LAND AT WITHY END, WITHY FARM, EAST HUNTSPILL, SOMERSET

Centred on ST 32389 43355

Results of an archaeological trench evaluation

Sedgemoor District Council planning reference 12/1160/PA

Prepared by:
Dan Brace
and Andrew Passmore

On behalf of:
CgMs Consulting Ltd

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AC archaeology

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CONTENTS

SUMMARY

An archaeological trench evaluation was carried out by AC archaeology in October 2015 on land at Withy End, Withy Farm, East Huntspill, Somerset (ST 32389 43355). The investigation was carried out as a condition of the grant of planning permission for a solar farm.

The evaluation comprised the machine excavation of 11 trenches that were positioned to target anomalies identified by a previous geophysical survey as well as cropmarks. No archaeological features were exposed in any of the trenches, and the only finds were of a cow burial of modern date. Under the historic agricultural topsoil and subsoil a deep series of Holocene and probably historic alluvial deposits were exposed, separated by a layer of peat dating to the Middle Bronze Age.

It is concluded that the construction of the solar farm will not impact on any buried archaeological features, and the identified peat will be preserved at a level lower than the groundworks for the solar farm.

1. INTRODUCTION (Fig. 1)

1.1 This report sets out the results of an archaeological trench investigation undertaken by AC archaeology in October 2015 on land at Withy End, Withy Farm, East Huntspill, Somerset (ST 32389 43355). The investigation was commissioned by CgMs Consulting Ltd on behalf of Wessex Solar Energy, and was required under condition 12 of the grant of planning permission (reference 25/12/00014/RM) by Sedgemoor District Council for "formation of solar energy facility, including the erection of solar photovoltaic panels to produce up to 5.5 megawatts of electricity." Guidance on the scope of works was provided by the Somerset County Council Senior Historic Environment Officer.

1.2 The site is located on the south side of Withy Farm, East Huntspill. It comprises agricultural fields, currently under pasture, and lies between 5m and 6m aOD. The underlying superficial geology is Quaternary tidal flat deposits of clay, silt and sand, which overlie bedrock comprising Jurassic and Triassic mudstone of the Langport Member Blue Lias Formation and Charmouth Mudstone Formation (British Geological Survey Online Viewer).

2. ARCHAEOLOGICAL BACKGROUND

2.1 The site has been subject to an archaeological Desk-Based Assessment (CgMs 2014). The assessment concluded that the site had formed part of the agricultural hinterland surrounding medieval settlement at Withy, and potential earlier settlement at Huntspill. It is likely that the site comprised agricultural fields from at least the early medieval period onwards. A low potential was identified for remains from other periods due to a lack of evidence from the Somerset Historic Environment Record or nearby investigations.

2.2 A geophysical survey of the site has also been undertaken (Stratascan 2014), and this revealed some evidence of field boundaries and geological activity, with some anomalies indicating possible archaeological remains. These results were collated together with known cropmarks to produce a model of potential remains, which were targeted during the evaluation.

3. AIMS

3.1 The aim of the evaluation (as set out in a written scheme of investigation prepared by CgMs; Bedford 2015) was to establish the presence or absence, extent, depth, character, date and significance of any archaeological features, deposits or finds within the site. The results of the work as set out in this document will be reviewed and used by the Somerset County Council Senior Historic Environment Officer to inform any subsequent archaeological mitigation.

4. METHODOLOGY (Fig. 2)

4.1 The evaluation was undertaken in accordance with the CgMs written scheme of investigation that had been submitted to, and approved by, the Somerset County Council Senior Historic Environment Officer prior to commencement.

4.2 The investigation comprised the machine excavation of 11, 1.50-2m wide trenches totaling 515m in length. In line with the approved method statement, trenches were positioned to target anomalies identified from the geophysical survey as well as the cropmarks (Fig. 2). Trenches were positioned on the ground using a Leica *Viva* GS08 device with a horizontal accuracy of up to 10mm. Due to the presence of buried services the positions of some trenches were altered to avoid safety buffer zones.

