair of Middle Bronze Age rubbish pits, and a shallow pit containing Middle Bronze Age pottery and re-deposited animal and human bone were all probably related to the excavated Bronze Age settlement at Longbarrow Crossroads.

In Area C1, west of Scotland Lodge, a large oval enclosure contained an Early Iron Age settlement, while a rectilinear subsidiary enclosure on the north-western side appears to be broadly contemporary. A small number of Early Iron Age features beyond the enclosures and residual Early Iron Age pottery may point to an earlier, unenclosed phase of settlement. Settlement on the site seems to have continued into the Roman-British period and other, smaller assemblages of Romano-British material may indicate other settlement activity in the vicinity.

Saxon and medieval material was poorly represented across the surveys, being limited to small quantities of metalwork, ceramics and ceramic building materials, much of which appears to derive from the 13th/14th century manuring of fields. Post-medieval material was similarly poorly represented, occurring primarily as stray finds.

The surveys were largely designed to inform decisions relating to the development of the road design, and as such were not targeted with the intention of producing large archaeological data sets. Consequently, with the exception of the Iron Age settlement in Area C1, the individual surveys did not produce structural evidence of a type or quantity that warrants further analysis or publication. Similarly, with the exception of the Beaker burials from Area P and the Mesolithic/Neolithic flint assemblage from DTA 6, most of the finds assemblages from the surveys do not in themselves warrant further analysis. However, when considered together they provide a substantial body of data which has the potential for comparison, particularly in terms of spatial distributions, with other projects conducted in the area over recent years.

The environmental assemblages include charred plant remains and charcoal, from contexts ranging in date from Neolithic to Iron Age, from buried soils, graves and settlement activity; and land snails from Late Bronze Age and Iron Age contexts. Geoarchaeological evidence includes relict brown earth/colluvial brown earth profiles, from the rolling chalk downland south of Stonehenge and the edge of the Avon valley west of Countess Farm; and stratified colluvial and sedimentary sequences from a dry valley in evaluation Area 4, including tree hollows and an argillic brown earth.



Within the framework provided by the Issues and Objectives identified in *Stonehenge World Heritage Site:* an *Archaeological Research Framework*, a number of research themes can be proposed, which the data from the surveys have the potential to contribute towards:

Theme 1: The early prehistoric development of the chalkland landscape and landuse (Issues 25, 26; Objective 3)

Theme 2: The Mesolithic occupation and environment (Issues 23-7; Objectives 3, 4)

Theme 3: Neolithic landscape and landuse (Issues 23-6; Objective 3)

Theme 4: Aspects of the missing Iron Age (Issues 23, 27; Objectives 4, 15)

It is envisaged that the potential of the results of the surveys, if published separately from the results of any future mitigation works, can be best fulfilled as part of a monograph publication describing the surveys conducted in connection with the development and promotion of the published scheme.

It is proposed that the monograph would be produced in colour hard-back form for publication as part of the established Wessex Archaeology monograph series. Different aspects of the research themes outlined above would be addressed in chapters focusing on the geoarchaeology (Theme 1); the important Mesolithic evidence and its accompanying environmental data (Theme 2); the individual and isolated Neolithic, Beaker and Middle Bronze Age material, with a discussion of how the remaining datasets (primarily finds distributions) contribute to existing understanding of activity within the Stonehenge landscape (Theme 3); and the series of Iron Age and Romano-British enclosures (Theme 4). Subject to additional funding, consideration could also be given to opportunities to widen the scope of the monograph to incorporate relevant results of other surveys undertaken as part of the Stonehenge Project, such as those commissioned by English Heritage and the National Trust as part of the WHS Land Use Plan and the New Stonehenge Visitor Centre and Access Scheme.

In addition to the academic publication proposals, the results of the surveys should be described in a popular leaflet aimed at a non-archaeological readership, for distribution via schools and public libraries in the area. The text and images used in the leaflet should also form the basis of a project website, which can also be used as a portal for the dissemination of more detailed specialist information derived during the analysis process but not otherwise published.

Subject to instruction, analysis and preparation of draft report texts and illustrations could be completed within six months, assuming commencement from September 2007. Subject to comments/approval, production of the monograph for publication would be complete within a further six months (September 2008), although this programme would require extension if assessment and incorporation of the results of surveys commissioned by English Heritage and the National Trust were considered. Preparation and production of the popular leaflet and establishment of the web site could be completed within three months, following completion of the analysis programme.



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The project was managed for Wessex Archaeology by Lorraine Mepham. This report was compiled by Michael J Allen, Matt Leivers, Lorraine Mepham and Chris Moore, with a contribution by Jessica Grimm (animal bone). The figures were prepared by Linda Coleman.



1 INTRODUCTION

1.1 Project Background

- 1.1.1 Consideration of options for improvements to the existing single-carriageway section of the A303 between Amesbury and Berwick Down began in 1991, with the identification of a series of alternatives centred on the provision of a bypass for the village of Winterbourne Stoke, west of the Stonehenge World Heritage Site (WHS), and the upgrading to dual carriageway standard of the A303 past Stonehenge. Alternatives considered included the on-line widening of the A303 (Yellow route) past Stonehenge, and a range of options for construction of a new dual carriageway road between Longbarrow Crossroads and the existing Amesbury Bypass at King Barrow Ridge; these latter options included routes to the south (Grey, Brown and Pink routes) and north (Purple, Purple Variant and Green routes) of Stonehenge. The potential options were debated at a planning conference in 1995 attended by a variety of stakeholders; no consensus on a preferred option was reached and the scheme was not progressed further until 1998.
- 1.1.2 In July 1998 the A303 Stonehenge Improvement scheme was included in the Government's national Targeted Programme of Improvements as an 'exceptional environmental scheme'. This was in recognition of the environmental problems caused by the A303 and A344 at Stonehenge and the Government's intention to address these heritage problems by placing the A303 in a 2km long tunnel past the Stones. The scheme is a central element of the Stonehenge Project (formerly the Stonehenge Master Plan) and the Stonehenge World Heritage Site Management Plan (English Heritage 2000).
- 1.1.3 A Preferred Route for the scheme was announced in June 1999. In March 2000 Mott MacDonald, with Wessex Archaeology and Nicholas Pearson Associates, were appointed as Stage 2 Design Consultants/Stage 3 Employers Agents. In April 2002, the Balfour Beatty Costain JV and Halcrow Gifford JV were appointed as construction contractor and designer respectively.
- 1.1.4 Draft Orders were published in June 2003 and the Published Scheme was the subject of a public inquiry in 2004. The Published Scheme comprises a 12.4km long dual carriageway improvement of the A303 between Amesbury and Berwick Down. It would provide a northern bypass of Winterbourne Stoke, with grade-separated junctions to the west of Winterbourne Stoke, with the A360 at Longbarrow Crossroads and with the A345 at Countess Roundabout. The Scheme would follow the line of the existing A303 through the Stonehenge World Heritage Site (WHS) between Longbarrow Crossroads and Countess Roundabout, and includes a 2.1km long twinbored tunnel past Stonehenge and the closure of the A344 from its junction with the A303 north-westwards up to the existing Stonehenge Visitor Centre car park entrance, in order to meet the objective of removing roads and traffic from the heart of the WHS.
- 1.1.5 The Inspector's report from the public inquiry was published in July 2005 and, subject to minor modifications to the draft Orders, recommended in favour of the Published Scheme. However, because of a significant



increase in the cost of the proposed tunnel, the Minister of State for Transport announced that there would be a review to examine whether the Published Scheme still represents value for money and the best option for delivering improvements to the setting of Stonehenge and to the A303. At the time of writing, the outcome of the review is not known.

1.1.6 The design stages of the Scheme have benefited from a large number of individual archaeological field surveys. Discoveries made during these surveys have been summarily considered and the results presented in individual written reports. This report draws together the results of these surveys and presents quantifications of the survey archives and an assessment of the potential of the results for further analysis and publication, in accordance with the guidance set out in *Management of Archaeological Projects* ('MAP 2', English Heritage 1991).

1.2 Archaeological Background

- 1.2.1 The archaeological background to the Published Scheme has been set out in the Environmental Statement (Halcrow Gifford 2003) and is not repeated here.
- 1.2.2 Proposals for the A303 Stonehenge Improvement have been the subject of extensive study and consultation since 1991. In addition to surveys undertaken for the Department of Transport and the Highways Agency, reports on similar work in the immediate vicinity have been compiled on behalf of English Heritage, The National Trust and others. The Archaeology Division of English Heritage (formerly the Central Archaeological Service) with Wiltshire County Council has assessed information on some 1,490 archaeological sites within a study area of some 135 sq. km centred on Stonehenge and compiled this into the Stonehenge GIS, which serves as a management tool to assist decision making within the context of the WHS Management Plan.
- 1.2.3 The results of these Stage 1 and third-party surveys were collated and summarised in a report commissioned by the Highways Agency (A303 Stonehenge Archaeological Appraisal, Mott MacDonald/Wessex Archaeology 2001), to inform design of archaeological surveys during Stage 2.

1.3 Archaeological Surveys

- 1.3.1 A series of archaeological surveys was undertaken by Wessex Archaeology during the Stage 1 options study phase between 1992 and 1999, and during the Stage 2 design phase between 2000 and 2003 to inform development of the Published Scheme. The surveys comprised four principal elements:
 - Fieldwalking of available land, where not undertaken as part of previous A303 proposals or the Stonehenge Environs Project;
 - Hand excavation of test pits in advance of, and a watching brief during excavation of, geotechnical test pits in 2000 and 2002;
 - Auger survey and hand excavation of test pits at three alternative crossing locations in the Till Valley; and



- Archaeological trial trenching of the Stage 1 route options, the 1999
 Preferred Route and, where different, the 2003 Published Scheme.
- 1.3.2 Stage 1 surveys were undertaken to investigate potential options for the Winterbourne Stoke Bypass, on-line improvements past Stonehenge, and alternative alignments north and south of Stonehenge (Pink, Grey, Brown and Brown Alternative routes). For the purposes of Stage 2 archaeological assessment and evaluation, the Preferred Route was divided into a series of Areas (Figures 1-3, Areas A-Z), working from west to east; subsequent survey of the Published Scheme defined a further series of four evaluation areas (Figure 1, Areas 1-4) north and west of Winterbourne Stoke.
- 1.3.3 The surveys undertaken are listed below and shown on **Figures 1-3** by Area and Wessex Archaeology project code.

WA Project code	Date	Project Name	Fieldwork type
34852	1992	A303 Stonehenge Down to Parsonage Down	Fieldwalking; auger survey; test pits
35734	1992/3	A303 Amesbury to Berwick Down: Pink and Grey Routes	Fieldwalking; trial trenches
37874	1994	A303 Amesbury to Berwick Down: Brown and Brown Alternative Routes	Fieldwalking
47422	1999/2000	A303 Winterbourne Stoke Bypass	Fieldwalking
48066	2000	A303 Stonehenge Improvement	Fieldwalking
48067	2000	Geotechnical Investigation	Watching brief; test pits
50157	2001	Evaluation Area C1	Trial trenches
50252	2002	Evaluation Areas A-D	Trial trenches
50275	2002	Stage 2 Fieldwalking Survey: Fields 21 and 43	Fieldwalking
50286	2002	Till Valley	Auger survey; test pits
50412	2002	Evaluation Areas L-O	Trial trenches
50527	2002	Evaluation Areas R & T	Trial trenches
50538	2002	Evaluation Area P	Trial trenches
52246	2002	Ground Investigation 2002	Watching brief; test pits
52524	2003	Evaluation Areas 1, 2, 3 & 4	Trial trenches
54379	2003	Evaluation Drainage Treatment Areas 2 & 6	Trial trenches

- 1.3.4 In addition, a series of eight geophysical surveys was undertaken by GSB Prospection from 1992, under subcontract to Wessex Archaeology and, latterly, Halcrow Gifford, in order to complete coverage of the Preferred Route.
- 1.3.5 The survey and assessment archives are currently held by Wessex Archaeology, with the intention that they will be deposited with the Salisbury and South Wiltshire Museum on completion of the project.



