

O X F O R D A R C H A E O L O G I C A L U N I T



DIDCOT 'B' POWER STATION
ARCHAEOLOGICAL EVALUATION

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INTRODUCTION

An archaeological evaluation was undertaken by the Oxford Archaeological Unit, on behalf of National Power, on three sites scheduled for development within the grounds of Didcot Power Station (NGR SU 505920 approx.). Areas I, III, and IV (see Fig. 1) were evaluated. The status of Area II with regard to proposed development has still to be determined, and the area was not examined.

ARCHAEOLOGICAL BACKGROUND

The areas of proposed development lie on the southern edge of the second gravel terrace, which, in general terms, was highly attractive to prehistoric settlement. Cropmarks (centred on SU 504926) on land immediately to the NW of Area III, show a trackway and enclosures. To the west, between Didcot Power Station and Milton, (centred on SU 497923), a complex of crop mark circles, rectilinear boundary ditches, enclosures, trackways and pits, probably indicate multi-period prehistoric/early historic occupation.

Archaeological material has also been found within the area of the Government Depot (which later became the Power Station). About 5 inhumations, together with much 2nd and 3rd century Roman pottery, were found c.1928 during the construction of railway sidings, although their precise location is not known. Later, an inhumation cemetery, with the skeletons facing west, was reported as having been found alongside Moor Ditch. This might also have been from the same locality as the 1928 burials, but a location further west, towards Milton also seems a possibility. In 1933, two bronze bowls were found within the Depot at a depth of 5-6 feet. Presumably burials accompanied them, but this is not reported. Between 1930 and 1955 the location of these finds was said to have been marked by a notice board at SU 50599190. This places it just east of Area I, at the southern corner of the present Contractors' Compound. Roman pottery has also been reported from the SE area of the Power Station (SU 508914).

The archaeological potential of this site (particularly Areas I and III), was therefore quite high. Of particular importance was the likely presence of a ?Roman inhumation cemetery in Area I. However, the ground disturbances caused by the Depot and Power Station construction work made it likely that archaeological deposits would be damaged to some degree.

BOREHOLE INFORMATION

Information on the geology and overlying sediments within the development area was obtained from borehole and trial-pit data provided by Structural Soils Limited in advance of the evaluation. The data are uneven in their spatial coverage, but

gave indications of the depth of modern made ground, and the nature of the geology, in Area I. In general, the southern and eastern parts of Area I showed between 0.3 and 1.2 m of made ground over alluvium. A single trial-pit near to the NW boundary (roughly Tr 21), showed 0.5 m of made ground over gravel.

STRATEGY

The evaluation took the form of machine-cut trenches, excavated as far as the natural geology. They were sufficient in number to give a 2% sample of the area under investigation, and spaced so as to cover the area in an even fashion, within practical limits. Modifications to the initial evaluation specification were made with the agreement of the County Archaeologist.

PRESENTATION OF RESULTS

The results of the evaluation are presented in summary fashion below. More detailed data on individual trenches is provided in Annex 1. A brief account of the open area excavation in Area I is included at the end of this report.

AREA I EVALUATION

Introduction

Area I comprised 1.5 ha within a triangle of land known as "Abbey Mills", bounded by a currently used carpark to the NW (Area II), Moor Ditch to the S, and Stevens Road to the NE.

Seven trenches, each 30 m long by 1.5 m wide were initially laid out (Tr 1 - 7). Two shorter ones (Tr 20 & 21) were later excavated in the northern corner of the site so as to define the extent of archaeological remains in this area (see Fig.1). Trench 7, in the SW corner of the site, was excavated only to a length of 20 m before being abandoned due to the depth and extent of modern disturbance.

The exact locations of the trenches were very much circumscribed by modern land use, which included a lorry park in the central part of the site, open air storage of hardware in the southern part, and trees in the northern part. Modern service pipes in the extreme southern part of the site (towards Moor Ditch) also imposed limitations here, notwithstanding the excessive build-up of modern deposits which made excavations, in any case, impracticable.

