

Archaeological Evaluation Report







### **Archaeological Evaluation Report**

#### Prepared for:

Perpetuus Tidal Energy Centre Ltd. 5 Fleet Place London EC4M 7RD

#### Prepared by:

Wessex Archaeology Portway House Old Sarum Park Salisbury Wiltshire SP4 6EB

www.wessexarch.co.uk

**July 2015** 

Report Ref 102181.02



#### **Quality Assurance**

Project Code	102181	Accession Code		Client Ref.	
Planning Application Ref.		Ordnance Survey (OS) national grid reference (NGR)	455290 077091		

Version	Status*	Prepared by	Checked and Approved By	Approver's Signature	Date
v01	E	S.F.	ВМЕ	BUUR-	13/07/2015
File:	\\projects	server\wessex\Projec	cts\102181\_Rep	ports	
v02	E	S.F.	ВМЕ	BUILE-	15/07/2015
File:	\\projects	server\wessex\Projec	cts\102181\_Rep	ports	<u>'</u>
v03	F	ВМЕ	ВМЕ	BUIL-	15/07/2015
File:		1			
File:					
File:					

<sup>\*</sup> I = Internal Draft; E = External Draft; F = Final

#### **DATA LICENSES**

Contains Ordnance Survey data © Crown copyright and database rights 2014

#### **DISCLAIMER**

THE MATERIAL CONTAINED IN THIS REPORT WAS DESIGNED AS AN INTEGRAL PART OF A REPORT TO AN INDIVIDUAL CLIENT AND WAS PREPARED SOLELY FOR THE BENEFIT OF THAT CLIENT. THE MATERIAL CONTAINED IN THIS REPORT DOES NOT NECESSARILY STAND ON ITS OWN AND IS NOT INTENDED TO NOR SHOULD IT BE RELIED UPON BY ANY THIRD PARTY. TO THE FULLEST EXTENT PERMITTED BY LAW WESSEX ARCHAEOLOGY WILL NOT BE LIABLE BY REASON OF BREACH OF CONTRACT NEGLIGENCE OR OTHERWISE FOR ANY LOSS OR DAMAGE (WHETHER DIRECT INDIRECT OR CONSEQUENTIAL) OCCASIONED TO ANY PERSON ACTING OR OMITTING TO ACT OR REFRAINING FROM ACTING IN RELIANCE UPON THE MATERIAL CONTAINED IN THIS REPORT ARISING FROM OR CONNECTED WITH ANY ERROR OR OMISSION IN THE MATERIAL CONTAINED IN THE REPORT. LOSS OR DAMAGE AS REFERRED TO ABOVE SHALL BE DEEMED TO INCLUDE, BUT IS NOT LIMITED TO, ANY LOSS OF PROFITS OR ANTICIPATED PROFITS DAMAGE TO REPUTATION OR GOODWILL LOSS OF BUSINESS OR ANTICIPATED BUSINESS DAMAGES COSTS EXPENSES INCURRED OR PAYABLE TO ANY THIRD PARTY (IN ALL CASES WHETHER DIRECT INDIRECT OR CONSEQUENTIAL) OR ANY OTHER DIRECT INDIRECT OR CONSEQUENTIAL LOSS OR DAMAGE.



## **Archaeological Evaluation Report**

#### **Contents**

	nary	
Ackno	owledgements	.iv
1	INTRODUCTION	. 1
1.1	Project background	
1.2	The Site	
2	ARCHAEOLOGICAL BACKGROUND	. 1
2.1	Introduction	
2.2	Prehistoric (900,000 BC- AD43)	. 2
2.3	Romano-British (AD43-410)	
2.4	Saxon and medieval (AD410-1500)	. 2
3	METHODOLOGY	2
3.1	Aims and objectives	
3.2	Fieldwork methodology	
3.3	Service location	
3.4	Ecology	
4	ARCHAEOLOGICAL RESULTS	. 4
4.1	Introduction	
4.2	Natural deposits and soil sequences	
4.3	Trench 2	
4.4	Trench 4	
5	ARTEFACTUAL EVIDENCE	. 5
5.1	Introduction	. 5
5.2	Pottery	. 6
5.3	Animal Bone	. 6
5.4	Other finds	. 6
6	ENVIRONMENTAL EVIDENCE	. 7
6.1	Introduction	. 7
6.2	Charred plant remains	. 7
6.2 6.3	Charred plant remains	
	•	. 7 . 7



	Wood charcoal	7
7	CONCLUSION	8
8	STORAGE AND CURATION	8
8.1	Museum	8
8.2	Archive	9
8.3	Discard policy	9
8.4	Security Copy	9
9	REFERENCES	9
9.1	Bibliography	9
10	APPENDICES	
10.1	Appendix 1: Trench Tables	
10.2	Appendix 2: Environmental Data	15
10.3	OASIS ID: wessexar1-217743	16
<b>Tables</b> Table 1: Table 2:	, ,	
Figures Figure 1 Figure 2	Site and trench and location. East facing section of Truncation by cut <b>509</b> . North facing section of ditch <b>212</b> . West facing section of gully <b>207</b> . East facing section of gully <b>209</b> . South-south-east facing section of feature <b>210</b> .	
Figure 3	3: Plan of Trench 2.	
Plates Plate 1: Plate 2: Plate 3: Plate 4: Plate 5: Plate 6: Plate 7:	East facing representative section of Trench 1. View from the south of Trench 1. South facing representative section of Trench 2. East facing representative section of Trench 3. North facing representative section of ditch 212. West facing section of gully 207. North-east facing section of modern feature 404.	



### **Archaeological Evaluation Report**

#### **Summary**

Wessex Archaeology was commissioned by Perpetuus Tidal Energy Centre Ltd. To undertake an archaeological evaluation on land at Steephill, Ventnor, Isle of Wight (hereafter the Site) centred on National Grid Reference (NGR) 255290, 0077091. The evaluation was carried out between the 29<sup>th</sup> of June and the 3<sup>rd</sup> of July 2015.

This document reports on the results of five evaluation trenches excavated across the Site. Four features were revealed within Trench 2, which consisted of one ditch, two gullies and one potential posthole/ gully terminus. The ditch contained 16 pieces of 10<sup>th</sup>-13<sup>th</sup> century medieval pottery. One of the gullies contained a single piece of Saxon pottery, which may have been residual. The alignments and close proximity of the features suggest that they are related and potentially within close proximity to a former settlement area nearby.

A single irregular feature of modern date was found within Trench 4, however no evidence of archaeological features was found within any of the other trenches. Trenches 3, 4 and 5 showed evidence of ground truncation, which potentially could have led to the loss of any previous archaeological resource within the area. Trench 1, placed along the line of the proposed cable trenching route, did not reveal any archaeology, although the lack of disturbance throughout suggests a potential for surviving remains.



