



*Land to the south and east of
Liberty Aluminium Technologies Ltd.
The Forge, Stourport Road, Kidderminster, Worcestershire*

Land to the south & east of

Liberty Aluminium Technologies Ltd.,

The Forge, Stourport Road, Kidderminster, Worcestershire, DY11 7QE.

Archaeological Evaluation

NGR: *SO 78796 44559*

Site code: *kid22*

HER ref: *wsm78231*

OASIS ID: *110archa1-508339*

Sean Cook BA (Hons) MCIfA

Illustration; Jill Atherton MCIfA

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Front cover; view of the application site from the west

SUMMARY

Archaeological evaluation was carried out during June 2022 on land to the south & east of Liberty Aluminium Technologies Ltd, The Forge, Stourport Road, Kidderminster, Worcestershire in connection with the development of the site comprising the construction of an energy and resource park. Although the site lies in an area of prehistoric archaeological potential, there was no indication that it was settled during this period. The site also lies to the north of the former Oldbury Farm, which is documented in 1086, but no medieval activity was observed during the investigation. Traces of an undated relict subsoil recorded within the western half of the site represented the historical remains of the agricultural landscape and the eastern limit of this deposit may indicate a former land boundary between the edge of the farm and the floodplain of the River Stour. The site was extensively developed for industrial use in the C20 as a waste management site which resulted in the eastern edge of the site being reclaimed and consolidated with redeposited waste. The evidence suggests that prior to this a former scarp or series of terraces marked the eastern edge of the former flood plain. The negative results of the evaluation suggested little human activity within the site until its development in the C20 and this hypothesis was supported by the absence of residual finds from across the application site. The investigation concluded that archaeological deposits are unlikely to be present within the application area and that the development would have no impact.



Fig. 1; Site location circled in red.

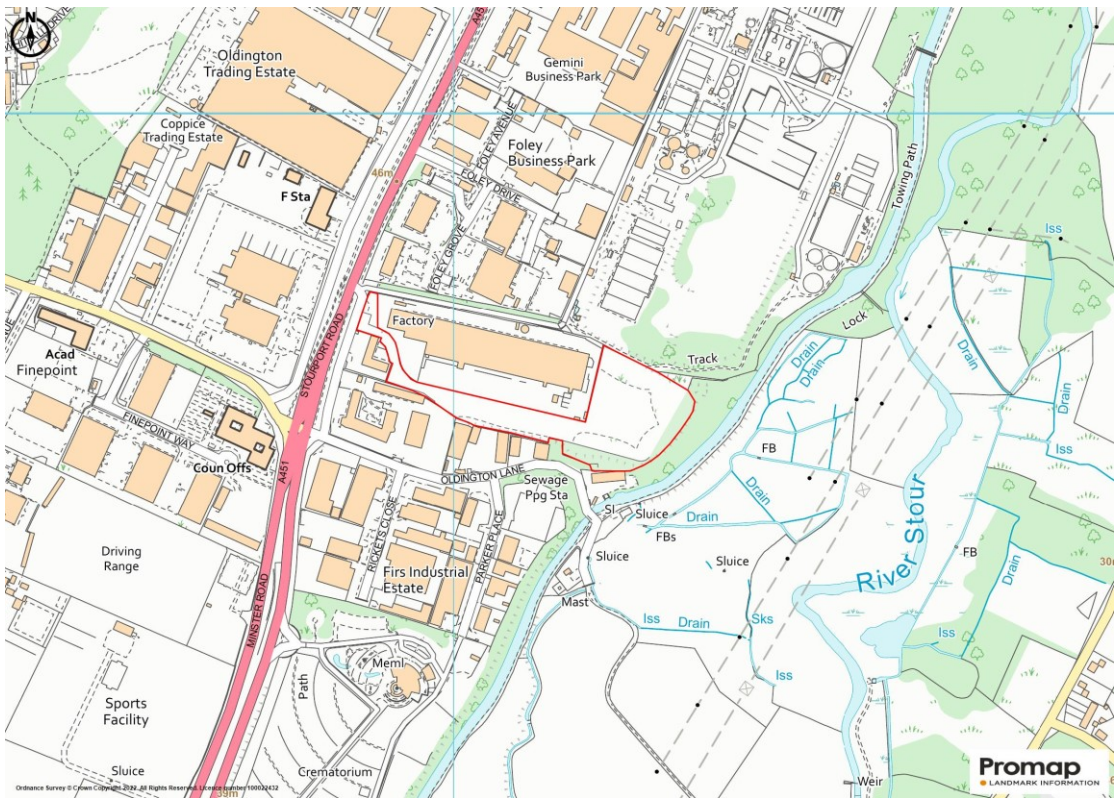


Fig. 2; Area of study outlined in red.

