



**West Wight Technology Park
Wellow, Isle of Wight**

Archaeological Evaluation Report



**WEST WIGHT TECHNOLOGY PARK
WELLOW, ISLE OF WIGHT
ARCHAEOLOGICAL EVALUATION REPORT**

Prepared on behalf of;

Your Energy Ltd.

Through;
Terence O'Rourke
Everdene
House
Deansleigh Road
Bournemouth
BH7 7DU

by
**Wessex Archaeology
Portway House
Old Sarum Park
SALISBURY
SP4 6EB**

Report ref.: 61880.02

January 2006

**WEST WIGHT TECHNOLOGY PARK
WELLOW, ISLE OF WIGHT**

ARCHAEOLOGICAL EVALUATION REPORT

CONTENTS

1	INTRODUCTION.....	1
1.1	PROJECT BACKGROUND	1
1.2	TOPOGRAPHY, GEOLOGY AND HYDROLOGY	2
1.3	ARCHAEOLOGICAL BACKGROUND	2
1.4	CURRENT LAND-USE	2
2	AIMS AND OBJECTIVES	2
3	EVALUATION STRATEGY.....	3
4	METHODOLOGY	3
4.1	GENERAL	3
4.2	TRENCH LAYOUT.....	3
4.3	GROUND CONDITIONS AND CONFIDENCE RATING.....	4
5	RESULTS	4
5.1	SUMMARY	4
5.2	RESULTS BY TRENCH.....	4
	<i>Trench 1</i>	4
	<i>Trench 2</i>	5
	<i>Trench 3</i>	5
	<i>Trench 4</i>	6
	<i>Trench 5</i>	7
	<i>Trench 6</i>	7
	<i>Trench 7</i>	8
6	FINDS EVIDENCE	8
7	PALAEO-ENVIRONMENTAL EVIDENCE	9
7.1	INTRODUCTION AND ENVIRONMENTAL SAMPLES TAKEN	9
7.2	CHARRED PLANT REMAINS AND CHARCOALS	9
	<i>Charred plant remains</i>	9
	<i>Charcoal</i>	9
7.3	LAND AND FRESH/BRACKISH WATER MOLLUSCS	10
7.4	GEOARCHAEOLOGICAL OVERVIEW	10
8	DISCUSSION AND CONCLUSIONS	10

APPENDICES

Appendix 1 - Trench descriptions

FIGURES

- Figure 1** Site and Trench Location Plan
- Figure 2** Trenches 1-4
- Figure 3** Trenches 5-7
- Figure 4** Trench 1 plan, sections and plates
- Figure 5** Trench 4 plan, section and plate
- Figure 6** Trench 6 plan and plate
- Figure 7** Trench 7 plan, section and plate

PLATES

- Plate 1** Ditch 108
- Plate 2** Trench 1 showing probable hillwash deposit 102
- Plate 3** Ditches 402 and 404
- Plate 4** Soil profile showing find spot of animal bone within (601)
- Plate 5** Gully 702

**WEST WIGHT TECHNOLOGY PARK
WELLOW, ISLE OF WIGHT**

ARCHAEOLOGICAL EVALUATION REPORT

SUMMARY

Wessex Archaeology was commissioned by Your Energy Limited through their Consultant Terence O'Rourke, to undertake an archaeological field evaluation of the proposed locations of six wind turbines south of Wellow on the Isle of Wight, centred on SZ 38230 87630. The trenches were excavated to investigate the footprints of the proposed wind turbines, their associated crane pads and a temporary construction compound, and were situated in a number of agricultural fields along a 1.5km east-west aligned transect. The fieldwork was undertaken between 4th and 9th January 2006.

The purpose of the investigation was to inform the planning process with regard to archaeological matters during the preparation of an Environmental Impact Assessment (EIA) to support the planning application.

A total of seven 1.8m-wide trenches of either 25m or 50m length were excavated. The investigation identified a low level of archaeology below subsoil level in three out of the seven trenches, as well as modern land drains and evidence of recent chalk quarrying. In all cases the features were of limited dimensions, undated and most likely served drainage functions.

Trenches 1, 2 and 3 located in the lower-lying terrain, generally below 50m above Ordnance Datum, exposed varied and complex substrata. Previous work in the vicinity has demonstrated that interpretation of these deposits can be difficult. Differentiation between natural *in situ* geology and re-worked colluvium can be problematic. There exists therefore some potential for archaeological remains to be within or beneath these deposits, should they prove to be of colluvial origin.

**WEST WIGHT TECHNOLOGY PARK
WELLOW, ISLE OF WIGHT**

ARCHAEOLOGICAL EVALUATION REPORT

ACKNOWLEDGEMENTS

Terence O'Rourke commissioned the archaeological evaluation on behalf of Your Energy Ltd. Wessex Archaeology would like to thank John Trehy of Terence O'Rourke for his assistance throughout the course of the project. The investigation was monitored by Owen Cambridge, Isle of Wight Council's Planning Archaeologist (IOWPA). His helpful comments and advice were welcomed.

The project was managed for Wessex Archaeology by Jonathan Nowell and directed in the field by Brigitte Buss. The fieldwork was undertaken by Mike Dinwiddy and Neil Fitzpatrick. This report was prepared by Brigitte Buss. Finds were assessed by Lorraine Mephram and environmental samples were assessed by Mike Allen. Illustrations were prepared by Karen Nichols.

The samples were processed by Laura Caitlin. The bulk sample was assessed by Dr Chris J. Stevens. The molluscs were assessed by Dr Michael J. Allen. The requirements for radiocarbon dating were assessed by Dr Michael J. Allen, who edited Section 6 of this report.

**WEST WIGHT TECHNOLOGY PARK
WELLOW, ISLE OF WIGHT**

ARCHAEOLOGICAL EVALUATION REPORT

1 INTRODUCTION

1.1 Project Background

- 1.1.1 Wessex Archaeology was commissioned by Your Energy Limited (the Client) through their Consultant Terence O'Rourke, to undertake an archaeological field evaluation of the proposed locations of six wind turbines south of Wellow on the Isle of Wight, centred on SZ 38230 87630 (hereafter, 'the Site'). See **Figure 1**.
- 1.1.2 As part of the planning application process for the proposed wind turbines an Environmental Impact Assessment (EIA) is being prepared. Two phases of archaeological assessment, comprising a desk-based assessment and geophysical survey (Cambrian Archaeology), preceded the current investigation. These identified the sensitive archaeological nature of the Site, which was confirmed by the recent location of important stray finds within the locality.
- 1.1.3 The need for a further stage of archaeological assessment, through a programme of trial trenching, was subsequently identified by the Isle of Wight Council's Planning Archaeologist (IOWPA), the results of which would be used to fully inform the planning process in relation to archaeological matters.
- 1.1.4 In response to this requirement a Written Scheme of Investigation (WSI) for a programme of archaeological trial trenching was prepared by Wessex Archaeology (WA December 2005 Ref 61880.01) and submitted to and approved by IOWPA prior to the fieldwork commencing. The WSI set out a detailed methodology and standards for the conduct of the trial trench evaluation, in response to the strategy agreed by the Consultant and Owen Cambridge of IOWPA.
- 1.1.5 The area subject to evaluation comprised a number of agricultural fields south-west of the village of Wellow. Trenches were excavated to investigate the footprints of the proposed wind turbines, their associated crane pads and a temporary construction compound along a 1.5km east-west aligned transect. The fieldwork was undertaken between 4th and 9th January 2006.

1.2 Topography, Geology and Hydrology

- 1.2.1 The drift geology of the Site consists of Oligocene and Eocene clays, more specifically the Osborne and Headon Beds (GsoGB, Part of Map Sheets (Drift) 330, 331, 344, 345. 1976).
- 1.2.2 Topographically, the Site is heavily undulating, but generally rising from north to south towards the Downs. Levels above Ordnance Datum (aOD) around Wellow lie at 24m aOD, with those near Shalcombe reaching up to 70m aOD.
- 1.2.3 A small watercourse traverses the Site north to south in its eastern half, effectively connecting the settlements of Wellow and Shalcombe. Ground water was observed to rise in all lower-lying trenches despite mostly dry weather conditions, suggesting a relatively high permanent water table.

1.3 Archaeological Background

- 1.3.1 Previous archaeological monitoring of a pipeline route in the north-western corner of the Site, in July 2001, revealed evidence for archaeological remains dating from the prehistoric to Post-medieval periods.
- 1.3.2 More specifically it is postulated that the Site probably forms part of a larger prehistoric and Saxon funereal landscape. The latter aspect is supported by the identification of significant stray finds at nearby locations, such as the 7th-9th century skillet from Shalfleet, which is thought to have originated from a richly furnished grave in the vicinity (MLA 2004/5: 56).
- 1.3.3 The high number of Bronze Age barrows survive in the area surrounding the Site, particularly along the top of Downs to the south, indicate this to be a significant prehistoric funerary landscape.