### **Archaeological Evaluation Report**

### Acknowledgements

Wessex Archaeology would like to thank Perpetuus Tidal Energy Centre Ltd. who commissioned the work. Wessex Archaeology would also like to thank Dave and Jane Dobbas for their help and assistance with access and logistics. Finally Wessex Archaeology would like to thank Owen Cambridge of The Isle of Wight County Council for his assistance throughout the project.

The fieldwork was undertaken by Simon Flaherty, Bill Moffat and Phoebe Olsen. The plant operation was undertaken by Tim Humphreys of JMC hire. The report was written by Simon Flaherty. The finds analysis was undertaken by Lorraine Mepham. The animal bone was assessed by Lorraine Higbee. The environmental samples were processed by Steve Winterton and analysed by Sarah Wyles. The Illustrations were produced by Rob Goller. The project was managed on behalf of Wessex Archaeology by Bruce Eaton.



### **Archaeological Evaluation Report**

#### 1 INTRODUCTION

#### 1.1 Project background

- 1.1.1 Wessex Archaeology (WA) was commissioned by Perpetuus Tidal Energy Centre Ltd. (PTEC), to undertake an archaeological evaluation on land at Steephill, Ventnor, Isle of Wight hereafter 'the Site' (**Figure 1**) centred on National Grid Reference (NGR) 255290, 0077091. Previous investigations, undertaken by Oxford Archaeological Unit in 1993 and RPS Consultants in 2002, confirmed the presence of human burials within the vicinity of the Site, at Flower's Brook, as well as medieval structures. Following consultation with Owen Cambridge, the Archaeological Officer for the Isle of Wight, as well as Arc Consultants regarding the ecological constraints on the proposed works, it was agreed to concentrate the archaeological evaluation on the plateau of land owned by Red Squirrel Ltd., in the area of the proposed PTEC onshore infrastructure, in accordance with the Application for Reserved Matters.
- 1.1.2 The archaeological evaluation took place between the 29<sup>th</sup> June and the 3<sup>rd</sup> July 2015.

#### 1.2 The Site

- 1.2.1 The Site lies just to the south of Steephill Road in an area formerly occupied by a caravan park/Red Squirrel Ltd. The eastern edge of the site is bounded by a Southern Water Services Ltd. pumping station and a public recreation ground known as Flower's Brook.
- 1.2.2 The site steeply slopes down from Steephill Road, which lies at a height of around 28m above Ordnance Datum (aOD), before levelling out into a gently sloping plateau up to the cliff edge.
- 1.2.3 The underlying geology is mapped as the mudstone of the Gault Formation with no superficial deposits recorded except beach and tidal flat deposits along the shoreline (British Geological Survey).

#### 2 ARCHAEOLOGICAL BACKGROUND

#### 2.1 Introduction

2.1.1 An archaeological desk-based assessment for the Site has previously been produced by Wessex Archaeology (WA 2014). The Study Area encompassed an area of 1km around the Site. The background provided below is a brief summary of this study and relates to the onshore heritage assets.



#### 2.2 Prehistoric (900,000 BC- AD43)

- 2.2.1 Some early prehistoric and Neolithic activity is known from the onshore study area, though such remains are often ephemeral and difficult to see within the archaeological record. Some early remains, due to localised landslips, may be deeply stratified beneath later deposits. Any remains from these periods are likely to be of value to the regional understanding of these periods.
- 2.2.2 Some Bronze Age funerary and occupation remains have been identified within the onshore study area suggesting potential for other features and finds from this period to be present. Any such remains would potentially be of value to local and potentially regional research objectives.
- 2.2.3 Considerable Iron Age activity is known from the Steephill area, mostly seen through midden deposits. However, previous investigations within the onshore site did not identify any features dating to this time. If present such remains would potentially be of value to local and potentially regional research objectives.

#### 2.3 Romano-British (AD43-410)

- 2.3.1 Though no specially Romano-British features have been identified in close proximity to the onshore site, a 4th century Roman coin was found at the eastern edge of the Site and many of the Iron Age sites in the wider area indicate continuity of occupation from the Iron Age into the Romano-British period.
- 2.3.2 Information from this period would potentially contribute to local research objectives.

#### 2.4 Saxon and medieval (AD410-1500)

2.4.1 Evaluation and excavations undertaken as part of a watching brief in connection with the pumping station and pipelines located early medieval settlement and cemetery remains.

#### 2.4.2 Post-medieval, 19<sup>th</sup> century and modern (AD1500-present)

- 2.4.1 At least three cottages are known to have stood on the onshore site until the early 19th century. This small settlement is thought to have dated from the 17<sup>th</sup> century.
- 2.4.2 Part of the onshore site was a public recreation ground and putting green in the modern period and surviving features from this use may be present within the onshore site. Earthworks noted in recent archaeological works in connection with the pumping station were concluded to be relatively recent in date and a stone laid trackway was also identified.

#### 3 METHODOLOGY

#### 3.1 Aims and objectives

- 3.1.1 The aims of the archaeological field evaluation were to:
  - Clarify the presence/absence and extent of any buried archaeological remains within the Site that may be impacted by development;
  - Identify, within the constraints of the evaluation, the date, character and condition of any surviving remains within the Site;
  - Assess the degree of existing impacts to sub-surface horizons and to document the extent of archaeological survival of buried deposits;



 Produce a report which will present the results of the evaluation in sufficient detail to allow an informed decision to be made concerning the Site's archaeological potential.

#### Specific aims:

• To better understand the nature, extent and date of the cemetery identified during previous archaeological works.

#### 3.2 Fieldwork methodology

- 3.2.1 All works were undertaken in accordance with the methodology set out within the WSI (WA 2015) and in compliance with the standards outlined in the ClfA's *Standard and guidance for archaeological field evaluation* (ClfA 2014a), excepting where they are superseded by statements made below.
- 3.2.2 A total of 5 machine-excavated trial trenches were excavated as shown on **Figure 1**. Trenches 2 and 3 measured *c*.20m in length. Trench 1 was shortened from 20m to 7.5m due to existing services and other onsite constraints. Trench 4 measured *c*.15m. Trench 5 was proposed to be 30m in length, however, due to the overburden and the depth to the natural geology the trench was only excavated to a length of *c*.22m. The trenches were 1.5m wide. All reductions in trench length were agreed onsite with the Isle of Wight Archaeological Officer.
- 3.2.3 The trial trenches were excavated using a 360° excavator equipped with a toothless bucket. The trenches were excavated under constant archaeological supervision. The turf, topsoil and subsoil were stored separately to allow for effective reinstatement after the works were completed.
- 3.2.4 All potential features and deposits of potential archaeological origin were partially excavated to ascertain their nature and function and were fully recorded using WA's *proforma* record sheets. All deposits were assigned a unique number.
- 3.2.5 A photographic record was maintained during the evaluation using a digital camera with an image sensor of not less than 10 megapixels. A full graphic record was maintained. The site drawings were drawn at an appropriate scale, typically 1:10 for sections and 1:20 for plans.
- 3.2.6 Site survey was carried out using a Leica Viva series GNSS unit using the OS National GPS Network through an RTK network with a 3D accuracy of 30mm or below. All survey data was recorded using the OSGB36 British National Grid coordinate system.
- 3.2.7 All environmental sampling was undertaken in accordance with WA's Guidelines for Environmental sampling along with policies outlined in the CIfA's Standard and Guidance documents and Environmental Archaeology; A Guide to the Theory and Practice of Methods, from Sampling and Recovery to Post-excavation (second edition) (English Heritage 2011).
- 3.2.8 All archaeological fieldwork was monitored on behalf of the Local Planning Authority by Owen Cambridge (Isle of Wight Archaeological Officer).

