

**LAND AT WILLOW FARM
HALLEN
SOUTH GLOUCESTERSHIRE**

**ARCHAEOLOGICAL WATCHING BRIEF
AND EVALUATION**

For

ATKINS HERITAGE

CA PROJECT: 2615
CA REPORT: 08164


AUGUST 2008



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CONTENTS

SUMMARY	2
1. INTRODUCTION	3
<i>The site</i>	3
<i>Archaeological background</i>	3
<i>Archaeological objectives</i>	4
<i>Methodology</i>	4
2. RESULTS (FIG 2)	5
<i>Watching brief results</i>	6
<i>Evaluation results</i>	6
<i>The Finds</i>	6
3. DISCUSSION.....	7
4. CA PROJECT TEAM	7
5. REFERENCES	7
APPENDIX A: CONTEXT DESCRIPTIONS	9
APPENDIX B: THE FINDS	15
APPENDIX C: THE PALAEOENVIRONMENTAL EVIDENCE	16
APPENDIX D: OASIS REPORT FORM.....	18

LIST OF ILLUSTRATIONS

Fig. 1 Site location plan (1:25,000)

Fig. 2 Trench location plan (1:2000)

SUMMARY

Project Name: Land at Willow Farm
Location: Hallen, Gloucestershire
NGR: ST 5454 8119
Type: Watching Brief and Evaluation
Date: 27-29 May and 4-20 August 2008
Location of Archive: Bristol Museums and Art Galleries
Site Code: WFH 08

An archaeological watching brief on geotechnical test pits and boreholes was undertaken by Cotswold Archaeology in May 2008 at the request of Atkins Heritage on land at Willow Farm, Hallen, South Gloucestershire. This was followed by a subsequent archaeological evaluation undertaken in August 2008. Eleven trenches were excavated throughout the proposed development area.

The archaeological fieldwork identified a consistent alluvial sequence across the site. This included a thin organic clay silt layer, recorded between 4.37m and 5.02m AOD, interpreted as an undated, emergent salt marsh deposit. In addition, evidence of ridge and furrow cultivation was recorded in two trenches.

1. INTRODUCTION

- 1.1 In May 2008 Cotswold Archaeology (CA) carried out an archaeological watching brief on geotechnical test pits and boreholes for Atkins Heritage on land at Willow Farm, Hallen, South Gloucestershire (centred on NGR: ST 5454 8119; Fig. 1). A subsequent archaeological evaluation was undertaken in August 2008 to accompany a planning application for the construction of a composting plant at the site.
- 1.2 The watching brief was carried out in accordance with a Written Scheme of Investigation (WSI) produced by CA (CA 2008a). The evaluation was carried out in accordance with a brief for archaeological evaluation (South Gloucestershire Council 2008) prepared by David Haigh, Archaeology and Conservation Officer, South Gloucestershire Council, the archaeological advisor to the Local Planning Authority (LPA), and with a subsequent detailed Written Scheme of Investigation (WSI) produced by CA (2008b) and approved by David Haigh. The fieldwork also followed *Standard and Guidance for an Archaeological Watching Brief* issued by the Institute of Field Archaeologists (2001), the *Standard and Guidance for Archaeological Field Evaluation* issued by the Institute of Field Archaeologists (2001) and the *Management of Archaeological Projects* (English Heritage 1991). It was monitored by David Haigh, including a site visit on 7 August 2008.

The site

- 1.3 The site is irregular in shape and covers an area of approximately 4.4ha on the Avonmouth Levels (Fig. 2). The application area lies at approximately 6m AOD, with current land use comprising rough pasture.
- 1.4 The underlying geology of the area is mapped as alluvium of the Pleistocene and modern era (BGS, 1971).

Archaeological background

- 1.5 A cultural heritage assessment of the site, currently being undertaken by Atkins Heritage, indicates that the site lies within the Severn Levels, an area of high archaeological potential, within which archaeological remains may occur within and

beneath the buried build up of silt deposits. Bands of peat that are likely to have developed and silty/sandy clays between them have the potential to assist in the reconstruction of prehistoric and historic environments within the estuary.

- 1.6 A geophysical survey of the current site undertaken by Archaeophysica Ltd suggested that the site had low archaeological potential, although several anomalies potentially indicative of archaeological features were identified (Archaeophysica 2008).
- 1.7 Within the immediate environs of the current site, Iron Age activity, including the identification of palisade enclosures and roundhouses, was identified at Hallen Marsh 750m to the south during mitigation works for the second Severn crossing (CA 2008b). Excavations at Minors Lane, which lies adjacent to the current site, were also undertaken during these mitigation works although no evidence for the origin or date of Minors Lane was identified (ibid.).