The trenches were excavated using a JCB mechanical excavator with a 5' toothless bucket, and a concrete breaker where appropriate. Features of archaeological, or possible archaeological, significance were then excavated by hand.

Results

General

The natural geology, encountered in all the trenches, was a sandy gravel, mixed to varying degrees with clay. The clay, which was light grey with inclusions of eroded chalk fragments, is of Pleistocene age contemporary with the gravel, and does not represent a more recent alluviation. In two of the trenches (Tr 4 & 7) the natural geology consisted almost exclusively of clay. 'Clean' gravel was encountered in Tr 5, 21, and the northern part of Tr 6, while the other trenches contained a mixture of gravel and clay. These observations, together with spot-height data on the trench bases (Fig. 1), indicate a gravel 'island' in the NW part of this site which can be estimated to coincide with the 56.9 m OD contour of the surface of the natural geology.

Beneath the modern land surface were deposits of recent made ground, varying in depth but generally between 0.4 m and 1.2 m deep. This modern dumping was less deep and more intermittent in Trenches 5, 6, 20, and 21.

In all the trenches, with the exception of Tr 4 and Tr 7, pre-dumping soil deposits were encountered, truncated to varying degrees, but generally 0.2 - 0.3 m thick. These consisted of a mid-brown or grey-brown silty clay / clay loam with 20-30% gravel. It may be a plough soil related to the pre-industrial use of the site. In Tr 3 this or a similar layer was very compact and contained fragments of modern brick and tile, but elsewhere it yielded no dating evidence.

In trenches 4 and 7 concrete foundations and slabs, both above and beneath modern dumping, had introduced disturbances as far down as the natural clay.

Archaeological Features

Just one feature of definite archaeological significance was discovered in this area. This was a shallow grave in Trench 5 (Feature 6) bearing the skeleton of a young adult. It was oriented with its head to the south, crouched on its right side, with a grave-good - possibly an iron knife with a copper ring attachment - by its side. It is likely to be part of the cemetery found during the construction of railway sidings in the 1920's, and thought to date to the Roman period.

Other shallow features were found in Trenches 1, 2, and 20. The only material of possible archaeological significance were two pieces of burnt flint from Tr 2. This suggests that there may be prehistoric activity here, which was not encountered in any of the other trenches, but presumably had its focus in an area towards the NE, outside the evaluation zone. In Tr 1 a broad shallow feature (3 m wide and 0.2 m deep) ran E-W. There was no indication that it was man-made, and seems likely to have been a natural irregularity in the gravel. In Tr 20, at the northern extreme of the evaluation area, two irregular hollows (each only about 0.1 m deep) were investigated, and are considered likely

to be root-holes.

AREA III EVALUATION

Introduction

Area III comprised 3.3 ha in a rectangle of land immediately W of the northern cooling towers, in a zone demarcated for a gas compound. 12 trenches, each 30 m long and 1.5 m wide were laid out in a systematic manner, and excavated down to undisturbed geology using a JCB mechanical excavator with a toothless bucket.

The 6" OS map of the Royal Ordnance Depot shows that this area was occupied by two groups of long narrow buildings oriented NNE-SSW, with a railway track on their eastern side approaching from the south. To the east of this feature a small S-N stream existed in the area now occupied by the cooling towers.

The ground covered in the evaluation was generally flat, with a slope towards the east from a height of 55 m - 55.5 m OD in the west, to about 54 m OD. The cooling towers are raised upon an artificial terrace, about 1 m high, which commences in a marked slope just beyond the edge of the evaluation area.

Results

General

Excavation showed that there is in fact a substantial deposit of made ground over the entire field, consistently about 0.5 m thick. This sealed layers of grey-brown to orange-brown silty clay, relatively undisturbed, which is interpreted as an earlier soil horizon. It could not be established whether this was a plough soil, or had developed under pasture, but no buried turf-line could be detected. The natural geology was everywhere a grey clay with inclusions of eroded chalky fragments.

