THAMES VALLEY

ARCHAEOLOGICAL

SERVICES

Waterditch Solar Farm, Lower Waterditch, Christchurch, Dorset

Archaeological Watching Brief

by Richard Tabor and Andrew Weale

Site Code: SZ 1780 9565

(SU 7810 7380)

Waterditch Solar Farm, Lower Waterditch, Christchurch, Dorset

Archaeological Watching Brief

For New Forest Energy Ltd

by Richard Tabor and Andrew Weale

Thames Valley Archaeological Services

(South West) Ltd

Site Code WDD 13/131

December 2015

Summary

Site name: Waterditch Solar Farm, Lower Waterditch, Christchurch, Dorset

Grid reference: SZ 1780 9565

Site activity: Watching Brief

Date and duration of project: 16th – 26th November 2015

Project manager: Andrew Weale

Site supervisor: Richard Tabor

Site code: WDD 13/131

Area of site: *c.* 8.2ha

Summary of results: All the identified archaeological features or deposits encountered were likely be of Post-medieval or modern date. The only artefacts observed were a sherd of 19th or 20th century pottery, some lumps of fired clay and a handful of burnt flints.

Location and reference of archive: The archive is presently held at Thames Valley Archaeological Services (South West), Taunton and will be deposited at Dorset County Museum in due course.

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Report 13/131b

Introduction

This report documents the results of an archaeological watching brief carried out at Waterditch Farm, Lower Waterditch, Christchurch, Dorset. The work was commissioned by Mr Jeremy Hinton of New Forest Energy Ltd, Meyrick Estate Office, Hinton Admiral, Christchurch, Dorset, BH23 7DU.

Planning permission (8/14/0226) was obtained from Christchurch Borough Council for the construction of a solar farm at Waterditch Farm (NGR SZ 1780 9565; Fig. 1). The archaeological potential of the site had been assessed in a desk-based assessment which found aerial photographic evidence of cropmarks thought to represent archaeological features in the southern area of the site. As a consequence of the possibility of archaeological deposits being damaged or destroyed by the development, condition 5 of the planning permission stipulated that there should be a programme of archaeological field observation and recording during groundworks.

This is in accordance with the Department for Communities and Local Government's *National Planning Policy Framework* (NPPF 2012) and the Borough Council's policies on archaeology. The field investigation was carried out to a specification for an archaeological watching brief approved by the Dorset County Archaeological Officer. The fieldwork was undertaken by Richard Tabor and Luis Esteves between 16th–26th November 2015. The site code is WDD 13/131.

The archive is presently held at Thames Valley Archaeological Services South West, Taunton, and will be deposited at Dorset County Museum in due course.

Location, topography and geology

Waterditch Farm is on the coastal plain between Christchurch and Bransgore, south-west of the New Forest. The solar farm site is 800m west of the village of Burton and 1km north of the A35 ring-road around the north of Christchurch, east Dorset. The area of the solar farm covered by this phase of archaeological work (Field 7 in the desk-based assessment) was a single field of 8.2ha, adjacent to the north-west boundary of the farm building complex north of Waterditch Road (Fig. 1). The site is set on Quaternary river terrace deposits of the proto-Solent river comprising sand and gravel overlying solid geology of Boscombe Formation Palaeogene

sedimentary sand deposits derived from a shoreline setting (BGS 1991). In general the soils are free-draining, slightly acid loams of low fertility (NSRI 2013).

Archaeological background

A desk-based assessment (Tabor 2013) found aerial photographic evidence of cropmarks thought to represent archaeological features, in the southern area of the overall site and within 1.5km of its northern and eastern boundaries. Cropmarks within Field 7 (the current area) were all thought to be either recent or geological. Further afield a large number of upstanding earthworks have been recorded to the north-east in the New Forest and the Iron Age hillfort of St Catherine's Hill lies to the west. Apart from the aerial photographs, the only record of any archaeological find within 1km of the site was a cluster of barrows around 1km to the east.

The ecclesiastical Parish of Burton which included Waterditch was formed in 1877 (VCH 1912, 101–10, fn. 23), when it was part of Hampshire but since the revision of boundaries in 1974 it was been part of Dorset. Neither Waterditch nor Burton is mentioned in Domesday Book (1086) but both are named during the 12th century in William Dugdale's *Monasticon Anglicanum* (VCH 1912, 83-101, fns. 37, 38).