Archaeological objectives

- 1.8 The objectives of the evaluation were to establish the character, quality, date and extent of any archaeological remains or deposits surviving within the site. This information will assist the LPA in making an informed judgement on the significance of the archaeological resource, and the likely impact upon it of the proposed development. Specific objectives of the watching brief and evaluation were to recover data that could be used to develop a deposit model of the underlying stratigraphic and alluvial sequence.

Methodology

- 1.9 The mechanical excavation of twelve geotechnical test pits was monitored under constant archaeological supervision. Each test pit measured 3m in length, 0.6m in width and between 2.9m and 4.7m in depth (see Fig. 2 for locations).
- 1.10 Eleven evaluation trenches, each measuring 50m length by 2.1m in width, were excavated in the locations shown on the attached plan (Fig. 2). The trenches were located to examine anomalies and seeming blank areas highlighted by the earlier geophysical survey. The locations of several trenches were altered slightly in the

field from those originally specified within the WSI due to the presence of overhead power lines crossing the site.

- 1.11 All evaluation trenches were excavated by mechanical excavator equipped with a toothless grading bucket. All machine excavation was undertaken under constant archaeological supervision to the top of the first significant archaeological horizon or the natural substrate, whichever was encountered first. Where archaeological deposits were encountered they were excavated by hand in accordance with CA Technical Manual 1: *Fieldwork Recording Manual* (2007).
- 1.12 Dr Keith Wilkinson, geo-archaeologist from ARCA visited the site to assess and record buried soil and sediment sequences (see Appendix C). This was undertaken in accordance with procedures and techniques specified in the English Heritage *Guidelines for carrying out assessments in geo-archaeology*.
- 1.13 Deposits were assessed for their palaeoenvironmental potential in accordance with CA Technical Manual 2: *The Taking and Processing of Environmental and Other Samples from Archaeological Sites* (2003). Two monolith samples of organic deposits identified within trenches 21 and 22 were taken by Dr Wilkinson.
- 1.14 The archive from the evaluation is currently held by CA at their offices in Kemble. Subject to the agreement of the legal landowner will be deposited with Bristol Museums and Art Galleries along with the site archive. A summary of information from this project, set out within Appendix D, will be entered onto the OASIS online database of archaeological projects in Britain.

2. RESULTS (FIG 2)

- 2.1 This section provides an overview of both the watching brief and evaluation results; detailed summaries of the recorded contexts and finds and are to be found in Appendices A and B respectively. The geoarchaeological report can be found in Appendix C.

Watching brief results

- 2.2 A broadly similar sequence of grey alluvial clays was observed in the geotechnical test pits across the site. No evidence for any deposits indicative of buried land surfaces or other archaeological features was encountered. Three sherds of post-medieval pottery were recovered from the topsoil of test pit 10 and a single clay pipe stem fragment from the topsoil of test pit 12.

Evaluation results

- 2.3 A consistent sequence of alluvial deposition was observed within the evaluation trenches, typically to a depth in excess of 1.4m below the existing ground surface, overlain by modern topsoil and subsoil. Such observations correlated with that previously noted within the geotechnical test pits.
- 2.4 A thin layer of dark organic silty clay, typically between 0.03 and 0.15m in thickness, was identified in evaluation trenches 13, 15, 16, 19, 20, 21 and 22 between 4.37m and 5.02m AOD (contexts 1305, 1507, 1605, 1909, 2007, 2108, and 2209). Monolith samples were taken from these deposits in Trenches 21 and 22. Boreholes, hand-drilled within the base of six of the evaluation trenches, indicated the presence of humidified peat deposits between 3.85m and 4.28m AOD.
- 2.5 Trenches 16 and 21 were orientated perpendicular across the ridge and furrow cultivation observed in the easternmost field. This showed that the crest of the ridges were between 5.5m and 7m apart whilst the furrows had a maximum depth of 0.29m
- 2.6 No further archaeological features were identified during the evaluation. No archaeological or geological features were identified which correlated to the anomalies identified by the earlier geophysical survey.

The Finds

- 2.7 Three sherds of post-medieval pottery and one clay pipe stem fragment were recovered from the topsoil within geotechnical test pits 10 and 12 respectively. No artefacts were recovered during the course of the evaluation.

3. DISCUSSION

- 3.1 Both the dark organic silty clay observed in the evaluation trenches and the humidified peat identified by the hand-drilled boreholes are interpreted as a salt marsh deposits formed when the site was above the high water mark (see Appendix C). No dateable material was retrieved from either of these horizons.
- 3.2 No other archaeological deposits, excepting evidence of ridge and furrow cultivation, were identified during the course of the watching brief or evaluation.