INTRODUCTION

Location and scope of works

This document details the results of an archaeological evaluation from 20th to 23rd June 2022 on land to the south & east of Liberty Aluminium Technologies Ltd, The Forge, Stourport Road, Kidderminster, Worcestershire, DY11 7QE at the request of the owner. A planning application (*Planning ref. 20/000034/CM*) had been granted for the development of the site comprising the construction of an energy and resource park conditional on the completion of an initial investigation (trial trenching) the results of which would, if necessary, inform a mitigation strategy for further archaeological work on site prior to or during the commencement of development.

The proposed development may have affected heritage assets of known archaeological significance. The site lies adjacent to the River Stour and within its former floodplain. Throughout Worcestershire, this is an area of high potential for prehistoric archaeological remains along the river corridor, including not just later prehistoric settlement remains but also finds and environmental remains from the Palaeolithic period onwards. The application site sits above the level of the sensitive environmental deposits and the risk of impact was likely low, but the possibility of early settlement overlooking the flood plain remained. The site may also have included remains of the former settlement of Oldington/Aldington. Recorded on the HER as ([wsm15020](#)), Oldington was one of 16 berewicks held by King William with Kidderminster in 1086. The former extent of the now demolished farmstead of Oldington Farm is unknown and there is good potential that medieval archaeology lies within the development area.

Given the scale of the development, and the anticipated archaeological potential, the likely impact on the historic environment caused by this development was offset by the implementation of a conditional programme of archaeological works. This involved initially trial trenching to determine the presence or absence, extent, date, character, condition and significance of any remains and the likely impact of the development upon them. If archaeological remains were identified that would be damaged or destroyed by the development and they could not be preserved in-situ, then the investigation would be followed by a defined programme of archaeological excavation and/or a watching brief to record the remains prior to their loss.

Geology and topography

Kidderminster is a large market and historic minster town and civil parish in Worcestershire, England, 17 miles (27km) south-west of Birmingham and 15 miles (24km) north of Worcester. Located north of the River Stour and east of the River Severn, in the 2011 census, it had a population of 55,530. Situated in the far north of Worcestershire (and with its northern suburbs only 3 and 4 miles from the Staffordshire and Shropshire borders respectively), the town is the main administration centre for the wider Wyre Forest District, which includes the towns of Stourport-on-Severn and Bewdley, along with other outlying settlements.

The proposed development site lies about 2.5km to the southwest of the centre of Kidderminster and comprises an area of approx. 2.5ha situated at approximately 43m Above Ordnance Datum (AOD). The River Stour is located approx. 280m beyond the eastern Site boundary. The Geological Survey of Great Britain indicates that the underlying geology comprises the Kidderminster Formation (BGS, 1976).

ARCHAEOLOGICAL AND HISTORICAL BACKGROUND

KIDDERMINSTER (VCH, 1913)

Chedeminstre (xi cent.); Kedeleministre, or Kideministre (xii–xiii cent.); Kidereministre (xiii–xv cent.); Kidderminster (xvi cent.).

The original ecclesiastical parish of Kidderminster covered all the land lying in the angle between the Severn and the Stour, with the exception of Over Mitton, a hamlet of Hartlebury situated in a bend of the latter river. An arm of the parish also extended eastwards, taking in the districts about Hurcott and Comberton. The northern boundary was formed by a chain of pools connected by a tributary of the Severn. The area of this triangular district is nearly 11,000 acres, of which 173 acres are covered with water, over 4,000 are arable land, 4,000 meadow and pasture and nearly 1,000 are covered with wood.

MANORS AND BOROUGH

The present town of Kidderminster has developed from a settlement on the left bank of the Stour. There is, however, evidence pointing to still earlier settlements elsewhere in the parish. In Mill Street, on the right bank of the river, there are caves in the sandstone cliff resembling the rock dwellings found in other parts of

the country. The exact nature of the camps at Warshill near Trimpley and of a tumulus near the Severn below the railway bridge is as yet undetermined.

Local tradition places at Broadwaters, on the northern boundary of the parish, the site of a Saxon monastery. It is at least certain that the 10 cassates of land in the province of Usmere near the River Stour granted in 736 by Ethelbald, King of the Mercians, to his companion (*comes*) Cyniberht for the purpose of founding a monastery were near to Kidderminster. This land lay on both sides of the Stour and touched on the north 'Cynibre' wood (? Kinver), and on the west another wood called 'Moerheb,' part of which was also granted to Cyniberht. Nothing is known of the monastery which Cyniberht was to have built. He had power to bequeath or alienate the land. It was certainly included in the 13 cassates at Stour-in-Usmere which his son, the Abbot Ceolfrith, gave to the Bishop and Cathedral Church of St. Peter, Worcester.

In 781 Bishop Heathored, in consideration of the restoration of certain disputed lands, is stated to have obtained from King Offa a confirmation of the rights of the bishopric in 14 'mansae' at Stour-in-Usmere. This document, however, is not certainly authentic, as are both the charters previously cited. There is no question as to the charter by which in 816 Denebert, then bishop, gave 14 cassates in two portions at Stour to Coenwulf, King of the Mercians, in return for certain privileges to be enjoyed upon the lands of his see.