#### 3.3 Service location

3.3.1 The Client provided information regarding the presence of all known below/above ground services. Before excavation commenced, the areas of proposed trenching were walked



- over and inspected to visually identify, where possible, the location of above and below ground services.
- 3.3.2 Prior to machine excavation all trial trench locations were scanned by Wessex Archaeology using a cable avoidance tool and signal generator. The position of all detected services was marked out on the ground.

#### 3.4 Ecology

- 3.4.1 There is sensitive ecology in the area surrounding the evaluation site. Of primary importance was the presence of nearby badger setts. The methodology and trench layout took this into consideration.
- 3.4.2 The proposed evaluation trenches were all positioned at a distance greater than 30m from known badger setts.
- 3.4.3 Wherever possible evaluation trenches were backfilled by the end of the working day. Where this was not possible Heras fence panels were laid across any excavations in order to prevent wildlife falling into the excavations overnight. In addition, at least one end of each evaluation trench was chamfered to allow any wildlife that may have fallen into the excavation a means of escape.

#### 4 ARCHAEOLOGICAL RESULTS

#### 4.1 Introduction

4.1.1 The following sections provide a summary of the information held in the Site archive. Details of individually excavated contexts and features are retained in the Site archive and a tabulated version of these can be found in **Appendix 1**.

#### 4.2 Natural deposits and soil sequences

4.2.1 The natural deposits and soil sequences vary greatly across the site. The whole site was heavily landscaped during the construction of the nearby Southern Water pumping station. The topsoil comprised of a silty loam that varied between 0.12m – 0.35m in thickness across the Site. Trenches 1, 2 and 3 contained a silty clay loam subsoil that varied between 0.12 and 0.23m in thickness. All of the trenches, except Trench 1 (Plates 1 & 2), contained layers of made ground (202, 302, 401, 402 & 501) comprising of building debris that was related to the construction of the nearby pumping station. This layer was between 0.3m and 0.68m thick and seems to have been used to partially level and infill the coombe located within the Site.

Trenches 2 and 5 (**203** and **505**) contained a layer beneath the made ground which seems to have been a mixture of topsoil and the effects of running heavy machinery over the ground in the past, churning up the ground and creating 'puddling'; this consisted of a greenish grey or blueish grey silty clay.

- 4.2.2 This layer sealed a single colluvial coombe deposit within Trench 2 (**204**, **Plate 3**) and two colluvial coombe deposits within Trench 5 (**506** and **507**). Trench 5 contained a compact dark yellow brown silty clay with chalk inclusions that was 0.55m thick. This in turn sealed a second compacted yellow brown calcareous silty clay with chalk inclusions. Trench 2 contained a mid greenish grey with brownish hue silty clay colluvial deposit at a depth of 0.92m+, the archaeological features were cut into this layer.
- 4.2.3 Trenches 1, 3 (**Plate 4**) and 4 were located upon higher ground and the natural was located directly beneath the made ground, suggesting a level of truncation within these



trenches. Within all trenches the natural was encountered at a depth of between 0.38m and, within a machine excavated sondage in the northern edge of Trench 5, 2.5m bgl (below ground level). The natural geology across the Site varied between the trenches; within the south-west area of the Site a silty clay chalk banding deposit was identified within Trenches 4 and 5, while to the centre and north-west of the Site (Trenches 1, 2 and 3) the natural was greensand.

4.2.4 Trench 5 contained a buried topsoil (**502**) at its southern end for 4.5m (**Figure 2**). This consisted of a dark greyish brown silt loam located at a depth of 0.52m and was 0.09m thick. This sealed a mid greyish brown silt loam subsoil that was also 0.09m thick. This was truncated by cut **509** which was filled with made ground. Any archaeological deposits or features which may have been present in this location will have been removed. The buried topsoil also had made ground sat upon it.

#### 4.3 Trench 2

- 4.3.1 Trench 2 contained four archaeological features (**Figure 3**), which were concentrated towards the eastern side of the trench. A north south aligned ditch (**212**, **Figure 2**, **Plate 5**) with a concave base and straight steep sides ran for 1.5m within the trench. It contained 16 sherds of medieval pottery that dated to between the 11<sup>th</sup> to early 13<sup>th</sup> century.
- 4.3.2 Gully **207** (**Figure 2**, **Plate 6**) was at 90° to ditch **212** and ran in an east-west direction. A single small body sherd of Saxon pottery dating to the 5<sup>th</sup>-8<sup>th</sup> century was recovered from fill **206**. However, this may be residual.
- 4.3.3 Gully **209**, which was 0.5m to the west of gully **207** and ran on the same east west alignment (**Figure 2**), was partially revealed within the trench and ran for a distance of 1.9m. Although the feature was undated, the alignment with **207** suggests a relationship.
- 4.3.4 A final feature, **211** (**Figure 2**), was revealed within Trench 2. It was unclear if this was a terminus of a gully or a posthole. It was 0.5m long (within the trench) and 0.5m wide with a depth of 0.36m and did not contain any archaeological material.

#### 4.4 Trench 4

4.4.1 Trench 4 contained a single small irregular feature, **404** (**Plate 7**). This contained pieces of modern material including brick and glass. It was very similar to the made ground layer above it and it is likely to represent a small depression that was infilled.

#### Trench 1

4.4.2 Trench 1 contained the cut of a modern foul drain 103 (Plate 1).

#### 5 ARTEFACTUAL EVIDENCE

#### 5.1 Introduction

5.1.1 The evaluation produced a small quantity of finds, ranging in date from Saxon to Post-medieval. These derived from contexts within three of the trenches excavated. Quantities by material type and by context are given in **Table 1**.