4. CA PROJECT TEAM

Fieldwork was undertaken by Tim Havard, assisted by Alistair Barber, Hazel O'Neill, Pippa Mitcheson, Steve Sheldon and Ashley Strutt. The report was written by Tim Havard, assisted by Pippa Mitcheson. The illustrations were prepared by Lorna Gray. The archive has been compiled by Tim Havard, and prepared for deposition by Kathryn Price. The project was managed for CA by Cliff Bateman and Laurie Coleman.

5. REFERENCES

Archaeophysica 2008 *Willow Farm, Avonmouth: Geophysical Survey Report*

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CA (Cotswold Archaeology) 2008a *Willow Farm, Almondsbury, South Gloucestershire: Written Scheme of Investigation for a Programme of Archaeological Works*

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APPENDIX A: CONTEXT DESCRIPTIONS

Geotechnical Test Pit 1 Present ground level: 6.45m AOD

No.	Type	Description	Depth (m) of deposit below ground level	Spot-date
100	Layer	Topsoil and turf	0.0 – 0.2	Modern
101	Layer	Firm light brown clay	0.2 – 1.7	
102	Layer	Firm grey and mottled orange brown clay	1.7 – 2.2	
103	Layer	Grey clay silt with common peaty lenses	2.2 – 3.8	

Geotechnical Test Pit 2 Present ground level: 6.45m AOD

No.	Type	Description	Depth (m) of deposit below ground level	Spot-date
200	Layer	Topsoil and turf	0.0 – 0.2	
201	Layer	Mottled orange, brown and grey clay	1.2 – 2.4	
202	Layer	Soft grey clay silt	2.4 – 3.5	

Geotechnical Test Pit 3 Present Ground Level: 6.19m AOD

No.	Type	Description	Depth (m) of deposit below ground level	Spot-date
300	Layer	Topsoil and turf	0.0 – 0.15	
301	Layer	Firm light brown grey clay	0.15 – 1.3	
302	Layer	Grey and mottled brown clay	1.3 – 2.3	
303	Layer	Soft grey clay silt	2.3 – 3.1	

Geotechnical Test Pit 4 Present Ground Level: 6.36m AOD

No.	Type	Description	Depth (m) of deposit below ground level	Spot-date
400	Layer	Topsoil and turf	0.0 – 0.2	
401	Layer	Soft grey clay with occasional lenses of pea grit	0.2 – 2.3	
402	Layer	Soft grey clay	2.3 – 2.7	
403	Layer	Soft grey clay with common peaty lenses	2.7 – 3.1	

Geotechnical Test Pit 5 Present Ground Level: 6.28m AOD

No.	Type	Description	Depth (m) of deposit below ground level	Spot-date
500	Layer	Topsoil and turf	0.0 – 0.15	
501	Layer	Firm light brown mottled orange and grey clay	0.15 – 2.2	
502	Layer	Soft grey clay with occasional peaty lenses	2.2 – 3.3	

Geotechnical Test Pit 6 Present ground Level: 6.23m AOD

No.	Type	Description	Depth (m) of deposit below ground level	Spot-date
600	Layer	Topsoil and turf	0.0 – 0.1	
601	Layer	Firm light brown mottled orange and grey clay	0.1 – 2.3	
602	Layer	Soft grey mottled orange brown clay silt with common peaty lenses	2.3 – 2.9	

Geotechnical Test Pit 7 Present ground level: 6.47m AOD

No.	Type	Description	Depth (m) of deposit below ground level	Spot-date
700	Layer	Topsoil and turf	0.0 – 0.2	
701	Layer	Firm light brown mottled grey and orange clay	0.2 – 2.4	
702	Layer	Soft grey clay with frequent peaty lenses	2.4 – 3.2	

Geotechnical Test Pit 8 Present Ground Level: 6.39m AOD

No.	Type	Description	Depth (m) of deposit below ground level	Spot-date
800	Layer	Topsoil and turf	0.0 – 0.15	
801	Layer	Firm light brown mottled grey and orange clay	0.15 – 1.5	
802	Layer	Firm grey mottled orange and brown clay	1.5 – 2.15	
803	Layer	Band of soft black peaty clay	2.15 – 2.25	
804	Layer	Soft grey clay with common peaty lenses	2.25 – 3.5	

Geotechnical Test Pit 9 Present Ground Level: 6.33m AOD

No.	Type	Description	Depth (m) of deposit below ground level	Spot-date
900	Layer	Topsoil and turf	0.0 – 0.2	
901	Layer	Firm light brown clay	0.2 – 1.6	
902	Layer	Firm grey mottled orange brown clay	1.6 – 2.3	
903	Layer	Soft grey clay with common peaty lenses	2.3 – 2.9	