Like the modern land surface, the natural clay surface sloped eastwards from 54.5 - 55 m OD, to around 53 m OD. It was therefore substantially lower than the level in Area I.

Archaeological Features

No features of archaeological interest were discovered. The presence of a probable soil profile beneath the modern dumping indicates that this absence is not the result of recent earth-moving disturbances. The low-lying, clayey nature of the land, and its unsuitability for settlement, is probably sufficient reason to account for this state of affairs.

Various modern features were discovered: concrete wall foundations, sometimes with 2 or 3 courses of brickwork on them; metal pipes; and a probable electric cable (Tr 12). These are

located on Fig. 2 . Land drains are not marked on this plan, although a few were encountered.

The wall footings ran in almost exact alignment with the evaluation trench layout. They undoubtedly relate to the buildings located on the old OS map. The footings are shallow, and the absence of large quantities of demolition debris suggest that some sort of prefabricated structure sat upon a few courses of brick. The service pipes and cable were unexpected and cannot be accounted for.

AREA IV EVALUATION

Introduction

Area IV comprised 0.84 ha in a block of land east of the 400KV electricity substation. Three 30 m trenches were laid out so as to give a systematic coverage of the area. In the event, the complete absence of archaeological deposits in the northern and southern trenches (Tr 22 & 23) made the excavation of the central trench of highly doubtful value, and it was not undertaken. The area, which consisted of an artificial terrace about 1.5 m above the surrounding land, was suspected of containing substantial deposits of made ground. The trenches were therefore 4 m wide at the top, stepped in to 1.9 m at the bottom, so as to avoid the need for shoring.

Results

Both Trenches 22 and 23 revealed exclusively modern landfill for a depth of about 2.5 m. In Tr 22 this overlay a grey-green clay, and in Tr 23 a mixture of gravel and pale brown clay. These levels were at between 51.5 m and 52.33 m OD, and were below the current water-table.

The absence of any pre-landfill land surface or soils indicates that, had any archaeological deposits existed in this area, they would have been quarried away. The 6" OS map shows that this area was, in any case, marshy. It seems likely that prehistoric settlement would not have been located here.

AREA I OPEN AREA EXCAVATIONS

Introduction

The discovery of a single inhumation in Trench 5 suggested that the cemetery, whose presence had been indicated by the finds made from the 1920's to the 1940's, had been located. The absence of graves in any of the other trenches further suggested that the cemetery was either a small one, or that it lay largely to the west, in Area II. An area of 2100 sq m was stripped around Trench 5 to expose the likely extent of the cemetery within Area

I.

Results (Fig 3)

Seventeen inhumations were discovered. The associated grave goods show that the cemetery dates to the Anglo-Saxon, rather than Roman, period. The graves were generally very shallow, and many of the skeletons had already been partly destroyed. The graves were also rather scattered, and it is difficult to know whether the absolute limits of the cemetery have been reached in any direction. This distribution may be due to the loosely defined nature of the burial area, but it might equally be due to the loss of many shallow burials to more recent ground disturbances, particularly in the largely blank central area of the site.

There is also settlement evidence of the Anglo-Saxon period in the northern part of the site. This includes a sub-rectangular sunken featured building ("Grubenhause"), and pits. They may be earlier in date than the cemetery. Two linear 'field boundary' ditches, crossing the site in NE-SW and NW-SE directions, date to the Roman period, and may have been used to define the limits of the later cemetery on its northern and eastern sides. A parallel gully to the south may also be Roman, but has no discernable role in relation to later land use.

Prehistoric features are also present in the northern area. An extensively recut ditch runs NW-SE, and turns a right-angle under the Saxon "Grubenhause" before petering out. This, and the occasional pit, probably date to the Later Neolithic (c 2000 BC).