4.3 All soil removal was undertaken under the control and direction of the site archaeologist. Topsoil and overburden were removed by mechanical excavator, using a toothless bucket, and ceased at the level at which archaeological deposits or natural deposits were exposed. Where deep sequences of alluvium were encountered, these were partially excavated in each trench, with deeper songages excavated in five trenches to investigate underlying deposits.

4.4 All archaeological deposits revealed were recorded using the standard AC archaeology *pro forma* recording system, comprising written, graphic and photographic records, in accordance with the company's *General Site Recording Manual, Version 2* and the prepared project design (Bedford 2015). 'Negative' or blank trenches were recorded using trench record forms. All site levels relate to Ordnance Datum and were collected via a Leica *Viva* GS08 digital GPS system.

5. RESULTS (Figs 2-3; Plates 1-5; Appendices 1 and 2)

5.1 No archaeological features were exposed during the evaluation, and apart from a single animal burial (see section 5.6 below) no finds were recovered. A summary of the general deposit sequence is outlined below. A full context listing by trench is presented as Appendix 1.

5.2 The site is located within the Central Somerset Levels, an area of extensive drained and reclaimed 'wetland' that borders the Severn Estuary. The underlying solid geology is overlain by early Holocene sands and then alluvial clays, along with bands of peat (Rippon 1997, fig. 10, 41-42). In trenches 3, 5, 7 and 11 (contexts 306, 506, 707 and 1104), clays that are likely to represent the upper parts of this Holocene alluvium sequence were identified.

5.3 Alluvial clays were overlain by a layer of peat that was exposed in trenches 3, 5, 7, 9 and 11 (contexts 305, 505, 706, 907 and 1103) at depths of between 1.65m and 2.4m below the ground level (2.73-3.39m aOD). Where fully exposed, this peat measured between

100mm and 300m thick. A sample of peat from context 706 in Trench 7 was submitted to the Scottish University Environmental Research Centre (SUERC-63758) for radiocarbon dating. This produced a determination of date of 3018±29 BP, which has been calibrated to 1390-1131BC at 95.4% probability. The SUERC calibration plot is presented as Appendix 2.

5.4 The peat was overlain by further deposits of alluvial clay, which was also present in all trenches. Where fully exposed these clays measured in total between 0.80m and 2m thick. The deposits were broadly consistent, although in trenches 1, 9 and 11, thin bands of silts and clays, some containing organic material were present towards the base of these layers, perhaps reflecting short-lived flood events.

5.5 The alluvial clays were sealed by agricultural topsoil and subsoil that together generally measured between 0.40m and 0.50m thick.

5.6 Within the subsoil (801) in Trench 8 a skeleton of a cow was exposed. No cut for the feature was identified, but it is likely to have been a modern burial. There is anecdotal evidence to the burial of livestock within the evaluation area *c*. 30 to 40 years ago. Charlotte Coles provides the following description of the find:

> "A total of 123 animal bones was recovered from context 801. These are the remains of a single cow, below the age of 4 months, and it is most likely to be a neonate individual. The remains include all long bones, some vertebrae, ribs, ankle bones, several teeth and a few fragments of skull. No signs of butchery were noted."

6. COMMENTS

6.1 The evaluation determined that across the site there was a generally a consistent sequence of alluvial deposits, which are typical of the Central Somerset Levels. The earliest exposed deposits comprised Holocene alluvial clays. These were overlaid by a layer of peat that was present in all the deeper sondages excavated within the evaluation trenches. The calibrated radiocarbon date of 1390-1131BC at 95.4% probability is of Middle Bronze Age date with similar deposits a short distance to the east at Pyde Drove and Woolavington Bridge have been radiocarbon dated to the Late Bronze Age and Late Iron Age respectively (Richard Brunning pers. comm. and Hughes *et al.* forthcoming). To the west, Late Bronze Age peat formations have been identified in the intertidal zone and littoral of the Severn Estuary where marine inundations have produced a sequence of fen and bog environments (Rippon 1997, 42-43). The peat deposit identified at Withy End would therefore fit into this pattern of Holocene deposits on the coastal edge of the Somerset Levels.

6.2 The peat was overlain by further layers of alluvium representing marine inundation, which during the current investigation were undated, but would be expected to be of post-Roman date (*ibid*., 44).