The identification of Kidderminster with a part of the land at Stour-in-Usmere rests upon the fact that the name 'Ismere' is now applied to the series of pools at 'Broadwaters,' and that Usmere was in 964 a part of the boundary between Kidderminster and Cookley in Wolverley. The identification is supported by the fact that both Wolverley and Kidderminster were after 816 lands of the Crown.

No other record of Kidderminster is known before the Domesday Survey, in which it is described as a central 'manor' with sixteen outlying farms or 'berewicks.' These were Wannerton, Trimpley, Hurcott, 'Bristitune,' Habberley, 'Fastochesfeld,' Wribbenhall, Sutton, Oldington, Mitton, 'Teulesberge' and 'Sudwale,' and two berewicks each at Franche and Ribbesford. In the time of Edward the Confessor the whole vill was possibly held by the king. In 1086 it was held by William I, but most of it lay waste and the king had added the woodland to his forest (of Feckenham). It had probably suffered from depredations by the Danes, who certainly ravaged Ribbesford, one of its berewicks. Three small estates in the manor were separately held. The land of one 'radknight' was held by the reeve of the manor; the land of another 'radknight' was held by a certain

William, and Aiulf held a virgate of land. Moreover, two houses, one at Droitwich, the other at Worcester, belonged to the manor.

An HER search was carried out on a buffered 1km radius of the site in July 2020 in connection with an earlier archaeological assessment (Kelly, 2020). The HER was consulted at the beginning of the project and confirmed that the results were still valid and that no significant additions have been made since then.

The Ordnance Survey First Edition County Series plan of 1883 shows the site as formerly open field immediately to the north of Oldington Farm. An historic map regression survey was carried out as part of the study into the effects of the proposed development on potential archaeological deposits (Heritage Archaeology, 2020) and showed that the application site formed part of a field to the north of the farm where tracks are recorded traversing the site from north to south.

EXCAVATION METHODOLOGY

Aims of the work

The objectives of the evaluation were to determine the date, character, quality, survival and extent of the archaeological deposits within the application area likely to be threatened by the proposed development in order that an informed decision on their importance in a local, regional and national context can be made. This information would clarify whether any remains should be considered for preservation *in situ* or form the basis of a mitigation strategy.

In general, the aims of the investigation will include:

- i) establishing the date, nature and extent of activity or occupation on the development site.
- ii) recovering artefacts to assist in the development of type series within the region.
- iii) recovering palaeo-environmental remains to determine local environmental conditions.

In particular, the aims of the investigation were to:

- iv) assessing the potential for settlement remains along the prehistoric floodplain of the River Stour.
- v) assessing the potential for medieval settlement remains associated with the occupation of the former Oldington Farm.

Sample size and scope of fieldwork

A total of 11 trenches varying between 10m-60m in length and all at 1.80m wide were excavated by machine across the whole of the application site. The trench plan was altered during the work due to avoid obstacles at ground level comprising concrete hard standings at various locations within the east end of the site and a compacted layer of rubble in trench 5.