Conclusion

The excavation confirmed the presence and approximate extent of the cemetery (albeit an Anglo-Saxon, rather than Roman, one). However, the graves appear more scattered than is usual for this type of site, and the limits of the cemetery are consequently more difficult to define. Excavation also revealed that there were more archaeological remains in this area than the trial-trench evaluation had suggested. They were concentrated in the northern part of the site, where modern constructional disturbances have been less archaeologically damaging. It is possible that, in the southern part of the site, features of all periods were more common than present evidence indicates. Deep graves may still be found beyond the southern limit of the excavations, where the edge of the gravel 'island' was not established. Other features are less likely to have survived modern ground disturbances. To the west, archaeological remains can be expected in Area II, perhaps in a greater density than in Area I since the focus, not only of the Anglo-Saxon cemetery, but also of the Anglo-Saxon, Roman and prehistoric settlement, might be in this direction.

ANNEX 1: SUMMARY OF TRENCHES EXCAVATED

(Modern and natural features excluded)

AREA 1

TR 1

Geology & Elevation OD: (N) gravel with clay patches 56.81
(C) gravel 56.89
(S) gravel (disturbed) 56.36

Total Depth (m): (N) 0.40
(S) 0.54

Stratigraphy: 0.1 - 0.5 m modern topsoil and made ground, over
0.2 m 'pre-industrial' plough soil.

Features: 1/9; E-W feature, 3.0 m wide x 0.2 m deep. Natural?

TR 2

Geology & Elevation OD: (NW) clay with gravel patches 56.49
(SE) gravel 56.68

Total Depth (m): (NW) 1.03
(SE) 1.02

Stratigraphy: 0.5 - 0.9 m modern topsoil and made ground, over
up to 0.3 m 'pre-industrial' plough soil.

Features: 2/6, 2/7, 2/8; shallow irreg. pits, 0.15 - 0.25 m
deep. 2 pieces burnt flint.

TR 3

Geology & Elevation OD: (SE) gravel 56.53
(NW) gravel with clay patches 56.69

Total Depth (m): (NW) 0.65
(SE) 0.72

Stratigraphy: 0.3 m modern dumping, over 0.3 - 0.35 m
compacted ?plough soil.

Features: none

TR 4

Geology & Elevation OD: clay with gravel patches 56.79

Total Depth (m): (SE) 0.98

Stratigraphy: 0.5 0.93 m PFA, over concrete (SE end only),
over clay/concrete dumping.

Features: none

TR 5

Geology & Elevation OD: gravel (NE) 57.14
(SW) 57.08

Total Depth (m): (NE) 0.43
(SW) 0.47

Stratigraphy: turf-line & concrete (SE area), over 0.3 - 0.35 m plough soil.

Features: 5/6; grave of young adult; head to S, lying on R side in semi-flexed position, with iron knife & copper ring by its side; Saxon.

TR 6

Geology & Elevation OD: (SW) clay with gravel patches 56.74
(NE) gravel 56.91

Total Depth (m): (SW) 0.56
(NE) 0.78

Stratigraphy: 0.45 m modern PFA & concrete, over 0.2 - 0.25 m plough soil.

Features: none.

TR 7 (20 m)

Geology & Elevation OD: clay (W) 56.50
(E) 56.72

Total Depth (m): (W) 1.04
(E) 0.95

Stratigraphy: modern dumping (0.5 m), over concrete, over modern disturbances.

Features: none.

TR 20 (15 m)

Geology & Elevation OD: (NE) gravel 56.64
(SW) gravel and clay 56.50

Total Depth (m): (NE) 0.30
(SW) 0.57

Stratigraphy: modern turfline, over gravelly clay loam plough soil.

Features: none.

TR 21 (10 m)

Geology & Elevation OD: gravel (NE) 56.83
(SW) 57.06

Total Depth (m): (NE) 0.55
(SW) 0.35

Stratigraphy: modern topsoil, over plough soil.

Features: none.

AREA III (No Features)

TR 8

Geology & Elevation OD: clay with gravel patches (N) 55.02
(S) 55.00

Total Depth (m): (N) 0.78
(S) 0.63

Stratigraphy: 0.5 - 0.6 m modern dumping, over 0.1 - 0.3 m grey-brown silty clay (pre-dumping topsoil), over light grey silty clay (subsoil).