Context	Animal Bone	Pottery	Other Finds
203		1/6	
206	6/4	1/5	1 stone
214	36/51	24/92	1 copper alloy
405			1 CBM; 1 glass; 1 iron
506	18/50		
Total	60/105	26/103	

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

CBM = ceramic building material

#### 5.2 Pottery

- 5.2.1 Pottery provides the primary dating evidence for the Site; the assemblage includes sherds of Saxon and medieval date. All sherds came from Trench 2.
- 5.2.2 The earliest sherd came from the fill of possible boundary gully **207**; this is a small body sherd in an organic-tempered fabric, which can be identified as early/mid Saxon (5<sup>th</sup>–8<sup>th</sup> century).
- All other sherds are medieval, with one sherd coming from possible buried topsoil layer **203**, and the remainder from the secondary fill of ditch **212**. Three ware types are represented here. Sixteen sherds are in shelly fabrics, five in sandy/shelly fabrics, and four in sandy fabrics. The latter are comparable to sandy wares found across east Dorset, while the shelly and sandy/shelly wares are more likely to be of local, island manufacture. There are no diagnostic sherds. All three types are paralleled within the large assemblage from Carisbrooke Castle (Mepham 2000, fabrics S400, S403 and Q401), where they have a date range of 11<sup>th</sup> to early 13<sup>th</sup> century.

#### 5.3 Animal Bone

- 5.3.1 A total of 60 fragments (or 122g) of animal bone was recovered by hand from two features (gully **207** and ditch **212**) in Trench 2 and layer **506** in Trench 5. A further 17g of bone was retrieved from the sieved residue of bulk soil sample No.1 taken from fill **214** of ditch **212**.
- 5.3.2 The identified remains include a piece of pig skull from **207**, a dog metatarsal and several sheep/goat bones and teeth from **212**, and a sheep/goat metatarsal and horse astragalus from **506**. The sieved material from **212** includes three identified fragments, a sheep/goat tooth and tarsal, and the first molar from a young dog.

#### 5.4 Other finds

- 5.4.1 A fragment of greensand stone from gully **207** is assumed to be building material; it has one flat surface, but is undated.
- 5.4.2 Other finds include a few tiny fragments of modern material from cut **404** (brick/tile, vessel glass and sheet iron), and a small copper alloy object from ditch **212**, possibly part of a small buckle frame, of unknown date.



#### 6 ENVIRONMENTAL EVIDENCE

#### 6.1 Introduction

6.1.1 A bulk sample was taken from ditch **212** of medieval date to evaluate the presence and preservation of palaeo-environmental remains. It was processed for the recovery and assessment of charred plant remains and charcoal.

#### 6.2 Charred plant remains

- 6.2.1 The bulk sample was processed by standard flotation methods; the flot retained on a 0.5 mm mesh, residues fractionated into 5.6 mm, 2 mm and 1 mm fractions and dried. The coarse fractions (>5.6 mm) were sorted, weighed and discarded. The flot was scanned under a x10 x40 stereo-binocular microscope and the preservation and nature of the charred plant and wood charcoal remains recorded in **Table 2**. Preliminary identifications of dominant or important taxa are noted below, following the nomenclature of Stace (1997) for wild plants, and traditional nomenclature, as provided by Zohary and Hopf (2000, Tables 3, page 28 and 5, page 65), for cereals.
- 6.2.2 The flot was relatively small with low numbers of roots and modern seeds. The charred material was well preserved.
- 6.2.3 A rich assemblage of charred remains was recovered from ditch **212**. The cereal remains included free-threshing wheat (*Triticum turgidum/aestivum* type) and barley (*Hordeum vulgare*) grain fragments. Other potential crops were celtic bean (*Vicia faba*), possible celtic bean/pea (*Vicia faba/Pisum sativa*), and oat (*Avena* sp.). The weed seeds included seeds of vetch/wild pea (*Vicia/Lathyrus* sp.), oat/brome grass (*Avena/Bromus* sp.) and docks (*Rumex* sp.).
- 6.2.4 This assemblage is indicative of settlement activity in the vicinity. It is compatible with the medieval date as free-threshing wheat, along with rye and barley, is the commonplace cereal recovered from charred assemblages in Southern England within the Saxon and medieval periods (Greig 1991). The weed seeds are typical of grassland, field margins and arable environments.

#### 6.3 Wood charcoal

6.3.1 Wood charcoal was noted from the flot of the bulk sample and is recorded in **Table 2**. Only a small quantity of charcoal fragments greater than 2 mm was retrieved from ditch 212.

#### 6.4 Further Potential

#### Charred plant remains

6.4.1 The analysis of the charred plant assemblage has the potential to provide some limited information on the nature of the settlement, the surrounding environment and the range of crops. This possibly has a higher importance as there are not many published analysed plant assemblages from medieval deposits on the Isle of Wight.

#### Wood charcoal

6.4.2 There is little potential for the analysis of the wood charcoal to provide information on the species composition, management and exploitation of the local woodland resource on the site due to the small quantity of charcoal recovered.



#### 7 CONCLUSION

- 7.1.1 The evaluation revealed four archaeological features within Trench 2. The features comprised of 1 ditch (212), 2 gullies (207, 209) and a further potential post hole or gully terminus (211). The pottery recovered from within ditch 212 broadly dates it to the 11<sup>th</sup> 13<sup>th</sup> century. This assemblage can be seen as indicative of settlement activity. Gully 207 contained a single piece of Saxon pottery, although this is possibly residual. The alignment and proximity of gullies 207 and 209 to ditch 212 suggests a possible relationship in function and date. The ditch and gullies may possibly be boundary delineations and drainage channels.
- 7.1.2 The density of animal bone and the rich assemblage of charred plant remains from the environmental bulk sample taken from fill **214**/ditch **212**, is also indicative of settlement activity within the Site. The charred plant remains present are consistent with cereal types recovered from Saxon or medieval contexts in Southern England.
- 7.1.3 The features identified within Trench 2 are probably related to the features previously identified in the 1993 Oxford Archaeology evaluation and the 2002 RPS Consultants excavations; two walls provisionally dated to the 10<sup>th</sup>-11<sup>th</sup> Centuries and a possible Saxon or early medieval settlement located in the environs of the Flower's Brook recreation ground and the Southern Water pumping station. The relationship with the inhumations previously discovered at Flower's Brook is less certain as a firm date for the burials has yet to be established beyond doubt. No further evidence of burials was discovered during the evaluation, which suggests that the northern limit of the burial ground is to the south of the Site.
- 7.1.4 Trenches 3, 4, and 5 show evidence of truncation down to the natural geology. This is shown within the southern end of Trench 5 with evidence of a buried topsoil being truncated in order to be infilled with building debris forming made ground. This suggests a potential loss of any archaeological resource that may have been present within this area of the Site. Trench 1, placed along the alignment of the proposed cable trenching route, did not contain any archaeological material. However, the lack of disturbance within it suggests a potential for the survival of archaeological remains within this location (**Plates 1** and **2**).
- 7.1.5 Trench 4 contained a single irregular feature that was modern in origin.
- 7.1.6 The Environmental Statement (ES) for the Site (Royal HaskoningDHV 2014) highlighted the potential for archaeological remains or artefacts relating to the Iron Age, medieval and Post-medieval periods. The evaluation results confirm the presence of medieval settlement activity within the northern portion of the Site, as well as the extent of truncation, but no direct evidence for Iron Age activity was identified and therefore the residual impact significance will remain negligible/minor, with appropriate mitigation, as identified in the ES.