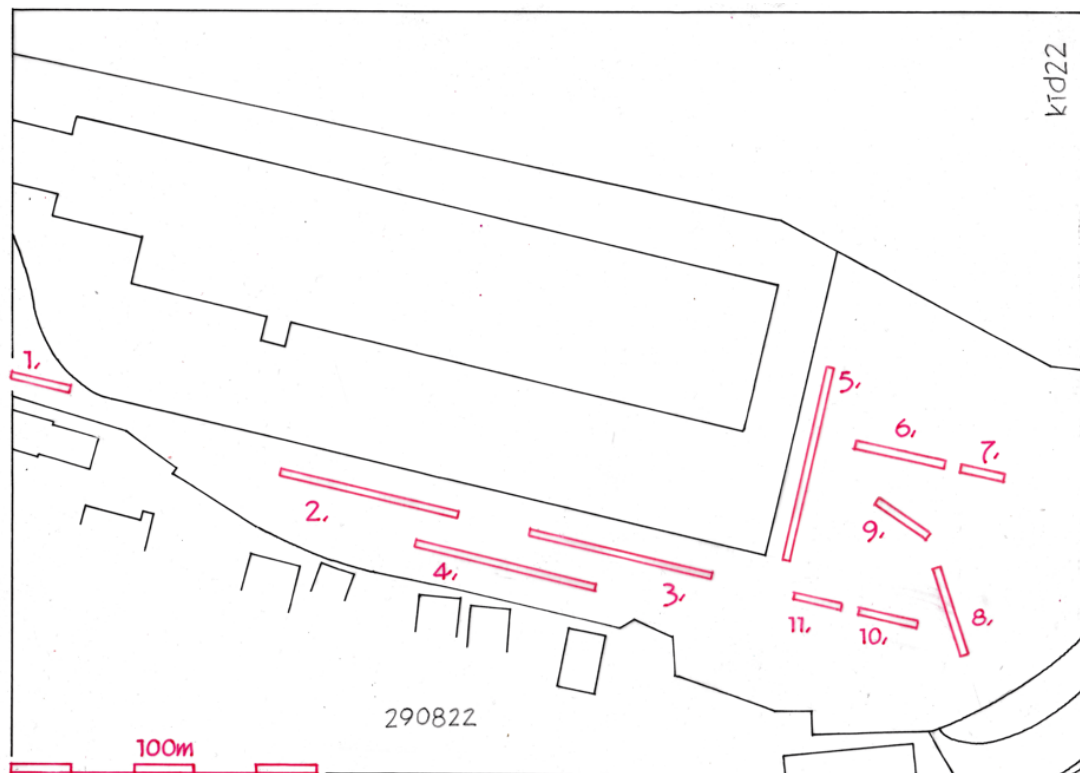


Fig. 3: Trench location plan.

Fieldwork methods and recording

The archaeological field work and post-excavation was carried out in accordance with standards and guidance for archaeological field evaluations produced by the Chartered Institute for Archaeologists (CIfA, 2020). All deposits were excavated removing the overburden under close archaeological supervision using a toothless bucket and investigated for archaeological features. Plans and sample sections of the trenches were made and recorded during excavation.

RESULTS: GENERAL

Soil and ground conditions

Conditions were generally dry during the excavation with the soil layers showing little moisture retention. With the exception of trench 5, excavation was relatively smooth throughout the being made through alternate layers of sandy-silt with pebbles and in some trenches building rubble, leaving a clean and visible surface within the natural gravel and sand substrate deposit.

Reliability of field investigation

Some truncation of the underlying deposits, probably connected with the development of the site in the C20, appears to have occurred in parts of the site. There was little evidence across the application site of truncation of the underlying deposits associated with modern pitting or services although trenches 2, 3 & 4 were positioned to avoid pipework adjacent to the south side of the existing factory.

Distribution of archaeological deposits

No archaeological deposits were revealed during the investigation, instead the excavation revealed an overall stratigraphy across the site comprising of a natural geology consisting of gravel or sand overlain in some of the trenching by an undated relict subsoil layer, but mostly redeposited layers of sandy-silt or building rubble.

Presentation of results

The results of the excavation (below) are described from the earliest to the latest deposits. Trenches were attributed context numbers with a numerical value equivalent to the number of the trench.

RESULTS: DESCRIPTIONS

Trench 1

A small 10m long trench was aligned east-west at the west end of the application site. The natural gravel was exposed throughout the length of the trench at a roughly level of height about 42.85m AOD. There were no archaeological deposits overlying the gravel or truncating its surface although some undulation within the deposit in connection with a few irregular shaped features was likely associated with former tree root activity. The overlying undated relict subsoil layer (101) consisting of a greyish-brown, sandy-silt with a large pebble component, was about 0.20-0.30m thick. This was sealed throughout the trench by a 0.40m thick layer (100) of modern brick rubble with a large component of sandy-silt.