TR 9

Geology & Elevation OD: clay (E) 54.20
(W) 54.88

Total Depth (m): (E) 0.80
(W) 0.93

Stratigraphy: 0.35 - 0.42 m topsoil & modern dumping, over pre-dumping soil (0.15 - 0.3 m) & subsoil.

TR 10

Geology & Elevation OD: clay (S) 54.78
(N) 54.89

Total Depth (m): (S) 0.66
(N) 0.69

Stratigraphy: 0.35 - 0.4 m topsoil, modern dumping & 0.5 m wide concrete foundations (E-W), over 0.3 m grey clay subsoil cut by (modern) wooden posts.

TR 11

Geology & Elevation OD: clay (E) 53.87
(W) 54.49

Total Depth (m): (E) 0.77
(W) 0.64

Stratigraphy: modern topsoil & dumping, over 0.4 - 0.5 m thick building foundations (3-4 courses cemented brick on concrete footings, E-W), over much disturbed

soil layer (0.4 m thick).

TR 12

Geology & Elevation OD: clay (S) 54.46

(N) 54.64

Total Depth (m): (S) 0.78

(N) 0.68

Stratigraphy: 0.45 m topsoil & modern dumping, over E-W concrete footings (0.7 m wide, 0.14 m thick), cutting relatively undisturbed soil/subsoil (0.45 m thick max.).

TR 13

Geology & Elevation OD: clay (E) 53.97

(W) 54.50

Total Depth (m): (E) 0.80

(W) 0.81

Stratigraphy: 0.6 m modern topsoil, limestone rubble & PFA, over mid-brown silty clay soil.

TR 14

Geology & Elevation OD: clay (N) 53.33

(S) 53.01

Total Depth (m): (N) 0.80

(S) 1.00

Stratigraphy: 0.35 - 0.45 m modern topsoil & dumping, over concrete (0.6 m deep, 2.2 m wide) & PFA, over 0.3 - 0.4 m (max.) sandy clay soil.

TR 15

Geology & Elevation OD: clay (E) 52.88

(W) 53.85

Total Depth (m): (E) 0.88

(W) 0.85

Stratigraphy: 0.5 - 0.6 m topsoil & dumping, over E-W concrete footings (E end of trench), over 0.4 - 0.5 m grey-brown clay.

TR 16

Geology & Elevation OD: clay (N) 53.23

(S) 53.20

Total Depth (m): (N) 0.95

(S) 0.76

Stratigraphy: 0.5 - 0.7 m modern dumping, over E-W brick wall on concrete footings (0.5 m wide), over 0.24 m grey-brown clay.

TR 17

Geology & Elevation OD: clay (E) 53.12
(W) 53.80

Total Depth (m): (E) 1.65
(W) 0.65

Stratigraphy: Modern dumping, over relatively undisturbed grey-brown clay (0.32 m). At E end, made ground directly overlies natural clay.

TR 18

Geology & Elevation OD: clay (N) 53.12
(S) 53.18

Total Depth (m): (N) 1.08
(S) 1.00

Stratigraphy: 0.52 - 0.72 m modern dumping, over 0.4 m wide E-W concrete footings, over orange-brown sandy clay.

TR 19

Geology & Elevation OD: clay (E) 53.68
(W) 54.06

Total Depth (m): (E) 1.26
(W) 0.53

Stratigraphy: 0.3 - 1.2 m modern dumping (not bottomed at E end, where it overlies a modern feature), over 0.2 - 0.3 m grey silty clay.