1.4 Current land-use

- 1.4.1 During the investigation the fields were under active mixed crop cultivation.

2 AIMS AND OBJECTIVES

- 2.1.1 The objective of the evaluation was to gather sufficient information to establish the presence/absence, extent, condition, character, quality and date of any archaeological deposits present on the locations of the six turbines for the proposed wind farm.

- 2.1.2 The results of the evaluation will be used to inform the planning process through clarification of the potential impact upon the archaeological resource of the proposed development, and seek to aid in the establishment of a mitigation strategy which takes into account both the quality of the archaeology and the engineering requirements of the developer.

3 EVALUATION STRATEGY

- 3.1.1 The WSI (WA December 2005 Ref 61880.01) detailed the excavation of six 50m x 1.8m trial trenches within the proposed locations of the six turbine foundation plinths and their associated crane pads. The trench located for the investigation of Turbine 1 was split into two trenches, each of 25m length, in order to extend the area of investigation westwards towards the proposed location for a temporary site compound. Trenches were numbered 1-7 from west to east in the field to reflect this. See **Figures 1-3**.

4 METHODOLOGY

4.1 General

- 4.1.1 All evaluation was conducted in compliance with the standards outlined in the Institute of Field Archaeologist's Standard and Guidance for Archaeological Field Evaluations (as amended 1994), excepting where they are superseded by statements made in the WSI. All work was furthermore carried out in accordance with the Health and Safety at Work etc. Act 1974 and the Management of Health and Safety Regulations 1992, and all other relevant Health and Safety legislation, regulations and codes of practice in force at the time.

- 4.1.2 Fieldwork was monitored by Owen Cambridge (IOWPA) on behalf of the Local Planning Authority and John Trehy (the Consultant) on behalf of the Client.

4.2 Trench layout

- 4.2.1 All trenches were set out with the aid of a Global Positioning System (GPS). No alterations to the proposed trench locations or dimensions were necessary or undertaken, excepting a small extension to Trench 1 (see below) to further investigate a potential archaeological feature. This extension to Trench 1 was undertaken after consultation with the IOWPA.
- 4.2.2 All trenches were excavated in line with the WSI, using a 360° tracked excavator equipped with a toothless bucket. Machine excavation was undertaken down to either the first archaeological horizon or onto sterile

natural, whichever was encountered first. All excavated spoil was stored adjacent to the trenches and scanned by metal-detector.

- 4.2.3 Sample excavation of features was undertaken by hand and recorded using Wessex Archaeology's *pro forma* system.
- 4.2.4 Limited environmental sampling was undertaken in agreement with the IOWPA and Consultant, and the results are presented below.
- 4.2.5 On completion of excavation and recording all trenches were backfilled with the excavated arisings in reverse order and left level, following sign-off inspections on Friday 7th January 2006 and Monday 9th January 2006 by the IOWPA.

4.3 Ground conditions and confidence rating

- 4.3.1 Weather conditions were predominantly cold and dry, with ground conditions varying between damp to slightly wet. Archaeological visibility during machining was good. Ground water influx in the lower-lying trenches did not impede archaeological investigation.

5 RESULTS

5.1 Summary

- 5.1.1 The investigation revealed a generally low level of archaeology of an unknown date, within the proposed locations of the turbine foundation plinths, associated crane pads and temporary construction compound. Archaeological or potential archaeological features were found to be present in three out of the seven trenches (Trenches 1, 4 and 7), see **Figures 1, 2 & 3**. Objects recovered by metal-detector, where datable, were exclusively of a Post-medieval date.

5.2 Results by trench

Trench 1

- 5.2.1 Trench 1 was located to investigate the footprint of the proposed temporary construction compound (see **Figures 1, 2 & 4**).
- 5.2.2 The trench was aligned NNE-SSW (following the alignment of the proposed compound) and situated at the far west end of the Site. In accordance with the WSI it was initially excavated to measure 25m in length, and, as with all other trenches, 1.8m wide. The trench was aligned laterally along the hill slope, and consequently the ground surface only showed a gradual incline from 49.2m aOD at the NNE to 50.1m aOD to at the SSW.

- 5.2.3 Trench 1 was excavated in two phases: initially excavation was undertaken to the originally agreed dimensions; these were extended during the monitoring visit on Friday 7th January by a short (c. 3m long) perpendicular ‘dog-leg’ to the west at the northern end of the trench. The object of the additional excavation was to confirm the archaeological nature of the feature identified in this area.
- 5.2.4 Overburden in Trench 1 consisted of modern ploughsoil (top soil) of 0.25m thickness overlying a colluvial subsoil which increased in depth northwards along the hillslope from between 0.25m at the southern end to 0.56m at the northern end. The natural at the base of the trench consisted of a mixture of light yellowish grey clay and soliflucted chalk (**Plate 2**).
- 5.2.5 An approximately east-west aligned ditch or gully of 0.22m depth (group 108) (**Plate 1**) was observed to cross the trench at its northern extent cut into the soliflucted chalk, and featured a potential eastern terminus. Initially it was unclear whether the feature represented a linear feature or a tree bole, but the extended excavation confirmed its archaeological nature. The ditch was excavated in three sections, which revealed no dating evidence, but suggested the presence of charcoal and burnt flint in its upper fill. On request of the IOWPA a bulk environmental sample was collected for the recovery of environmental evidence and finds (see **Section 7**).

Trench 2

- 5.2.6 Trench 2 was located to investigate the proposed footprint of Turbine 1 and associated crane pad (see **Figures 1 & 2**)
- 5.2.7 Trench 2 measured 25m in length and was aligned east-west. Ground levels sloped from 49.6m aOD to the east to 48.2m aOD to the west.
- 5.2.8 Within this trench a 0.33m thickness of modern ploughsoil (topsoil) overlay an approximate 0.25m depth of colluvial subsoil. At 0.58m Below Ground Level (BGL) a light yellow natural was exposed, consisting of clay and soliflucted chalk. This became increasingly mixed with soil components upslope, resulting in a darker hue there. Two modern chalk-lined land drains ([203] and [205]) were observed to traverse the trench in a north-south direction, however no archaeological features were identified within this trench.

Trench 3

- 5.2.9 Trench 3 was located to investigate the proposed footprint of Turbine 2 and associated crane pad (see **Figures 1 & 2**).

- 5.2.10 Trench 3 measured 50m in length and was aligned north-south. Located on higher-lying terrain, ground levels rose from 60.89m aOD to the north to 62.9m aOD to the south.
- 5.2.11 Consistent with the elevated position of this trench, a reduced level of modern overburden was observed, with only 0.28m thick active ploughsoil directly overlying soliflucted chalk, with no subsoil present.
- 5.2.12 The trench featured two distinct natural deposits: largish chunks of chalk bedrock mixed with a soil matrix (302) covering the southernmost two thirds of the trench, overlying a solid yellowish-grey soliflucted chalk downslope to the north (301). Subsequently the trench depth was reduced by a further 0.12m in order to confirm the stratigraphic sequence of these deposits and their natural origin.
- 5.2.13 It is assumed that (302) represents a diffuse interface between the natural chalk and the ploughsoil due to repeated ploughing, and that its absence further down the slope may be due to erosional factors.

Trench 4

- 5.2.14 Trench 4 was located to investigate the proposed footprint of Turbine 3 and associated crane pad (see **Figures 1, 3 & 5**).
- 5.2.15 Trench 4 was aligned east-west and measured 50m in length and was, again, situated within the higher-lying terrain. Ground levels gradually varied from 62.2maOD to at the western end to 61.6m aOD at the eastern end.
- 5.2.16 Natural deposits in Trench 4 were identical with those in Trench 3, with a diffuse interface of mixed chalk and soil (401) overlying more solid soliflucted chalk bedrock. As with Trench 3 this was confirmed by later re-machining of the trench. Topsoil depth in this trench was recorded as 0.33m, with the topsoil directly overlying the natural deposits.
- 5.2.17 In this trench the chalk/soil interface represented by (401) could be identified as the archaeological horizon due to the presence of two north-south aligned linear features ([402], [404]) cut through the deposit at the eastern extreme of the trench (**Plate 3**).
- 5.2.18 Upon excavation, feature depth proved to be 0.29m and 0.38m respectively, with [404] representing a slightly deeper replacement cut of the earlier boundary. Both features were 100% hand excavated for finds retrieval following recording, but no artefacts were recovered, and the features remain undated.

