

# Lyde Green Roman Villa, Emersons Green, South Gloucestershire

Edited by

Matthew S. Hobson and Richard Newman

With contributions from

Adrian Bailey, Damion Churchill, Kimberley Colman, Lynne Gardiner, Frank Giecco, Richard Henry, David Jackson, Gerry McDonnell, Mike McElligott, Ed R. McSloy, Gwladys Monteil, Don O'Meara, Philip Mills, Megan Stoakley, David Williams, Imogen Wood, and Robert Young

Small finds photography by Richard Henry

Illustration work by Helen Phillips and Adrian Bailey

Figures by Matthew S. Hobson, Helen Phillips and Adrian Bailey



ARCHAEOPRESS PUBLISHING LTD

Summertown Pavilion

18-24 Middle Way

Summertown

Oxford OX2 7LG

[www.archaeopress.com](http://www.archaeopress.com)

ISBN 978-1-80327-046-3

ISBN 978-1-80327-047-0 (e-Pdf)

© the individual authors and Archaeopress 2021



This work is licensed under the Creative Commons Attribution-NonCommercial-NoDerivatives 4.0 International License. To view a copy of this license, visit <http://creativecommons.org/licenses/by-nc-nd/4.0/> or send a letter to Creative Commons, PO Box 1866, Mountain View, CA 94042, USA.

This book is available direct from Archaeopress or from our website [www.archaeopress.com](http://www.archaeopress.com)



Reconstruction painting of Lyde Green Roman Villa by Kevin Horsley





# Contents

List of Figures .....	iii
List of Tables.....	v
List of Plates .....	vi
Acknowledgements .....	vii
Editors' foreword .....	viii
<b>Chapter 1 Introduction .....</b>	<b>1</b>
Richard Newman, Matthew S. Hobson, and Damion Churchill	
1.1. The purpose and format of this publication .....	2
1.2. Project background .....	3
1.3. The development site.....	3
1.4. Location, topography and geomorphology .....	4
<b>Chapter 2 Research objectives, methodologies and summary of results .....</b>	<b>6</b>
Richard Newman, Matthew S. Hobson, and Damion Churchill	
2.1. The purpose of research objectives .....	6
2.2. Summary of the archaeological and historical background.....	6
2.3. Previous archaeological investigations.....	9
2.4. Wardell Armstrong's evaluation trenches.....	9
2.5. The excavation areas: research objectives and methods .....	9
2.6. Post-excavation research objectives.....	13
2.7. Summary of the principal archaeological phases .....	13
<b>Chapter 3 The development of the landscape before the 1st millennium AD .....</b>	<b>27</b>
Robert Young and Richard Newman with contributions by Adrian Bailey, Kimberley Colman, Lynne Gardiner, David Jackson, Mike McElligott and Megan Stoakley	
3.1. Neolithic stone axe .....	27
3.2. Bronze Age pits .....	28
3.3. Bronze Age pottery.....	29
3.4. Lithics .....	31
3.5. Overview of the pre-Iron Age evidence .....	31
3.6. An isolated Early Iron Age pit.....	32
3.7. Conclusion: Lyde Green before the 1st millennium AD .....	32
<b>Chapter 4 Dating the origins of the rural settlement at Lyde Green: a Late Iron Age enclosure system? .....</b>	<b>34</b>
Richard Newman and Matthew S. Hobson with contributions by Lynne Gardiner, Mike McElligott, Ed McSloy and Megan Stoakley	
4.1. Archaeological deposits containing 'Middle to Late Iron Age' pottery .....	35
4.2. Excavation Area D: stratigraphic phases.....	37
4.3. Additional evidence from Excavation Areas B and C .....	39
4.4. The enclosures: context, duration, function and reasons for change.....	42
4.5. Archaeobotany .....	43
4.6. Discussion .....	43
<b>Chapter 5 The Romano-British period and the villa estate .....</b>	<b>47</b>
Mike McElligott, Richard Newman, Matthew S. Hobson and Megan Stoakley with contributions by Don O'Meara and Lynne Gardiner	
5.1. Romano British occupation and land-use from the early 2nd century AD to the mid-3rd century AD .....	47
5.2. The enclosure system.....	47
5.3. Pre-villa structures and evidence of occupation.....	49
5.4. The villa complex and its development .....	57
5.5. A tripartite corridor villa .....	59