#### 8 STORAGE AND CURATION

#### 8.1 Museum

8.1.1 It is recommended that the project archive resulting from the excavation be deposited with **Isle of Wight Heritage Service**. The Museum has agreed in principle to accept the project archive on completion of the project **102181**. Deposition of any finds with the Museum will only be carried out with the full agreement of the landowner.



#### 8.2 Archive

- 8.2.1 The complete site archive, which will include paper records, photographic records, graphics, artefacts, ecofacts and digital data, will be prepared following the standard conditions for the acceptance of excavated archaeological material by **Isle of Wight Heritage Service**, and in general following nationally recommended guidelines (SMA 1995; CIfA 2014b; Brown 2011; ADS 2013).
- 8.2.2 All archive elements will be marked with the **102181**, and a full index will be prepared. The physical archive comprises the following:
  - 01 cardboard boxes or airtight plastic boxes of artefacts & ecofacts, ordered by material type
  - 01 files/document cases of paper records & A3/A4 graphics

#### 8.3 Discard policy

- 8.3.1 Wessex Archaeology follows the guidelines set out in *Selection, Retention and Dispersal* (Society of Museum Archaeologists 1993), which allows for the discard of selected artefact and ecofact categories which are not considered to warrant any future analysis. Any discard of artefacts will be fully documented in the project archive.
- 8.3.2 The discard of environmental remains and samples follows nationally recommended guidelines (SMA 1993; 1995; English Heritage 2011).

#### 8.4 Security Copy

8.4.1 In line with current best practice (e.g. Brown 2011), on completion of the project a security copy of the written records will be prepared, in the form of a digital PDF/A file. PDF/A is an ISO-standardised version of the Portable Document Format (PDF) designed for the digital preservation of electronic documents through omission of features ill-suited to long-term archiving.

#### 9 REFERENCES

#### 9.1 Bibliography

- ADS 2013, Caring for Digital Data in Archaeology: a guide to good practice, Archaeology Data Service & Digital Antiquity Guides to Good Practice
- Brown, D.H., 2011, Archaeological archives; a guide to best practice in creation, compilation, transfer and curation, Archaeological Archives Forum (revised edition)
- Chartered Institute for Archaeologists (CIfA), 2014a, Standard and guidance: archaeological field evaluation, Chartered Institute for Archaeologists, Reading
  - 2014b, Standard and guidance for the creation, compilation, transfer and deposition of archaeological archives, Chartered Institute for Archaeologists, Reading
- English Heritage, 2011, Environmental Archaeology; a guide to theory and practice of methods, from sampling and recovery to post-excavation, Swindon, Centre for Archaeology Guidelines



- Greig J., 1991 The British Isles, in W. van Zeist, K. Wasylikowa, K-E. Behre (eds) *Progress in Old World Palaeoethnobotany*, Rotterdam, 229-334
- Royal HaskoningDHV, 2014 Perpetuus Tidal Energy Centre: ES Chapter 20: Onshore Archaeology and Cultural Heritage
- Mepham, L., 2000, Pottery, in C.J. Young, *Excavations at Carisbrooke Castle, Isle of Wight, 1921-1996*, Salisbury: Wessex Archaeol. Rep. 8, 98–131
- Oxford Archaeology Unit, 1993, Flowers Brook Recreation Ground, Ventnor, Isle of Wight: Archaeological Evaluation, unpublished client report
- RPS Consultants, 2002, Excavations at Flowers Brook, Ventnor, Isle of Wight, Archaeological Investigations, unpublished client report
- SMA 1993, Selection, Retention and Dispersal of Archaeological Collections, Society of Museum Archaeologists
  - 1995, *Towards an Accessible Archaeological Archive*, Society of Museum Archaeologists
- Stace, C, 1997, *New flora of the British Isles* (2<sup>nd</sup> edition), Cambridge: Cambridge University Press.
- Wessex Archaeology (WA), 2014, Perpetuus Tidal Energy Centre, Isle of Wight: Technical Appendix 20A Onshore Archaeology and Cultural Heritage Baseline Assessment, WA Report 102180.01
  - 2015, Perpetuus Tidal Energy Centre Proposed Onshore Facility, Steephill, Ventnor, Isle of Wight: Written Scheme of Investigation for an Archaeological Evaluation, WA Report T20468.01
- Zohary, D, and Hopf, M, 2000, *Domestication of plants in the Old World: the origin and spread of cultivated plants in West Asia, Europe, and the Nile Valley*, 3rd edition, Clarendon Press, Oxford.



### 10 APPENDICES

## 10.1 Appendix 1:Trench Tables

	Dimensions :	7.3m x 1.5m x 0.6m		
Trench 1	Centre line Coordinates (NGR):	455285.02, 77060.41 455287.78, 77053.68	Ground surface level:	25.65m aOD
Context No.	Category	Description		Depth
100	Topsoil	Dark yellowish brown slightly pea gravel throughout trenct Thicker at uphill end. Essen possibly due to landscaping Strat: Seals 101	h with very abrupt base. tially just turf at north end	0-0.38m bgl southern end 0-0.15m bgl northern end
101	Subsoil	Dark grey brown silty clay loam with moderate very fine green sand fragments. Base undulating but the definition between this and the top soil is very sharp. Possibly the remnants of topsoil that's been truncated by landscaping.  Strat: sealed by 101, seals 102		0.25-0.38m bgl
102	Natural	Yellow sandy clay banding of greensand outcropping at so <b>Strat</b> : sealed by 101		0.38m+ bgl
103	Cut	Cut of foul drain <b>Strat</b> : cuts 101		0.15m+ bgl
104	Fill	Backfill of foul drain pipe. Pl Mid grey yellow brown silty back fill. <b>Strat</b> : fill of 103		0.15m+
Comment	s: Trench shortene	d due to services.		