AREA IV (No Features)

TR 22

Geology & Elevation OD: Grey-green clay (E) 52.18
(W) 52.33

Total Depth (m): (E) 2.31
(W) 2.62

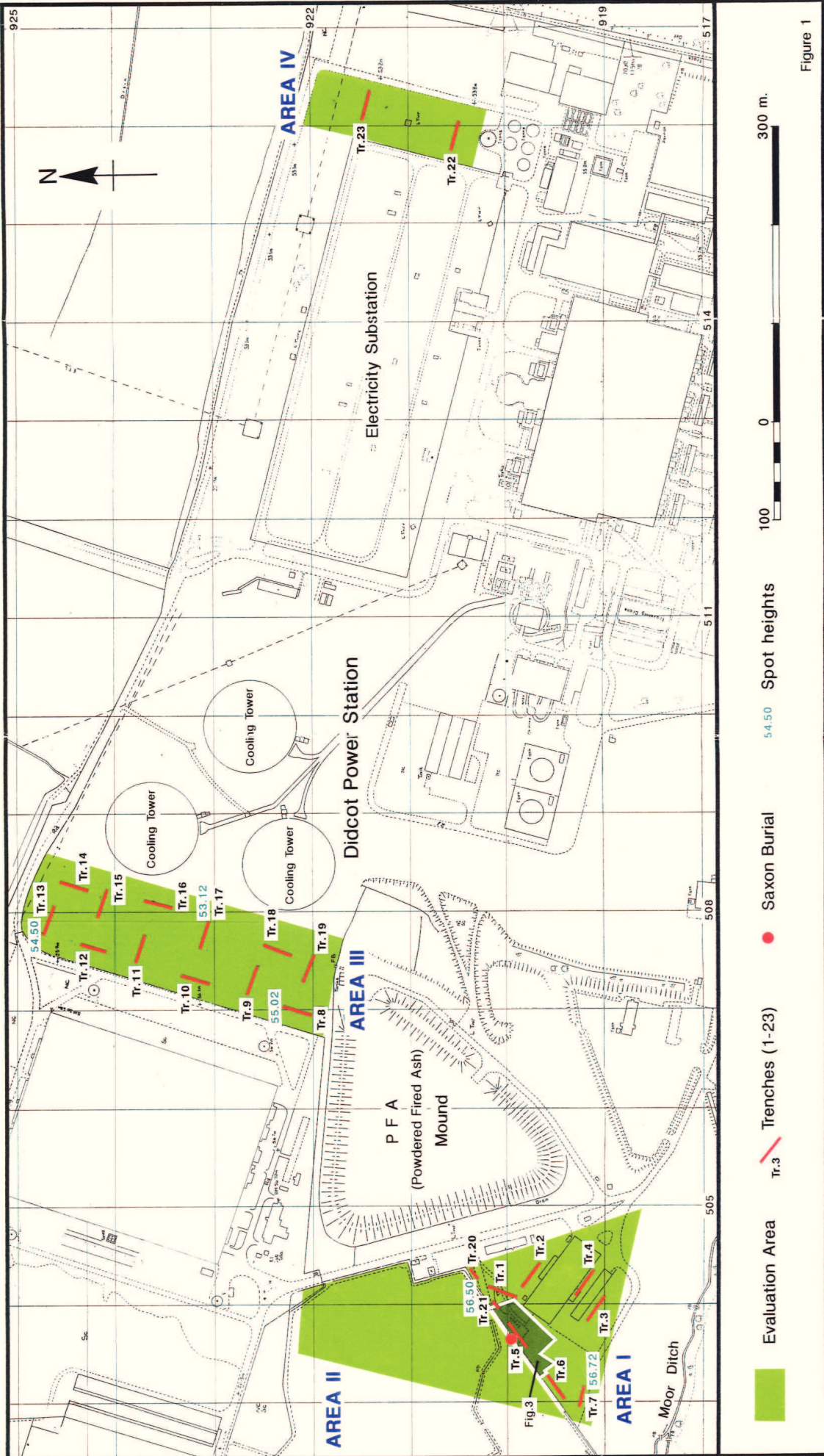
Stratigraphy: exclusively modern dumping.