5.6. The villa estate's ancillary buildings .....	63
5.6. Areas C and D as part of the villa estate .....	73
5.7. Romano-British burial .....	73
5.8. Human remains .....	78
5.9. Archaeobotany .....	81
5.10. Zooarchaeology .....	83
5.11. Discussion .....	84
5.12. The abandonment of the villa estate .....	85
<b>Chapter 6 The Romano-British artefacts (mid-1st century AD to 5th century AD) .....</b>	<b>86</b>
6.1. Locally produced handmade pottery in the Middle to Late Iron Age tradition .....	86
6.2. Roman pottery .....	90
6.3. Ceramic building material .....	113
6.4. Small finds .....	117
6.5. Coins .....	140
<b>Chapter 7 The development of the landscape from the Roman period to the present day .....</b>	<b>150</b>
Richard Newman with contributions from Ed McSloy and Megan Stoakley	
7.1. Introduction .....	150
7.2. A post-villa period well? .....	150
7.3. Medieval .....	151
7.4. Post-medieval .....	153
7.5. Small finds .....	154
7.6. Bulk finds .....	155
7.7. Discussion .....	155
<b>Chapter 8 Lyde Green and the Romano-British villas of South Gloucestershire .....</b>	<b>157</b>
Richard Newman	
8.1. What is a villa? .....	157
8.2. The villa as a farmstead and the villa estate .....	158
8.3. Summary of the excavated evidence from Lyde Green .....	158
8.4. Romano-British settlement in the vicinity of Mangotsfield, Pucklechurch and Westerleigh .....	165
8.5. The villas of South Gloucestershire .....	166
8.6. South Gloucestershire's villas and the Late Roman villa .....	172
<b>Chapter 9 Appendices .....</b>	<b>177</b>
Appendix 1: Catalogue of Bronze Age pottery .....	177
Appendix 2: Table of radiocarbon dates .....	178
Appendix 3: Catalogue of decorated Samian and Samian stamps .....	179
Appendix 4: Petrographic report of thin-section analyses .....	182
Appendix 5: Fabric descriptions of ceramic building material .....	187
Appendix 6: XRF methodology and tables .....	188
Appendix 7: Methodology for analysis of the human remains .....	190
Appendix 8: Roman pottery illustration catalogue .....	191
<b>Bibliography .....</b>	<b>194</b>
Abbreviations .....	194
Bibliographical references .....	194

# List of Figures

## Introduction

Figure 1.1 The location of Lyde Green .....	1
Figure 1.2 The location of the trial trenches and excavation areas .....	5

## Research objectives, methodologies and summary of results

Figure 2.1 Plan illustrating the location of Iron Age sites in the region of Bristol and South Gloucestershire.....	7
Figure 2.2 The tribal territory of the Dobunni .....	8
Figure 2.3 Plan showing the concordance of phasing between all excavation areas.....	12
Figure 2.4 Archaeological features recorded within Excavation Area A by phase .....	14
Figure 2.5 Selected sections across archaeological features within Excavation Area A.....	15
Figure 2.6 Archaeological features recorded within Excavation Area B by phase .....	17
Figure 2.7 Selected sections across archaeological features within Excavation Area B (1) .....	18
Figure 2.8 Selected sections across archaeological features within Excavation Area B (2) .....	19
Figure 2.9 Plan of archaeological features within Excavation Area C by phase.....	20
Figure 2.10 Selected sections across archaeological features within Excavation Area C .....	21
Figure 2.11 Plan of archaeological features within Excavation Area D by phase .....	22
Figure 2.12 Selected sections across archaeological features within Excavation Area D.....	23
Figure 2.13 Plan of archaeological features within Excavation Area E by phase.....	24
Figure 2.14 Plan of archaeological features in Excavation Area F by phase .....	25

## The development of the landscape before the 1st millennium AD

Figure 3.1 Neolithic stone axe (SF 23).....	27
Figure 3.2 Excavation Area A, phase 1 pit [1006].....	32

## Dating the origins of the rural settlement at Lyde Green: a Late Iron Age enclosure system?

Figure 4.1 Plan of the D-shaped enclosure excavated in Area D, with Wardell Armstrong's 2013 Evaluation Trench 1 and gully terminus [118] also shown.....	36
Figure 4.2 Plan of phases 1-3 within Excavation Area D, including the D-shaped enclosure ditch .....	38
Figure 4.3 Plan showing Late Iron Age and Early Romano-British field system and enclosures (Excavation areas A-D, Periods 2, 3.1, 3.2, 3.3 and 4.1). .....	40
Figure 4.4 Plan of pit [3949] and wind break [4212], located within Excavation Area B.....	41
Figure 4.5 Comparison of the D-shaped enclosure within Excavation Area D with Kingsdown Camp .....	44

## The Romano-British period and the villa estate

Figure 5.1 Plan showing pre-villa features in excavation areas A-D.....	48
Figure 5.2 T-shaped corn-drying oven {6236} with foundation trench (4193) located in Excavation Area B .....	50
Figure 5.3 Structure {4226} within Excavation Area B .....	51
Figure 5.4 Excavation Area C, phase 4 rectangular enclosure ditch [2468] .....	53
Figure 5.5 Plan and section of well {2330} within Excavation Area C .....	55
Figure 5.6 Three-celled rectangular building {1650} within Excavation Area D.....	56
Figure 5.7 Plan of Excavation Area B showing features relating to the use-life of the Roman villa.....	58
Figure 5.8 Floor plan of the tripartite corridor villa found within Excavation Area B.....	60
Figure 5.9 Plan of structure {4213} found within Excavation Area B.....	63
Figure 5.10 Plan of structures {4196} and {4235} found within Excavation Area B .....	67
Figure 5.11 Plan of structure {4219} and furnace 3615 found within Excavation Area B .....	71
Figure 5.12 Plan of structure {3583} found within Excavation Area B.....	72
Figure 5.13 Plan showing the location of the cremation burials found in areas B and D.....	74