Three no longer extant boundaries were marked on the tithe map of 1841 and the First Edition Ordnance Survey map of 1870 lay within the site boundary. Two of the internal boundaries continued to appear on maps until 1968.

Objectives and methodology

The purpose of the watching brief was to identify, excavate and record any archaeological deposits affected by the works. This involved monitoring during the excavation of cable trenches where they were deeper than the thickness of the topsoil (Pl. 1) and of the excavations for a substation and a transformer (Pl. 2).

A length totalling approximately 775m of trenching was excavated for long cables and for short branches linking them to rows of solar panels (Fig. 2). The groundworks for the substation comprised the excavation of slots for the construction of concrete plinths to support the structure and of a trench for a surrounding earth cable. The entirety of an area of 15m by 7.5m was excavated for the base of the transformer.

The ground reduction for the transformer base was carried out by a 360^0 tracked machine fitted with a 2m wide toothless grading bucket, initially to the surface of the natural gravel. Elsewhere, depending on their width, the substation plinth bases and cable trenches were excavated with either a 0.30m or a 0.60m wide bucket to a depth varying from approximately 0.60m to nearly 1m.

Where encountered, archaeological deposits were to be sampled by manual excavation to establish their characters and with the objective of recovering datable artefacts. Written, drawn and photographic records were made of the identified archaeological cuts and deposits.

Results

The topsoil (50) varied in thickness from 0.28m to 0.35m, the greatest depth at the northern end of the site (Fig. 3). It was shallowest in the south corner of the field where there was a slight rise in ground level. Across most of the site the ploughsoil lay over subsoil (51) of friable, mottled yellow and brown sandy loam and silty sand varied in depth from 0.08m in the north area to up to 0.20m in the central and much of the south-eastern area. However, towards the southern corner the ploughsoil directly overlay the natural geology (52). The exposed geological deposits variously comprised yellow sand and flint gravels.

Cable trenches, north east end of site

A single feature [1] was observed in the south end of a short, 0.3m-wide, cable slot towards the northern corner of the site (Fig. 2). This feature cut the subsoil (51) (Fig. 3, section 1). Only its northern edge was within the trench and with its' wide, shallow profile it was considered to be a pit or possibly a pond. A single blue transfer-printed pottery sherd (not retained) indicated the feature was no earlier than the late 19th century, which would be supported by its cutting through the subsoil. The feature was recorded to the depth of machine excavation (0.60m) but was not explored further due to its apparently recent date and the difficulty of manual excavation in a narrow trench.

Cable trenches south end of site

Three ditches were identified at the southern end of the site in a high voltage cable trench connecting the substation to the transformer (Fig. 2). Ditch 2 was only seen in section (Fig. 3, plan 1, sections 2 and 3). On cleaning it was found to be defined clearly as a 1.20m wide cut on the north side of the trench narrowing to 0.60m on the south, 0.19m deep, concave-sided and based, roughly south to north oriented, linear cut directly into natural (52) (Pl. 4). However, although it had a fairly clear outline in the north side of the trench, it had a much shallower slope on its east side and a near vertical slope on the west side where it appeared to have been disturbed by further cutting (Fig. 3, section 3). The upper fill (54) comprised loose to friable grey brown loamy sand including rare subrounded natural flints. However, in the south-facing baulk, layer 54 sealed a 0.08m thick deposit (55) of friable loamy sand, in places stained dark grey to black, which included moderate amounts of small sub-rounded natural flints (Pl 3). There were also moderate amounts of yellowish orange soft fired clay

and fire-cracked flints. A bulk sample <1> was collected from deposit 55 but contained no charred seeds or charcoal, though it did yield some more burnt flint.

A seemingly parallel 0.39m deep ditch, 3, cut into natural 0.80m to the east of ditch 2. It's profile differed significantly with gently convex sides and a concave base visible in both sections (Fig. 3, section 2; Pl. 4). Its single fill (56) was of friable, slightly yellowish brown loamy sand, very similar to the topsoil but distinguished from it by the greater frequency of gravel inclusions. Fire-cracked flints were the only finds.

A third ditch, 4, was also discovered cutting subsoil (51) (Fig. 3, section 4). It had straight sides, at approximately 45 degrees, and was concave-based. Its orientation appeared to be similar to those of the other ditches. It was filled with soft to friable grey brown loamy sand (57) which included rare gravel. It had not been observed in the cable trench immediately to the north probably due to the extremely wet conditions.