Geotechnical Test Pit 10 Present Ground Level: 6.31m AOD

No.	Type	Description	Depth (m) of deposit below ground level	Spot-date
1000	Layer	Topsoil and turf	0.0 – 0.2	C19-20
1001	Layer	Firm light brown mottled orange grey clay	0.2 – 1.4	
1002	Layer	Grey mottled brown and orange clay	1.4 – 2.6	
1003	Layer	Soft grey clay with frequent peaty lenses	2.6 – 3.6	

Geotechnical Test Pit 11 Present Ground Level: 6.16m AOD

No.	Type	Description	Depth (m) of deposit below ground level	Spot-date
1100	Layer	Topsoil and turf	0.0 – 0.15	

1101	Layer	Firm light brown clay	0.15 – 1.4	
1102	Layer	Firm grey mottled orange brown clay	1.4 – 1.75	
1103	Layer	Band of soft grey clay with frequent peaty lenses	1.75 – 1.85	
1104	Layer	Firm grey mottled orange brown clay	1.85 – 2.5	
1105	Layer	Soft grey clay with frequent peaty lenses	2.5 – 4.7	

Geotechnical Test Pit 12 Present Ground Level: 6.18m AOD

No.	Type	Description	Depth (m) of deposit below ground level	Spot-date
1200	Layer	Topsoil and turf	0.0 – 0.2	PMED
1201	Layer	Firm light brown mottled orange and grey clay	0.2 – 1.5	
1202	Layer	Grey mottled orange brown clay	1.5 – 2.6	
1203	Layer	Soft grey clay with frequent peaty lenses	2.6 - 4	

Evaluation Trench 13

No.	Type	Description	Top of Deposit (m AOD)	Depth of deposit (m)	Spot-date
1300	Layer	Topsoil	6.17	0.27	
1301	Layer	Subsoil	5.90	0.16	
1302	Layer	Alluvium: mid brown grey clay with frequent dark brown mottling	5.74	0.89	
1303	Layer	Alluvium: blue grey clay	4.87	0.05	
1304	Layer	Alluvium: mid blue grey clay with frequent brown mottling	4.82	0.32	
1305	Layer	Alluvium: organic dark brown/black clay	4.50	0.04	

Evaluation Trench 14

No.	Type	Description	Top of Deposit (m AOD)	Depth of deposit (m)	Spot-date
1400	Layer	Topsoil	6.31	0.11	
1401	Layer	Subsoil	6.20	0.19	
1402	Layer	Alluvium: mid brown grey clay with frequent dark brown mottling	6.01	0.27	
1403	Layer	Alluvium: mid brown clay	5.74	0.73	
1404	Layer	Alluvium: blue grey clay	5.01	0.2	
1405	Layer	Alluvium: grey brown clay with brown mottling	4.81	0.15	
1406	Layer	Alluvium: blue grey clay	4.66	>0.05	

Evaluation Trench 15

No.	Type	Description	Top of Deposit (m AOD)	Depth of deposit (m)	Spot-date
1500	Layer	Topsoil	6.27	0.17	
1501	Layer	Subsoil	6.10	0.18	

1502	Layer	Alluvium: mid brown grey clay with frequent dark brown mottling	5.92	0.32	
1503	Layer	Alluvium: mid brown clay	5.60	0.68	
1504	Layer	Alluvium: blue grey clay	4.92	0.05	
1505	Layer	Alluvium: grey brown mottled clay	4.87	0.35	
1506	Layer	Alluvium: mid grey clay	4.52	0.1	
1507	Layer	Alluvium: organic dark brown/black clay	4.42	>0.03	

Evaluation Trench 16

No.	Type	Description	Top of Deposit (m AOD)	Depth of deposit (m)	Spot-date
1600	Layer	Topsoil	6.37	0.4	
1601	Layer	Subsoil	5.97	0.2	
1602	Layer	Alluvium: mid brown grey clay with frequent dark brown mottling	5.77	0.77	
1603	Layer	Alluvium: blue grey clay	5.00	0.18	
1604	Layer	Alluvium: mid brown grey clay	4.82	0.45	
1605	Layer	Alluvium: organic dark brown/black clay	4.37	>0.05	

Evaluation Trench 17

No.	Type	Description	Top of Deposit (m AOD)	Depth of deposit (m)	Spot-date
1700	Layer	Topsoil	6.26	0.17	
1701	Layer	Subsoil	6.09	0.23	
1702	Layer	Alluvium: mid brown grey clay with frequent dark brown mottling	5.86	0.9	
1703	Layer	Alluvium: blue grey clay	4.96	0.03	
1704	Layer	Alluvium: mid grey brown clay with frequent dark brown mottling	4.93	0.17	
1705	Layer	Alluvium: mid grey clay	4.76	0.1	
1706	Layer	Alluvium: mid blue grey clay	4.66	0.1	
1707	Layer	Alluvium: dark grey clay	4.56	0.05	
1708	Layer	Alluvium: mid blue grey clay	4.51	>0.05	