Trench 5

- 5.2.19 Trench 5 was located to investigate the proposed footprint of Turbine 4 and associated crane pad (see **Figures 1 & 3**).
- 5.2.20 The trench measured 50m in length and was aligned north-south. Ordnance Datum levels ranged from 61.2m aOD at the southern end to 59.6m aOD to the north.
- 5.2.21 The active ploughsoil in this trench was 0.3m deep, and noticeably more loose and chalkier than those of the earlier trenches. Below it machining exposed the backfill of relatively recent quarrying activity of 0.4m thickness, featuring distinct laminations of pulverised chalk and topsoil (represented in section by typical ‘tip-lines’). At 0.7m depth BGL solid soliflucted chalk natural, (504), was encountered below the backfill.
- 5.2.22 At the northern end of the trench the edge of the quarry pit could be seen to cut through a chalk/soil interface layer, (502), identical to that observed in Trenches 3 and 4. This, and the apparently relatively shallow depth of the cut, leads to the conclusion that this deposit itself was the object of the quarrying activity, possibly for the recovery of chalk-rubble for the use in land drains.
- 5.2.23 Recent quarrying activity could be visually confirmed on site in the presence of a raised land ridge within the field to the south-east of the trench.

Trench 6

- 5.2.24 Trench 6 was located to investigate the proposed footprint of Turbine 5 and associated crane pad (see **Figures 1, 3 & 6**).
- 5.2.25 Trench 6 was 50m long and aligned north to south, with ground levels sloping slightly from north to south from 46.3m aOD to 45.85m aOD. The trench was situated in the low-lying terrain adjacent to the watercourse which ran across the Site, its close proximity to the brook caused influx of ground water into the trench base.
- 5.2.26 The overburden consisted of 0.27m thick ploughsoil (600) overlying a colluvial subsoil of an average thickness of 0.4m. The depth of the subsoil, (601), increased within the centre of the trench, where it infilled a natural hollow or runnel (**Plate 4**). A small amount of fairly large fragments of animal bone was recovered from this deposit.
- 5.2.27 The natural in this trench consisted of yellowish-grey chalk and soliflucted chalk, similar to that encountered in Trenches 1 and 2. In this trench, however, the natural featured a higher number of inclusions as well as reddish/blueish coloured patches, which is typical of the

Osborne Beds (British Association for the Advancement of Science. 1964:31) and, although visually misleading, not of anthropogenic origin

- 5.2.28 Two modern land drains, one chalk-filled and in north-south alignment, [605], and one in SW-NE alignment, [603], were located in the trench. No features of an archaeological nature were identified during the investigation of the trench.

Trench 7

- 5.2.29 Trench 7 was located to investigate the proposed footprint of Turbine 6 and associated crane pad (see **Figures 1, 3 & 7**).
- 5.2.30 Trench 7 was aligned east-west, and measured 50m in length. It was situated on the higher-lying terrain at the far eastern side of the Site. Ground levels sloped west to east from 62.4m aOD to 61.4m aOD.
- 5.2.31 A 0.32m depth of topsoil was present within the trench, with a complete absence of subsoil. Directly below the topsoil the natural consisted of yellowish clay mixed with soliflucted chalk, (701), as observed elsewhere on site. However, in this trench the natural was pocked with large areas of brownish soil with frequent manganese staining. These were interpreted to be solution hollows, or possibly less likely fairly recent tree disturbances, infilled with remnant subsoil/topsoil. The area is thought to have been arable land for a period in excess of 300 years (*J. Trehy. Pers. comm.*), which makes the latter possibility less likely.
- 5.2.32 One shallow gully, [702] (**Plate 5**), was observed to cut across the Trench (701) in a SE-NE alignment, featuring a single sterile fill, (703). Sample excavation did not recover any artefacts.

6 FINDS EVIDENCE

- 6.1.1 Finds recovered during the evaluation were minimal, and comprised 13 fragments of animal bone (unidentifiable to species) from subsoil (601) in Trench 6, and six post-medieval metal objects from topsoil in Trenches 1, 4 and 6 (recovered by metal detector). The metalwork included two copper alloy buttons, a cartridge case and a lead musket ball. It is not recommended that these finds are retained for long-term curation.

Table 1: Finds Summary; quantification by type and context

Context	Material	Count	Weight	Comments
100	CuAlloy	2	3	1 button, 1 fragment
400	CuAlloy	3	22	1 button, 1 fragment, 1 cartridge
600	Lead	1	29	shot
601	Animal Bone	13	38	unidentified

7 PALAEO-ENVIRONMENTAL EVIDENCE

7.1 Introduction and environmental samples taken

7.1.1 A single bulk sample of 20 litres was taken from an undated east-west ditch (108) located within Trench 1. The sample was processed for the recovery and assessment of charred plant remains and charcoals.

7.2 Charred Plant Remains and Charcoals

7.2.1 The sample was processed by standard flotation methods; the flot retained on a 0.5 mm mesh, the residue fractionated into 5.6 mm, 2mm and 1mm 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 presence of charred remains quantified (Table 2) in order to present data to record the preservation and nature of the charred plant and charcoal remains and assess their potential to address the project and subsidiary aims.

7.2.2 The flots were very small and dominated by fine roots, with occasional shells of *Cecilioides acicula*. These may be indicative of stratigraphic movement, reworking or the degree of contamination by later intrusive elements. There was very little charred material.

Charred plant remains

7.2.3 No identifiable charred macroscopic remains were seen within the flot.

Charcoal

7.2.4 Charcoal was noted from the bulk sample flots and is recorded in Table 2. Some small fragments of charcoal were noted within the flots. All but 4-5 fragments were under 2mm in size. These results cannot usefully contribute to the objectives of the evaluation.

Table 2: Assessment of the charred plant remains and charcoal

Feature type/no	Context	Sample	size litres	flot size ml	Grain	Chaff	Flot			Charcoal >2mm	Other	Residue	
							Weed uncharred	seeds charred				Charcoal >5.6mm	analysis
Ditch [106]	107	1	20	15 ¹⁴	-	-	-	-	C	moll-t (C)	-	-	

KEY: A** = exceptional, A* = 30+ items, A = ≥10 items, B = 9 - 5 items, C = < 5 items, (h) = hazelnuts, smb = small mammal bones; Moll-t = terrestrial molluscs Moll-f = freshwater molluscs;

Analysis: C = charcoal, P = plant, M = molluscs, C14 = radiocarbon suggestions

NOTE: ¹flot is total, but flot in superscript = ml of rooty material. ²Unburnt seed is in lower case to distinguish it from charred remains

7.3 Land and fresh/brackish water molluscs

- 7.3.1 No samples or sequences of samples were taken specifically for land snails, as they do not normally survive well on this the clay rich Oligocene geology (Preece 1980). Nevertheless, during the processing of bulk soil sample for the recovery of charred remains, snails were noted, and recorded (Table 2), in the flots. These was a single shell of *Vallonia excentrica*, a few fragments of *Vallonia* sp. and two fragments of *Discus rotundatus*.
- 7.3.2 Whilst the presence of shells indicates the potential for survival of calcareous subfossils (bone and shell) in these deposits, shell numbers are too few to even broadly characterise the nature of the wider landscape.

7.4 Geoarchaeological Overview

- 7.4.1 The site lies on Oligocene beds below the shallow chalk escarpment. The Oligocene Beds here comprise Osborne and Hendon Series which are predominantly clays and marls. The Oligocene beds at Wellow are less disturbed than many other tertiary deposits on the Isle of Wight, but the 'exceptionally broad dip-slope produces a kind of glacis near the foot of the Downs, in the neighbourhood of Shalcombe and Wellow', (Osborne Wight 1921, 141). The debris gives rise to colluvial brown earths and colluvium which seals and buries and contain archaeological sites (Allen 1994; 2005), and consequently the area supports good agricultural soil on the broad dip-slope particularly at Wellow (Osborne White 1921, 181).
- 7.4.2 Previous testpit investigations in the vicinity (1986-7) revealed shallow brown earths and colluvial brown earths (0.3m thick) under which there were shallow medieval and post medieval drainage features containing sparse charcoal flecks. Significantly these were cut into over 0.6m thickness of calcareous clay-rich colluvium, which sealed two Middle Bronze Age features rich in charcoal and grain (cf. *Triticum* sp. ident. J. Ede) and scraps of Middle Bronze Age decorated urn (ApSimon pers. comm.; Tomalin pers. comm).
- 7.4.3 Augering demonstrated this deposit/s extended to within 50m of the crest of the slope.