Finds

Burnt flint by Richard Tabor

A total of 5 pieces of burnt flint (40g) were recovered, two from the lower fill (55) of ditch 2, and three from the fill (56) of ditch 3. A further 90g of small fragments of burnt flint came from the soil sample from fill 55. All were thoroughly cracked but unworked.

Fired clay by Richard Tabor

Two fragments of fired clay (1g) were collected from the upper fill (54) of ditch 2. These were in a sandy fabric with rare inclusions of off white grits (<0.5mm). On both fragments a rough, probably outer, surface was of buff orange colour. No clear original inner surface was present but the core was reduced dark grey to black. The fabric was brittle.

Conclusion

The probability that archaeological deposits might be present on the site was deemed only moderate. In the event all identified features are likely to originate from no earlier than the later Post-medieval period. The possible pit or pond in the north of the field is likely to have been of 19th or 20th century date, based on a single pottery sherd observed during machine excavation (the only dating evidence from this site).

Given the lack of datable finds the best evidence for the dating of three ditches in the southern area of the site is cartographic. The tithe map of 1841 and the First Edition Ordnance Survey map of 1870 both show that

during the mid-19th century the present field was subdivided by two long south-south-east to north-north-west boundaries (Fig. 2, A and B), one of which terminated at its southern end against the northern limit of a rectangular enclosure (Fig. 2, C). By 1931 the enclosure had been removed and the boundary which had terminated against it had been extended as far as the southern boundary of the modern field (Fig. 2, D). The long boundaries were still marked in 1968 but had both been removed by 1975. No trace of the western long linear boundary was observed in the cable trench but ditch 2 appears to correspond well with the western boundary of the enclosure, and it is possible that it co-existed with ditch 3, perhaps divided from it by a hedge or fence. Although ditch 4 did not coincide with the anticipated point of intersection with the eastern linear boundary, D, it was close enough to suggest it was this, and no other comparable feature was found nearby.

References

BGS, 1991, *British Geological Survey*, 1:50,000, Sheet 329, Solid and Drift Edition, Keyworth

Mills, A D, 1998, *Dictionary of English Place-Names*, Oxford

NPPF, 2012, *National Planning Policy Framework,* Dept Communities and Local Govt, Norwich

Tabor, R, 2013, 'Waterditch Farm, Lower Waterditch, Christchurch, Dorset: Desk-based Heritage Assessment', TVAS South West, unpubl rep **13/131**, Taunton

Williams, A and Martin, G H, 2002, *Domesday Book, A complete Translation,* London

APPENDIX 1: Context summary

Cut		*Deposits/Fills*	*Type*	*Date*	*Dating evidence*
		50	Topsoil	Modern	Stratigraphy
		51	Subsoil	Undated	Stratigraphy
		52	Natural	Quaternary	Stratigraphy
1		53	Pit	Post-medieval/modern	Stratigraphy
2		54, 55	Ditch	Post-medieval/modern	Cartographic
3		56	Ditch	Post-medieval/modern	Cartographic
4		57	Ditch	Victorian/modern	Cartographic