2 SURVEY RESULTS

2.1 Introduction

- 2.1.1 Archaeological assessments of Stage 1 route options were undertaken in accordance with the Highways Agency's standard approach (*Design Manual for Roads and Bridges* Volume 11, Section 3, Part 2, Chapter 8). Archaeological evaluation in each Stage 2 Area was undertaken in accordance with an overarching Field Evaluation Strategy (Wessex Archaeology 2001) and a series of individual written schemes of investigation (WSIs), which were approved by Wiltshire County Council and English Heritage prior to commencement of work. Areas were subdivided or grouped for evaluation as appropriate. All archaeological work in connection with the Stonehenge Project is guided by the *Statement of Principles Governing Archaeological Work within the WHS* adopted by the WHS Management Committee in 2002 and the *Stonehenge WHS: an Archaeological Research Framework* (Darvill 2005).
- 2.1.2 The results of the individual surveys are reported separately (see References below). The archaeological remains encountered during the surveys are reviewed below, by archaeological period.

2.2 Early Prehistoric

- 2.2.1 No archaeological remains dating to the Glacial or early post-glacial periods were encountered in any of the surveys.
- 2.2.2 In Drainage Treatment Area (DTA) 6 (WA 54379), west of Countess Farm, a relict forest soil containing a Late Mesolithic/Early Neolithic flint assemblage was of post-Glacial/Holocene date.
- 2.2.3 Trench B of WA35734 (Pink Route) was positioned to test the state of preservation of a Neolithic long barrow (Wiltshire Monument No. 63c). Two trenches revealed that the structure has been severely damaged by human and animal activity.
- 2.2.4 Later Neolithic activity was represented primarily in assemblages from fieldwalking areas 9-11 and 13 in WA 35734 (Pink and Grey Routes), and by low density scatters of stone tools across many of the survey areas. The only significant Late Neolithic lithic assemblages came from Trenches 1 and 2 on WA 35734 (North Kite/Wilsford Down), where two distinct groups of *in situ* knapping debris were encountered.

2.3 Bronze Age

- 2.3.1 Bronze Age lithics were widely distributed across the surveys, if in no great numbers.
- 2.3.2 Evaluation Trenches A1 and 2 in WA 35734 (Grey Route) revealed an undated linear ditch and scoop. Although no diagnostic finds were recovered, mollusca indicated well-established country conditions which prevailed from the Late Neolithic, and the lack of large numbers of Introduced Helicellids probably suggests a prehistoric date.



- 2.3.3 Trench C on WA 35734 (Pink Route) tested the state of preservation of a Bronze Age round barrow (Wiltshire Monument No. 63b). Limited excavation indicated that the mound was generally well-preserved, although some limited animal disturbance and erosion was noted.
- 2.3.4 In Evaluation Area P east of Longbarrow Crossroads (WA 50538), two Early Bronze Age Beaker burial pits were encountered, containing Beaker ceramics. A pair of Middle Bronze Age rubbish pits from the same evaluation and a shallow pit containing Middle Bronze Age pottery and redeposited animal and human bone encountered during a watching brief on ground investigation work (WA 52246) also appear to be related to the undated field system associated with the excavated Bronze Age settlement at Longbarrow Crossroads.
- 2.3.5 Further to the east in Area R (WA 50527), a buried linear ditch was located west of the Long Barrow. Worked flint flakes from this feature are consistent with a Bronze Age date.
- 2.3.6 In Area C (WA 50252), west of Winterbourne Stoke, a Late Bronze Age storage pit close to the A303 suggests settlement activity. Other probable Bronze Age features in this area include two ring ditches, which may represent ploughed-out round barrows.

2.4 Iron Age and Romano-British

- 2.4.1 In Area A (WA 50252), west of Winterbourne Stoke, a small, unstratified assemblage of Early Iron Age pottery was encountered. In Area 3 (WA 52524), north of Winterbourne Stoke, Iron Age finds from a pit and tree throw, together with an undated boundary ditch, may also suggest settlement-related activity.
- 2.4.2 The primary focus for activity in the Iron Age occurs in Area C1 (WA 50157), west of Winterbourne Stoke. A large oval enclosure contained an Early Iron Age settlement, while a rectilinear subsidiary enclosure on the north-western side appears to be broadly contemporary. A small number of Early Iron Age features beyond the enclosures and the relatively high proportion of residual Early Iron Age pottery found across the site may point to an earlier, unenclosed phase of settlement. Post holes and ring gullies of Iron Age roundhouses, Iron Age burials, and pits containing pottery dated to the Middle and Late Iron Age occurred inside and beyond the main enclosure. The settlement seems to have expanded in the Late Iron Age, with the creation of further enclosures to the south.
- 2.4.3 Settlement on the site seems to have continued into the Roman-British period, although it seems unlikely that the oval enclosure was still in use. A small rectangular enclosure added to the north-west of the enclosure complex may have been constructed in the Late Iron Age or Early Roman period: the ditch of this enclosure was certainly almost completely silted up by the Late Roman period, when two graves were dug through the ditch fills. A rectilinear enclosure encountered to the west during a watching brief on ground investigation works (WA 52246) is probably related to this same enclosure complex. An enclosure ditch in the same part of Area C was encountered in subsequent evaluation trenching (Area 1, WA 52524). Other, smaller assemblages of Romano-British material (primarily pottery)



encountered in Field 1 (WA 34852), Areas A-D (WA 50252) and during fieldwalking (WA 50275) may indicate other settlement activity in the vicinity.

2.5 Saxon and Medieval

2.5.1 Saxon and medieval material was poorly represented across the surveys. Only four sherds of Saxon pottery were recovered, and medieval finds were limited to small quantities of metalwork, ceramics and ceramic building materials, primarily from DTA 6 west of Countess Farm (WA 54379) and from fieldwalking and trial trenching around Winterbourne Stoke (WA 34852, 50275 and 52524), much of which appears to derive from the 13th/14th century manuring of fields.

2.6 Post-medieval and Modern

- 2.6.1 Post-medieval material was similarly poorly represented. Metalwork, ceramics, ceramic building materials, clay pipe and glass occurred primarily as stray finds.
- 2.6.2 Notable features of the modern landscape were encountered during the watching brief on geotechnical investigations (WA 48067) and evaluation trenching (WA 50527) in Areas R and T, which located building footings of the former Stonehenge Airfield. The locations and extent of these buildings are known from historic maps and have been traced by geophysical survey within the Stonehenge Triangle.

3 FINDS ASSESSMENT

3.1 Introduction

- 3.1.1 This section provides an overview of the finds from the 16 surveys. Six of these surveys consisted of, or included, systematic surface artefact collection (fieldwalking) (WA 34852, 35734, 37874, 47422, 48066, WA 50275); two comprised test pitting and watching brief on geotechnical investigations (WA 48067, WA 52246); and two comprised test pitting and auger survey (WA 34852, 50286). The remainder comprised evaluation by trial trenching.
- 3.1.2 Differing collection policies were applied to surface artefact collection (SAC) and evaluation surveys. For the former, the following categories were not collected in the field: animal bone, metalwork (with the exception of chronologically distinctive pieces pre-dating the post-medieval period) and metalworking debris (slag). All finds were collected for evaluation surveys.
- 3.1.3 For each survey, finds have been quantified by material type (**Table 1**).

3.2 Pottery

3.2.1 Pottery was recovered from all surveys except trial trenching in Areas R and T (WA 50527). All pottery has been spot-dated on a context-by-context basis for each survey, and in most cases fabrics have been defined at least broadly, e.g. flint-tempered, sandy. The breakdown of the overall pottery assemblage by chronological period and by survey is given in **Table 2**, with significant pottery assemblages summarised in **Table 3**. The majority of the



assemblage is of prehistoric date, with a smaller amount of Late Iron Age/Romano-British material. Post-Roman material is relatively scarce.

Early Prehistoric

- 3.2.2 Early prehistoric material was identified in five of the surveys; although only in Area P did it occur in anything more than negligible quantities.
- 3.2.3 A single rim sherd of Middle Neolithic Peterborough Ware pottery came from a pit in Area L (WA 50412), south of Longbarrow Crossroads.
- 3.2.4 The remaining early prehistoric material has been identified as Early Bronze Age. This includes two almost complete but fragmentary Beaker vessels, both from inhumation burials in Area P (WA 50538; 131 sherds combined). One accompanied an adult inhumation, and is decorated with all-over comb impressions. The second vessel is plain, and was associated with an infant inhumation.
- 3.2.5 Two body sherds (one decorated with irregular jabs) from WA 35734 Trench C are probably Beaker. Seventeen sherds from a single pit in Area L (WA 50412) appear to derive from a single vessel, probably a Collared Urn; there is one rim sherd, and one body sherd has traces of impressed (possibly twisted cord) decoration.
- 3.2.6 The remaining sherds (from geotechnical watching brief WA 48067; evaluation Areas A-D, WA 50252; and Area L, WA 50412) are dated as Early Bronze Age on the basis of grog-tempered fabrics, but are undiagnostic and thus not attributable to ceramic tradition.

Later Prehistoric

- 3.2.7 This chronological period (Middle Bronze Age to Middle Iron Age) is the most commonly represented; sherds occurred in nine of the surveys.
- 3.2.8 The Middle Bronze Age assemblage from Area L (WA 50412; 221 sherds) largely comprises a single vessel, probably deposited complete (in a pit), although subsequently truncated by ploughing. The vessel is a large, bucket-shaped form, decorated with finger impressions below the rim with a second row about one-third of the way down the vessel. Form and decoration are both well paralleled within Deverel-Rimbury assemblages from the Wessex region (e.g. Annable and Simpson 1964, 1357).
- 3.2.9 Twenty further sherds, in flint-tempered or calcareous (shelly or limestone-tempered) fabrics, are more tentatively dated as Middle or Middle/Late Bronze Age: five sherds from Area L (WA 50412); six sherds from Area P (WA 50538); eight sherds from ground investigation watching brief WA 52246; and one sherd from evaluation Area 1 (WA 52524). Only the sherd from Area 1 is at all diagnostic, deriving from an upright, rounded rim.
- 3.2.10 The use of both flint and calcareous (shell) temper continued into the Late Bronze Age; one small group of 26 sherds in such fabrics was recovered from Area C (WA 50252). One body sherd derived from a finger-impressed shoulder, a typical Late Bronze Age decorative technique. Further plain and finger-impressed shoulder sherds were recovered from Field 1 (WA 34852).



- 3.2.11 A further small group of 33 sherds from Area A (WA 50252) in sandy fabrics is more characteristic of the Early Iron Age, although no diagnostic forms are present. A larger group from Area C1 (WA 50157) contains a wider range of both fabrics (sandy, oolitic, shelly and flint-tempered), but diagnostic forms confirm an Early Iron Age date. These forms include coarseware jars and long-necked, fineware bowls, some of which have been red-finished ('haematite coated'). These forms are characteristic of the All Cannings Cross-Meon Hill ceramic style of the 5th to 3rd centuries BC (Cunliffe 1991, fig. A:6). Three further diagnostic forms came from Area L (WA 50412): one convex bowl, one shouldered jar with applied cordon and a second cordon, probably from a similar vessel, all forms which can be paralleled within local assemblages of Early Iron Age date (e.g. Morris 2000, figs. 49, 58; bowl type 7, jar type 56). A single sand-tempered sherd from the rim of a fineware bowl came from Field 8 (WA34852).
- 3.2.12 Sporadic continuity into the Middle Iron Age was noted in Area A (WA 50252), identified mainly on the basis of fabric (predominantly sandy wares) and vessel form (rounded vessels, one with a distinctive expanded rim). One sherd from here can also be assigned to this period a rim sherd from a straight-sided vessel with slightly beaded rim, similar to the 'saucepan' pots of, for example, the St Catherine's Hill/Worthy Down style of the 2nd to 1st centuries BC (Cunliffe 1991, fig. A:15).
- 3.2.13 Other, smaller groups of later prehistoric material are more broadly dated within this overall period.