8 DISCUSSION AND CONCLUSIONS

- 8.1.1 Evaluation within the footprints of the proposed turbines, crane pads and compound identified only a limited number of archaeological features, none of which could be positively dated. These features comprised three separate ditches or gullies, with one in each of Trenches 1, 4 and 7. A single sample was taken from the ditch in Trench

1 for palaeo-environmental assessment, however the results from assessment of this material were largely negative.

- 8.1.2 A small number of stray finds were recovered from the excavated spoils (topsoils and subsoils), through observation, by hand and by metal-detection. With the exception of thirteen small fragments of undated animal bone from Trench 6, all the finds were either Copper alloy or Lead objects dated to the Post-medieval period. These Post-medieval objects all appear consistent either with chance losses or through manuring as part of agricultural practice.
- 8.1.3 The evaluation identified differing geological formations across the Site, reflecting the changes in topography. On the hilltop above some 60m aOD (i.e. Trenches 3, 4, 5 and 7) there was an absence of subsoil formation, with topsoils overlying the soliflucted chalk, with a heterogeneous chalk/soil interface.
- 8.1.4 In lower lying areas, below some 50m aOD (i.e. Trenches 1, 2 and 6), colluvial deposits (hillwash) were identified and excavated within the trenches. However the composition of the 'natural' sub strata within these locations is, and has been previously demonstrated to be, extremely variable (see sect 7.4) and complex. It is not always possible to distinguish beyond all reasonable doubt between *in situ* geological deposits and re-worked colluvial deposits in such locations.
- 8.1.5 The results of the trial trench evaluation stand in contrast to the demonstrably rich archaeological landscape surrounding the Site. The undated ditches and gullies found on the hilltops, particularly the re-cut ditch in Trench 4, were very shallow and may indicate the impact of post-medieval ploughing and erosion on features of much larger original dimensions.
- 8.1.6 From the evaluation there remains some archaeological potential within and beneath the substrate in Trenches 1, 2 and 6, where these were to prove to be reworked or colluvial deposits rather than *in situ* natural deposits.

References

- Allen, M.J., 1988. *Aspects of the chalk landscape evolution in the Beaker period in southern England*, UnPubl. MPhil/PhD upgrading paper, Univ Soton (vol 4)
- Allen, M.J. 1994. *The land-use history of the southern English chalklands with an evaluation of the Beaker period using environmental data; colluvial deposits as cultural indicators*. Unpub Ph.D thesis, University of Southampton.
- Allen, M.J., 2005. Beaker settlement and environment on the chalk downs of southern England, *Proceedings of the Prehistoric Society* 71, 219-245
- British Association for the Advancement of Science. 1964. *A Survey of Southampton and Its Region*. Southampton University Press
- Evans, J.G., 1972. *Land Snails in Archaeology*. London, Seminar Press.
- Museum Libraries Archives. *Portable Antiquities Scheme – Annual Report 2004/2005*.
- Osborne Wight, H.J., 1921. *A short account of the geology of the Isle of Wight*. London: Memoirs of the Geological Survey of Great Britain (HMSO).
- Preece, R., 1980. *An Atlas on the Non-Marine Mollusca of the Isle of Wight*. Isle of Wight County Museum Service Natural history Series 1.
- Wessex Archaeology. 2006. *West Wight Technology Park – Written Scheme of Investigation for an Archaeological Field Investigation*. WA ref 61880.

APPENDIX 1 – TRENCH DESCRIPTIONS

Trench No.:	1	Dimensions:	25m x 1.8m (plus 3m extension)
Alignment:	NNE-SSW	Ground level (maOD):	49.2-50.1
Context	Description	Depth (mBGL)	
100	Topsoil. Mid to dark medium brown silty clay loam, sparse flint sub-rounded/sub-angular flint pebbles <0.075m diameter, occasional 'bedrock' sub-rounded/sub-angular cobbles <0.12m diameter	0.00-0.25	
101	Subsoil. Mid reddish/greyish brown silt clay, occasional flint sub-rounded/sub-angular flint pebbles < 0.03m diameter, occasional 'bedrock' pebbles. Colluvium. Noticeably increases in depth S-N.	0.25-0.56 (S)/0.83 (N)	
102	Natural. Light yellowish grey/white soliflucted chalk and clay.	0.83+	
103 Group 108	Cut of E-W aligned gully with terminus at eastern end	Feature depth 0.19	
104	Top (secondary) fill of [103]. Mid greyish brown silty clay with occasional sub-rounded/sub-angular cobbles < 0.08m diameter	Max depth 0.19m	
105	Basal (primary) fill of {103}. Very light yellowish grey brown silty clay with frequent fragments of soliflucted chalk and bedrock cobbles < 0.08m diameter	Max depth 0.09m	
106 (= 103) Group 108	Cut of gully as recorded in perpendicular trench extension towards south. Same as [103]	Feature depth 0.22m	
107 (= 105)	Fill of [106]. Same as (105). Rare charcoal and burnt flint observed but not retained. Bulk sampled (Sample No <1>)	Max depth 0.22m	

Trench No.:	2	Dimensions:	25 m x 1.8m
Alignment:	East-west	Ground level (maOD):	48.2-49.6
Context	Description	Depth (mBGL)	
200	Topsoil. Mid to dark medium brown silty clay loam, sparse flint sub-rounded/sub-angular flint pebbles <0.075m diameter, occasional 'bedrock' sub-rounded/sub-angular cobbles <0.12m diameter	0.00-0.33	
201	Subsoil. Mid reddish/greyish brown silt clay, sparse flint sub-rounded/sub-angular flint pebbles < 0.4m diameter	0.00-0.58	
202	Natural. Soliflucted chalk and clay. Light yellowish grey/white at lower slope (E), turning to light yellowish/greyish brown on upper slope (W)	0.58+	
203	Cut of north-south aligned modern chalk-lined land drain		
204	Fill of [203]		
205	Cut of north-south aligned modern chalk-lined land drain		
206	Fill of [205]		

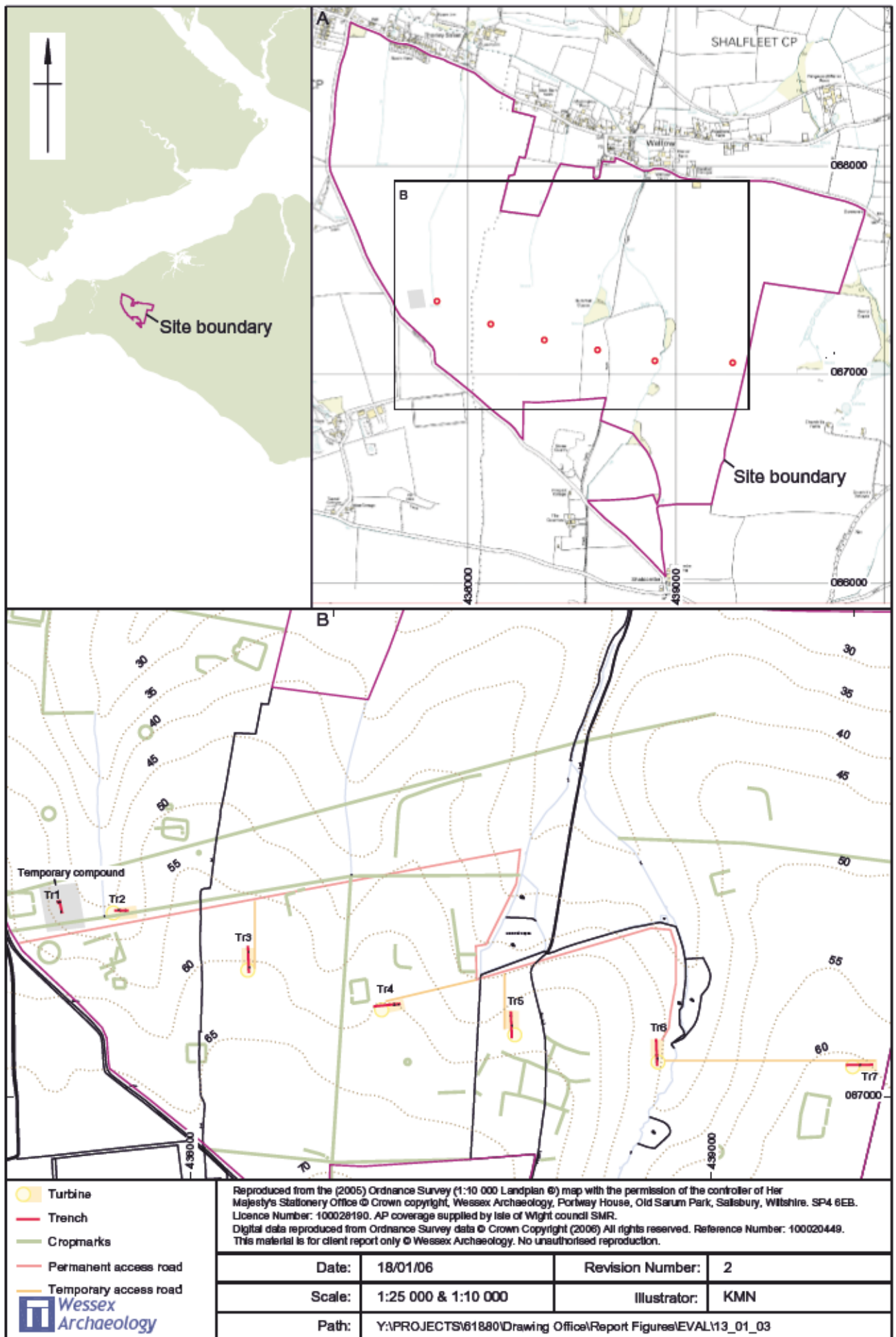
Trench No.:	3	Dimensions:	50m x 1.8m
Alignment:	North-south	Ground level (maOD):	60.9-62.9
Context	Description	Depth (mBGL)	
300	Topsoil. Mid to dark medium brown silty clay loam, sparse flint sub-rounded/sub-angular flint pebbles <0.025m diameter, occasional 'bedrock' sub-rounded/sub-angular cobbles <0.07m diameter	0.00-0.28	
301	Natural. Soliflucted light yellowish-grey chalk	0.28-0.4+	
302	Natural. Chalk chunks (0.05>0.3m diameter) mixed with brownish soil matrix, occurs c. 16-18m from southern trench end and overlies (301) across brow of elevation. Assumed to be diffuse, broad interface between solid natural and overlying soils, possibly resulting from natural processes such as frost-action. Machine-investigated but not bottomed. No evidence of anthropogenic origin.	0.28-0.4+	