6.3 No archaeological features were identified during the evaluation, with the only finds being a modern cow burial in Trench 8. There may be several reasons for this. Firstly, the anomalies identified as land drainage may have been shallow, and only historically excavated within topsoil. Secondly, if the interpretation of some of the anomalies as possible palaeochannels is correct, then these may be present at depths below the levels excavated within the trench, i.e. potentially below the alluvial clays of probable post-Roman date. Thirdly, the anomalies represent changes in soil chemistry in the topsoil (and subsoil) and are not related to buried archaeological features.

6.4 It is concluded that the groundworks associated with the solar farm will not impact on any below-ground archaeological features or deposits. No archaeological features have been identified within the depths of the proposed groundworks, and the identified peat deposit is located at a depth far below the formation level of the groundworks, and will be preserved *in situ*.

7. ARCHIVE AND OASIS ENTRY

7.1 The archive is currently stored at the offices of AC archaeology, 4 Halthaies Workshops, Bradninch, Devon EX5 4LQ, and will be deposited at the Somerset Heritage Centre under a museum allocated accession number.

7.2 An OASIS entry has been created using the unique identifier 233205, and includes a digital copy of this report.

8. ACKNOWLEDGMENTS

8.1 The evaluation was commissioned by CgMs Consulting Ltd, and managed for them by Will Bedford and for AC archaeology by Andrew Passmore. The fieldwork was carried out by Vince Simmons, Lizzie Hudson and Dan Brace. The report illustrations were prepared by Stella De-Villiers. The advice and guidance of Steven Membery, the Somerset County Council Senior Historic Environment Officer, was gratefully received.

9. SOURCES CONSULTED

Bedford, W., 2015, *Archaeological Written Scheme of Investigation, Land at Huntspill Level, Sedgemoor District, Somerset. Planning Reference 25/15/00014/RM*, CgMs ref. **WB/17502**

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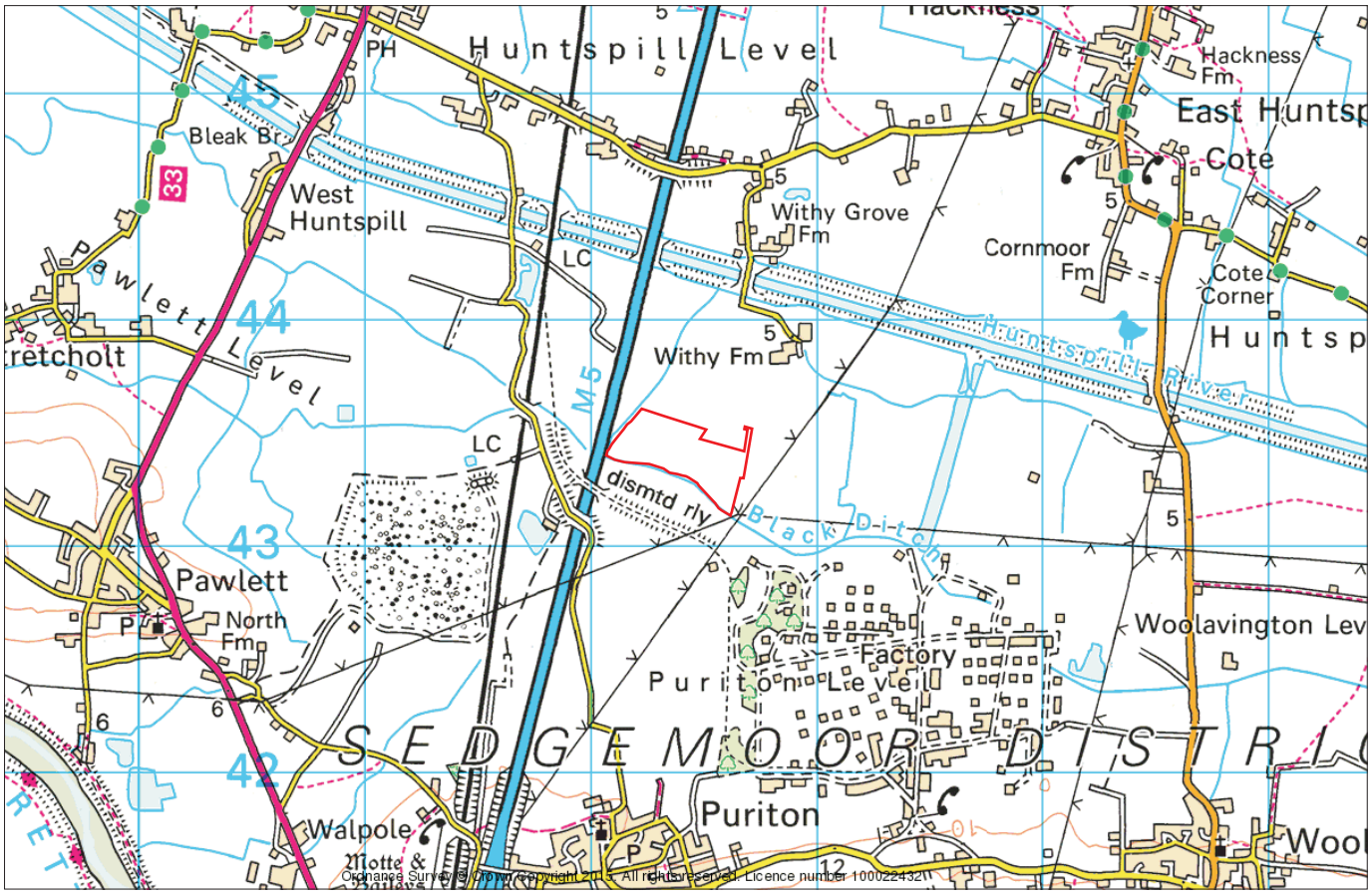
Hughes, S., Payne, N. and Rainbird, P. forthcoming 'The Excavation of a later Romano-British Saltern at Pyde Drove, near Woolavington, Somerset', *Archaeology in the Severn Estuary*