Late Iron Age/Romano-British

- 3.2.14 Pottery of this period is relatively scarce; it was recorded in 12 of the surveys, but occurred in significant quantities only in Area C1 (WA 50157) and the adjoining Stage 1 fieldwalking area Field 1 (WA 34852). Some of the indigenous Late Iron Age ceramic traditions of southern England span the conquest period, and this is exemplified in this area by the grogtempered fabrics of Savernake type, found across north Wiltshire and beyond from the 1st century BC to at least the 2nd century AD. Vessel forms present at Area C1 include necked and bead rimmed jars, some with cordons. Much of this grog-tempered pottery, however, occurred with more 'Romanised' wares. This part of the assemblage is dominated by coarse greywares, almost certainly from more than one source; vessel forms are utilitarian bowls and dishes, of which few are closely datable although dropflanged bowls, flanged bowls, mortaria, New Forest colour-coated vessels (later 3rd/4th century AD) were recognised. There are also a handful of sherds of Black Burnished ware from the Poole Harbour area of Dorset. Finewares are represented by nine sherds of samian.
- 3.2.15 Other smaller groups of Late Iron Age/Romano-British pottery from other surveys replicate the range of fabrics seen at Area C1/Field 1, but produced little to aid closer dating within the period. Fieldwalking Plot 3 on WA 37874 produced a group of 30 sherds containing both 1st/2nd century and 3rd/4th century samian and British finewares.
- 3.2.16 One sherd from Area C (WA 50252) had been reused as a spindle whorl.

Post-Roman



- 3.2.17 Post-Roman material is relatively scarce, and the Saxon period is particularly poorly represented here. Only four sherds were identified one each from the fieldwalking (WA 48067) and the ground investigation watching brief (WA 52246), and two from test pitting in the Till valley (WA 34852 and 50286), all in organic-tempered fabrics of Early to Mid Saxon type.
- 3.2.18 Medieval sherds mainly comprise coarsewares of various types Laverstock-type wares from the Salisbury area, calcareous wares probably from north Wiltshire, and flint- and flint/chalk-tempered wares of a type found widely up the Kennet Valley from Newbury to Devizes. There are also two Laverstock-type finewares and two sherds of Late Medieval or Early Postmedieval fine glazed jugs.
- 3.2.19 Post-medieval pottery includes coarse redwares, tin-glazed earthenwares, Verwood, stonewares and modern refined wares.

3.3 Ceramic Building Material (CBM)

- 3.3.1 This material type was encountered in quantity only from the fieldwalking areas. These groups consisted primarily of medieval and post-medieval material, on WA50275 in a ratio of approximately 1:3, the former comprising roof tile only, and the latter also including some brick fragments as well as roof tile. Medieval tile has been distinguished on the basis of fabric, which is generally coarser and more poorly wedged, and is frequently pale-firing. Such fabrics have been commonly recorded in Salisbury from the 13th century onwards.
- 3.3.2 One very abraded fragment from a decorated medieval floor tile was recovered from the fieldwalking (WA 48066); the design is illegible and this tile cannot therefore be assigned to a specific school of tile design, nor dated more closely. A second decorated floor tile came from Field 4 (WA 34852).
- 3.3.3 Two fragments from Area C1 (WA 50157) have been identified as box flue tile of Romano-British date. Three fragments from fieldwalking Field 1 (WA 34852) included a further two box tile fragments and one imbrex.
- 3.3.4 CBM from other sites is of medieval to post-medieval date, but occurred in small quantities only.

3.4 Fired Clay

3.4.1 Fired clay was recorded in quantity only from Area C1 (WA 50157). The majority of this derived from two dumped deposits which appear to be structural in origin, e.g. hearth/pit lining or upstanding structures, many pieces with wattle impressions.



3.5 Worked Flint

Raw Material

3.5.1 With the single exception of a piece of Portland Chert from Area L (WA 50412), raw material comprises locally available chalk flint.

Condition

- 3.5.2 The condition of the assemblages is variable, ranging from relatively fresh to heavily rolled and edge-damaged, frequently exhibiting the edge damage characteristic of ploughzone assemblages. Small isolated patches of "race" (calcium carbonate concretion) were seen on some pieces from WA 35734.
- 3.5.3 The degree of patination varies across the assemblage, with most collections including both patinated and unpatinated pieces. For instance, on WA 34852 the most heavily patinated pieces occurred in the eastern part of the survey area (particularly Fields 7 and 8, east of Longbarrow Crossroads). The majority of pieces from Stage 2 fieldwalking areas 6, 7, 9 and 10 (WA 50275) were heavily patinated, varying in colour from white to a mottled bluish grey, while flint from fieldwalking areas 1, 2 and 5 was more variable, and included a higher proportion of unpatinated and lightly patinated pieces. The material from Area L (WA 50412) was mostly patinated to a light grey colour, while the early component from DTA 6 (WA 54379) was in good condition, with little or no edge damage and only a light patination, if any.

Mesolithic/Neolithic

- 3.5.4 The assemblage from DTA 6 (WA 54379) includes a small but significant group of early prehistoric (Mesolithic/Neolithic) worked flint deriving from a preserved forest soil in Trench 3.
- 3.5.5 This portion of the lithic assemblage derived largely from three test pits (3B, 3C and 3D) dug through the preserved forest soil, but also from overlying layers and from underlying subsoil. The material appears to be largely consistent in its morphological and technological characteristics (with the exception of topsoil 300, and underlying layer 301), and can be dated as Late Mesolithic or Early Neolithic. The group includes a significant blade component, including blade cores, as well as one failed microlith and a possible piece of axe debitage. Burnt, unworked flint occurred almost exclusively within Trench 3, associated with the worked flint, and can be assumed to be of similar date.
- 3.5.6 Other early elements are difficult to isolate, but may include a group of soft hammer struck flakes and blades from Stage 1 fieldwalking Fields 5 and 6 (WA 34852, south of Longbarrow Crossroads).

Neolithic/Bronze Age

3.5.7 There are very few chronologically distinctive pieces in the collections, making dating particularly difficult. The majority of the pieces have traits which correspond to Late Neolithic or Bronze Age technologies (broad,



- squat flakes struck using hard hammer technique). Close dating is impossible in nearly every instance.
- 3.5.8 In WA 37874, 83 blades or blade-like flakes were recovered from across the three fieldwalking plots on Parsonage Down, perhaps indicating a widespread Neolithic element amongst the otherwise predominantly Bronze Age material.
- 3.5.9 The bulk of the 851 pieces from WA 34852 conforms to a Bronze Age date: typologically distinctive tools are limited to thumbnail scrapers. Densities were highest in Fields 5, 6 and 8 around the Winterbourne Stoke barrow group.
- 3.5.10 Area 12 on WA 35734 lay adjacent to WA 34852 Field 5, and has certain similarities, although the presence of a chisel arrowhead, a possible knife made on a blade, a rejuvenation tablet from a core with an abraded striking platform and at least one scraper with a finely retouched scraping edge indicate that the material is mixed. The amount of archaeological activity in the vicinity of Longbarrow Crossroads, which includes the early Neolithic long barrow, numerous Bronze Age round barrows and a Late Bronze Age settlement, makes it unlikely that any single period will be represented.
- 3.5.11 Trench C on WA 35734 produced an assemblage of 312 pieces, including a Levallois core, a scraper, two rough scraper/borers, two probable hammers/choppers, an edge retouched flake and a burnt probable thumbnail scraper. Overall, the material is likely to be of Late Neolithic or, more probably, Early Bronze Age date.
- 3.5.12 Trenches 1 and 2 on WA 35734 (North Kite/Wilsford Down) contained significant *in situ* assemblages of knapping waste. Two nucleated groups (including refitting material) in mint condition had contrasting technologies: one with considerable evidence of platform abrasion, the other more robust and associated with a chisel arrowhead.
- 3.5.13 All 77 pieces from Trenches 2-6 in Area C1 (WA 50157) are of this broad date range, among which a single scraper was the only tool in a collection of flake material (one blade from the packing of an Iron Age posthole is likely to be residual or fortuitous).
- 3.5.14 Of the 15 pieces recovered from Area B (WA 50252), 12 derived from a single context, including five possible blades. However, there are also a number of flakes with hinge fractures. These flints all have a patina, whereas the three pieces from Trench 41 appear fresher. There are no tools or other utilised pieces.
- 3.5.15 The 1,579 pieces from the 2000 test pitting in advance of geotechnical investigations (WA 48067) consist almost entirely of flake and core material, with only three scrapers noted (test pits 56, 115, 128), and no other tools or utilised pieces. In general the worked flint occurred as a low level scatter across the test pits (only eight test pits produced more than 25 pieces), but by far the largest number (414 pieces) came from test pit 121, including a substantial group (368 pieces) from a colluvial deposit (12101). This group does not contain anything diagnostic, and includes a mixture of patinated and unpatinated pieces, suggesting a chronologically mixed assemblage; the presence of a relatively high proportion of small chips and spalls in this

- group, however, may be noted. Although chronologically mixed, it is suggested that this assemblage at least in part represents a localised knapping episode, exploiting a natural flint-rich gravel deposit in a natural hollow in the chalk.
- 3.5.16 West of Longbarrow Crossroads, a concentration of worked flint was noted in Fields 56 and 63 (WA 48067, test pits 52 to 56: 323 pieces in total), within which adjacent test pits 55 and 56 in Field 63 produced notably larger quantities of material (188 and 60 pieces respectively). Fieldwalking of these areas did not produce any comparable concentrations (WA 48066; Wessex Archaeology 2000).
- 3.5.17 The flint assemblage from trial trenching in Area P (WA 50538) consisted of 15 waste flakes. These were recovered from three features. Most of the flakes are broad and squat, although some are longer and more blade like. There are no diagnostic pieces in this small collection.
- 3.5.18 The 110 pieces from trial trenching in Areas 1-4 (WA 52524) largely comprise flake and broken flake material. Only two tools, both scrapers (from Trenches 53 and 55), were noted, in addition to one broken but probably retouched flake from Trench 42.
- 3.5.19 The 226 pieces from Area L (WA 50412) include three scrapers, none of which are chronologically distinctive. The remainder of the assemblage comprises flake and core material. One group (65 pieces from pit 308) has a fresh appearance, and may represent a single knapping episode.
- 3.5.20 Only six pieces were recovered from Areas R and T (WA 50527): five flakes from Trench 6 and a single scraper/knife from topsoil north of Trench 23.

Early/Middle Bronze Age

- 3.5.21 The 106 pieces from fieldwalking (WA 50275) exhibit the general technological characteristics of the Early/Middle Bronze Age, although it is possible that some earlier material is also present. Flakes are generally squat, thick forms, with frequent hinge terminations and prominent bulbs of percussion indicative of hard hammer technique, although there are a very small number of narrow, blade-like flakes. Core material is scarce but appears to consist entirely of fragments of unprepared cores. Retouched forms comprise six end scrapers and another possible retouched piece, none of which are chronologically distinctive.
- 3.5.22 Worked flint from upper contexts in DTA 6 (WA 54379) Trench 3 and from other trenches here is more difficult to characterise and is likely to be chronologically mixed, although probably largely of Bronze Age date. Flakes are broad and squat, and cores unsystematic (although one blade core came from a colluvial layer). One scraper came from layer 301; no other tools or utilised pieces were identified. This material is more variable in condition, with mixed patination and several pieces exhibiting edge damage and/or rolling.
- 3.5.23 The 184 pieces from the 2002 test pitting in advance of ground investigations (WA 52246) consist almost entirely of flake and core material; there are two scrapers. Flint was found in small quantities in 36 of the excavated test pits; no test pit produced more than 16 pieces. This low level



distribution, however, is sufficient to demonstrate widespread prehistoric activity across the area.