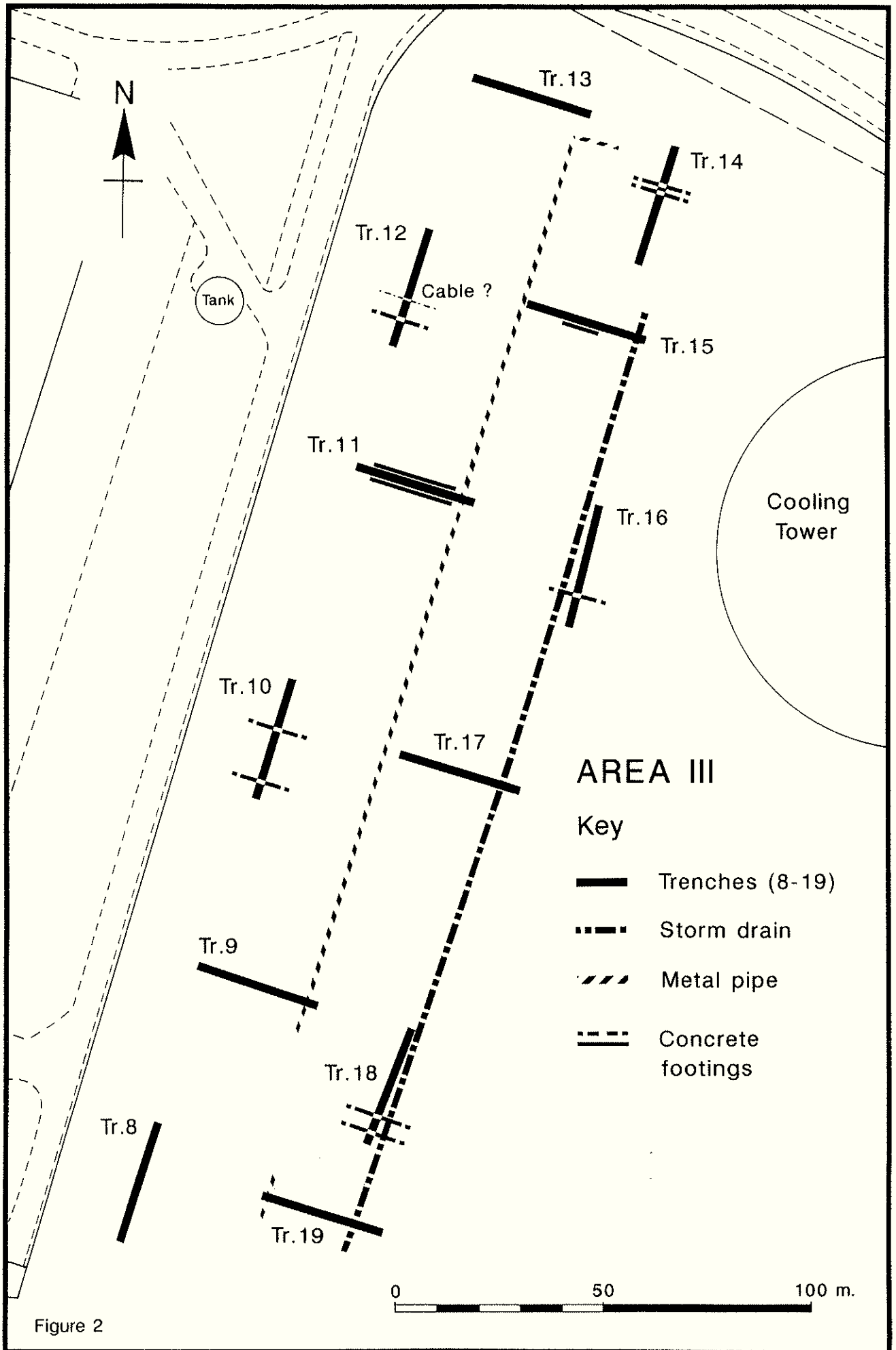
TR 23

Geology & Elevation: gravel and clay (E) 51.55
(W) 52.20

Total Depth (m): (E) 2.34
(W) 2.61

Stratigraphy: exclusively modern dumping.