Evaluation Trench 18

No.	Type	Description	Top of Deposit (m AOD)	Depth of deposit (m)	Spot-date
1800	Layer	Topsoil	6.31	0.22	
1801	Layer	Subsoil	6.09	0.13	
1802	Layer	Alluvium: mid brown grey clay with frequent dark brown mottling	5.96	0.15	
1803	Layer	Alluvium: mid grey brown clay	5.81	0.87	
1804	Layer	Alluvium: blue clay	4.94	0.1	
1805	Layer	Alluvium: blue grey clay	4.84	0.29	
1806	Layer	Alluvium: dark grey clay	4.55	>0.05	

Evaluation Trench 19

No.	Type	Description	Top of Deposit (m AOD)	Depth of deposit (m)	Spot-date
1900	Layer	Topsoil	6.30	0.12	
1901	Layer	Subsoil	6.18	0.18	
1902	Layer	Alluvium: mid brown grey clay with frequent dark brown mottling	6.00	0.53	
1903	Layer	Alluvium: mid grey brown clay	5.47	0.62	
1904	Layer	Alluvium: blue clay	4.85	0.06	
1905	Layer	Alluvium: mid grey brown clay	4.79	0.34	
1906	Layer	Alluvium: dark grey clay	4.45	0.09	
1907	Void	Number not assigned			
1908	Void	Number not assigned			
1909	Layer	Alluvium: organic grey black clay	4.36	0.1	
1910	Layer	Alluvium: light grey clay	4.26	>0.05	

Evaluation Trench 20

No.	Type	Description	Top of Deposit (m AOD)	Depth of deposit (m)	Spot-date
2000	Layer	Topsoil	6.39	0.15	
2001	Layer	Subsoil	6.24	0.08	
2002	Layer	Alluvium: mid brown grey clay with frequent dark brown mottling	6.16	1.1	
2003	Layer	Alluvium: blue clay	5.06	0.08	
2004	Layer	Alluvium: blue grey clay	4.98	0.38	
2005	Layer	Alluvium: mid to dark grey clay	4.60	0.05	
2006	Layer	Alluvium: light grey clay	4.55	0.12	
2007	Layer	Alluvium: organic grey black clay	4.43	0.03	
2008	Layer	Alluvium: blue grey clay	4.40	>0.05	

Evaluation Trench 21

No.	Type	Description	Top of Deposit (m AOD)	Depth of deposit (m)	Spot-date
2100	Layer	Topsoil	6.36	0.18	
2101	Layer	Subsoil	6.18	0.17	
2102	Layer	Alluvium: mid brown grey clay with frequent dark brown mottling	6.01	0.33	
2103	Layer	Alluvium: mid grey brown silty clay	5.68	0.6	
2104	Layer	Alluvium: blue grey clay	5.08	0.02	
2105	Layer	Alluvium: mid brown grey clay with frequent dark brown mottling	5.06	0.04	
2106	Void	Number not assigned			
2107	Void	Number not assigned			
2108	Layer	Alluvium: organic black silty clay	5.02	0.15	
2109	Layer	Alluvium: mid grey brown clay	4.87	>0.05	

Evaluation Trench 22

No.	Type	Description	Top of Deposit (m AOD)	Depth of deposit (m)	Spot-date
2200	Layer	Topsoil	6.27	0.12	
2201	Layer	Subsoil	6.15	0.2	
2202	Layer	Alluvium: mid brown grey clay with frequent dark brown mottling	5.95	0.23	
2203	Layer	Alluvium: mid grey brown silty clay	5.72	0.67	
2204	Layer	Alluvium: blue grey clay	5.05	0.1	
2205	Layer	Alluvium: grey brown clay	4.95	0.22	
2206	Layer	Alluvium: blue grey clay	4.73	0.03	
2207	Layer	Alluvium: dark grey clay	4.70	0.15	
2208	Layer	Alluvium: grey brown clay	4.55	0.13	
2209	Layer	Alluvium: organic black silty clay	4.42	0.05	

Evaluation Trench 23

No.	Type	Description	Top of Deposit (m AOD)	Depth of deposit (m)	Spot-date
2300	Layer	Topsoil	6.32	0.15	
2301	Layer	Subsoil	6.17	0.1	
2302	Layer	Alluvium: mid brown grey clay with frequent dark brown mottling	6.07	0.3	
2303	Layer	Alluvium: mid brown silty clay	5.77	0.6	
2304	Layer	Alluvium: blue clay	5.17	0.05	
2305	Layer	Alluvium: blue grey clay	5.12	0.24	
2306	Layer	Alluvium: mid to dark grey clay	4.88	>0.05	

APPENDIX B: THE FINDS

By Teresa Gilmore

Three sherds of post-medieval pottery and one fragment of clay tobacco pipe stem were recovered from the topsoil of Trenches 10 and 12. Pottery types have been matched to the Bristol Pottery Type Series (Ponsford 1988, Ponsford 1998).