Fieldwalking Results

- 3.5.24 The distribution of worked flint recovered from fieldwalking (WA 34852, 35734, 37874, 47422, 50275) was relatively even across the survey areas. Small concentrations were apparent in Fields 5, 6 and 8 of WA34852, in Plots 2 and 3 of WA 37874 and in fieldwalking areas 1, 2, 6 and 9 of WA 50275. The burnt, unworked flint shows a similarly even distribution. Although concentrations coincided with those of the worked flint in Field 5 and areas 1 and 2, no correlation was found with the worked flint concentrations in Fields 6 and 8 or areas 6 and 9. No clear patterns of distribution were apparent within any of the WA 35734 survey areas; all contained individual 25m runs with no finds.
- 3.5.25 The route crosses a landscape of extensive prehistoric activity. Of particular note, fieldwalking areas 1 and 2 lie to the south-west and north-east respectively of the multi-period enclosure complex in Area C1. The worked flint assemblage from areas 1 and 2 is technologically consistent with a Late Neolithic-Bronze Age date range, but the absence of diagnostic material prevents further correlation. Bronze Age flintwork in Fields 5 and 6 lay immediately south of a Late Bronze Age settlement. A further concentration of worked flint in fieldwalking area 9 lies close to Stonehenge itself. Fieldwalking of a 25m wide strip adjacent to the A303 in connection with the Stonehenge Conservation and Management Project (SCMP) (Wessex Archaeology 1991, Area E) also recovered worked flint consistent with a Bronze Age date. The concentrations of worked flint are generally insignificant in comparison with those identified by the Stonehenge Environs Project (SEP: Richards 1990, fig. 10).
- 3.5.26 Plotting of the worked flint recovered during the course of fieldwalking according to the categories used by Richards (1990, fig. 8) shows that on WA 34852 nine of the 25 x 50m quadrats contained between 11 and 39 flints, two of which (in Fields 5 and 6) contained over 20.
- 3.5.27 On WA 50275 only three of the 25 x 50m quadrats fieldwalked contained between 11 and 33 flints. Of these, two contained 11 worked flints and the third 13. None of the 25 x 50m quadrats contained more than 13 flints, and the results therefore fall within the lower end of the range of densities revealed by the SEP.
- 3.5.28 The worked flint recovered during all fieldwalking generally falls into the lowest level of activity, at between 0 and 10 flints per quadrat. This, combined with the fact that most of the highest results do not conjoin, suggests that the worked flint recovered during the course of fieldwalking does not form a significant assemblage. Indeed, the assemblages seem rather low for the area of study, although similarly barren areas were noted in Richards' work (1990, Fig. 10). Plotting of the worked flint recovered during fieldwalking using the three categories of density used by Blore *et al.* (1995, fig. 9) shows that all of the results fell within the lowest category of density.
- 3.5.29 Where areas fieldwalked lie adjacent to areas covered by these previous analyses, the results seem to confirm those of the previous work. Significant



areas of high density worked flint have been noted within the WHS, but little that lies along the current line of the A303.

3.6 Burnt Flint

3.6.1 Quantities of unworked burnt flint were recovered from the 2000 geotechnical investigation test pitting (WA 48067), fieldwalking (WA 34852, 37874, 47422, 48066, 48067) and (especially) Area C1 (WA 50157). No significant distributions were noted, although the association of smaller quantities of burnt flint with Late Mesolithic/Early Neolithic struck flint on DTA 6 (WA 54379) is noteworthy. Burnt flint need not be anthropogenic, although it is often assumed to be prehistoric. In this instance, the largest quantities came from Iron Age and Romano-British contexts.

3.7 Stone

3.7.1 Small quantities of worked stone were recovered, including a broken Neolithic stone axe (from Area B, WA 50252); Iron Age/Romano-British quernstones (from Field 1, WA 34852, Area C1, WA 50157 and close by in evaluation Area 2, WA 52524; two are greensand); post-medieval and modern roofing slate (from fieldwalking WA 34852, 50275 and ground investigation test pitting WA 52246 respectively); whetstone fragments (from Fields 3, 4, 5 and 8, WA 34852 and the geotechnical investigation WA 48067); and undated fragments of fossiliferous limestone (from Fields 1 and 8 WA 34862; evaluation Area 2, WA 52524), calcareous and ferruginous sandstone (from Field 1, WA 34852).

3.8 Metalwork

3.8.1 Metal objects include coins, as well as objects of copper alloy, iron and lead. The majority of these are either undated, or are demonstrably or probably (on grounds of provenance) post-medieval. The exceptions are two Roman coins, found unstratified at Area C1 (WA 50157), dated to AD 270-90 and AD 364-78 respectively; and nine iron hobnails from the same site, all assumed to be of Roman date (six came from one of the inhumation burials and a seventh from a second burial).

3.9 Worked Bone

- 3.9.1 One worked bone object came from Area P (WA 50538), where it was associated with an adult inhumation burial also accompanied by a Beaker vessel. The object is a Class I belt ring, an object type typically found in Beaker burials (Clarke 1970, figs. 143 and 261).
- 3.9.2 Two bone objects came from a Late Roman context at Area C1 (WA 50157); both appear to be points, and one may be a pig fibula pin, perhaps used as a clothes fastener (MacGregor 1995, fig. 64:39).

3.10 Human Bone

3.10.1 Unburnt human bone was encountered on two sites, comprising the remains of eight individuals, six from Area C1 (WA 50157) and two from Area P (WA 50538). In Area C1 only one *in situ* burial (of probable Iron Age date) was excavated, that of a subadult; bone from two other contexts was redeposited



(adult and neonate), and the excavated remains of three further inhumed individuals (one probably Iron Age, two late Romano-British) were left *in situ*.

3.10.2 Of the two inhumation burials excavated in Area P, one comprised the slightly disturbed remains of a mature adult male (c.30-40 years), and the second comprised a disturbed grave, containing four fragments of neonatal/infant bone. Both were accompanied by Beaker vessels (see above, Pottery), and the adult burial also contained a worked bone object (see above, Worked Bone). Analysis of the strontium and oxygen isotopes present in tooth enamel from the adult burial indicates a static lifestyle with data consistent with a childhood in the Stonehenge area (Evans, Chenery and Fitzpatrick, 2006).

3.11 Animal Bone

- 3.11.1 Animal bone was recovered in quantity only from Area C1 (WA 50157); assemblages of moderate size came from Area P (WA 50538) and the ground investigation test pitting (WA 52246), although the assemblage from WA 52246 consists largely of a single pit group.
- 3.11.2 Conjoining fragments that were demonstrably from the same bone were counted as one bone in order to minimise distortion, and therefore specimen counts (NISP) given in the text here may differ from the absolute raw fragment counts in **Table 1**.

Bronze Age

- 3.11.3 Twenty bones derived from an early Bronze Age Beaker grave, an Early Bronze Age pit and a Middle Bronze Age rubbish pit in Area P (WA 50538). The overall condition of the bones was fair.
- 3.11.4 The Beaker grave contained at least one heavily fragmented cattle skull and a sheep/goat radius. The cattle skull might represent a ritual deposit. Although Bronze Age farmers practised a mixed husbandry strategy, economies were cattle-based in temperate Europe (Harding 2000, 134). Placing of a cattle skull in a grave might reflect this importance.
- 3.11.5 Early Bronze Age pit 204 contained two cattle bones, of which one can be aged. Middle Bronze Age rubbish pit 208 contained 11 cattle bones (juvenile and mature), a sheep/goat bone and a large piece of shed antler (beam, brow and bez tine of a mature red deer). Two of these bones can be measured (one provides a height at the withers for cattle) and four can be aged. Shed antlers are a common feature of Neolithic and Bronze Age archaeozoological assemblages on Salisbury Plain (e.g. from Boscombe Down, Amesbury: Wessex Archaeology in prep.).
- 3.11.6 The majority of the assemblage from WA 52246 comprises a group of 388 bones from a single Middle/Late Bronze Age pit in Area P. This produced mostly cattle bone, with some horse and sheep and a possible goat horn core. The bones comprise elements from all parts of the carcass, including long bones, ribs, feet, skull fragments and horn cores. The bone survives in good condition. There was clear evidence of carnivore damage and this, together with the presence of a single human bone, suggests that the bones are redeposited although, as various body parts are represented, it seems likely that the animals were processed on the spot.



Iron Age and Romano-British

- 3.11.7 The assemblage from Area C1 (WA 50157) derives from Iron Age and Romano-British contexts. This assemblage contained a relatively high proportion of identifiable fragments (57%), and was in excellent to average condition. In both Iron Age and Romano-British phases, sheep/goat are most numerous (in contrast to the prevalence of cattle in the Bronze Age), followed by cattle, dog, horse and pig. This pattern of sheep husbandry is common for upland chalk sites from the Iron Age onwards (King 1991) and similar proportions have been noted at other sites on Salisbury Plain, such as Battlesbury Bowl, Beach's Barn and Chisenbury Warren (Wessex Archaeology 1999; Powell *et al.* forthcoming). Other species recovered include red deer, possible roe deer, amphibian, rodent and bird.
- 3.11.8 The assemblage from Area C1 is large enough to allow intra-site analysis of depositional practices. The results showed that cattle bones were mainly deposited in ditches and sheep/goat bones in pits, reflecting the pattern noted by Maltby (1981) and Wilson (1996); this pattern was also observed for the Roman material from Dorchester Hospital (Wessex Archaeology in prep.). Furthermore, four dog skeletons or partial skeletons (from individuals of varying sizes) and a group of nine sheep mandibles were recovered from what may be termed 'special deposits'. One of the dog skeletons has cut marks suggesting skinning. Other possible 'special deposits' include four very fragmentary cattle skulls found within pits. Such deposits, particularly of dogs, are common in the Romano-British period, for example, from Dorchester Greyhound Yard (Maltby 1993) and Springhead, Kent (Wessex Archaeology in prep.).

3.12 Other Finds

3.12.1 Other finds comprise clay tobacco pipe fragments, vessel and window glass, and metalworking slag. All are demonstrably or probably of post-medieval date.

4 ENVIRONMENTAL ASSESSMENT

4.1 Introduction

- 4.1.1 Palaeo-environmental data was recovered from 12 of the 16 surveys. Two of these comprised test pitting and watching brief on geotechnical investigations (WA 48067, WA 52246); two comprised test pitting and auger survey (WA 34852, WA50286); and the other eight surveys comprised evaluation by trial trenching.
- 4.1.2 This section provides an overview of the palaeo-environmental data; detailed assessments are presented in the individual survey reports and are not reiterated here. The palaeo-environmental evidence is summarised below by material and theme; **Table 4** summarises the palaeo-environmental evidence by survey.



4.2 Charred Plant Remains and Charcoal

4.2.1 Charred plant remains and charcoal were recovered from five surveys, ranging from Beaker to Iron Age in date and from graves to settlement activity.

Beaker

4.2.2 The Beaker burial in Area P (WA 50538) contained no charred plant remains, but sieving of the soils recovered large quantities of charcoal from the pit fill. This provides a relatively rare assemblage of Beaker-associated charcoal.

Middle – Late Bronze Age

4.2.3 Middle and Late Bronze Age pits in Area B (WA 50252) and Area P (ground investigation WA 52246) produced some charred plant remains, although they were sparse in WA 50252. Charcoal was sparse and disparate in the pits even where charred plant remains were common.

Iron Age

4.2.4 The Iron Age settlement in Area C1 (WA 50157) produced very rich charred plant assemblages from pits typical of such sites, but sparse charcoal. Significantly, Iron Age activity is very rare in the Stonehenge area, excepting Vespasian's Camp (Hunter-Mann 1999).

4.3 Site-specific Snail Sequences

4.3.1 Sequences of samples for land snails were taken from five sites, of Neolithic (Trench B, WA 35734), uncertain (Trench A, WA 35734), Late Bronze Age (Area B, WA 50252), Iron Age (Area C1, WA 50157) and possibly Saxon (WA 34852) date. The three samples from the buried soil of the Neolithic long barrow are sparse, but of great value in view of the rarity of buried soils prehistoric date in this area (Allen *et al.* 1990; Allen 1997). Snails were poorly preserved in poorly dated but probably Bronze Age ditches in Area B, but moderately well preserved in the Iron Age enclosure ditches in Area C1. In WA 34852, preservation was fair, but numbers too low to allow any significant interpretations.

4.4 Geoarchaeology

4.4.1 Several of the surveys produced important glimpses of the past soil regimes in the area, or long colluvial sequences which are non-existent within the immediate Stonehenge environs (Richards 1990; Allen 1997).