Trench No.:	4	Dimensions:	50m x 1.8m
Alignment:	East-west	Ground level (maOD):	61.6-62.2
Context	Description	Depth (mBGL)	
400	Topsoil. Mid to dark medium brown silty clay loam, sparse flint sub-rounded/sub-angular flint pebbles <0.025m diameter, occasional 'bedrock' sub-rounded/sub-angular cobbles <0.07m diameter	0.00-0.33	
401	Natural. Soliflucted chalk in varying shades of yellow, grey and brown, v. fragmented. Same as (302), but with no visible interface with more solid chalk bedrock below. Also machine-investigated for depth but not bottomed.	0.33+	
402	Cut of north-south aligned linear	Feature depth 0.29m	
403	Fill of [402]. Mid-greyish brown silty clay with occasional bedrock cobbles (< 0.04m diameter) and rare flint pebbles, (< 0.02m diameter). Single, secondary fill.	Max depth 0.29m	
404	Cut of aligned linear, replacement cut of [402].	Feature depth 0.38m	
405	Fill of [404]. Basal, primary fill of linear, light yellowish-greyish brown silty clay with occasional sub-rounded/ sub-angular bedrock cobbles, < 0.065m diameter and rare flint pebbles, < 0.03m diameter	Max depth 0.26m	
406	Fill of [404]. Top, secondary fill of linear, mid-greyish brown silty clay with occasional sub-rounded/sub-angular cobbles < 0.075m diameter and rare flint.	Max depth 0.16m	

Trench No.:	5	Dimensions:	50m x 1.8m
Alignment:	North-south	Ground level (maOD):	59.6-61.2
Context	Description	Depth (mBGL)	
500	Topsoil. Mid to dark-medium greyish brown silty clay loam, sparse flint sub-rounded/sub-angular flint pebbles <0.025m diameter, occasional 'bedrock' sub-rounded/sub-angular cobbles <0.07m diameter. Noticably more loose than topsoil in other parts of field due to higher chalk component.	0.00-0.3	
501	Backfill of modern chalk quarry pit [503]. Quarrying activity observed on site by ridge north-east of trench. Distinct lamination of topsoil and chalk pockets, both represented in section and observed in plan during machining, caused by levelling of backfill.	0.3-0.7	
502	Natural. Soliflucted chalk occurring in largish chunks, same as (302) and (401). Present only in northern extent of trench and observed to dip towards (504). Assumed to represent deposit removed by quarrying.	0.3+	
503	Modern quarry cut, possibly for the recovery of chalk fragments for the use in land drains as observed across site		
504	Natural. Soliflucted light yellowish-grey chalk.	0.7+	

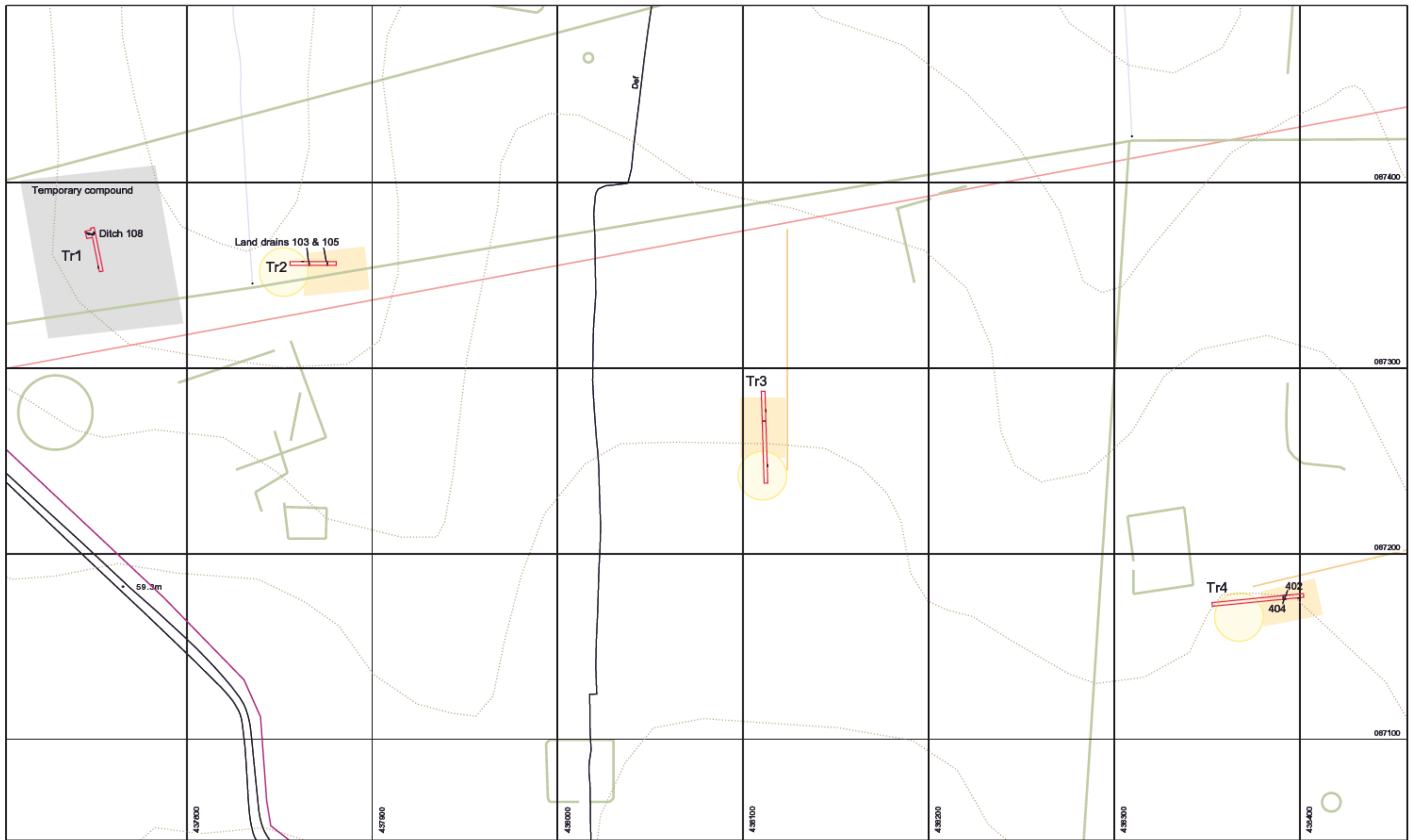
Trench No.:	6	Dimensions:	50m x 1.8m
Alignment:	North-south	Ground level (maOD):	45.8-46.3
Context	Description	Depth (mBGL)	
600	Topsoil. Mid to dark medium brown silty clay loam, sparse flint sub-rounded/sub-angular flint pebbles <0.075m diameter, occasional 'bedrock' sub-rounded/sub-angular cobbles <0.4m diameter	0.00-0.27	
601	Subsoil. Mid reddish/greyish brown silty clay with rare flint sub-rounded/sub-angular pebbles < 0.035m diameter and rare bedrock cobbles < 0.065m diameter. Colluvium. Deposit slightly thicker within natural E-W aligned runnel at centre of trench.	0.27-0.67	
602	Natural. Light yellowish/ greyish brown chalk and clay. Inclusions are occasional flint pebbles < 0.01m diameter, bedrock cobbles < 0.06m diameter, chalk pea-grit < 0.01m diameter, all sub-rounded/sub-angular. *NB: coloured (reddish/blueish) patches occur naturally within this deposit and are not of anthropogenic origin. Possibly part of Osborne Beds?	0.67-0.78+	
603	Modern SW-NE aligned land drain		
604	Fill of [603]		
605	Modern E-W aligned field drain		
606	Fill of [605]		