## The Romano-British artefacts (mid-1st century AD to 5th century AD)

Figure 6.1 Profile illustrations of the handmade ceramics produced in the Iron Age tradition.....	87
Figure 6.2 Illustration of six cremation urns and one accessory vessel (no. 88).....	92
Figure 6.3 Profile illustrations of Early Roman pottery .....	104
Figure 6.4 Profile illustrations of the Early-mid Roman pottery (1).....	105
Figure 6.5 Profile illustrations of the Early-mid Roman pottery (2).....	106
Figure 6.6 Profile illustrations of the Mid-late Roman pottery .....	108
Figure 6.7 Profile illustrations of the Late Roman pottery.....	110
Figure 6.8 A selection of brooches from Lyde Green.....	119
Figure 6.9 Selected small finds from Lyde Green. Items of personal adornment and toilet implements .....	127
Figure 6.10 Selected small finds from Lyde Green.....	130
Figure 6.11 Ceramic weights.....	131
Figure 6.12 Lead pipe (SF 62) found within structure {4213} and column base found within structure {6197} .....	136
Figure 6.13 The 77 coins from Lyde Green, by Reece period.....	140
Figure 6.14 Comparison of the coins assemblage from Lyde Green with those from ten other villa sites in the region.....	143

## **The development of the landscape from the Roman period to the present day**

Figure 7.1 Archaeological features of medieval and Post-medieval date recorded within the excavation areas ..... 152

## **Lyde Green and the Romano-British villas of South Gloucestershire**

Figure 8.1 The excavation areas, shown in relation to a Digital Terrain Model (LiDAR data from the Environment Agency, 2005 ..... 160

Figure 8.2 Map showing the altitude of villa sites within the region ..... 164

Figure 8.3 Lyde Green in the context of other Roman villa sites and the principal Roman roads in the region ..... 167

Figure 8.4 Map of villa sites in the region related to modern land-use ..... 173

## **Appendices**

Figure 9.1 Rubbings of decorated and stamped Samian ware sherds described in the catalogue..... 181

Figure 9.2 Thin sections of the selected Roman pottery sherds..... 183

Figure 9.3 Images of ceramic building material fabrics and mortar..... 187

# List of Tables

## Research objectives, methodologies and summary of results

Table 2.1 Concordance of phasing between excavation areas .....	13
-----------------------------------------------------------------	----

## The development of the landscape before the 1st millennium AD

Table 3.1 Human remains recovered from Bronze Age Vessel 4.....	29
Table 3.2 The Bronze Age pottery: sherd count, vessel form and context .....	29

## The Romano-British period and the villa estate

Table 5.1 Contextual information on cremations excavated in Areas B and D .....	75
Table 5.2 The Human Remains: summary of the assemblage's state of preservation .....	79
Table 5.3 The Human Remains: measurements of bone fragmentation .....	79
Table 5.4 The Human Remains: quantification of neonatal bones.....	81
Table 5.5 Quantification of human skeletal elements from deposit (3203) .....	81
Table 5.6 Age estimates using regression equations from Scheuer et al. (1980) (In. Scheuer & Black 2000, 394 & 415) .....	81
Table 5.7 Selected archaeobotanical data .....	82

## The Romano-British artefacts (mid-1st century AD to 5th century AD)

Table 6.1 Handmade pottery in the Iron Age tradition: Distribution of ceramic forms by area and context.....	86
Table 6.2 Handmade pottery in the Iron Age tradition: technology and surface finishing .....	88
Table 6.3 Handmade pottery in the Iron Age tradition: fabric types.....	89
Table 6.4 Handmade pottery in the Iron Age tradition: rim forms.....	89
Table 6.5 Handmade pottery in the Iron Age tradition: rim diameters .....	90
Table 6.6 Summary of the Roman pottery by ware group and excavation area .....	93
Table 6.7 Samian by manufacturing region. Incidence across Site Areas A-D and unstratified contexts. Percentage values show relative abundance by area as a proportion of all pottery .....	94
Table 6.8 Samian summary showing breakdown by vessel form/fabric.....	94
Table 6.9 Pottery attributed to ceramic phases 1-3 by ware group. The quantities given are sherd count, weight and rim EVEs ..	102
Table 6.10 The Early Roman pottery (Ceramic phase 1: mid-1st c. to early 2nd c. AD) .....	103
Table 6.11 Pottery from enclosure ditch [1005] in Area D, representative of Ceramic phase 1 (mid-1st c. AD to early 2nd c. AD)...	103
Table 6.12 Pottery assemblage from pit [1489] in Area D, representative of Ceramic Phase 2 (mid-2nd c. to mid-3rd c. AD).....	107
Table 6.13 Area C ditch [2296] and ditch [2444] (CP2) pottery summary.....	111
Table 6.15 Vessel forms summary by 'Ceramic Phase'.....	111
Table 6.14 Area C ditch [2254] and Area B layer 3881 (CP3) pottery summary .....	111
Table 6.16 Stratified CBM form classes.....	113
Table 6.17 CBM fabrics as a proportion of the whole assemblage.....	114
Table 6.18 CBM forms in fabric T01.....	114
Table 6.19 CBM forms in fabric T11.....	115
Table 6.20 Number of different key classes on flue tile .....	116
Table 6.21 List of stratified coins .....	142
Table 6.22 Roman coins found during the excavations at Lyde Green.....	143
Table 6.23 Total count and weight of each slag type.....	146
Table 6.24 Dimensions of the furnace bases .....	147
Table 6.25 Dimensions of the hearth bottoms.....	147