Rippon, S., 1997, *The Severn Estuary, Landscape evolution and wetland reclamation*

Stratascan, 2014, *Geophysical Survey Report – Huntspill Level Solar Park, Somerset*



PROJECT

Land at Withey End, Withey Farm, East Huntspill, Somerset

TITLE

Fig.1: Site location

0 250m

1:10,000@A4

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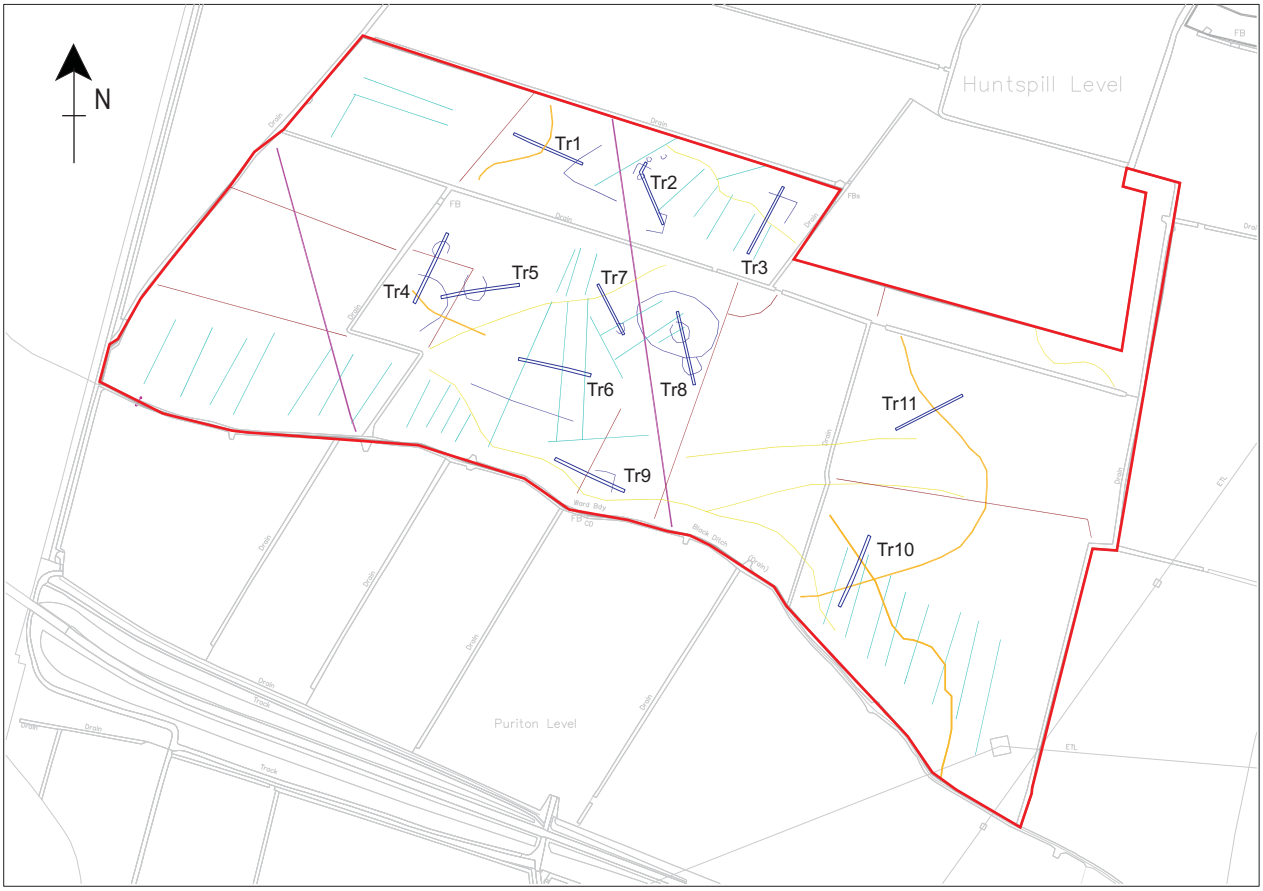