Soils

4.4.2 The wider Stonehenge area is notable in the lack of soil studies. Where soils have been preserved under Bronze Age barrows they are invariably rendzinaforms. Unfortunately, much of the archaeological work in the area has concentrated on plough-damaged monuments from which no buried soils survive (Richards 1990), with the notable exception of Neolithic



- examples at Stonehenge (Evans 1984; Allen 1995c), Durrington Walls (Evans 1971) and Woodhenge (Evans and Jones 1979).
- 4.4.3 Argillic brown earths are not widely present in the Stonehenge landscape today (Allen 1995a; Findlay *et al.* 1984), nor have any deep colluvial deposits been recorded in this landscape (Richards 1990, 210-11; Allen 1994, 270-3; Allen 1995b, 332-3; and Allen 1997, 130-6). However, it has been suggested that the former soil cover comprised argillic brown earths (Allen 1997); if so, this has significant implications for understanding of Neolithic and Early Bronze Age landscapes and ecosystems in the Stonehenge landscape. The presence, identification, characterisation and analysis of argillic brown earths or brown earth soils have, therefore, relevance well beyond the site of their survival and are relevant to the soil development history of the wider environs as a whole.
- 4.4.4 A clear relict brown earth / colluvial brown earth profile was recorded during test pitting in advance of geotechnical investigations (WA 48067) in a bowl or depression in Area T. There is evidence of a relict argillic brown earth beneath and kubiena samples were taken to allow confirmation and analysis of this. Further east in Area T, field records and pedological descriptions of brown earths and well developed argillic brown earths under shallow colluvium at Stonehenge Bottom (WA 50527) also contribute to this evidence.
- 4.4.5 In Area L (WA 50412), an irregular subsoil feature contained a rare preservation of a brown earth and potential argillic brown earth. Although this provides an important field record, the potential for further analysis, including that of possible soil pollen survival, is limited here.
- 4.4.6 Whilst the above records are all from the rolling chalk downland, perhaps one of the most important sequences came from DTA 6 on the edge of the Avon valley west of Countess Farm (WA 54379), where very good soil profiles were preserved on the terrace edge. These included argillic brown earths in association with a Late Mesolithic/Early Neolithic flint scatter. The weakly calcareous soils over periglacial chalk mud here have provided exceptionally rare survival. The potential of both soil and pollen data here is particularly significant, especially in view of the lack of dated Late Mesolithic/Early Neolithic archaeological and environmental evidence from the Stonehenge environs.

Colluvium

- 4.4.7 Colluvium was considered to be absent in the Stonehenge environs (Richards 1990; Allen 1994), but chance finds near Coneybury (Allen 1997) proved their existence and shallow colluvial sequences have subsequently been recorded during geotechnical investigations (WA 48067) and in evaluation trenches in Area T (WA 50527) and DTA 6 (WA 54379), sealing brown earth/argillic brown earths.
- 4.4.8 Outside the immediate Stonehenge environs to the west, on land leading towards the Till valley (Winterbourne Stoke) and in the Till valley itself, significant stratified colluvial and sedimentary sequences have been described. In WA 34852, a shallow sequence of typical hillwash from Tertiary Clay-with-Flints deposits was encountered in test pits in the Till valley. In evaluation Area 4 (WA 52524), trenching throughout the dry valley



produced a large sequence of colluvial profiles from which it is possible to model the colluvial architecture and examine the prehistoric to early historic land-use, in marked contrast to the lack of evidence from within the immediate Stonehenge environs.

4.4.9 Trenching the valley bottom in Area 4 revealed relatively deep (c. 1.5m +), banded colluvium, restricted to the valley floor. The presence of tree hollows and an argillic brown earth suggest a sequence of some antiquity (i.e. possibly Neolithic) and the presence of a buried land surface. No buried archaeological sites were recognised. Although the overlying sequence probably represented a considerable time period (possibly Bronze Age to Medieval) and reflects changes in the local land-use, very few artefacts were recorded. This paucity of artefacts is relatively unusual and tends to indicate that settlements did not occur in the immediate vicinity, and that the area was both cultivated and used for pasture in a wider settled landscape. There is the potential here to examine the buried land surface in order to determine the nature of the local land-use history and relate this to wider, social interpretations of the landscape. Key sequences with thicker and better dated deposits were selected for particular attention and samples were taken for land snails, soil micromorphology and pollen from the earlier, less calcareous deposits. These provide a long history of land-use, farming and soil depletion and provide a proxy record for much of the local area.

Alluvium

In contrast to the downland landscape, the flat Till valley floodplain has produced shallow alluvial sequences with colluvial edge deposits on the floodplain margins (WA 50286). Here, a full alluvial profile can be constructed and defined through the sedimentological descriptions and snails, for comparison with evidence elsewhere within the landscape.

Snails

- Land snails were examined from the buried soil of the Neolithic long barrow in Area R (Stage 1 trial trenching WA 35734), Area C1 (WA 50157) and Area B (WA 50252); assemblages from the enclosed settlement in Area C1 in particular can provide evidence of the local land-use.
- Long sequences of snails from evaluation Area 4, north-east of 4.4.12 Winterbourne Stoke (WA 52524) and the Till Valley (WA 50286) provide longer land-use histories, unparalleled elsewhere in the Stonehenge area.

Soil Micromorphology and Chemistry

The presence of brown earths and argillic brown earths in Area T (WA 48067) and DTA 6 (WA 54379), and relict argillic brown earths beneath colluvium in Area 4 (WA 52524), have enabled sampling for soil micromorphology to characterise and analyse these; this has been accompanied by sampling for soil chemistry.



5 STATEMENT OF POTENTIAL

5.1 Research Themes

- 5.1.1 The Stonehenge World Heritage Site: an Archaeological Research Framework (Darvill, 2005) identifies a series of issues or subjects that together form a broad-based research agenda for the WHS, and sets out a series of 25 objectives forming a strategy intended to move towards the resolution, wholly or in part, of these issues. The issues and objectives most relevant to the data from the surveys are as follows:
 - Issue 23: Filling the gaps and understanding distributions
 - Issue 25: Environment and change to the physical landscape
 - Issue 26: The hidden landscapes
 - Issue 27: The missing slices of time
 - Objective 3: Modelling environment and landscape change (Issue 27)
 - Objective 4: Understanding occupation (Issue 23)
 - Objective 15: Filling data gaps (Issues 23,26)
- 5.1.2 Within the framework provided by these issues and objectives a number of research themes can be proposed, towards which the data from the Stage 1 and 2 surveys have the potential to contribute. These are discussed below, with reference to relevant Research Framework issues and objectives.
 - Theme 1: The early prehistoric development of the chalkland landscape and landuse (Issues 25, 26; Objective 3)
- 5.1.3 The geoarchaeological data in particular the evidence of the soils and the long colluvial sequences provides a unique opportunity to examine the early development of the chalkland landscape. This can augment ongoing work in the area (e.g. Allen 2002) and contribute to national examination of the development and use of chalkland landscapes (French *et al.* 2003).
 - Theme 2: The Mesolithic occupation and environment (Issues 23-7; Objectives 3, 4)
- 5.1.4 The presence of non-ploughzone Late Mesolithic/Early Neolithic activity and Late Upper Palaeolithic/Early Holocene environmental data from DTA 6 (WA 54379) is unique in this landscape and exceptionally rare on the chalklands of England. The lithics assemblage from DTA 6 is similarly rare, and provides an opportunity to examine activity in a period for which evidence is otherwise almost entirely absent in the immediate area.
 - Theme 3: Neolithic landscape and landuse (Issues 23-6; Objective 3)
- 5.1.5 The rare preservation of a Neolithic buried soil beneath the Long Barrow (WA 35734) enables only limited analysis, but nonetheless can make a

useful contribution which can be compared with the new wealth of data from the Stonehenge Riverside Project at Durrington Walls and sites in the vicinity. The lithics scatters and other material recovered from various phases of the project belong predominantly to this period, and provide comparative material which can be assimilated into existing landscape-wide surveys of the locality.

Theme 4: Aspects of the missing Iron Age (Issues 23, 27; Objectives 4, 15)

5.1.6 The Iron Age is largely absent within the core area around Stonehenge, with monuments and sites lying on its periphery. Little work was undertaken at Vespasian's Camp (Hunter-Mann 1999), and the evidence from the enclosed settlement in Area C1 (WA 50157) allows a significant contribution to Iron Age studies in this area.

5.2 Structural Evidence

- 5.2.1 The 16 Stage 1 and 2 surveys were largely designed to inform decisions relating to the development of the road design, and as such were not targeted with the intention of producing large archaeological data sets. Consequently, with the exception of Area C1 (WA 50157), the individual surveys did not produce structural evidence of a type or quantity that warrants further analysis or publication.
- 5.2.2 The enclosed settlement in Area C1 was known from aerial photographs, fieldwalking and geophysical survey to be of Iron Age and Romano-British date. Six trenches of 50m by 5m were excavated across areas of the enclosure, targeted on the basis of previous surveys to evaluate the character, date and state of preservation of archaeological remains across the site. All six trenches contained a comprehensive range of settlement features, spanning one millennium of occupation, with a continuation of occupancy from the Early Iron Age to the Early Roman period, and with finds spanning the Late Bronze Age to medieval periods. The preservation of the archaeological remains on the site was generally good, and in places exceptional. The road alignment was modified to pass to the north of the enclosures through an area indicated by geophysical survey and trial trenching to lie beyond the focus of archaeological activity associated with the enclosures.
- 5.2.3 The range of features, the degree of preservation and the suggested continuity of occupation are unusual in a single site within Wiltshire, making the remains of at least regional importance. Given that the settlement also appears largely complete, the remains may be considered of national importance and to warrant publication separately from the project-wide analyses of finds.

5.3 Finds

5.3.1 Taken singly, most of the assemblages from the surveys do not warrant further analysis. The clear exceptions to this are the Beaker burials from Area P (WA 50538), the *in situ* Late Neolithic knapping scatters from WA 35734, and the Mesolithic/Neolithic flint assemblage from DTA 6 (WA 54379).



- 5.3.2 Nonetheless, when considered together the overall assemblage provides a substantial body of data which has the potential for comparison, particularly in terms of spatial distributions, with other projects conducted in the area over recent years, for example the Stonehenge Environs Survey (Richards 1990), and various projects conducted by Wessex Archaeology as part of proposals for the new Stonehenge Visitor Centre (Darvill 1991; Wessex Archaeology 1992; 1993). More recently, surface artefact collection has been undertaken in various locations around Stonehenge in advance of a change in land-use (Wessex Archaeology 2004). Together, these projects have produced large amounts of distributional data, particularly for lithic material, but also for ceramics. Chronological and technological evidence has also been discussed for both categories for the prehistoric period (Harding 1990; Riley 1990; Cleal with Raymond 1990), as has the evidence for animal exploitation in the Stonehenge area (Maltby 1990).
- 5.3.3 To this can be added the results of other landscape studies further afield on Salisbury Plain, for example the Wessex Linear Ditches project and the Salisbury Plain project, both conducted under the aegis of Reading University and both of which produced useful artefactual assemblages of prehistoric to Romano-British date (Bradley et al. 1994; Fulford et al. 2006). All these projects provide a useful chronological and spatial framework within which to view the data from the surveys.

Prehistoric Pottery

5.3.4 Analysis of the prehistoric pottery is unlikely to add significantly to our understanding of the local and regional ceramic sequence (Cleal with Raymond 1990; Raymond 1994; Raymond 2006), but the detailed recording of fabric and form will fulfil recommended minimum archive requirements (PCRG 1997) and will provide basic comparative data.

Lithics

5.3.5 Initial analysis of lithic distribution patterns from the survey has indicated that few of the assemblages represent more than the normal background levels of lithics encountered across the wider Stonehenge landscape. The concentrations of worked flint are generally insignificant in comparison with those identified by the Stonehenge Environs Project (Richards 1990, fig. 10), and overall the results fall within the lowest category of density identified for the World Heritage Site (Blore et al. 1995, fig. 9). However, distribution analyses would be worthwhile for the assemblages recovered from fieldwalking (WA 34852, 48066, 50275) and test pitting (WA 48067, 52246).

Faunal Remains

5.3.6 The potential of the faunal assemblage is limited by its size and it cannot inform on overall husbandry or consumption patterns; two out of the three largest site assemblages, for example, relate to specific Bronze Age episodes of deposition. However, a fuller analysis of the small assemblages from Area P (WA 50538, 52246) and the larger assemblage from Area C1 (WA 50157) can contribute to questions addressed during the analysis of the animal bone from the Salisbury Plain Project (Powell *et al.* 2006) and the Stonehenge Environs Project (Maltby 1990) concerning differences in depositional practices between sheep/goat and cattle bone, in respect to

conclusions about differences in animal husbandry strategy; and differences in environmental conditions in respect to cattle or sheep/goat dominance at a particular site. In addition, metric analysis of the (partial) dog skeletons from Area C1 will contribute to our understanding of prehistoric and protohistoric dog types.

5.4 Environmental Evidence

Charred Plant Remains and Charcoal

5.4.1 Charred plant remains from settlement activity in this area are rare, and thus even sparse assemblages from the Middle Bronze Age are valuable to add to understanding of the wider landscape. The Iron Age evidence is very rare in the area, and provides the first good charred plant and charcoal remains of this period in the area.