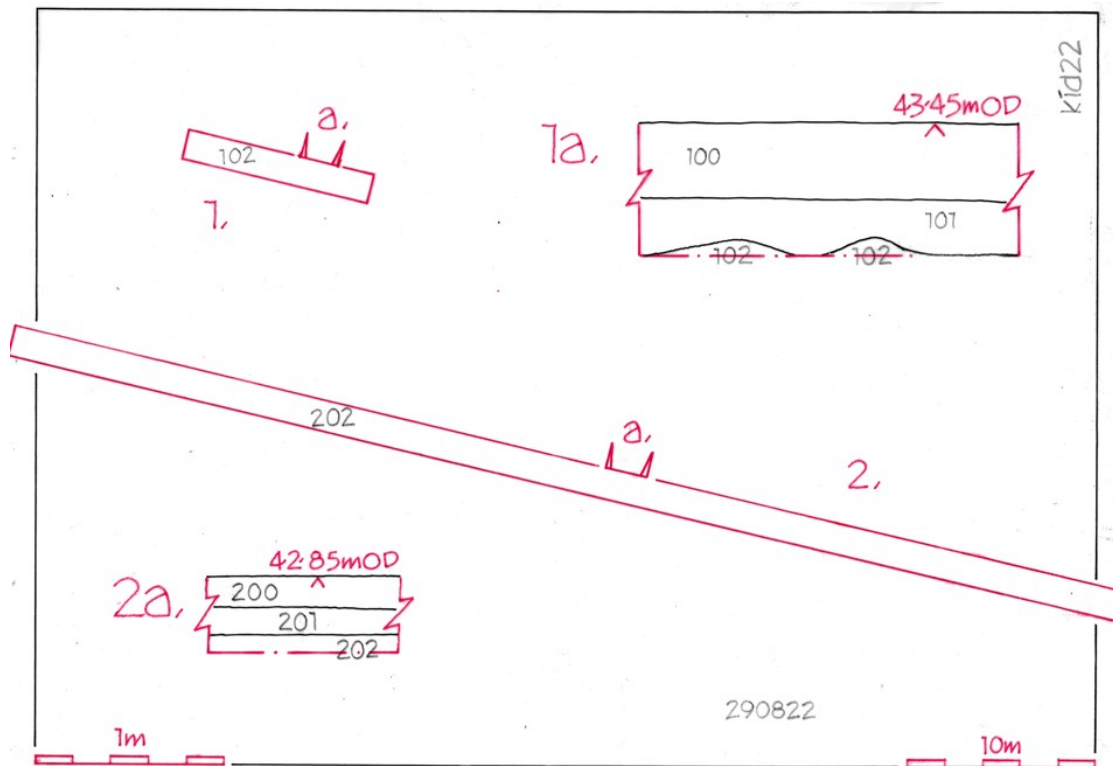


Fig. 4: Trenches 1 & 2: Plans and sections.

Trenches 2, 3, & 4

Three 60m long trenches, each aligned east-west were excavated within the southern part of the application site. Their location was partly intended to investigate an earlier trackway and field boundary associated with Oldbury Farm recorded aligned north-south in the late C19 (OS 1884). The natural substrate comprised mostly gravel in trenches 2 and 4 and red sand in trench 3. It was

exposed throughout the length of all three trenches at a height varying between 42.10m in trench 3; 42.40m in trench 4 and 42.55m in trench 2. No archaeological deposits or cut features were observed overlying or truncating this deposit in either of the trenches. The only feature was a single small square modern pit recorded truncating the gravel towards the west end of trench 3. Overlying the gravel in trenches 2 & 4 was a single layer of sandy-silt ranging from 0.14m thick (201) and 0.22m thick (401). In both trenches these deposits were sealed by a grey layer of modern crushed stone up to 0.16m thick.

In the trench 3, the sequence of deposit differed slightly. The red sand substrate was overlain by an undated relict subsoil deposit (303) of mid-dark, greyish-brown, sandy-silt with a component of small, rounded pebbles. It was observed throughout most of the trench at various levels of thickness ranging from 0.10-0.16m. At the east end of the trench the sand was overlain by successive layers (301 & 302) of redeposited light, greyish-brown, sandy-silt with pebbles amounting to an overall thickness of about 0.45m. This was in turn sealed by a 0.18m thick layer of modern crushed stone. At the west end of the trench a 0.20m thick deposit of equivalent redeposited soil sealed the sand and was in turn overlain by 0.40m thick layer of brick rubble.