## The development of the landscape from the Roman period to the present day

Table 7.1 Medieval pottery from Lyde Green .....	155
--------------------------------------------------	-----

## Lyde Green and the Romano-British villas of South Gloucestershire

Table 8.1 Attributes of villas within c. 17 km of Lyde Green.....	170
-------------------------------------------------------------------	-----

## Appendices

Table 9.1 Summary of radiocarbon dates .....	178
Table 9.2 HH-XRF analyses of the smelting tap slag samples (weight %) .....	188
Table 9.3 HH-XRF analyses of the smelting slag and furnaces bases (weight %).....	188
Table 9.4 HH-XRF analyses of the hearth bottom samples (weight %).....	188
Table 9.5 HH-XRF analyses of the smithing slag samples (weight %).....	189
Table 9.6 HH-XRF mean values for the four slag types (weight %) .....	189
Table 9.7 Comparison of the mean values of the HH-XRF analyses of the tap slags and furnace bottoms from the Saxon site and the tap slags and smelting slags from the Villa site (weight %) .....	189



# List of Plates

## Research objectives, methodologies and summary of results

Plate 2.1 The excavation team working on Area B in February 2013.....	10
-----------------------------------------------------------------------	----

## The development of the landscape before the 1st millennium AD

Plate 3.1 Sherds of Bronze Age pottery, Vessel 3.....	30
-------------------------------------------------------	----

## Dating the origins of the rural settlement at Lyde Green: a Late Iron Age enclosure system?

Plate 4.1 Feature [3949] containing loomweights.....	41
------------------------------------------------------	----

## The Romano-British period and the villa estate

Plate 5.1 Well {6031}, looking east.....	50
Plate 5.2 Ditch [4160] & layers (3141) and (4149), showing foundations {3123} of structure {4226}, looking southeast.....	52
Plate 5.3 Enclosure [2017]/[2120], looking east.....	54
Plate 5.4 Well {2330}, looking west.....	56
Plate 5.5 Aerial view of structure {6197}, looking west.....	61
Plate 5.6 Foundation trench [6039] – southwest corner, looking northeast.....	62
Plate 5.7 Walls {6065} and {6075}, looking north.....	62
Plate 5.8 Aerial shot of structures {4213} & {3967} (middle) and {4196} (background), looking south.....	64
Plate 5.9 Rectangular pool [3370] within bathhouse, looking west.....	64
Plate 5.10 Pool [3370] showing drainage culvert {4218} & walled cavity {3372}, looking west.....	65
Plate 5.11 Culvert {4218} showing structure {3371}, looking east.....	65
Plate 5.12 Well [3222], looking northwest.....	66
Plate 5.13 Aerial shot of structure {4196} mid-excavation, showing wall {3897}/{3956} & structure {4235}, looking northeast.....	68
Plate 5.14 Well [3535], looking west.....	70
Plate 5.15 Shot of structure {3583} within ditch [4181], looking east.....	72
Plate 5.16 Urn from Cremation no. 10.....	75
Plate 5.17 Pre-excavation shot of Cist burial 1, looking north.....	76
Plate 5.18 Cist burial 1, looking north.....	76
Plate 5.19 Cist burial 2 showing iron boot plate SF 122 in situ, looking north.....	77

## The Romano-British artefacts (mid-1st century AD to 5th century AD)

Plate 6.1 Cremation no. 5 with urn in situ, looking west.....	91
Plate 6.2 Fragment of possible siphon.....	114
Plate 6.3 Walled cavity {3529} and lead pipe & ceramic drain {3425}, looking south.....	135

## The development of the landscape from the Roman period to the present day

Plate 7.1 Culvert {2483}, looking east.....	150
Plate 7.2 Medieval post-built structure {3967}, looking west.....	151

## Acknowledgements

Wardell Armstrong thanks Gardiner & Theobald LLP on behalf of Taylor Wimpey PLC, for commissioning the project, and for all their assistance throughout the work. Thanks are also due to David Haigh and Paul Driscoll at South Gloucestershire Council for their assistance during the project. We thank Julian Hemmens of JH Plant Hire Ltd., Joe O’Leary of Greenways Plant Hire and their ground-works staff, for their help. We are grateful to Pete Twinn for metal detecting the site, and James Flynn of Falcon’s View Photography for taking the aerial photographs.

Dr Robert Young is grateful to Professor Tom Moore of Durham University and Dr James Gerrard of the University of Newcastle upon Tyne for their generosity in sharing their encyclopaedic knowledge of the Iron Age pottery of southwest England with him. G Monteil gives her warmest thanks to Brenda Dickinson for her help and time with the stamp of Paullinus V. Richard Newman thanks Mark Brett (Cotswold Archaeology) for providing information on the Dings Crusaders site in Stoke Gifford.

The archaeological excavation was supervised by Mike McElligott and Juan Moreno, assisted by Adam Reid, Alistair Byford-Bates, Angus Clark, Barbara Dziurawiec, Ben Moore, Charles Rickaby, Chris Timmins, Claire McGlenn, Damion Churchill, Dan Miller, Dan Tomlinson, Diana Chard, Ed Johnson, Emily Gal, Eva Maria Gonzalez Suarez, Frances Ward, Frederick Neville-Jones, Hannah Flint, Helen Phillips, Hope Hancox, Hypatia Atheria, James Coles, James Hicks, Joanne Clawley, Karen Duignan, Karen Mason, Kevin Mounsey, Kirsty Beecham, Lee Newton, Melvyn Suller, Michelle Gamble, Natalia Hunt, Nathan Chinchin, Olivia Hamlett, Paul Geldard, Pete Aherne, Peter Capps, Phil Wright, Rachel Stacey, Ray Ducker, Rebecca Enlander, Rebekah Pressler, Ryan Wilson, Sam Pointer, Scott Vance, Sean Johnson, Steve Froud, and Tom Stewart.