Tronch	Dimensions :	20m x 1.5m x 1.3m		23.08m
Trench 2	Centre line Coordinates (NGR):	455295.05, 77087.32 455312.73, 77094.80	Ground surface level:	aOD
Context No.	Category	Description		Depth
200	Topsoil	Dark greyish brown silt loam with rare sub angular inclusions <30mm  Strat: seals 201		0-0.15m bgl
201	Subsoil	Mid greyish brown silt loam with moderate sub angular inclusions <50mm  Strat: sealed by 200, seals 201		0.15- 0.38m bgl



202	Layer	Made ground with brick glass and plastic inclusions. Layer very compact contains large rocks and concrete .Layer is likely to be related to the construction of the pumping station in the adjacent parcel of land.  Strat: sealed by 202, seals 203	0.38- 0.68m bgl
203	Layer	Dark greenish grey with brown hue silty clay (small sand %) may have been heavily affected by made ground layer deposited on top of it. Possibly represents a buried topsoil layer  Strat: sealed by 203, seals archaeology	0.68- 0.92m bgl
204	Layer	Mid greenish grey with brownish hue silty clay (small sand %) alluvial layer  Strat: seals 205 and cut by archaeology	0.92m+ bgl
205	Natural	Light greenish grey greensand stone blocks. <b>Strat</b> : sealed by 204.	0.92m bgl
206	Fill	Dark yellowish grey soft silty clay loam with moderate medium- to very large chalk, green sand and Jurassic limestone fragments. Secondary fill of ditch but likely some episodic backfilling with the large stones within the fill. It contained a single piece of pottery, animal bone and sparse charcoal flecking. Stone component I upper half of the fill  Strat: fill of 207, sealed by 204	0.3m thick
207	Cut	Cut of narrow linear feature running in east to west direction. It has a flat base with steep vertical sides. It is on the same alignment as shallower linear feature 209. They are separated by distance of 0.5m. It ran for 4m within the trench it was 0.45m wide and 0.3m deep. Possibly forms a boundary gully.  Strat: filled with 206, cuts 204.	0.3m
208	Fill	Dark grey silty clay loam secondary fill. No inclusions or finds. Secondary fill caused by gradual silting up of feature.  Strat: Sealed by 203, fill of 209	0.07m thick
209	Cut	Shallow linear feature on the same line as 207 and separated from it by 0.5m gap. However it very shallow when compared to 207. It has a concave base with shallow concave sides. Undated gully.  Strat: Filled with 208, Cuts 204	0.07m
210	Fill	Dark yellowish grey silty clay loam secondary fill. No finds or inclusions.  Strat: sealed by 203, fill of 210	0.3m thick
211	Cut	Cut of north to south aligned feature. Only partially revealed in trench unclear if the feature was posthole or a gully terminus. It has a concave base with convex steep sides. It is 0.5m wide and 0.3m in depth.  Strat: filled by 210, cuts	0.3m
212	Cut	Cut of north to south aligned ditch with a concave base and straight steep sides. It runs for 1.5m in the trench is 0.7m wide and 0.36m deep.  Strat: filled with 213 and 214, cuts 204	0.36m



213	Fill	Mid greenish grey with brown and yellow mottled silty clay. Basal primary fill of ditch caused by initial stabilisation of feature. It contained rare limestone inclusions <60mm and rare charcoal flecking.  Strat: Sealed by 214, fill of 212	0.09m
214	Fill	Mid greyish brown with green hue silty clay with sparse sub angular stone chert and limestone <40mm. Fill firmly compacted and diffuse with 213. It contained marine shell, charcoal, pottery and animal bone. Secondary fill of feature caused by gradual silting up through water action.  Strat: sealed by 203, fill of 212	0.24m
Commen	ts		

	Dimensions:	20m x 1.5m x 0.94m	Ground	
Trench 3	Centre line Coordinates (NGR):	455303.32, 77081.13 455311.30, 77062.81	surface level:	23.66m aOD
Context No.	Category	Description		Depth
300	Topsoil	Dark greyish brown silty loam, with sparse sub inclusions <50mm  Strat: Seals 301	0-0.18m bgl	
301	Subsoil	Mid greyish brown silty loam , with sparse sub inclusions <50mm  Strat: sealed by 300, seals 302	0.18-0.3m bgl	
302	Layer	Made ground with brick , terram, concrete and stone inclusions  Strat: sealed by 301, seals 303		0.3m- 0.78m bgl
303	Natural	Light greyish green with brown hues sandy silt with greensand stone blocks. Sits directly below made ground 302 suggesting the area had been stripped down to natural previously.  Strat: sealed by 302		0.78m+ bgl
Comments	<b>S</b> :	·		

Trench 4	Dimensions : Centre line Coordinates (NGR):	14.2m x 1.5m x 0.65m 414363.43, 144091.65 414379.77, 144106.07	Ground surface level:	24.67m aOD
Context No.	Category	Description		Depth
400	Topsoil	Mid grey black silty sandy clay, heavily bioturba <b>Strat</b> : seals 401	ated	0-0.15m bgl



401	Layer	Made ground mid yellow brown silty sand with gravel inclusions <40mmsub rounded well sorted abundant.  Made ground similar to the gravels used in a car park but with a higher sand content.  Strat: sealed by 400, seals 402	0.15m- 0.25m bgl
402	Layer	Made ground mid grey black silty clay with a touch of sand, building debris inclusions including ceramic building material, scaffolding pole, metal, wire, concrete etc. Probably part of the same layer as 401. Made ground related to the construction of the pumping station nearby.  Strat: Sealed by 402, seals cut 404	0.21- 0.50m bgl
403	Natural	Light yellow brown silty clay with chalk banding, chalk inclusions <70mm with sub angular- sub rounded, moderately sorted abundant.  Strat: cut by 404	0.50m+ bgl
404	Cut	Cut of irregular feature. Possible posthole or more likely a small infilled depression very similar material to 402. the feature had an irregular base a concave slope on its southeast side and a straight on its northwest edge. The southeast side was shallow while the northwest side was steep. The feature measured 0.5m x 0.4m x 0.07m. <b>Strat</b> : filled with 405, cuts 403	1.09m deep
405	Fill	Backfill, mid grey black sandy silty clay it feels 'gritty'. It contained chalk and gravel inclusions. Chalk inclusions were <60mm sub angular poorly sorted. Gravel inclusions <30mm rounded, moderately sorted, rare. It contained 1 piece of pottery, glass and pieces of slag.  Strat: sealed by 402, fill of 404	0.19m thick
Comments	s:	•	

	Dimensions :	22m x 1.8m x 2.5m		
Trench 5	Centre line Coordinates (NGR):	455330.76, 77082.09 surface level:		125.66m aOD
Context No.	Category	Description	Depth	
500	Topsoil	Dark greyish brown silt loam rare sub angular inclusions <30mm  Strat: seals 501 and 510	0-0.12m	
501	Layer	Made ground– brick , plastic, glass, subsoil an mixed  Strat: seals 503, sealed by 500	0.12m-0.8m bgl	
502	Layer	Buried topsoil dark greyish brown silt loam, rar angular inclusions <30mm  Strat: sealed by 501, truncated by 509	0.52-0.61m bgl	