Trench No.:	7	Dimensions:	50m x 1.8m
Alignment:	East-west	Ground level (maOD):	61.4-62.4
Context	Description		Depth (mBGL)
700	Topsoil. Mid to dark medium brown silty clay loam, rare flint sub-rounded/sub-angular flint pebbles <0.03m diameter, sparse 'bedrock' cobbles		0.00-0.32
701	Soliflucted chalk and yellowish clay natural with sparse flint pebbles 0.05m diameter. 'Checkered' appearance of deposit due to presence of frequent clay solution hollows/(?tree disturbances?) filled with topsoil/remnant subsoil (not separately recorded). Frequent manganese inclusions within fills of hollows.		0.32+
702	Cut of SW-NE gully		Feature depth 0.4m
703	Fill of [703]. Mid yellowish brown silty clay. Single, secondary fill.		Max depth 0.4m



Site and trench location plan

Figure 1



- Turbine and crane pad
- Trench
- Cropmarks
- Permanent access road
- Temporary access road

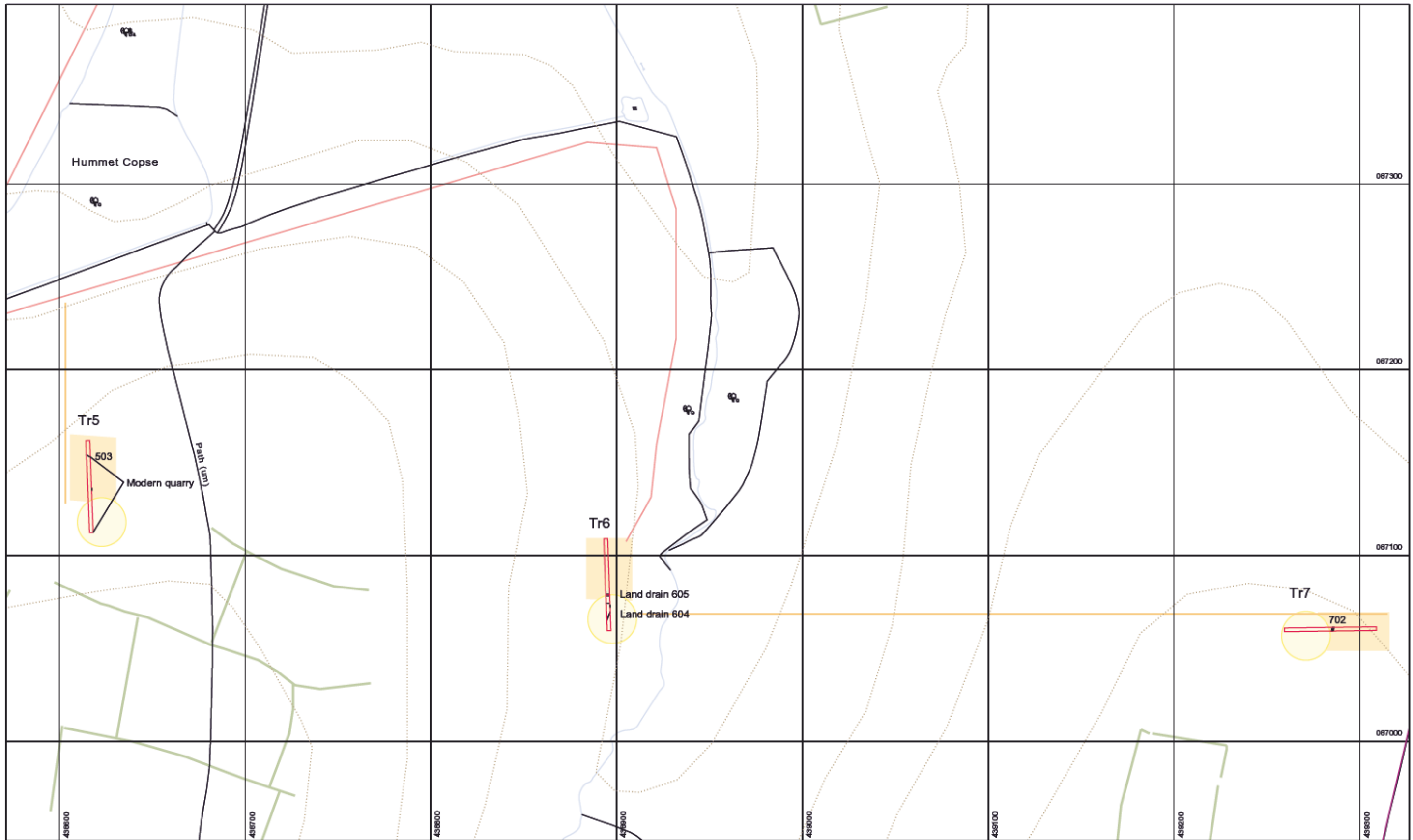


Reproduced from the (2005) Ordnance Survey (1:10 000 Landplan ©) map with the permission of the controller of Her Majesty's Stationery Office © Crown copyright, Wessex Archaeology, Portway House, Old Sarum Park, Salisbury, Wiltshire. SP4 6EB. Licence Number: 100028190. AP coverage supplied by Isle of Wight council SMR. Digital data reproduced from Ordnance Survey data © Crown Copyright (2006) All rights reserved. Reference Number: 100020449. This material is for client report only © Wessex Archaeology. No unauthorised reproduction.

Date:	18/01/06	Revision Number:	1
Scale:	1:2,000	Illustrator:	KMN
Path:	Y:\PROJECTS\61880\Drawing Office\Report Figures\EVAL\13_01_03		

Trenches 1-4

Figure 2



- Turbine and crane pad
- Trench
- Cropmarks
- Permanent access road
- Temporary access road