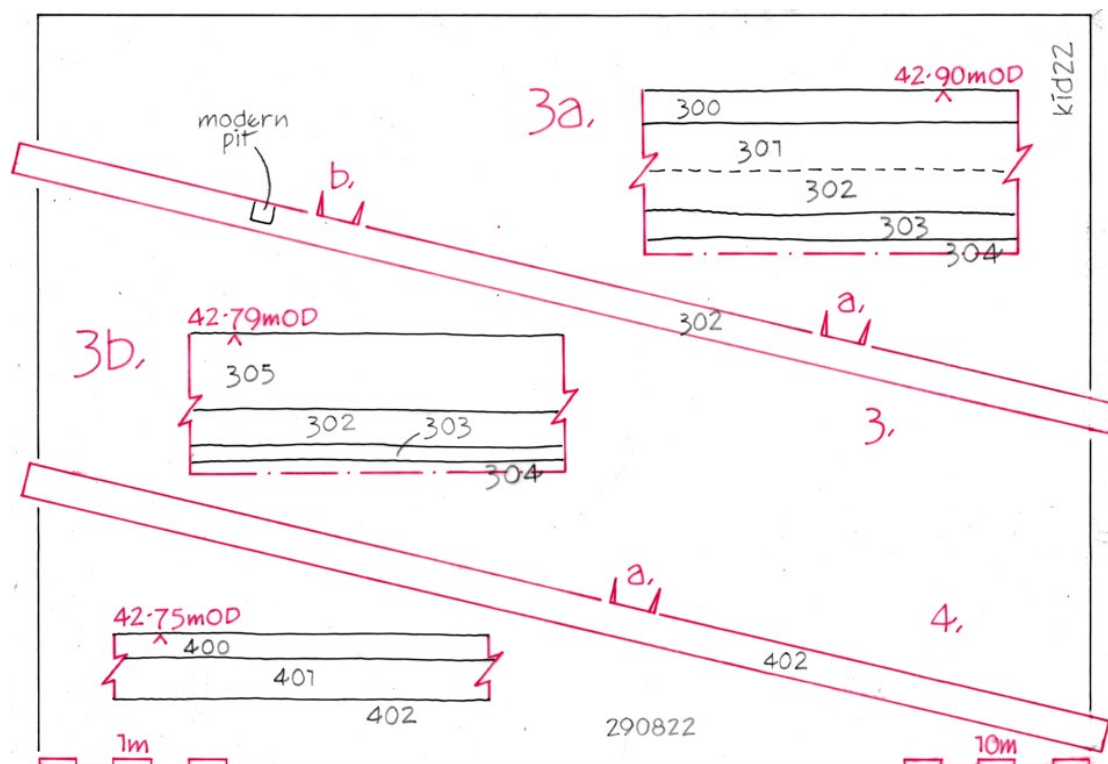


Fig. 5: Trenches 3 & 4: Plans and sections.

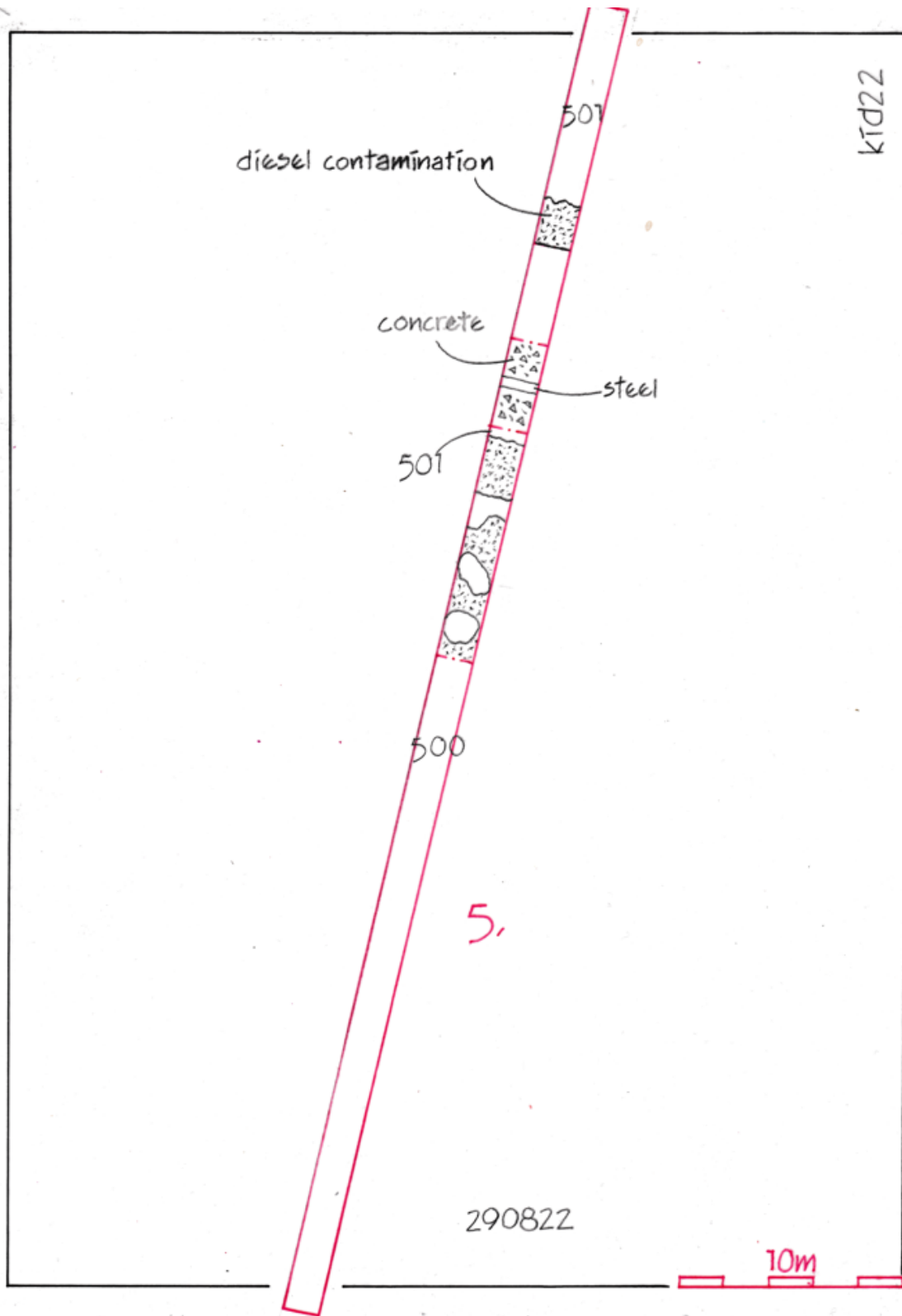


Fig. 6: Trench 5: Plan.