The project was managed at various stages by Frank Giecco, Richard Newman and David Jackson.

## Editors' foreword

Matthew Hobson joined Wardell Armstrong in the position of Associate Director at the Carlisle office, following a post at the University of Leicester, in early March 2020. Shortly after his arrival Matthew received instruction to bring the partly completed Lyde Green monograph to final publication. A draft text, minus some specialist reports and a concluding discussion, was prepared by Richard Newman by spring 2017. Richard then became heavily occupied with the management of a series of excavations related to the East Anglia One windfarm onshore construction works in Suffolk, and subsequently with overseeing the process of resultant post-excavation assessment. This project was only completed in the month before Richard departed Wardell Armstrong. By early 2020 the Lyde Green excavations were becoming a rather distant event in the company's history. Michael McElligott, who prepared the two substantial archive reports in 2014, had by then emigrated to Australia to work as an archaeologist. Initial meetings with Richard, who himself had not taken part in the original excavations, helped greatly developing Matthew's understanding of what remained to be done. Michael McElligott also kindly took the time to answer several queries about the methodology employed during the excavations.

Most of the specialist reports were still in their original form and required editing down and their conclusions cross-referencing with one another. Analysis still needed to be arranged for the Roman small finds and ceramic building material, and the process of conducting the former led to some revisions in the dating. Data for the draft stratigraphic figures was moved from AutoCAD over to GIS, and a rough concordance of the phasing between each of the excavation areas drawn up. From this digital archive, a phase plan for each of the excavation areas was prepared. Helen Philips then produced figures of selected section drawings. Richard Henry photographed a selection of the small finds and Matthew produced figures of these and the illustrations in Adobe InDesign. Richard Newman completed the text of the final chapter at the beginning of May 2020.

The production of the monograph has been a collective effort. In addition to the team of contributors, multiple anonymous academic peer reviewers kindly submitted comments on the draft text and figures, one of whom read the entire text of an early draft. These comments have helped to iron out many inconsistencies. Inevitably some will remain, but the responsibility for these remains ours.

Matthew S. Hobson and Richard Newman  
18/05/2021

# Chapter 1

## Introduction

Richard Newman, Matthew S. Hobson, and Damion Churchill

The archaeological investigations described in this monograph were undertaken during 2012 and 2013 at Lyde Green on the north-eastern outskirts of Bristol, within what was then the known as the Emersons Green East development area (Figure 1.1). The excavations recorded a 1st century AD farmstead occupying a visually prominent position. The site occupies a low ridge overlooking a stream valley to the east, into which a number of spring lines flow. The farmstead developed into a villa estate by the late 3rd century and continued life well into the second half of the 4th century. The main villa building, complete with remains of a bathhouse and other ancillary structures, was excavated beneath what is now Lyde Green Primary School. The focus of settlement activity

in the 1st century, however, originally lay some 200m further south within a D-shape enclosure, which now lies beneath the new residential housing estate built by Linden homes at the junction of Acorn Drive and Willowherb Road. This enclosure was surrounded by field systems probably dedicated to stock raising and arable farming. Traces of its agricultural and non-agricultural production activities, such as corn drying, iron smelting and blacksmithing, were recorded dating to the 2nd to 4th centuries AD. Only a small amount of evidence for earlier activity from the Neolithic, Middle-Late Bronze Age and the Early Iron Age was found, and does not indicate the close proximity of dense sedentary settlement before the 1st century AD. The site had suffered badly from medieval and later



Figure 1.1 The location of Lyde Green

stone robbing, as well as modern agricultural activity, with no floor surfaces of any of the Romano-British buildings remaining in situ. Evidence of a medieval field system was found, as well as some Post-medieval quarrying. Where the focus of activity was during the 5th-8th century is unknown, but an important 9th-10th Anglo-Saxon iron smelting site has been excavated just 250-300m to the west of the main villa building (Figure 1.2). The most significant observation is the degree of continuity on the site from the 1st century AD into the late Roman period. The Lyde Green excavations have allowed archaeologists to plot the development of this section of landscape over several hundred years, from a rural farmstead of the very late Iron Age into a Romano-British villa estate.

### 1.1. The purpose and format of this publication

The Romano-British villa at Lyde Green provides an opportunity to contextualise similar remains from elsewhere in the Bristol/south Gloucestershire sub-region. Such an opportunity has implications for our knowledge and understanding of villa economies and landscapes throughout south-west England. This publication is, therefore, not set out as a standard description of the excavation results, like that recently published for the nearby villa at Wortley (Wilson *et al.* 2014), for example. The focus lies more on the landscape and on the wider understanding of villas in south Gloucestershire, rather than on a detailed examination of the remains of the Lyde Green villa itself. Consequently, detailed stratigraphic descriptions are avoided, though such can be accessed through the site archive (deposited with Bristol Museums Service) and in the unpublished archive and assessment reports available through the Archaeology Data Service (Bailey 2013; Churchill 2013; McElligott 2012; McElligott 2014a; McElligott 2014b; Moore 2013).