503	Layer	Buried subsoil. Mid greyish loam silt loam with common chalk inclusions <50mm  Strat: sealed by 501, seals 504	061- 0.7m bgl
504	Natural	Natural. Off-white chalk with some pronounced bedding and common patches of sub rounded boulders.  Strat: sealed by 508 and 503	Encountered between 0.7-2.5m+
505	Layer	Blue grey compact silty clay beneath 510. Layer caused by puddling and ground disturbance.  Strat: Sealed by 510	0.82-1.05m bgl
506	Layer	Dark yellow brown compact dry silty clay with rare moderate small-medium sub rounded to angular chalk. Colluvial layer  Strat: sealed by 505, seals 507	1.05-1.6m bgl
507	Layer	Yellow brown compact calcareous silty clay with moderate- common, small –medium sub rounded-angular chalk. Colluvial Layer  Strat: sealed by 506, seals 508	1.6-1.95m bgl
508	Layer	Dark yellow brown calcareous silty clay with chalk inclusions small – medium, moderate-common, sub round- angular. Colluvial layer  Strat: sealed by 507, seals 505	2-2.5m bgl
Comment	s. The trench wa	is shortened due to excessive depth of natural geology	

**Comments**: The trench was shortened due to excessive depth of natural geology.

### 10.2 Appendix 2: Environmental Data

Table 2: Assessment of the charred plant remains and charcoal

Samples					Flot							
Feature	Context	Sam	1100	. Flot	Flot % roots	Charred Plant Remains				Charcoal	Other	Anal
reature	Context	ple		(ml)		Grain	Chaff	Other	Comments	>4/2mm	Other	ysis
Trench 2	Trench 2 – Medieval Ditch											
212	214	1	30	40	10	A*	-	۸	Free-threshing wheat + barley grain frags, Vicia faba, ?Vicia/Pisum, Vicia/Lathyrus, Avena/Bromus, Rumex	5/2 ml	Sab (A), periwinkle	Р

Key:  $A^{***}$  = exceptional,  $A^{**}$  = 100+,  $A^{*}$  = 30-99, A = >10, B = 9-5, C = <5; Sab = small animal bones, Analysis: P = plant



#### OASIS ID: wessexar1-217743 10.3

**Project details** 

PTEC - proposed onshore facility, Steephill, Ventnor, Isle of Wight; Archaeological Project name

Evaluation

Short description of

the project

Evaluation trenches on land at Steephill, Ventnor, revealed a ditch and two gullies. Artefactual and environmental evidence suggests that this was part of a wider settlement dating to between C11th - C13th, with one possibly residual sherd of pottery dating to

between C5th - C8th.

Project dates Start: 29-06-2015 End: 03-07-2015

Previous/future

work

Yes / Not known

Any associated project reference

codes

102181 - Contracting Unit No.

Type of project Field evaluation Current Land use Other 5 - Garden Monument type **DITCH Medieval** 

Significant Finds POTTERY Early Medieval

Significant Finds **POTTERY Medieval** 

**Project location** 

Country England

Site location ISLE OF WIGHT ISLE OF WIGHT VENTNOR Steephill, Ventnor, Isle of Wight

Postcode

Study area c.10000.00 Square metres

Site coordinates SZ 55290 77091 50.5903390277 -1.21883038491 50 35 25 N 001 13 07 W Point

Height OD / Depth Min: 20.90m Max: 22.18m

**Project creators** 

Name of Organisation Wessex Archaeology

Project brief originator

Wessex Archaeology

Project design originator

Bruce Eaton

Project

director/manager

Bruce Eaton

Project supervisor

Simon Flaherty Consortium

Type of sponsor/funding

body

Name of sponsor/funding

body

Perpetuus Tidal Energy Centre



#### **Project archives**

Physical Archive recipient

Isle of Wight Heritage Service

Physical Contents

"Animal Bones","Ceramics"

Digital Archive recipient

Isle of Wight Heritage Service

Digital Contents

"Survey"

Digital Media available

"GIS","Survey","Text"

Paper Archive

recipient

Isle of Wight Heritage Service

Paper Contents

"Survey"

Paper Media available

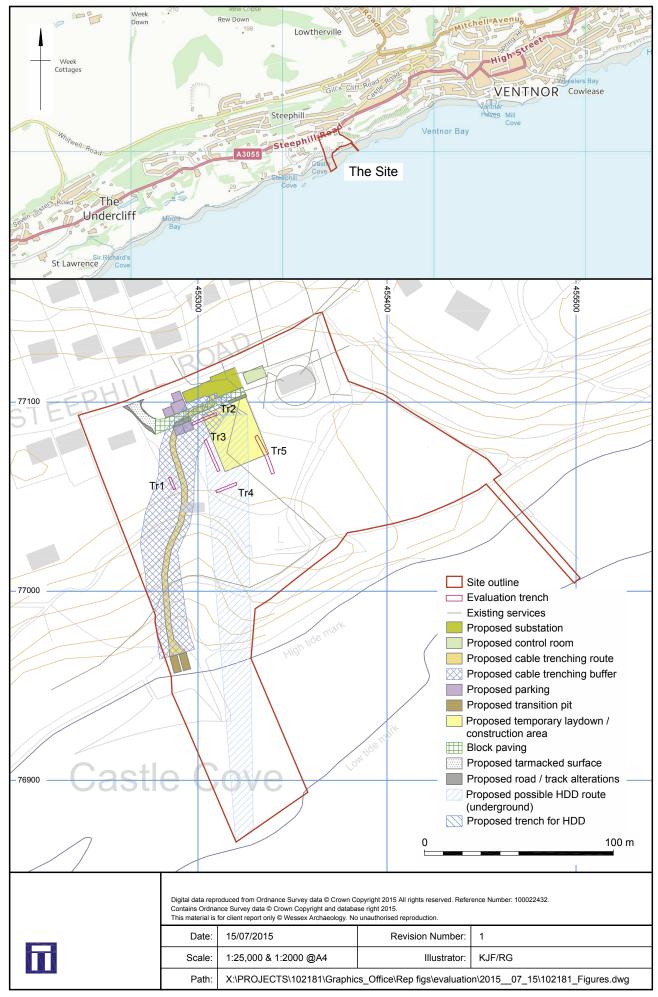
"Context sheet","Diary","Drawing","Report","Section"