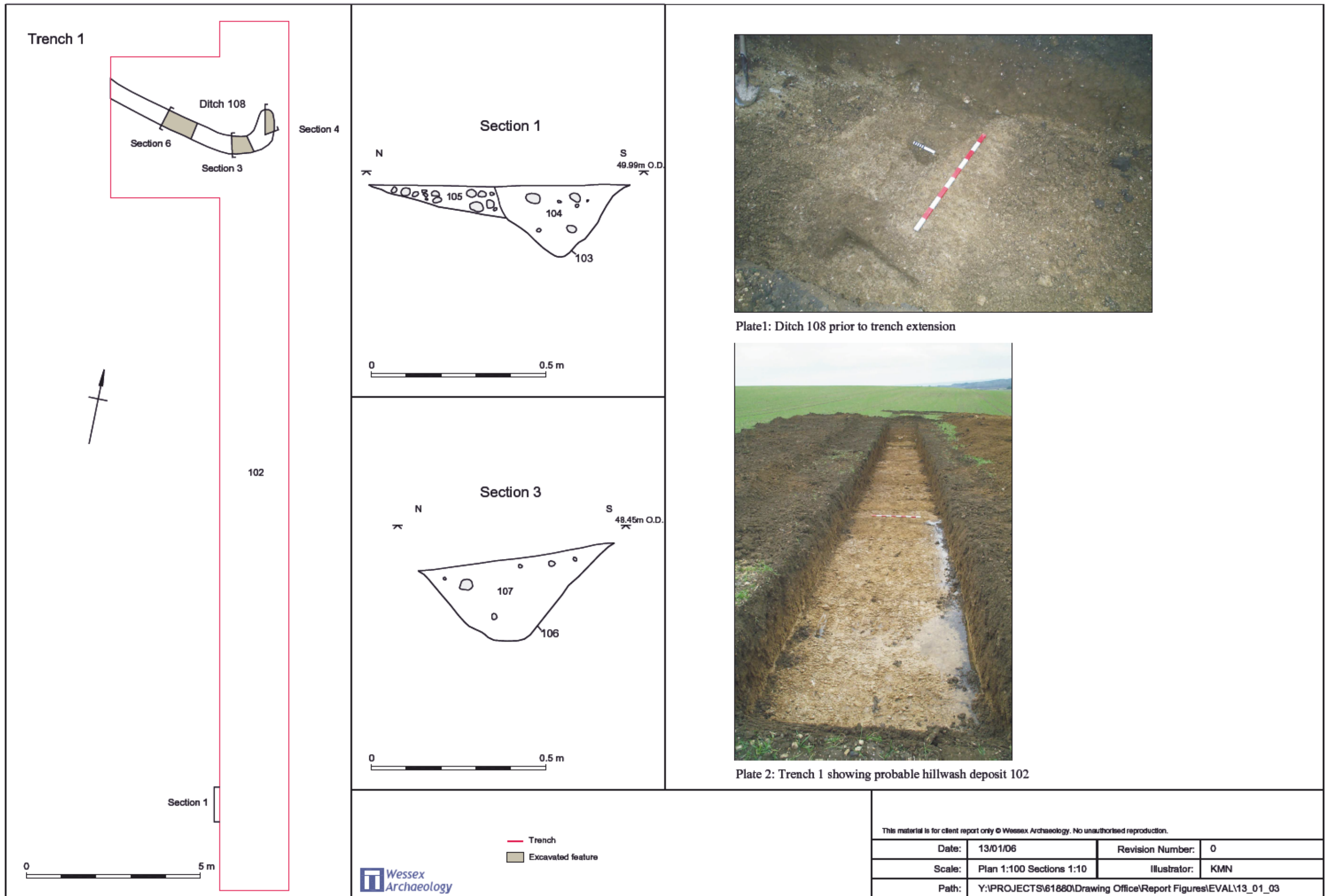


Reproduced from the (2005) Ordnance Survey (1:10 000 Landplan ©) map with the permission of the controller of Her Majesty's Stationery Office © Crown copyright, Wessex Archaeology, Portway House, Old Sarum Park, Salisbury, Wiltshire. SP4 6EB. Licence Number: 100028190. AP coverage supplied by Isle of Wight council SMR. Digital data reproduced from Ordnance Survey data © Crown Copyright (2006) All rights reserved. Reference Number: 100020449. This material is for client report only © Wessex Archaeology. No unauthorised reproduction.

Date:	18/01/06	Revision Number:	1
Scale:	1:2,000	Illustrator:	KMN
Path:	Y:\PROJECTS\61880\Drawing Office\Report Figures\EVAL\13_01_03		

Trenches 5-7

Figure 3



Trench 1: plan, sections and plates

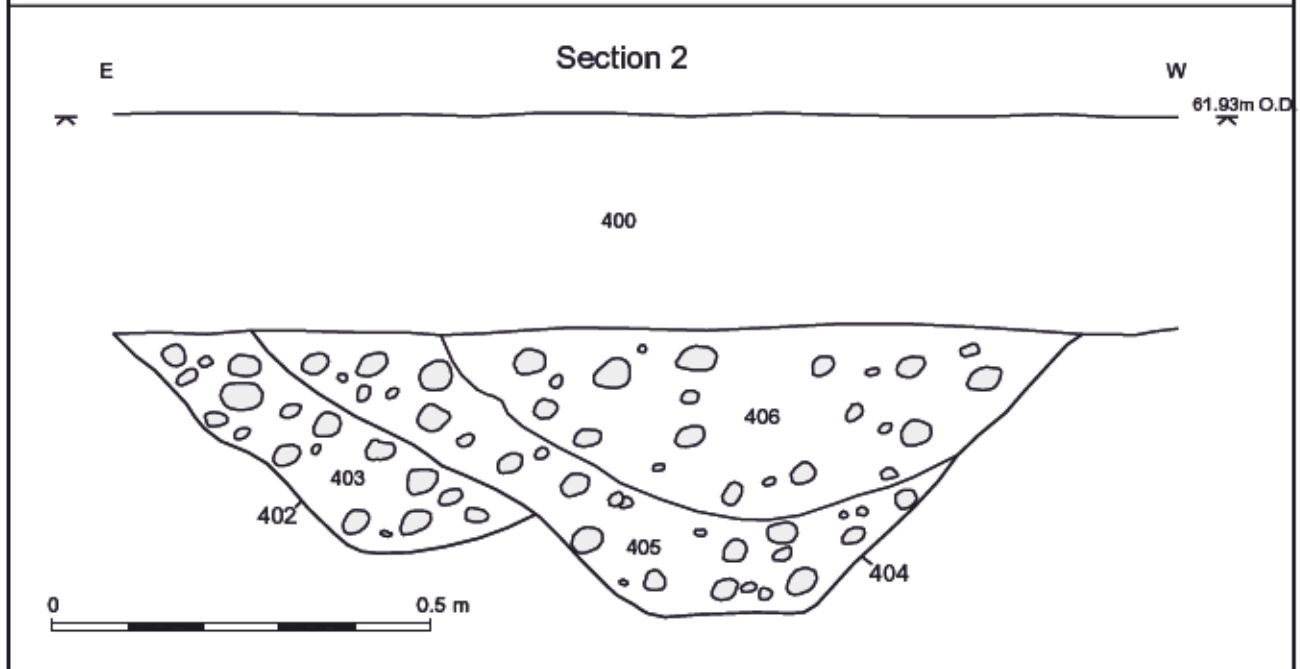
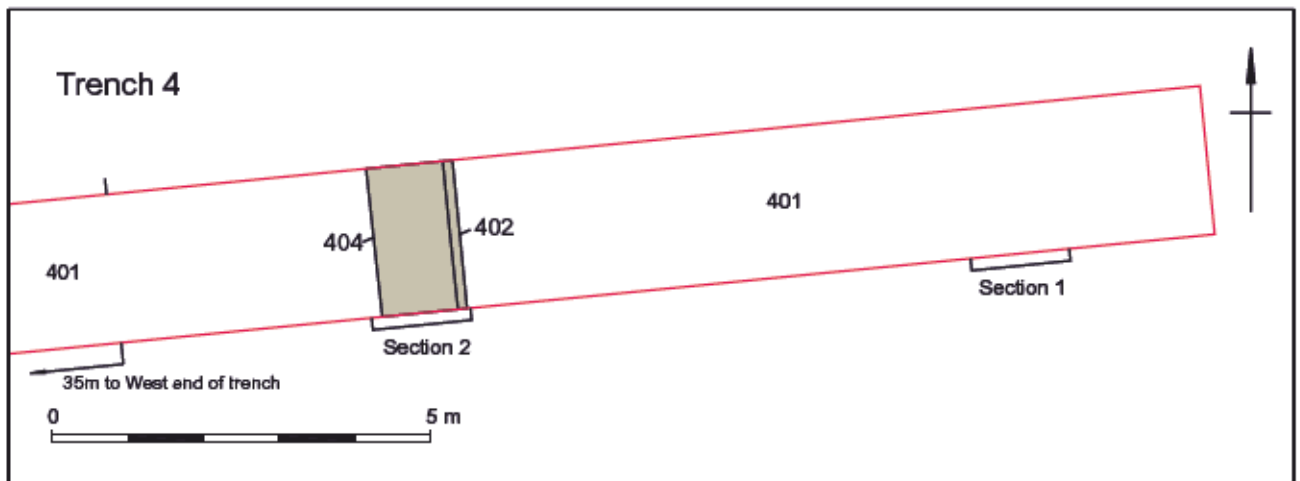


Plate 3: 402 and 404

<p>— Trench</p> <p>■ Excavated feature</p>	This material is for client report only © Wessex Archaeology. No unauthorised reproduction.			
	Date:	16/01/06	Revision Number:	0
	Scale:	Plan 1:100 Sections 1:10	Illustrator:	KMN
	Path:	Y:\PROJECTS\61880\Drawing Office\Report Figures\EVAL\13_01_03		