Key

- Trench location
- Former field boundary
- Land drainage
- Paleo-channel
- Possible archaeology in geophysics
- Service
- Aerial photograph feature

0 100m

Scale 1:2000@A4

PROJECT

Land at Withey End, Withey Farm, East Huntspill, Somerset

TITLE

Fig.2: Location of trenches in relation to the geophysical survey and cropmarks

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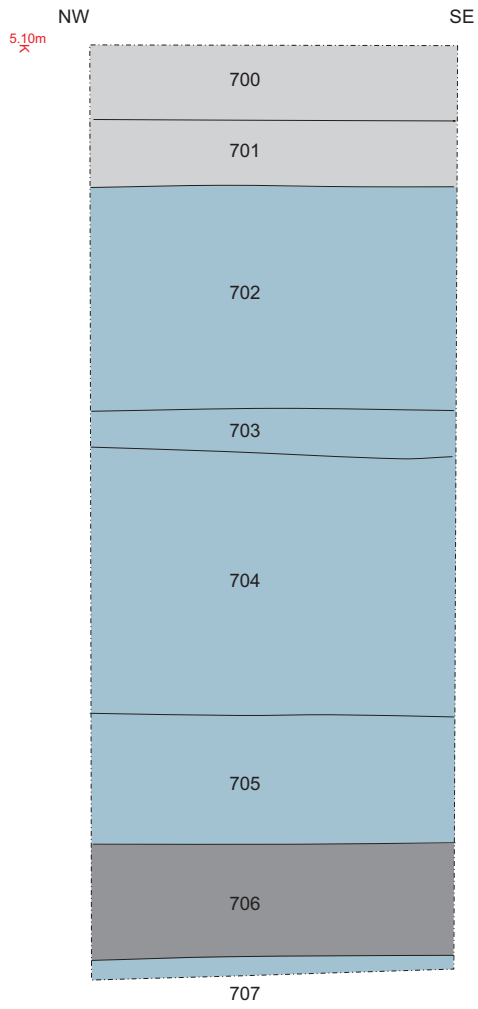

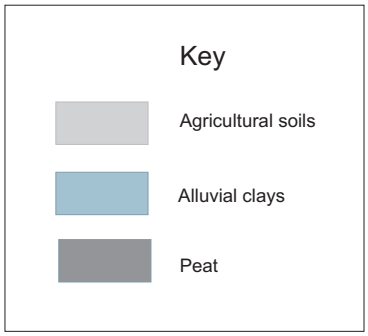

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PROJECT

Land at Withey End, Withey Farm, East Huntspill, Somerset

TITLE

Fig.3: Section of Trench 7 showing the depth of the sampled peat 706

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Plate 1: General view of the site, viewed from the northeast