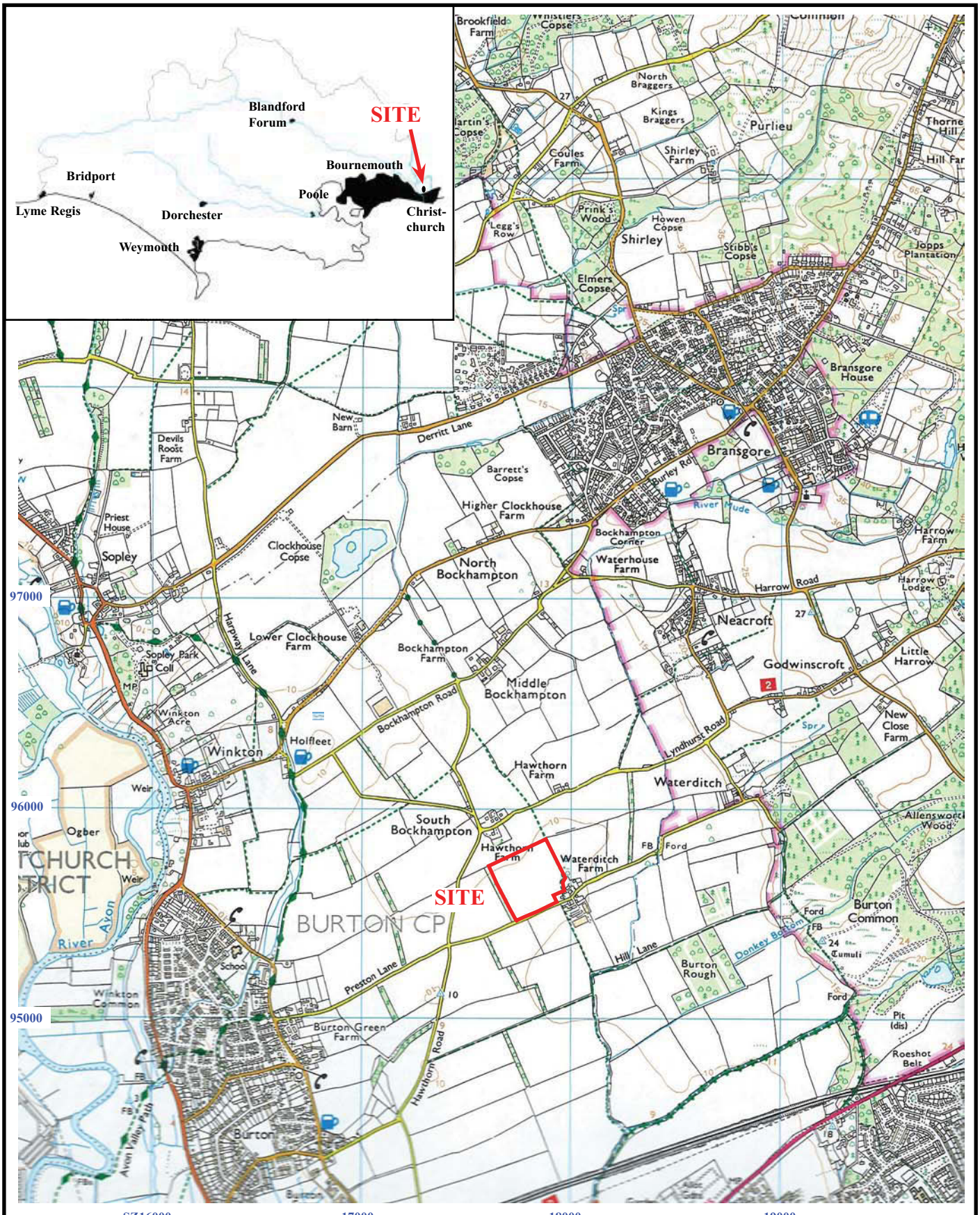

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Figure 1. Location of site in relation to Waterditch Farm and within Dorset.

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Figure 2. Site plan showing locations of groundworks, features and 19th and earlier 20th century boundary ditches. Scale 1:2500