Trench 5

It was initially anticipated that the trench would be 80m long, but this was reduced to 60m due to the width of the bund material along the north of the site.

What appeared to be the surface of the gravel substrate (501) was observed within the base of the trench at the north end and recorded at a height of about 42.40m AOD. The gravel showed signs of considerable oil contamination from the former use of the site for waste recycling. It was sealed throughout the length of the trench by a 0.50m thick layer of compacted rubble (500). There was a break in the excavation about halfway along the trench where a large and thick concrete slab was located and although excavation continued a little further through the rubble, this was eventually abandoned and the remaining length of trenching excavated in another part of the site.

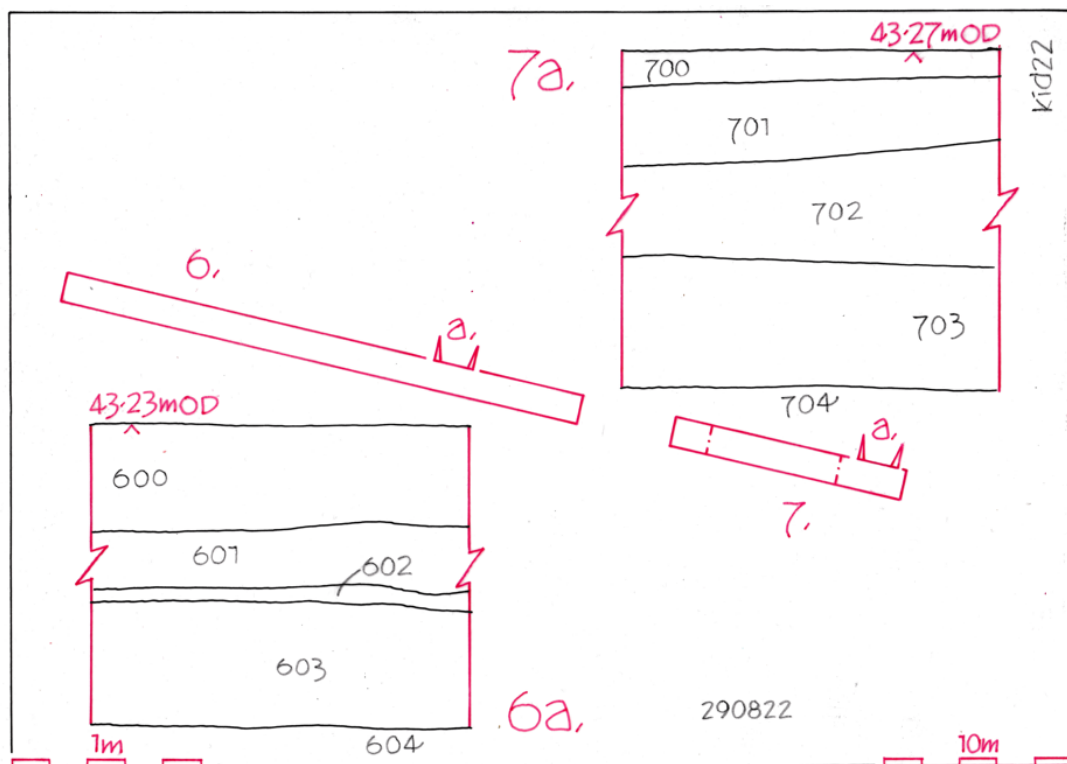


Fig. 7: Trenches 6 & 7: Plans and sections.

Trench 6

In trench 6, red sand, interpreted at the natural substrate (604), was recorded at a level height of about 46.60m AOD throughout the length of the trench. It was overlain, also throughout the trench, by a 0.65m thick undated deposit of probable alluvium (603) comprising a light-mid, greyish-brown, silty sand and gravel with a large component of small, rounded pebbles. It is sealed by a thick, 0.10m thick deposit of orange, sandy-gravel, discoloured black from diesel contamination. This material was in turn overlain by two redeposited modern layers consisting initially of (601), an orange sand and gravel with lenses of soil,

0.35m thick which is overlain by (600) a 0.55m thick deposit comprising gravel, soil, bricks, clinker and fragments of metal.

Trench 7

In trench 7 the natural substrate was not reached, instead a series of layers (701, 702, 703 & 704) consisting of silty, sand and gravel were recorded to a depth of 41.47m AOD at the east end of the trench where excavation was terminated 1.80m below ground level. The earliest deposit (704) showed signs of oil contamination and was sealed by two thick layers (701 & 702) of redeposited silty, sand and gravel, the upper deposit comprised redeposited red sand (701) overlain by modern crushed stone and rubble (700). The east end of the trench was marked by another concrete slab.

Trench 8

The trench was located at the southeast corner of the site revealing a sequence of thick redeposited layers of silty, sand and gravel throughout most of the trench to a depth of about 1.20m below ground level. At the eastern end of the trench excavation went to a depth of about 2.0m revealing a series of tip lines indicating the process of redeposition sloping down eastwards.