Archaeology at the Lyde Green site was not well preserved, having been adversely impacted by both the character of the soil and by its post-depositional history. A modern farm track, for example, had been constructed directly over the main villa building and had to be removed before excavation could begin. There are other villa sites in the Bristol/south Gloucestershire sub-region that have survived in a better condition and which have provided more detailed examinations of aspects of Romano-British villas. The exploration of these sites, however, is generally far more fragmentary than was the case at Lyde Green. The nature of the remains at Lyde Green, and their condition, was a highly significant factor in the determination of the approach taken in this publication.

The opportunity to use the Lyde Green excavation data to contextualise other villa sites in south Gloucestershire

and more widely in the South-West, as well as there being a reasonably large and significant finds assemblage associated with the villa, justify its publication as a monograph. This monograph is illustrated with plans, sections, finds drawings and site photographs, along with, where relevant, regional distribution maps. The monograph is referenced throughout using the Harvard system. Where references are made to the South Gloucestershire Historic Environment Record, these are either given as a reference to the online Historic Environment Record or to the individual record's Primary Record Number (PRN). Footnotes and endnotes have been avoided and an extensive bibliography is included at the end of the book.

The monograph is set out as a sequenced chronological approach to the development of the Lyde Green landscape. For the most part, finds and palaeoenvironmental analyses are contained within the relevant chapters, and not within a separate technical section. The authors consider that this makes for a more integrated and harmonious study. The remaining part of this introductory chapter outlines the development context within which the archaeological evaluations and excavations took place. A brief account of the archaeological and historical background is given, as well as a summary of the chief archaeological findings. Chapter 2 gives a little more detail concerning the evolution of the research objectives, from the fieldwork to post-excavation stage. Chapter 3 discusses the development of the landscape before the onset of the Late Iron Age. Evidence from the excavations constitutes residual Mesolithic and Neolithic assemblages of stone tools and a small quantity of Bronze Age pottery derived from two pits in Area E.

Chapters 4, 5 and 6 introduce and interpret the main body of the data relating to the Late Iron Age and Romano-British rural site. Chapter 4 describes the evidence available to date the origins of the Lyde Green settlement, as well as the nature of the occupation site and its early farming practices. The evidence for the development of the Late Iron Age farmstead into a substantial, but not hugely wealthy, Romano-British villa estate is examined in Chapter 5. Chapter 6, on the Romano-British artefactual assemblages, is divided into several sections. Section 6.1 and 6.2 discuss the 181kg of Roman-period pottery and transitional wares (wares of the Late Iron Age which continued in production into the 1st century AD). Section 6.3 summarises the 36kg of ceramic building material (far from being a large assemblage for a site of this nature). Section 6.4 covers the small finds. A fairly standard assemblage for this type of site, it consists mainly of dress accessories, with a few toilet implements, household items and farming implements. Section 6.5 presents the analysis of the 77 Roman coins found during the excavations. Some



of these were stratified, but the majority were metal detected from the spoil heaps. Section 6.6 presents the results of scientific analyses on the iron-smelting and blacksmithing waste. Strong evidence of both practices being carried out at Lyde Green during the Roman period is present. Iron smelting at villa sites is a reasonably rare occurrence and there are indications that this became a specialism of the local population, with the nearby Anglo-Saxon smelting site mentioned above having also recently been excavated.

Chapter 7 deals with the few archaeological features and artefacts of medieval and Post-medieval date. These periods were probably most notable for stone-robbing activities, dismantling the Roman stonework for use elsewhere.

The final chapter (Chapter 8) discusses the evidence for the development of a Roman villa at Lyde Green within its regional context. Eighteen other villa sites within a c. 20 km radius of the Lyde Green site are examined to help understand what is typical or atypical about it.

This publication will focus on the main phases of significant archaeological activity at the site. For the purposes of this monograph, the archaeological remains have been assigned 6 broad periods of activity, with Period 1 representing the Middle Bronze Age to Early Iron Age activity, and Period 6 representing the Post-medieval activity. For the purposes of analysing the phasing on each of the excavation areas, these periods have been broken down into 13 sub-periods outlined in Table 2.1 of the following section. Chapter sections 2.7, 3.6-4.4, 4.4, 5.1-5.7 & Chapter 7 describe the principle archaeological features within each phase, and are ordered by the phases of activity. Some of the information and data from specialist reports has been integrated into this text.

Many of the archaeological features discovered at Lyde Green comprised the truncated remains of negative cut features, including pits, ditches and postholes. For this reason, in many cases the interpretation of the heavily disturbed and fragmented archaeological remains is either not possible or must remain highly tentative. Within the description of the archaeological features, structure and enclosure numbers have been assigned where appropriate, and have no chronological relevance, but are a descriptive aid. Chapter 2 also contains figures outlining the main phases of archaeological activity. These figures show context, group and building numbers as necessary. Each feature was recorded in its entirety and where features have been truncated, or their extent exceeded the limit of excavation, conjecture has been used to aid interpretation. This conjecture is clearly marked on the figures and takes the form of dashed lines.