Snails

5.4.2 The potential and significance of the Neolithic assemblages is clear; they are early, rare and important assemblages. Those from the Iron Age enclosure ditches, whilst only moderately preserved provide some of the first non-hillfort data for the Iron Age landscape. Although we cannot examine the detail of the nature of the open country (i.e. arable land use versus pasture), there is the potential to define its presence, and evidence of abandonment (vegetation regeneration) phases.

Geoarchaeology

5.4.3 The combination of this evidence has the potential to advance understanding of chalk landscapes and the human effect on their development, both regionally and nationally. There are preserved soils, colluvial and alluvial sequences not encountered previously in this landscape. Long prehistoric land snail sequences (with the exception of Coneybury) are lacking in this area, and long timescales are provided by two sites. In combination, the disparate and separate evidence of large numbers of interventions with palaeo-environmental sequences (e.g. Areas 1-4, WA 52524), and other more specific sequences (e.g. DTA 6, WA 54379), can facilitate the re-writing of the development of the chalk landscape, a theme currently under much scrutiny and debate (French et al. 2003; 2005; Allen & Scaife in press). There is important and rare evidence of Neolithic landuse from the buried soil of the Neolithic long barrow in Area R (WA 35734), and other individually unremarkable sets of evidence (e.g. Areas A-D, WA 50252; Area P, WA 50538; and Area T, WA 52246), which collectively provide an important palaeo-environmental narrative to complement that already known (Allen 1997).

Pollen

5.4.4 Pollen is generally poorly preserved or absent from the chalk (Scaife in Cleal and Allen 1994), but has been preserved at Stonehenge (Scaife 1995). The possibility of pollen preservation at key sites, namely DTA 6 (WA 54379) and Area 4 (WA 52524) should be examined, as its presence here from dated sequences would be of regional, if not national, significance.



Radiocarbon dating

- 5.4.5 The two Beaker burials in Area P (WA 50538) should be dated to enable them to be chronologically compared with other Beaker burials in the vicinity (e.g. the burial from the Stonehenge ditch, the 'Amesbury Archer' and companion burials, etc.) and provide well-dated environmental evidence to facilitate detailed spatial and chronological mapping of the prehistoric landuse.
- 5.4.6 A date from the Middle Bronze Age pit in Area P (WA 52246) will allow this event to be related to the chronology of Stonehenge (Cleal *et al.* 1995), and place this environmental data within the dated events of the Stonehenge landscape (Allen 1997).

6 PROPOSALS FOR FURTHER ANALYSIS AND PUBLICATION

6.1 Publication Proposals

- 6.1.1 It is envisaged that the potential of the results of the surveys, if published separately from the results of any mitigation works in respect of the A303 scheme, can be best fulfilled as part of a monograph publication describing the surveys conducted in connection with the development and promotion of the Published Scheme.
- 6.1.2 It is proposed that the monograph would be produced in colour hard-back form for publication as part of the established Wessex Archaeology monograph series, with an estimated length of approximately 100 pages and appropriate HA corporate covers (if desired). Different aspects of the research themes would be addressed in chapters focusing on:
 - the geoarchaeology (Theme 1);
 - the important Mesolithic evidence (Theme 2) and its accompanying environmental data;
 - the individual and isolated Neolithic (Area R and Trenches 1 and 2, WA 35734; DTA 6, WA 54379), Beaker (Area P, WA 50538) and Middle Bronze Age material, with a discussion of how the remaining datasets (primarily finds distributions) contribute to existing understandings of activity within the Stonehenge landscape (Theme 3); and
 - the series of Iron Age and Romano-British enclosures (Area C1, WA 50157) (Theme 4).
- 6.1.3 Subject to additional funding, consideration could also be given to opportunities to widen the scope of the monograph to incorporate relevant results of other surveys undertaken as part of the Stonehenge Project, such as those commissioned by English Heritage and the National Trust as part of the WHS Land Use Plan and the New Stonehenge Visitor Centre and Access Scheme.
- 6.1.4 In addition to the academic publication proposals, the results of the surveys will be described in a popular leaflet aimed at a non-archaeological

readership, for distribution via schools and public libraries in the area. The text and images used in the leaflet will also form the basis of a project website, which will also be used as a portal for the dissemination of more detailed specialist information derived during the analysis process but not otherwise published.

6.2 Finds Proposals

- 6.2.1 Basic data have already been recorded for the finds assemblages broad fabric groups for pottery, classification by basic type for worked flint, and species identification for animal bone. These data are intended to form the minimum archive for the project.
- 6.2.2 Further analysis will take a scheme-wide approach to these categories (pottery, worked flint and animal bone), involving more detailed recording of selected site assemblages, combined with a consideration of the total assemblage in order to draw out chronological and spatial variation across the area investigated, and to present bodies of data which can be discussed in a more informed manner within their local and regional context.
- 6.2.3 The excavated human remains from Area C1 (WA 50157) and Area P (WA 50538) will be recorded in detail.
- 6.2.4 Other categories are represented in much smaller quantities overall, and no further analysis is proposed for these, although certain items warrant comment (and possibly illustration) due to their provenance and/or intrinsic interest, for example the bone belt ring from a Beaker burial in Area P (WA 50538).

Pottery

- 6.2.5 Prehistoric site assemblages from Area C1 (WA 50157, 430 sherds), Areas A-D (WA 50252, 62 sherds), Area L (WA 50412, 278 sherds) and Area P (WA 50538, 2 Beaker vessels) are proposed for detailed recording, involving analysis of fabric and form following nationally recommended guidelines (PCRG 1997). Romano-British and later material does not warrant further consideration.
- 6.2.6 The overall prehistoric ceramic sequence will be briefly discussed in its local and regional context. A small selection of vessels will be illustrated, including the two Beaker vessels and a representative sample of other vessels to demonstrate the prehistoric chronological sequence (maximum 20 vessels).

Worked Flint

- 6.2.7 Detailed recording is proposed for the assemblage from DTA 6 (WA 54379). Metrical and technological analysis of debitage may determine if single or multiple knapping episodes are represented, and targeted refitting will demonstrate if the assemblage is *in situ* or redeposited.
- 6.2.8 Detailed recording is proposed for the assemblage from Trenches 1 and 2, WA 35734. Metrical analysis and refitting may elucidate the very different technologies apparent in these seemingly contemporary and *in situ* assemblages.

6.2.9 The assemblages from fieldwalking and test pitting (WA 48067, 52246) are proposed for distributional analysis. Methodologies exist (Wessex Archaeology 2002) and in many instances basic plots have been produced during assessment.

Human Bone

6.2.10 Analysis of the human remains from Area C1 (WA 50157) (one inhumation burial and redeposited bone from two other contexts) and Area P (WA 50538) (two inhumation burials) will provide more detailed demographic data with regard to the age and sex of individuals. With limited reconstruction, metric data — including stature estimates and cranial indices — can be recovered. A study of any pathological lesions will enable assessment of the health and, by inference, the lifestyle and potentially the status of individuals.

Animal Bone

6.2.11 The assemblages from Area C1 (WA 50157) and Area P (WA 50538, 52246) will be fully analysed, involving the recording of species identifications, dimensions where measurable bones occur, pathology, and evidence for butchery and post-depositional modification (e.g. by dog gnawing). The publication text will discuss changes in animal husbandry practices through time. The belt slider from Area P will be illustrated.

6.3 Palaeo-environmental Proposals

- 6.3.1 With the exception of pollen, assessment and characterisation of the environmental data and fossils has been undertaken, but no extraction (where required) or analysis (ie species identification) and reporting has been undertaken. Where sediment sequences have been examined in the field these represent the final descriptions (see below), requiring only final interpretation and reporting.
- 6.3.2 The analyses proposed are targeted on specific assemblages or soil/sediment sequences to advance the information both on a site-based and a project-wide basis, and have been selected on the basis of their local and chronological importance in relation to the known information form the area.

Pollen

- 6.3.3 Two key sequences are identified. Appropriate samples will be taken from existing monoliths and rapid assessment undertaken using full and appropriate processing methods (including where necessary micromesh sieving) to define the presence and preservation of pollen. This will not involve detailed assessment of the palaeo-environment; if pollen survives in suitable concentrations, full analysis will be undertaken.
- 6.3.4 Reporting will be at the basic level for each site and will concentrate on the wider landscape and chronological issues highlighted in the research themes.

Charred plant remains and charcoals



- 6.3.5 Charred plant remains and charcoal will be sorted from the flots and coarse residues of the selected samples and identified to species (where possible), quantified, tabulated and reported upon by recognised environmental specialists
- 6.3.6 The charred plant remains and charcoals will provide information regarding activities on a site and feature level in the first instance. The evidence will also be considered in a wider, principally chronological framework to address the relevant research themes outlined above.

Land snails

- 6.3.7 Selected samples and sequences will be fully extracted, identified and tabulated to enable the construction of mollusc histograms (Evans 1972).
- 6.3.8 These data will provide local site histories in the first instance, and will be compared with other published sequences and ongoing analysis at Durrington Walls, Woodhenge etc (Allen 2006) as part of the Stonehenge Riverside project. The data will be considered at a landscape and chronological level to address the relevant research themes outlined above.

Magnetic susceptibility

6.3.9 Subsamples will be taken as appropriate from identified mollusc sequences and prepared for standard measurement as 10g air dried (less than 2mm) and recorded using a Bartington MS1B meter. The results will be used to aid interpretation of the soils and sediments, and the land snail sequence (cf. Allen 1986; 1988).

Geoarchaeology 1: Colluvial, alluvial and soil sequences

6.3.10 Identified colluvial sequences that have been fully and adequately described (ie, WA 52524, Area 3 and WA 54379, DTA 6) will be interpreted and reported.

Geoarchaeology 2: Soils micromorphology and chemistry

6.3.11 Soil micromorphological slides will be prepared from samples taken from appropriate monoliths from WA 35734, Area R; WA 50157, Area C1; and WA 50252, Area B. The slides will be analysed and reported by recognised specialists in basic descriptive terms by site. Reporting will also address the chronological development of the soil history and identification of human interferences and modification of these soils.

Radiocarbon dating

6.3.12 The radiocarbon samples have been assessed and the relationship between the material and the event to be dated has been determined. The selected items will be fully identified /recorded before submission for AMS dating. The results will be calibrated and quoted in standard form and compared to other relevant dates in the area using OxCal.



7 STORAGE AND CURATION

7.1 Museum

7.1.1 It is proposed that the complete survey archive be deposited with the Salisbury and South Wiltshire Museum, Salisbury. The Museum has agreed in principle to accept the archive on completion of the project. Deposition of the finds with the Museum will only be carried out with the full agreement of the landowners. Negotiations with the latter have been opened during this assessment phase, but not concluded.

7.2 Conservation

7.2.1 Finds which have been identified as of unstable condition and therefore potentially in need of further conservation treatment comprise the metal objects. All metal objects have been X-radiographed as a basic record and to aid identification. On the basis of the X-rays, the range of objects present and their provenance on the Site, no further conservation treatment is proposed.

7.3 Storage

7.3.1 The finds from Stage 2 surveys are currently stored in perforated polythene bags in 39 cardboard or airtight plastic boxes, ordered by material type, following nationally recommended guidelines (Walker 1990).

7.4 Discard Policy

- 7.4.1 Wessex Archaeology follows the guidelines set out in *Selection, Retention and Dispersal* (Society of Museum Archaeologists 1993), which allows for the discard of selected artefact and ecofact categories which are not considered to warrant any future analysis. In this instance, burnt, unworked flint has been discarded, as has selected post-medieval/modern material from fieldwalked sites (e.g. CBM, glass, etc). Any further discard could target other post-medieval material.
- 7.4.2 The discard of environmental remains and samples follows the guidelines laid out in Wessex Archaeology's 'Archive and Dispersal Policy for Environmental Remains and Samples'. The archive policy conforms with nationally recommended guidelines (SMA 1993, 1995; English Heritage 2002) and is available upon request.

7.5 Archive

7.5.1 Stage 1 archives (WA 34852, 35734, 37874, 47422) have been deposited with the Salisbury and South Wiltshire Museum. The complete Stage 2 archive, which will include paper records, photographic records, graphics, artefacts and ecofacts, will be prepared following the standard conditions for the acceptance of excavated archaeological material by Salisbury and South Wiltshire Museum, and in general following nationally recommended guidelines (SMA 1995). **Table 5** gives a breakdown of archive quantities by site.