Plate 2: Northeast-facing section of sondage in Trench 1 showing thin layer of dark organic material at the base (at the water level). Scales 1m

Plate 3: General view of Trench 3 viewed from the south-southwest. Scales 1m

Plate 4: South-southwest-facing section of sondage in Trench 3 showing peat exposure at the base. Scale 1m

Plate 5: Southwest-facing section of sondage in Trench 7 showing the peat (706) exposure at the base. Scale 1m

Appendix 1

Tabulated context descriptions by trench

APPENDIX 1: TABULATED CONTEXT DESCRIPTIONS BY TRENCH

Trench 1		**Length** 50m	**Width** 1.5m	**Alignment** WNW-ESE
Context	**Description**	**Depth (mm)**	**Interpretation**	
100	Firm to hard brown loamy silty-clay, with bioturbation	0-300	Topsoil	
101	Hard to very hard mottled grey-brown and blue-grey silty-clay with rust-brown flecks	300-800	Historic alluvium	
102	Very hard mottled grey-brown and blue clay with rust-brown flecks	800-1005	Historic alluvium	
103	Very hard blue clay. Not fully excavated. At a depth of c. 1.20m below ground level a *c*.15mm thick layer of dark blue-black organic silt was present within this deposit	1005-1200+	Historic alluvium	

Trench 2		**Length** 46m	**Width** 1.6m	**Alignment** N-S and NE-SW
Context	**Description**	**Depth (mm)**	**Interpretation**	
200	Firm to hard brown loamy silty-clay, with bioturbation	0-300	Topsoil	
201	Hard mottled grey-brown and blue-grey silty-clay	300-500	Historic alluvium	
202	Hard mottled grey-brown and blue clay with rust-brown flecks	500-800	Historic alluvium	
203	Hard light blue clay	800+	Historic alluvium	

Trench 3		**Length** 50m	**Width** 1.5m	**Alignment** NNE-SSW
Context	**Description**	**Depth (mm)**	**Interpretation**	
300	Firm to hard brown loamy silty-clay, with bioturbation	0-300	Topsoil	
301	Hard grey-brown, blue tinged slightly silty clay, with bioturbation	300-400	Subsoil	
302	Hard to very hard mottled blue-grey very slightly silty clay with orange-brown flecks	400-900	Historic alluvium	
303	Very hard mottled blue-grey clay with orange-brown/rust-brown flecks	900-1500	Historic alluvium	
304	Hard blue clay with black flecks	1500-2400	Historic alluvium	
305	Dark brown fibrous peat with leaf structure clearly visible	2400-2500	Peat horizon	
306	Hard blue clay with black flecks	2500+	Quaternary alluvium	

Trench 4		**Length** 50m	**Width** 2m	**Alignment** NE-SW
Context	**Description**	**Depth (mm)**	**Interpretation**	
400	Firm to hard brown loamy silty-clay, with bioturbation	0-200	Topsoil	
401	Firm grey-brown silty-clay	200-500	Subsoil	
402	Firm to hard grey mottled blue silty-clay	500-900	Historic alluvium	
403	Hard blue clay	900+	Historic alluvium	

Trench 5		**Length** 51m	**Width** 2m	**Alignment** E-W
Context	**Description**	**Depth (mm)**	**Interpretation**	
500	Firm to hard brown loamy silty-clay, with bioturbation	0-200	Topsoil	
501	Firm grey-brown silty-clay	200-500	Subsoil	
502	Hard grey mottled blue clay	500-1000	Historic alluvium	
503	Hard blue-grey mottled grey-brown clay	1000-1400	Historic alluvium	
504	Hard blue clay with some vegetation inclusions	1400-1900	Historic alluvium	
505	Brown fibrous peat with firm dark brown humic silty-clay inclusions	1900-2000	Peat horizon	
506	Hard blue clay	2000+	Quaternary alluvium	