## 1.2. Project background

Wardell Armstrong LLP was commissioned by Taylor Wimpey PLC, Linden Homes and Emersons Green Urban Village Ltd to undertake a programme of archaeological investigation at Emersons Green on land known as Lyde Green. The work was required as a condition of planning consent (Planning Application No. PK04/1965/0) for retail, residential and commercial development.

Condition 23 of the planning permission required an agreed programme of archaeological works to be submitted and carried out. It was agreed with the Archaeological Officer at South Gloucestershire Council that, once all archaeological investigation was completed on site, the partial discharge of condition 23 prior to the commencement of enabling works would be recommended, thus releasing the site from further development constraints. Consequently, at the time of writing the development of Lyde Green is well underway, with a number of the residential estates already having been built.

Five phases of trial trenching and six separate open-area excavations were conducted by Wardell Armstrong LLP on behalf of the clients ahead of the construction of several residential estates (see below). During the project, five of the excavation areas were designated areas A to E. For the purposes of this monograph a sixth area, undertaken for Linden Homes adjacent to the A4174 Avon Ring Road, has been designated as Area F (Figure 1.2). The excavation areas were located to the south of Whitehouse Farm and surrounding the former Hallen Farm, now overbuilt. Wardell Armstrong carried out the post-excavation assessment work in 2014 and 2015, with the analysis and monograph writing taking place in 2018 and 2019.

All archaeological work undertaken was carried out in accordance with agreed project designs, known as written schemes of investigation (WSI). All WSIs for the archaeological works were prepared by Wardell Armstrong LLP and submitted to the Archaeology Officer of South Gloucestershire Council for approval on behalf of Taylor Wimpey, Linden Homes and Emerson Green Urban Village Ltd. The WSI for the excavation included provision for consolidating the site records and finds assemblages into an archive, a post excavation assessment, post-excavation analysis and publication of the archaeological results.

## 1.3. The development site

The excavations at Lyde Green are a direct result of plans outlined in the 'Emersons Green East' development brief, adopted in 2006 and designed to meet the dwelling needs of South Gloucestershire

for the period up to 2011. The development area described in the brief covers 177-ha, delimited to the west by the A4174 (the Avon Ring Road), the M4 motorway to the north, and the route of a disused railway line to the south and east (see South Gloucestershire Council 2006a, fig. 1). The ongoing growth of the city of Bristol, of which the recent development has been a small but significant part, has resulted in the urbanisation of this landscape unit (South Gloucestershire Council 2015: 1). Numerous archaeological interventions associated with this ongoing process of urbanisation, for example, were undertaken by the Avon Archaeological Unit in the 1990s and early 2000s. These related to an area west of the Avon Ring Road, close by, but outside of the Emersons Green East development area (see, for example, Erskine 1998; Hume and Samuels 1996; Townsend 2001). In 2015 Emersons Green became officially recognised and administered as a town, with the parish of Mangotsfield Rural being renamed after it.

For much of the 20th century, however, this area was occupied by little more than a collection of hamlets surrounded by farmland within the Gloucestershire parish of Mangotsfield Rural. The name Emersons Green is not a new creation. Indeed, it is frequently asserted that the community is named in commemoration of local 18th-century industrialist James Emerson of Hanham (Wardell-Armstrong 2006). Emersons Green is the historic name of a former green settlement within the hamlet of Downend, lying to the west of the modern Avon Ring Road. ‘Emerson’s Green’, appearing in this case with the correctly used possessive apostrophe, is clearly shown on the later 19th-century Ordnance Survey maps. Along with Vinny Green, Sherman Green and Lyde Green, it was one of numerous green settlements within the vicinity. It was a long-established settlement by 1788 when common rights were extinguished over the green, parts of which at least remained unenclosed into the later 19th century (Parliamentary Archives HL/PO/PB/1/1788/28G3n79).

The development at the Emersons Green East site necessitated archaeological investigations both as precursors for developers to gain planning consent and as conditions of consent. These planning requirements were stipulated within the policies of the then current South Gloucestershire Local Plan, adopted in January 2006 (South Gloucestershire Council 2006b: 61). In accordance with the Local Plan, the costs of the resultant archaeological works were expected to be met by the developers. At Emersons Green these expectations were fully met by the developers and resulted in the production of this monograph.

#### 1.4. Location, topography and geomorphology

The site lies on the north-eastern outskirts of Bristol, South Gloucestershire, c. 7 miles from the city centre. Emersons Green East lay within undulating open arable and pasture farmland. The investigation area at Lyde Green is relatively low-lying, situated on contours ranging from 50m to 64m above sea level. A small watercourse flows south to north, south of Whitehouse Farm and to the immediate east of the site. Eventually this watercourse becomes the Folly Brook and flows into the River Frome to the north of the M4. The excavation areas lay a short distance to the west of this watercourse. Emersons Green East is within the Bristol, Avon Valleys and Ridges National Character Area (Natural England 2014), which is comprised of a ‘steep scarp crowned by a high, open wold’, which is ‘interspersed by wooded valleys’ (*ibid*). Within the South Gloucestershire Landscape Character Assessment, Emersons Green East is situated in Landscape Character Area 12 - Westerleigh Vale and Oldland Ridge. This character area extends from the A431 road in the south, to the Bristol to London railway line in the north. The area is characterised by a gently rolling to sloping landscape. The landscape is contained to the east by Pucklechurch Ridge and to the west by the urban fringe of Bristol. It also features a diverse vegetative structure of overgrown and clipped hedgerows and tree growth, which is often associated with older settlement and common land (South Gloucestershire Council 2006a: 97).