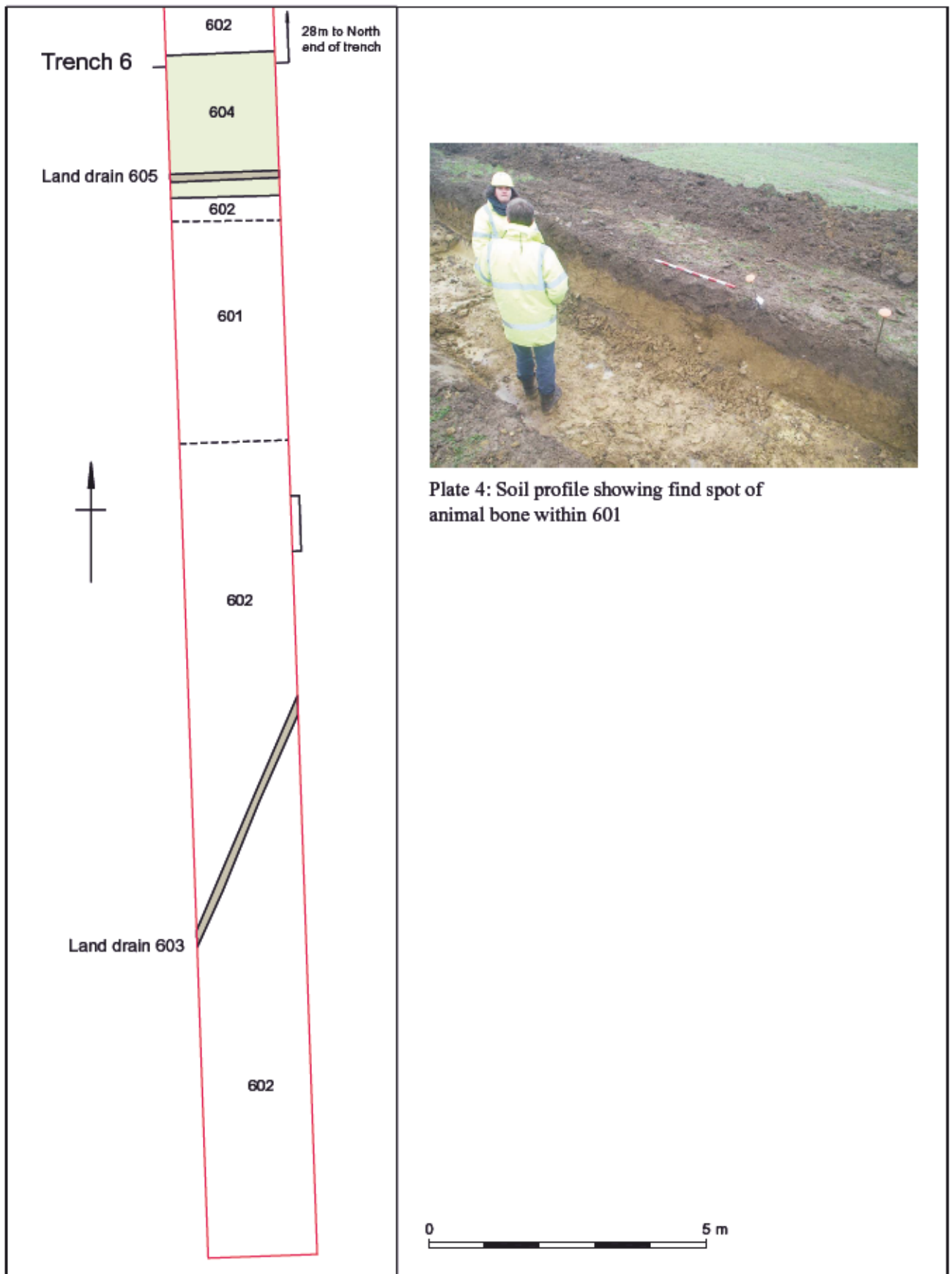


Plate 4: Soil profile showing find spot of animal bone within 601

<p>— Trench</p> <p>█ Excavated feature</p> <p>█ Chalk rubble</p> <p> Wessex Archaeology</p>	This material is for client report only © Wessex Archaeology. No unauthorised reproduction.			
	Date:	16/01/06	Revision Number:	0
	Scale:	Plan 1:100	Illustrator:	KMN
	Path:	Y:\PROJECTS\61880\Drawing Office\Report Figures\EVAL\13_01_03		

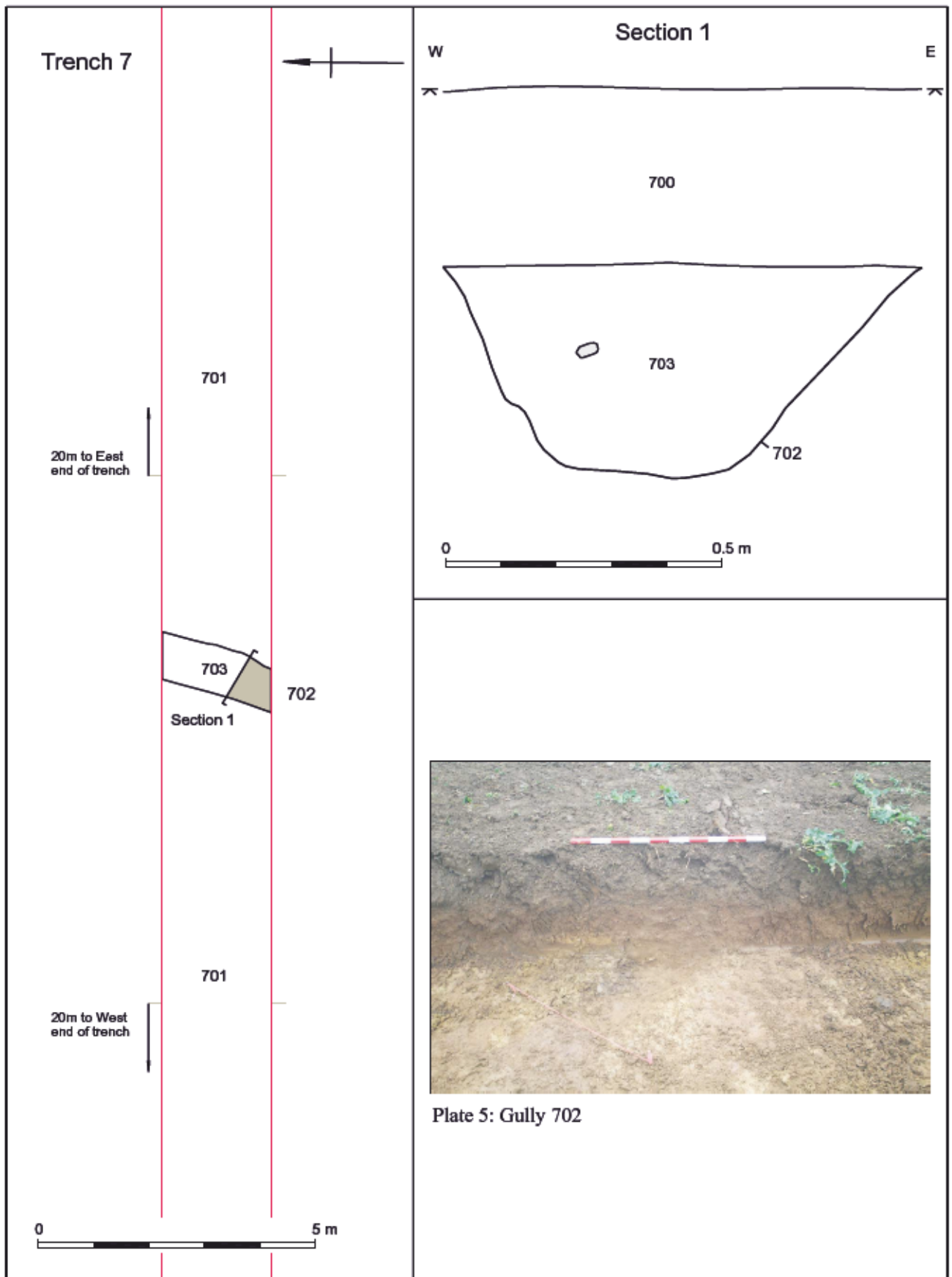


Plate 5: Gully 702

<p>— Trench</p> <p>■ Excavated feature</p>	This material is for client report only © Wessex Archaeology. No unauthorised reproduction.			
	Date:	16/01/06	Revision Number:	0
	Scale:	Plan 1:100 Sections 1:10	Illustrator:	KMN
	Path:	Y:\PROJECTS\61880\Drawing Office\Report Figures\EVAL\13_01_03		

Trench 7: plan, section and plate

Figure 7



WESSEX ARCHAEOLOGY LIMITED.

Head Office: Portway House, Old Sarum Park, Salisbury, Wiltshire SP4 6EB.

Tel: 01722 326867 Fax: 01722 337562 info@wessexarch.co.uk www.wessexarch.co.uk

London Office: Unit 113, The Chandlery, 50 Westminster Bridge Road, London SE1 7QY.

Tel: 020 7953 7494 Fax: 020 7953 7499 london-info@wessexarch.co.uk www.wessexarch.co.uk