Pottery types present are of 19th—20th century dating and include miscellaneous local glazed earthenware (BPT 285) and hand-painted white china (BPT 202).

The clay pipe fragment consists of an unmarked stem and is broadly post-medieval in date.

Due to the residual nature of the finds, none have been retained.

Context	Artefact type	Count	Weight (g)	Spot-date
1000	Post-medieval pottery: miscellaneous glazed earthenware, hand painted china	3	20	C19-C20
1200	Clay tobacco pipe: stem	1	4	PMED

APPENDIX C: THE PALAEOENVIRONMENTAL EVIDENCE

By Dr Keith Wilkinson

Introduction

A site visit was made by the author to Willow Farm, Hallen on 8 August 2008 to comment on the stratigraphy exposed in the 11 evaluation trenches excavated by Cotswold Archaeology. The visit took the form of a brief examination of vertical sections in each trench followed by a more detailed investigation of six trenches. The results of previous geophysical and geotechnical surveys were also examined as hard copy on site while these data have subsequently been provided to the author as digital (PDF) files. This report briefly reports on the stratigraphy revealed in the trenches, in hand-drilled boreholes (drilled to 3.5m depth through trench bases) sited in six of the evaluation trenches and reported in the geotechnical survey and assesses the stratigraphic resource

Stratigraphy

The sediment sequence in all evaluation trenches is broadly the same suggesting that the strata outcropping on the site are both extensive and tabular. They comprise [in Trench 22 (surface at 6.24m AOD) – a typical example]:

Depth (below surface)	Visible in section:
0.00-0.15m	An immature soil developed in intertidal clays (10 YR 4/4 clay as cobble-sized, primitive, rectangular blocks penetrated by frequent fine, vertical roots. Lightly iron-stained at surface. Well sorted), with a diffuse boundary to:
0.15-1.55m	Iron-stained/redox impacted intertidal clays (10 YR 5/2 silt/clay with frequent 10 YR 3/4 iron stains as granular-sized patches and more general 10 YR 6/4 iron-stained areas. Well sorted), with a diffuse boundary to:
1.55-1.70m	Immature palaeosol developed in intertidal clay, impacted by redox processes (5 Y 6/1 mottled 10 YR 5/3 clay in a primitive blocky structure, with occasional 7.5 YR 4/4 clay-filled root channels), with a diffuse boundary to:
1.70-1.85m	Intertidal clay (5 Y 5/1 homogeneous clay with very occasional vertical 7.5 YR 4/4 [iron-stained] clay filled root channels. Well sorted), with a diffuse boundary to: Visible the section or in hand-drilled boreholes:
1.85-1.90m	Emergent organic salt marsh deposit (2.5 Y 2.5/1 homogeneous organic mud lacking plant macrofossils. Well sorted), with diffuse boundary to:
1.90-3.40m	Intertidal clay (5 Y 5/1 homogeneous clay. Well sorted), with a diffuse boundary to: Visible in hand-drilled boreholes:
3.40-3.85m	Channel/creek fill sands and silts (Alternate thin layers of 5 Y 5/1 silt and 5 Y 4/1 fine sand/silt. Each layer comprises bundles of straight, wavy, thin, continuous and parallel laminations), with a diffuse boundary to:
3.85-4.00m	Emergent organic salt marsh deposit (10 YR 3/2 highly humified peat/organic mud containing frequent fibrous plant remains – mostly grasses), with a sharp boundary to:
4.00-4.10m	Upper organic salt marsh deposit (10 YR 2/2 moderately humified peat with frequent herbaceous plant remains), with a diffuse boundary to:
4.10-4.17m	Emergent organic salt marsh deposit (10 YR 3/2 highly humified peat/organic mud containing frequent fibrous plant remains – mostly grasses) with a diffuse boundary to:
4.17-4.28m	Upper organic saltmarsh deposit (10 YR 3/3 moderately humified peat with moderate rush-like plant macro-remains of pebble-size) with a sharp boundary to: Visible in hand drilled boreholes and described in geotechnical boreholes (BH 1 used as an example):
4.28-9.00m	Intertidal clay (5 Y 5/1 homogeneous clay. Well sorted) Described in geotechnical boreholes (data from BH 1 is used as example)
9.00-9.45m	Peat
9.45-15:00m	Intertidal clay
15:00-15:45m	Peat with shells
15.45-16:00m	Intertidal clay
16:00-16.10m	Peat
16.10m+	Mercia Mudstone

The organic layer at 1.85-1.90m was sampled in monolith tins in two trenches (Trenches 21 and 22), but the organic layers at 3.85-4.28m and below could not be sampled as appropriate drilling equipment was not available during the visit to the site.