The underlying geology is complex, with four different bedrock groups located within the site boundaries (British Geological Survey 2018). The bulk of the geology is composed of the Mercia Mudstone Group; a sedimentary bedrock formed during the Triassic Period approximately 201 to 252 million years ago. This mudstone includes an area centred around Lyde Green, where the geology comprises Farrington Member and Barren Red Member Sandstone, which formed 308 to 310 million years ago in the Carboniferous Period. Mudstone belonging to this group and formed during the same period is present north of the sandstone. To the west of the investigation area the bedrock geology comprises sedimentary rock consisting of mudstone, siltstone and sandstone of the Mangotsfield Member. These rock types were formed 310 to 315 million years ago, again, in the Carboniferous Period. The overlying superficial deposits across the Lyde Green area of Emersons Green East consist of shallow, clayey silt topsoils. The solid bedrock geology was encountered immediately upon stripping these topsoils. This caused some problems during the archaeological investigation during the winter of 2012, as the site was particularly wet and little natural drainage was available.

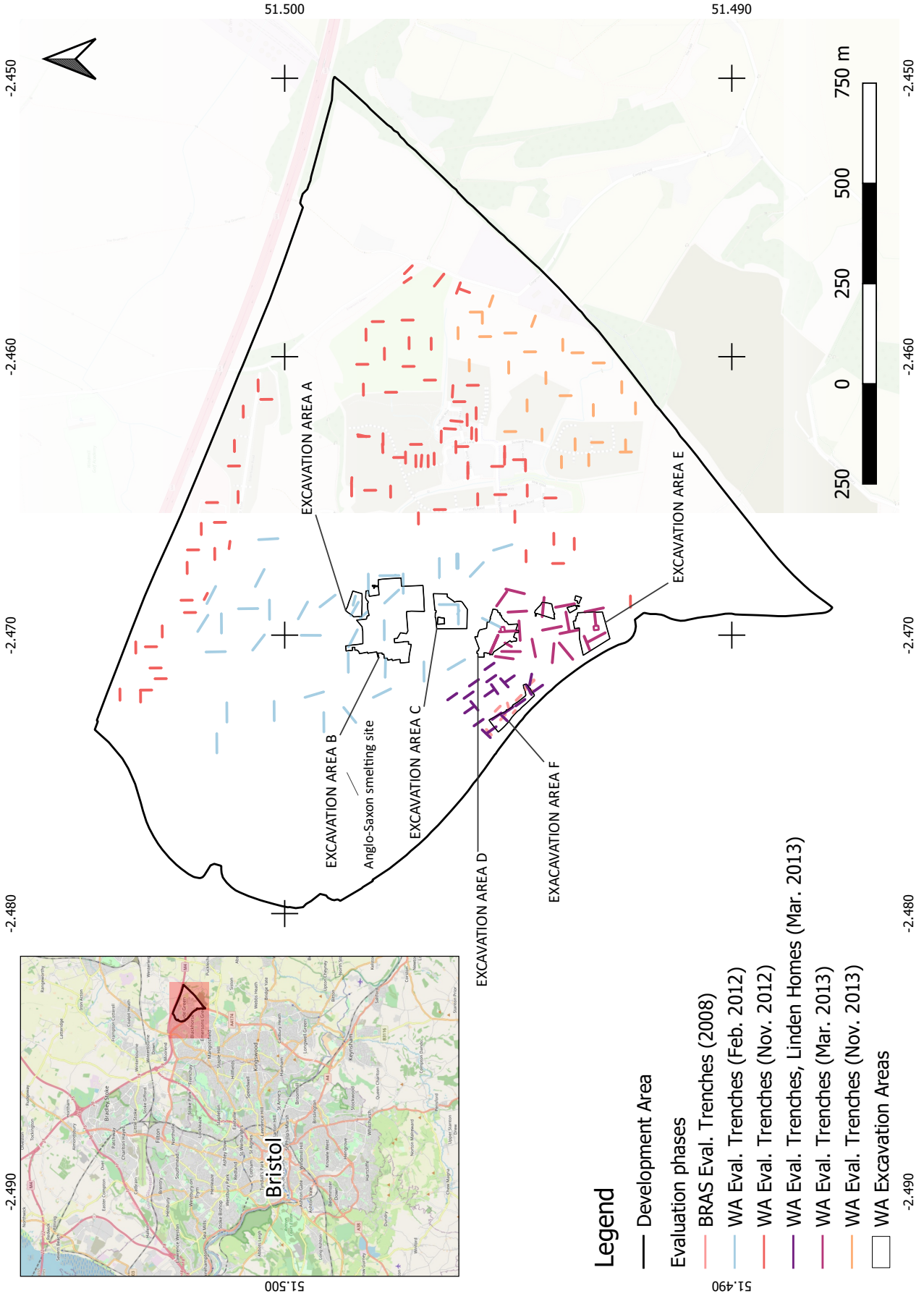


Figure 1.2 The location of the trial trenches and excavation areas. © OpenStreetMap contributors