7.6 Copyright

7.6.1 The full copyright of the written/illustrative archive relating to the Site will be retained by Wessex Archaeology Limited under the Copyright, Designs and Patents Act 1988 with all rights reserved. The recipient 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-profit making and conforms to the Copyright and Related Rights Regulations 2003.

7.7 Security Copy

7.7.1 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 Archaeological Record (English Heritage), a second diazo copy will be deposited with the paper records, and a third diazo copy will be retained by Wessex Archaeology.

8 RESOURCES AND PROGRAMME

8.1 Named Project Team

8.1.1 The proposed project team consists primarily of internal Wessex Archaeology staff, with a limited input by external specialists: Wessex Archaeology reserves the right to replace any member of the named team at its discretion. The project will be directed by Chris Moore BA MIFA and managed by one of Wessex Archaeology's post-excavation managers.

Grade	Name	Qualifications	Role Molluscan analysis,
External Consultant	Michael J Allen	BA PhD MIFA FSA	environmental overview
Project Officer	Christine Butterworth	MIFA	Archivist
Senior Project Officer	Cathie Chisham	BSc MSc PhD MIEEM MIFA	Geoarchaeologist
Head of Communications	Andrew Fitzpatrick	BA PhD MIFA FSA	QA review
External Consultant	Rowena Gale		Charcoal specialist
Senior Technical Manager	Julie Gardiner	BA PhD MIFA FSA	Publication editor
Web Designer	Tom Goskar	BA MSc PIFA	Website design
Project Officer	Jessica Grimm	PhD AIFA	Animal Bone specialist Structural and finds
Senior Project Officer	Matt Leivers	BA Phd AIFA	analysis, report text
Senior Project Officer	Jacqueline McKinley	BTech MIFA	Osteo-archaeologist
Senior Technical Manager	Lorraine Mepham	BA MIFA	Finds Manager
Head of WA Heritage	Chris Moore	BA MIFA	Project Director Graphic Designer/
Senior Illustrator	Karen Nichols		Illustrator
External Consultant	Rob Scaife		Pollen specialist Environmental
Senior Project Officer Head of Specialist	Chris Stevens	BSc PhD MIFA	Archaeologist
Services	Karen Walker	BA MPhil MIFA	QA review Environmental
Project Officer	Sarah Wyles	BA PIFA	Archaeologist
Technical Manager	tbc		Project Manager
External Consultant	tbc		Soil Micromorphology
External Consultant	tbc		Soil Chemistry



8.2 Outline Programme

- 8.2.1 A full task list for the analysis and publication is included at **Appendix 1**. It is anticipated that, subject to instruction, analysis and preparation of draft report texts and illustrations could be completed within six months, with commencement from September 2007. Subject to HA comments/approval, production of the monograph for publication would be complete within a further six months (September 2008). This programme would require extension if assessment and incorporation of the results of surveys commissioned by English Heritage and the National Trust was considered.
- 8.2.2 Subject to instruction and approval of text and illustrations, preparation and production of the popular leaflet and establishment of the web site could be completed within three months following completion of the analysis programme.

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10 APPENDIX 1: TABLES

Table 1: All finds by site (number / weight in grammes)

CBM = ceramic building material; * denotes fieldwalked area

Project	Animal	Burnt			Worked		Human			Other
Code	Bone	Flint	CBM	Fired Clay	Flint	Pottery	Bone	Stone	Metal	Finds
										Metal
										includes
										slag
34852*	-	?/70,020	333/8,409	1/3	851/?	282/2,432	-	26/3320	27/375	7 glass
35734*	?/923	?/6,977	324/7243	-	2862/?	46/?	-	16/1067	6/?	9 glass
37874*	-	?/59,903	335/7,698	-	4316/?	82/629	-	-	-	2 glass
47422*	-	334/11,093	163/3,713	-	100/1,507	33/405	-	5/2,259	-	-
										1 clay pipe
										2 glass
48066*	-	774/27,173	33/1173	1/14	434/3557	45/523	-	-	-	56g slag
										1 clay pipe
									2 Cu;	24 glass
48067	10/4	469/5787	51/1770	3/11	1395/7119	28/138	-	2/39	18 Fe	229g slag
									3 Cu;	1 shell
50157	1844/11,331	2567/214,030	6/653	136/16,628	77/914	768/13,255	3 indiv.	54/7282	36 Fe	1 glass
50252	55/76	25/684	-	-	15/336	66/645	-	1/378	2 Fe	1 glass
										1 clay pipe
									2 Fe;	19 glass
50275*	-	115/3615	455/10,680	-	106/1251	38/387	-	11/67	1 Pb	92g slag
50286	-	-	-	-	-	1/1	-	-	-	-
50412	24/108	321/6855	-	-	226/2578	282/6471	-	-	-	-
50527	3/12	-	-	-	6/176	-	-	-	-	-
50538	113/972	2/270	-	-	15/269	137/1121	2 indiv.	-	-	-
52246	394/3634	80/1234	22/364	-	184/1793		-	1/2	3 Fe	23g slag

						26/144				2 glass
										511g slag
52524	29/322	84/4197	3/36	-	110/1235	24/108	-	4/1689	-	3 glass
						3/4			1 Cu;	
54379	3/475	180/3425	8/405	-	226/2506		-	1/20	3 Fe	1 glass

Table 2: Pottery totals by chronological period (number of sherds / weight in grammes)

Code	Early prehist	Later prehist	LIA/ Roman	Saxon	Medieval	Post- med	Undated	TOTAL
34852	-	7/?	204/?	1/?	15/?	54/?	1/?	282
35734	3/?	-	15/?	-	-	-	-	4/?
37874		1	44		2	36		
47422			1		2	30		
48066	-	-	14/149	-	9/51	22/323	-	45/523
48067	2/9	2/5	14/59	-	3/11	7/54	-	28/138
50157	-	430/5978	335/7144	-	1/39	2/94	-	768/13,255
50252	2/7	60/619	4/19	-	-	-	-	66/645
50275	-	-	2/14	-	5/59	31/314	-	38/387
50286	-	-	-	1/1	-	-	-	1/1
50412	21/71	257/6392	4/8	-	-	-	-	282/6471
50538	131/1074	6/47	-	-	-	-	-	137/1121
52246	-	14/81	1/2	1/2	6/45	3/11	1/3	26/144
52524	-	19/84	3/9	-	1/11	1/4	-	24/108
54379	-	-	-	-	3/4	-	-	3/4

Table 3: Summary of significant pottery assemblages by period

	Early	Later	LIA/		
Code	prehist	prehist	Roman	Saxon	Medieval
34852		*	***	*	*
35734	*		*		
37874		*	*		*
47422			*		*
48066			*		*
48067	*	*	*	*	*
50157		***	***		*
50252	*	**	*		
50275			*		*
50286				*	
50412	*	***	*		
50538	***	*			
52246		*	*	*	*
52524		*	*		*
54379					*

^{*} sporadic occurrence (<50 sherds); ** moderate occurrence (50-100 sherds); *** significant occurrence (>100 sherds)

Table 4: Palaeo-environmental evidence by survey (no. of samples retained / suggested no. for analysis)

Project Code	Charred plant remains	Charcoal	Land snails (site based)	Land snails (geoarchaeology)	Colluvial/ soil sequences	Soil micro- morphology	Magnetic susceptibility sequences	Pollen sequences	Radiocarbon
34852			4/0		2				
35734			3/3						
48067					1	2			
50157	8/5	8/3	15/10						
50252	2/2	2/0	2/0						
50286				18/18	2				
50412	6/0	6/0			1				
50527					2				
50538	11/0	11/1							2
52246	1/1	1/0							1
52524				22/22	3	1	1	1	
54379					3	2		1	
TOTAL	28/8	28/4	24/13	40/40	13	5	1	2	3



Table 5: Stage 2 Surveys archive quantification by site

Project no.	No. finds boxes	No. files	A1 dwgs (Y/N)	Photos (Y/N)
	noxes		(1/N)	(I / IN)
48066	4	1	-	Y
48067	5	3	Υ	Υ
50157	17	3	Υ	Υ
50252	2	3	Υ	Υ
50275	2	-	-	-
50286	*	1	-	Υ
50412	3	2	Υ	Υ
50527	1	1	-	Υ
50538	1	1	-	Υ
52246	2	1	-	Υ
52524	1	4	-	Υ
54379	1	1	Υ	Y
Totals	39	25		