Assessment

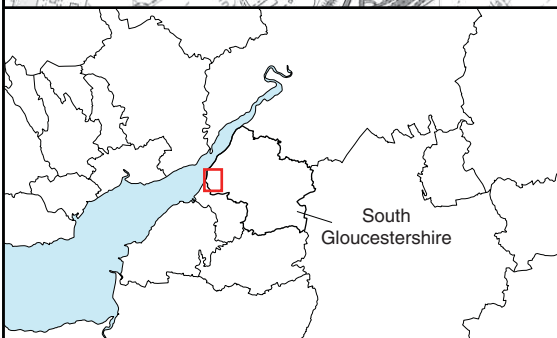
Stratigraphic work carried out as part of this evaluation and in the preceding geotechnical survey demonstrates that sedimentary beds on the site are tabular and laterally continuous. The identified peat and organic layers represent standstill phases in intertidal sedimentation, i.e. episodes of terrestrial accretion when the marsh would have been emergent above the high water mark and therefore available for human usage. No archaeological artefacts were recovered from these deposit, consequently they both currently remain undated. The organic layer identified at 1.85-1.90m has been penetrated in a number of trenches and was sampled in monolith tins in two (Trenches 21 and 22).


The humified peat outcropping at 3.85-4.28m has not yet been sampled, but visual inspection does suggest that it contains very good biological preservation with reed macrofossils being readily identifiable even in the 20mm diameter gouge auger that was used.. It outcrops at a depth where excavation of trenches/test pits to expose it is both logistically difficult and expensive. As with the overlying (1.85-1.90m) organic unit, the 3.85-4.28m peat is continuous across the site - albeit at a depth at which it is impractical to excavate. It appears that the 3.85-4.28m peat shelves off to the north of the site as it was not encountered in the 3.5m drill holes below the trench base in Trenches 13 and 16 (but was found in Trenches 18, 20, 21, 22).