Trench 6		**Length** 30m	**Width** 2m	**Alignment** E-W
Context	**Description**	**Depth (mm)**	**Interpretation**	
600	Firm to hard brown loamy silty-clay, with bioturbation	0-200	Topsoil	
601	Firm grey-brown mottled blue silty-clay	200-400	Subsoil	
602	Hard grey mottled blue slightly silty clay with orange flecks and some manganese inclusions	400+	Historic alluvium	

APPENDIX 1: TABULATED CONTEXT DESCRIPTIONS BY TRENCH

Trench 7		**Length** 38m	**Width** 1.6m	**Alignment** NW-SE
Context	**Description**	**Depth (mm)**	**Interpretation**	
700	Firm to hard brown loamy silty-clay, with bioturbation	0-200	Topsoil	
701	Firm grey silty-clay	200-400	Subsoil	
702	Hard grey mottled blue slightly silty clay	400-1000	Historic alluvium	
703	Hard dark blue clay	1000-1100	Historic alluvium	
704	Hard grey-brown mottled blue clay	1100-1810	Historic alluvium	
705	Hard blue clay with abundant vegetation	1810-2200	Historic alluvium	
706	Brown fibrous peat with dark brown humic silty-clay inclusions	2200-2500	Peat horizon	
707	Very hard blue clay	2500+	Quaternary alluvium	

Trench 8		**Length** 50m	**Width** 1.6m	**Alignment** N-S
Context	**Description**	**Depth (mm)**	**Interpretation**	
800	Firm to hard brown loamy silty-clay, with bioturbation	0-200	Topsoil	
801	Hard light grey-brown silty-clay with blue and rust-brown flecks	230-400	Subsoil	
802	Hard mid-grey slightly silty clay with blue flecks	400-800	Historic alluvium	
803	Very hard blue clay	800+	Historic alluvium	

Trench 9		**Length** 50m	**Width** 2m	**Alignment** ESE-WNW
Context	**Description**	**Depth (mm)**	**Interpretation**	
900	Firm to hard brown loamy silty-clay, with bioturbation	0-200	Topsoil	
901	Firm greyish brown silty-clay	200-400	Subsoil	
902	Firm light grey-brown and blue silty-clay with rust-brown flecks	400-550	Historic alluvium	
903	Hard mid-grey mottled blue silty-clay	550-800	Historic alluvium	
904	Hard blue clay with grey and rust-brown flecks	800-1000	Historic alluvium	
905	Hard dark blue clay. At 1.185m below ground level a c.15mm thick layer of dark blue-black organic silt was present within the layer.	1000-1200	Historic alluvium	
906	Hard mid-grey mottled blue silty-clay	1200-1650	Historic alluvium	
907	Peat	1650-1800+	Peat horizon	