^{*} finds boxed with 50275

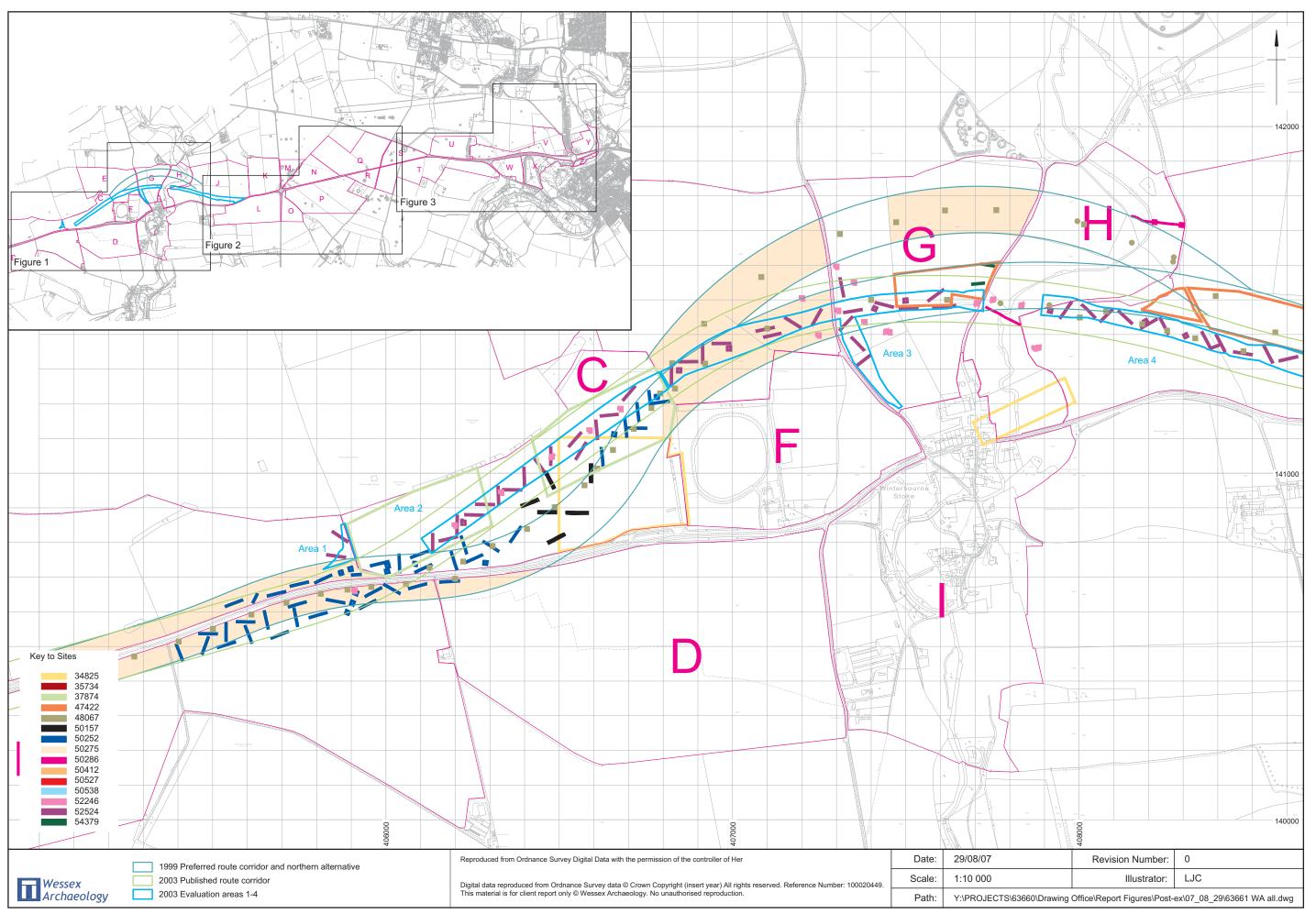


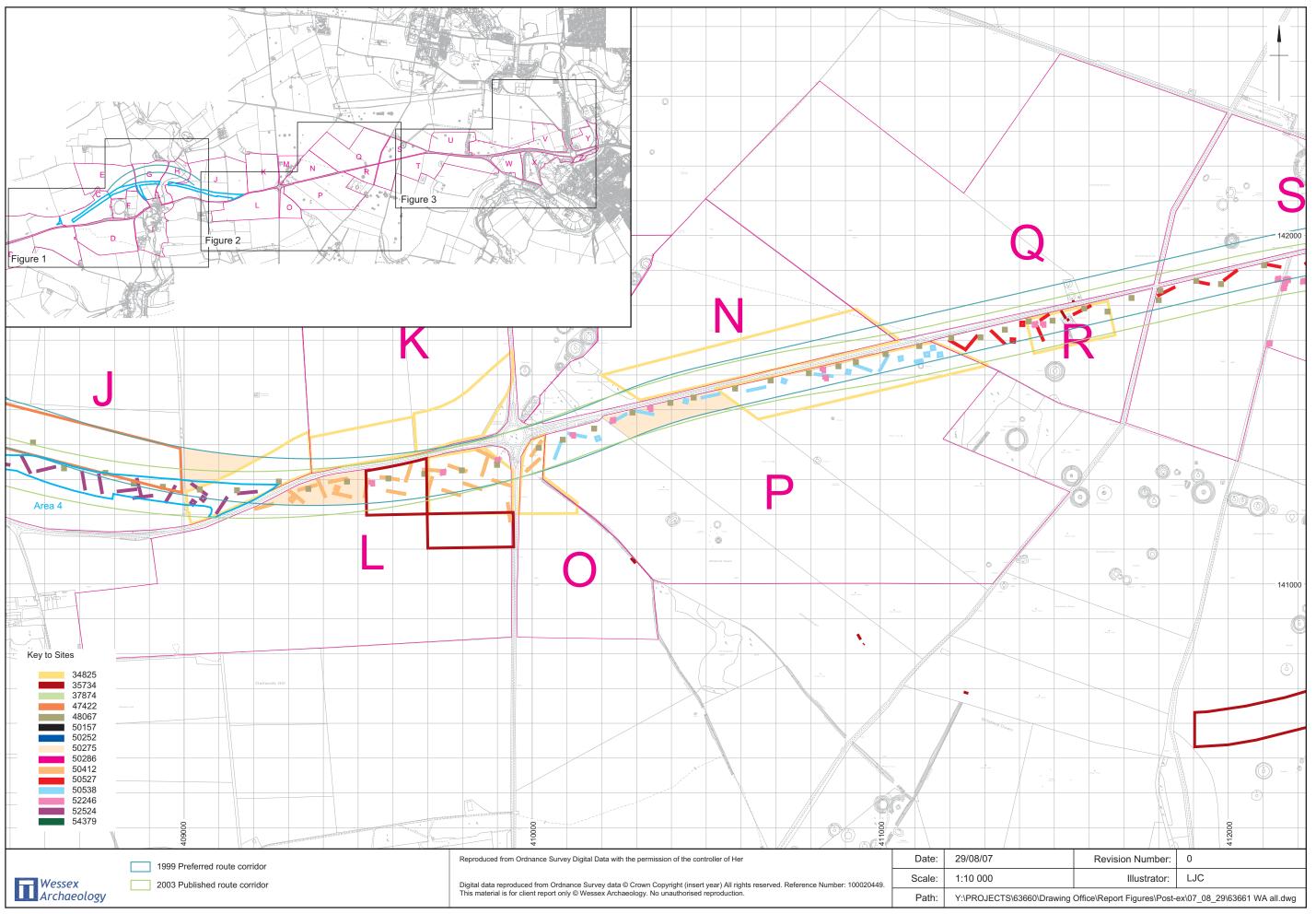
11 APPENDIX 2: TASK LIST

	Task	Grade	Name	Hours
Management				
1.1	General management	SH	C Moore	120
1.2	General management	STM	L Mepham	20
1.3	Environ management	TM	M J Allen	20
Stratigraphic				
2.1	Site narrative (Site C1)	SPO	M Leivers	40
2.2	Figures for publication	DO	K Nichols	40
Finds				
3.1	Prehistoric pottery	SPO	M Leivers	40
3.2	Worked flint	SPO	M Leivers	70
3.3	Human bone	SPO	J McKinley	20
3.4	Animal bone	РО	J Grimm	90
3.5	Finds illustration	DO	K Nichols	50
3.6	Edit specialist reports	STM	L Mepham	4
Environmental				
	Pre-analysis tasks			
4.1	Extraction of charred plants and charcoal	EO	S Wyles	20
	Preparation of file for specialists (charcoal		S Wyles	4
4.2	& charred plants)	EO	,	
4.3	Extraction of land snails	EO	S Wyles	75
	Commissioning analysis and contracts		M J Allen	12
4.4	(charcoal, charred seeds)	TM		
	Analysis tasks			
4.5	C14 (£350) (inc submission)	ext	Rafter	6
4.6	C14 identification	SPO	C Stevens	2
4.7	C14 calib and report	TM	M J Allen	8
4.8	Charred Plant Remains	SPO	C Stevens	32
4.1	Charcoals	SPO	C Chisham	8
4.11	Charcoals	ext	R Gale	8
4.12	Snails: Identification, tabulation, database	EO	S Wyles	120
4.12	entry Snails: histogram	EO	S Wyles	20
4.14	Snails: histogram	DO	K Nichols	16
4.15	Snails: checking and report writing	TM	M J Allen	80
4.16	Pollen assessment	ext	R Scaife	40
4.17	Pollen (analysis)	ext	R Scaife	80
4.17	Magnetic susceptibility: sample	EXI	S Wyles	24
4.18	preparation and measurement	PS	O vvyics	
4.19	Magnetic susceptibility (reporting)	TM	M J Allen	6
4.20	Soil micromorph slide production	ext	External cost	_
4.21	Soil micromorphology analysis/report	ext	External cost	_
4.22	Soil chemistry (if possible)	ext	External cost	_
11.2.2	Site field records (colluvium/ buried soils/	- OAR	S Wyles	40
4.23	alluvium)	EO	, , , ,	
	Sediment descriptions and		M J Allen	80
4.25	interpretation/reporting	TM		
	Overview / Palaeo-environmental		M J Allen	40
4.26	Summary/report	TM	14 811 1 1	
4.27	Drawings of sediments- architecture	DO	K Nichols	85
4.28	Editing texts (seeds, bone, charcoal,	TM	M J Allen	20

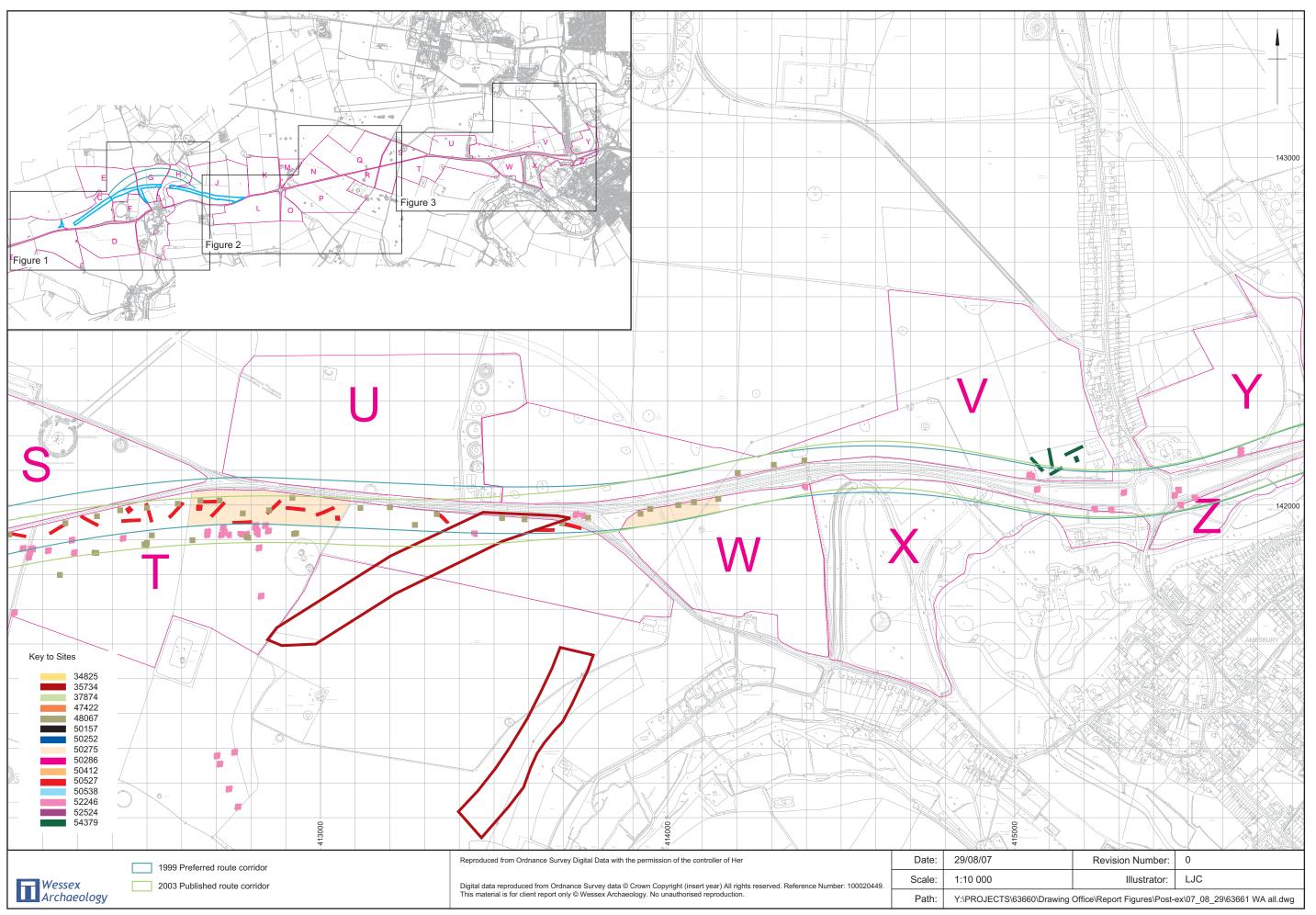


	snails, soils etc)			
	Post Analysis tasks			
4.29	Archive	EO	S Wyles	12
Publication				
5.1	Write reports			
5.1.1	Introduction	SH	C Moore	20
5.1.2	Overview	SH	C Moore	20
5.1.3	Geoarchaeology	TM	M J Allen	40
5.1.4	Mesolithic	SPO	M Leivers	30
5.1.5	Neolithic/BA	SPO	M Leivers	30
5.1.6	Iron Age	SPO	M Leivers	50
5.1.7	Discussion/conclusions/summary	SH	C Moore	40
5.2	Edit reports	STM	L Mepham	16
5.3	Review reports	STM	J Gardiner	8
5.4	QA Review	SH	K Walker	8
5.5	Editors corrections	SH	C Moore	20
5.6	Report production			
5.6.1	Production of print-ready copy	STM	J Gardiner	80
5.6.2	Quotes/management etc.	STM	J Gardiner	40
5.6.3	Printing & binding	-	External cost	-
Popular report				
6.1	Draft text	SPO	M Leivers	40
6.2	Design & Illustrations	DO	K Nichols	40
6.3	Review & edit	SH	A Fitzpatrick	16
6.4	Text revisions	SPO	M Leivers	8
6.5	Design & illustration revisions	DO	K Nichols	8
6.6	Report production			
6.6.1	Quotes/management etc.	STM	J Gardiner	16
6.6.1	Printing & binding	-	External cost	-
Website				
7.1	Draft web text	SPO	A Powell	10
7.2	Design	WD	T Goskar	60
7.3	QA Review	SH	A Fitzpatrick	8
7.4	Revisions	WD	T Goskar	20
Archive				
8.1	Archive preparation	РО	C Butterworth	24
8.2	Microfilm jobsheets and checking	РО	C Butterworth	4
8.3	Microfilm paper records	-	External cost	-
8.4	Archive deposition	РО	C Butterworth	4
8.5	Box storage grant	-	External cost	-





Location of surveys



Location of surveys