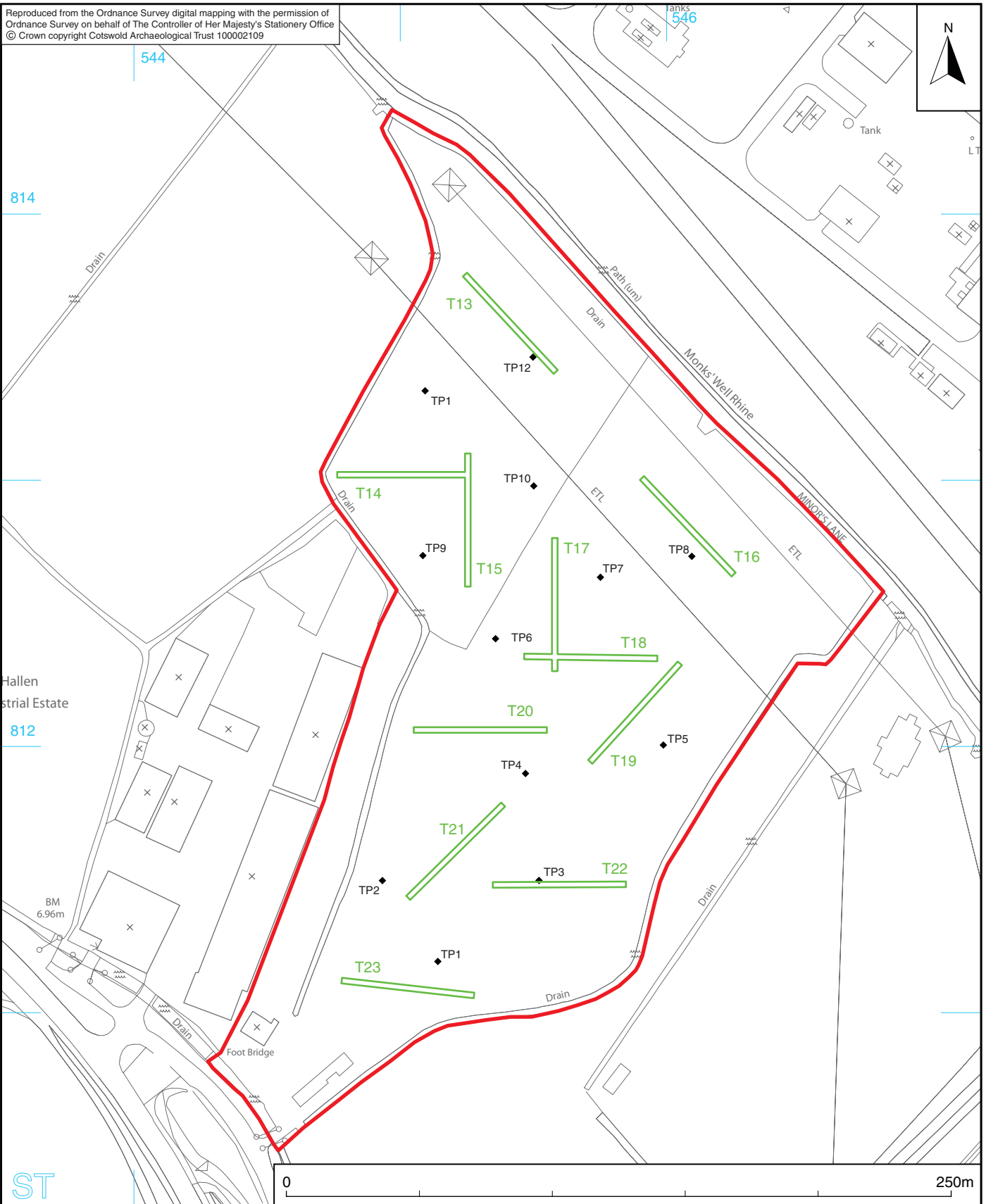
APPENDIX D: OASIS REPORT FORM

PROJECT DETAILS		
Project Name	Land at Willow Farm, Hallen, South Gloucestershire: Archaeological Watching Brief and Evaluation	
Short description (250 words maximum)	An archaeological watching brief on geotechnical test pits and boreholes was undertaken by Cotswold Archaeology in May 2008 at the request of Atkins Heritage on land at Willow Farm, Hallen, South Gloucestershire. This was followed by a subsequent archaeological evaluation undertaken in August 2008. Eleven trenches were excavated across the proposed development area. The archaeological fieldwork identified a consistent alluvial sequence across the site. This included a thin organic clay silt layer, recorded between 4.37m and 5.02m AOD, interpreted as an undated, emergent salt marsh deposit. In addition, evidence of ridge and furrow cultivation was recorded in two trenches.	
Project dates	May and August 2008	
Project type (e.g. desk-based, field evaluation etc)	Archaeological watching brief and archaeological evaluation	
Previous work (reference to organisation or SMR numbers etc)	Geophysical survey undertaken by ArchaeoPhysica	
Future work	Unknown	
PROJECT LOCATION		
Site Location	Land at Willow Farm, Hallen, South Gloucestershire	
Study area (M ² /ha)	c. 4.4ha	
Site co-ordinates (8 Fig Grid Reference)	ST 5454 8119	
PROJECT CREATORS		
Name of organisation	Cotswold Archaeology	
Project Brief originator	David Haigh, Archaeology and Conservation Officer, South Gloucestershire Council	
Project Design (WSI) originator	Cotswold Archaeology	
Project Manager	Cliff Bateman and Laurie Coleman	
Project Supervisor	Tim Havard	
PROJECT ARCHIVES		
	Intended final location of archive (museum/Accession no.) Recipient of each type of archive	Content (e.g. pottery, animal bone etc) Indicate the contents of each archive box
Physical	Bristol Museums and Galleries	For example ceramics, animal bone etc
Paper	Bristol Museums and Galleries	Context sheets, matrices etc
Digital	Bristol Museums and Galleries	Database, digital photos etc
BIBLIOGRAPHY		
Cotswold Archaeology (CA) 2008 Land at Willow Farm, Hallen, South Gloucestershire: Archaeological Watching Brief and Evaluation. CA Report 08164		

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 COTSWOLD ARCHAEOLOGY			
PROJECT TITLE Land at Willow Farm, Hallen South Gloucestershire			
FIGURE TITLE Site Location Plan			
DRAWN BY	SCALE	PROJECT NO.	FIGURE NO.
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ST

- site
- evaluation trench
- test pit



COTSWOLD ARCHAEOLOGY

PROJECT TITLE

Land at Willow Farm, Hallen
 South Gloucestershire

FIGURE TITLE

The site, showing location of test pits and evaluation trenches

DRAWN BY

LG

SCALE

1:2000@A4

PROJECT NO.

2615

FIGURE NO.

2