Entered by

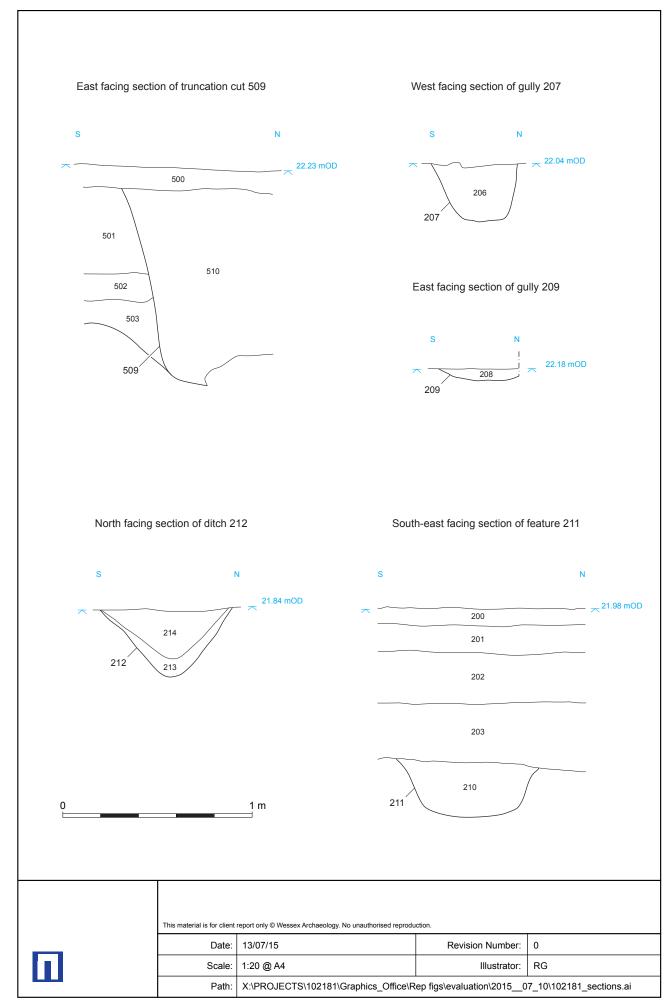
Bruce Eaton (b.eaton@wessexarch.co.uk)

Entered on

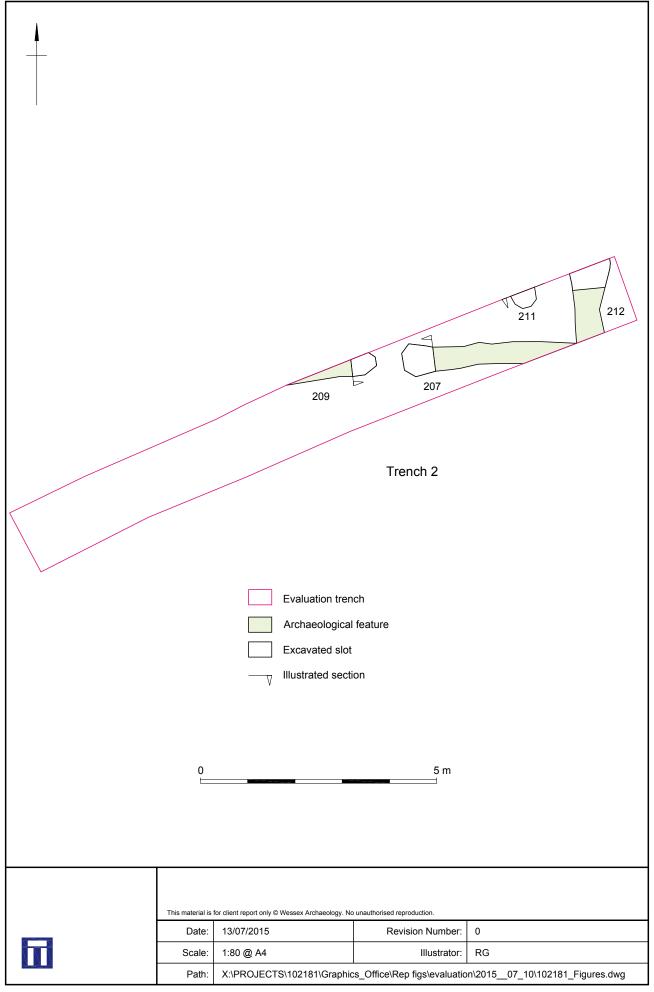
15 July 2015



Site and trench location Figure 1



Sections Figure 2



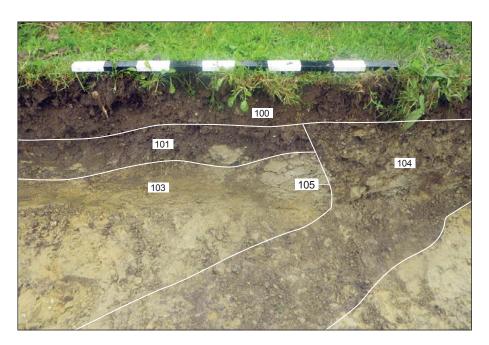


Plate 1: East facing representative section of Trench 1



Plate 2: View from the south of Trench 1

This material for client report only @ Wessex Archaeology. No unauthorised reproduction.							
	Date:	13/07/2015	Revision Number:	0			
Ш	Scale:	n/a	Illustrator:	RG			
	Path:	X:\PROJECTS\102181\Graphics_Office\Rep figs\evaluation\2015_07_10\102181_pl01.ai					

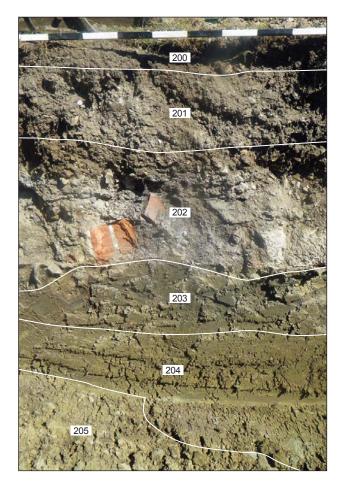


Plate 3: South facing representative section of Trench 2

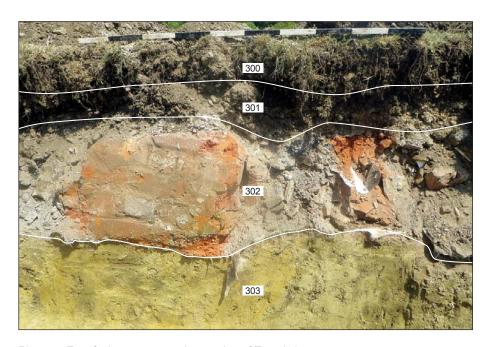


Plate 4: East facing representative section of Trench 3

	This material for client report only © Wessex Archaeology. No unauthorised reproduction.					
	Date:	13/07/2015	Revision Number:	0		
	Scale:	n/a	Illustrator:	RG		
8	Path:	X:\PROJECTS\102181\Graphics_Office\Rep figs\evaluation\2015_07_10\102181_pl02.ai				



Plate 5: North facing section of ditch 212



Plate 6: West facing section of gully 207

	This material for client report only © Wessex Archaeology. No unauthorised reproduction					
_	Date:	13/07/15	Revision Number:	0		
	Scale:	n/a	Illustrator:	RG		
	Path:	X:\PROJECTS\102181\Graphics_Office\Rep figs\evaluation\2015_07_10\102181_pl03.ai				



Plate 7: North-east facing section of modern feature 404

	This material for client report only © Wessex Archaeology. No unauthorised reproduction					
_	Date:	13/07/15	Revision Number:	0		
lil	Scale:	n/a	Illustrator:	RG		
	Path:	X:\PROJECTS\102181\Graphics_Office\Rep figs\evaluation\2015_07_10\102181_pl04.ai				