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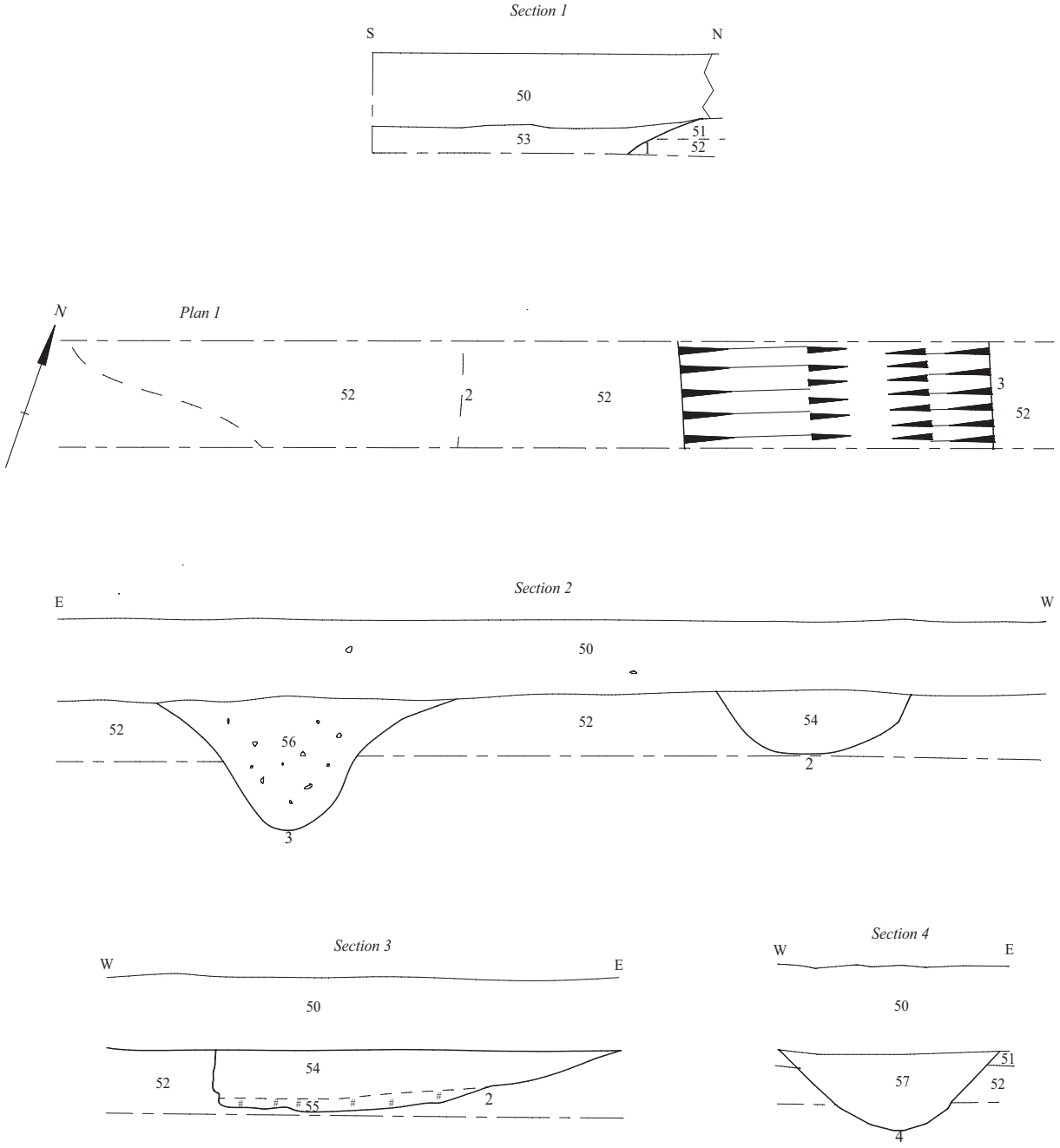

Charcoal

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Figure 3. Plan 1 and Sections 1 to 4.

0 1m

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Plate 1. A long cable trench and branch from it, looking north-west, Scale: 2m

Plate 2. The transformer base, looking north-west, Scale: 2m

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Plates 1 and 2.

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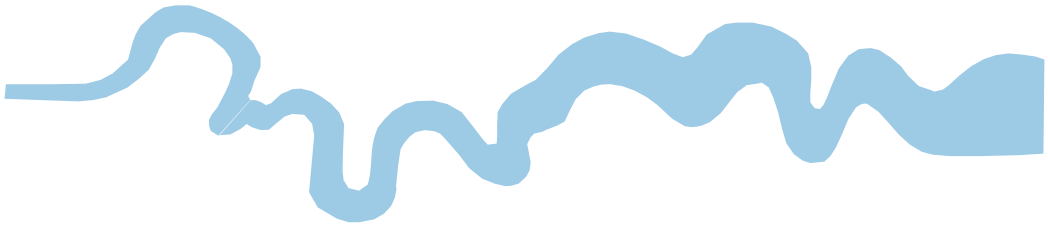
Plate 3. Disturbed area (55) of ditch [2] relative to ditch [3] (top right), looking north, Scales 2m and 1m.

Plate 4. Ditch [3] with ditch [2] in the background, looking south-west, Scales 2m and 1m.

TIME CHART

	Calendar Years
Modern	AD 1901
Victorian	AD 1837
Post Medieval	AD 1500
Medieval	AD 1066
Saxon	AD 410
Roman	AD 43
Iron Age	BC/AD 750 BC
Bronze Age: Late	1300 BC
Bronze Age: Middle	1700 BC
Bronze Age: Early	2100 BC
Neolithic: Late	3300 BC
Neolithic: Early	4300 BC
Mesolithic: Late	6000 BC
Mesolithic: Early	10000 BC
Palaeolithic: Upper	30000 BC
Palaeolithic: Middle	70000 BC
Palaeolithic: Lower	2,000,000 BC



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