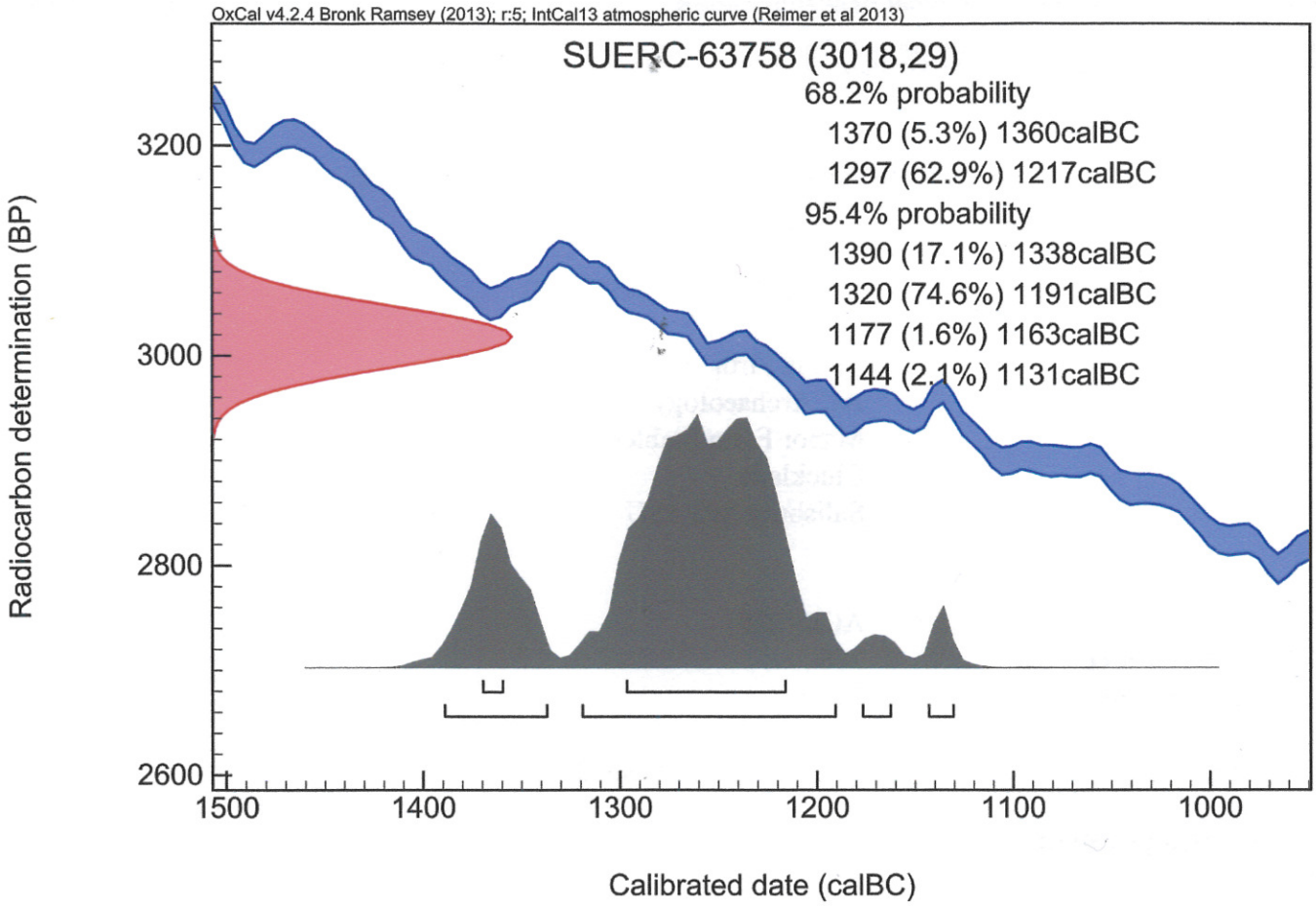
Trench 10		**Length** 50m	**Width** 2m	**Alignment** N-S
Context	**Description**	**Depth (mm)**	**Interpretation**	
1000	Firm to hard brown loamy silty-clay, with bioturbation	0-200	Topsoil	
1001	Firm grey-brown silty-clay with some blue and rust-brown flecks	200-550	Subsoil	
1002	Hard mottled grey and blue clay with some rust-brown flecks	550+	Historic alluvium	

Trench 11		**Length** 50m	**Width** 1.5m	**Alignment** WSW-ENE
Context	**Description**	**Depth (mm)**	**Interpretation**	
1100	Firm to hard brown loamy silty-clay, with bioturbation	0-200	Topsoil	
1101	Hard mottled blue-grey slightly silty clay with orange-brown streaks and flecks, and bioturbation	250-450	Subsoil	
1102	Hard to very hard mottled blue-grey slightly silty clay with orange-brown streaks and flecks, and some lenses of dark blue-grey silty-clay probably representing tidal/flood events	450-1700	Historic alluvium	
1103	Brown amorphous peat	1700-1800	Peat horizon	
1104	Firm to hard bright blue clay	1800+	Quaternary alluvium	

Appendix 2

Radiocarbon calibration plot

Calibration Plot



Devon Office

AC archaeology Ltd
Unit 4, Halthaies Workshops
Bradninch
Nr Exeter
Devon
EX5 4LQ

Telephone/Fax: 01392 882410

Wiltshire Office

AC archaeology Ltd
Manor Farm Stables
Chicklade
Hindon
Nr Salisbury
Wiltshire
SP3 5SU

Telephone: 01747 820581
Fax: 01747 820440

www.acarchaeology.co.uk