AREA I

Key

- 3 Anglo-Saxon burials
- Anglo-Saxon settlement features
- Roman features
- Neolithic features
- Spot heights

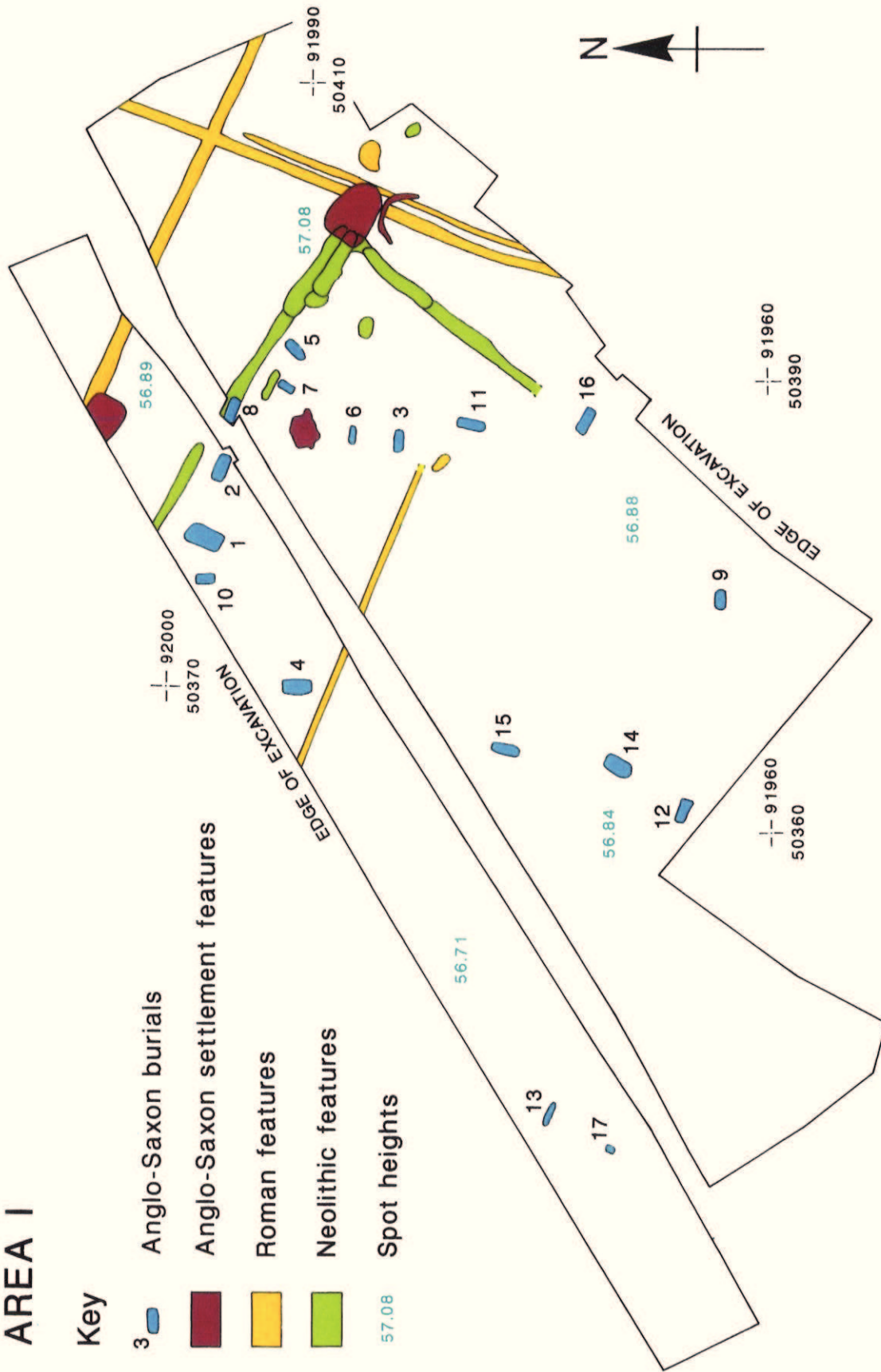


Figure 3



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