Trench 9

Trench 9 produced much the same result as the adjacent trenches and excavation terminated at just over a metre below the existing ground level. The earliest deposit (902) remained unexcavated at the base of the trench, approx. 1.10m below ground level and consisted of oil contaminated sand and gravel. This was overlain by a 0.60m thick deposit of sand and gravel (901) which was in turn sealed by a layer (900) of modern stone and rubble.

Trenches 10 & 11

The stratigraphy within both trenches, which were separated by a concrete slab, was broadly similar comprising a sequence of redeposited layers of sand and gravel within which were lenses of greyish-brown silt (1101 & 1102) amounting to an overall thickness of 0.65m. Oil contamination was again observed withing the layer (1102). The upper part of the trench consisted of a modern stone and rubble deposit (1100).

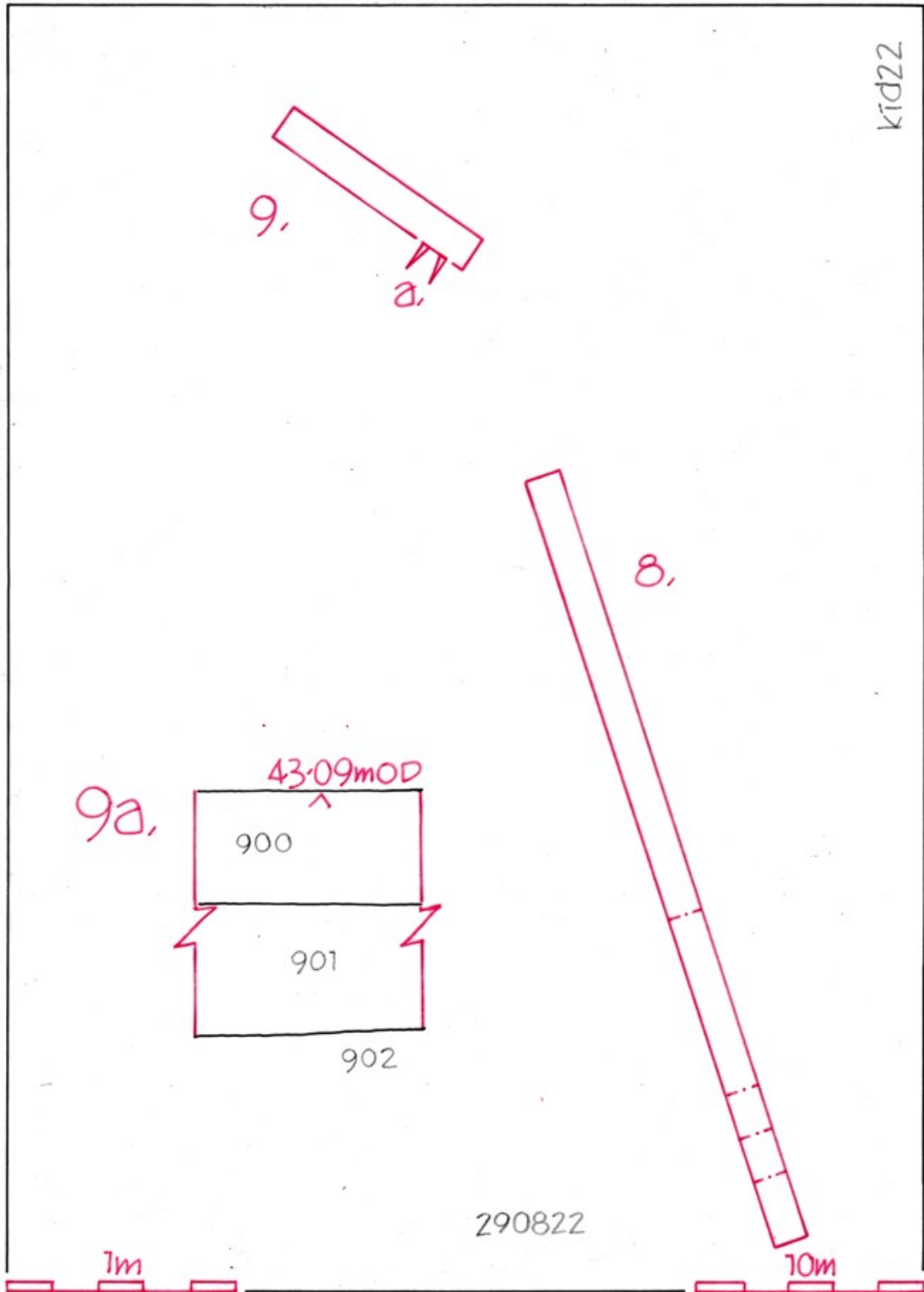


Fig. 8: Trenches 8 & 9: Plans and section.

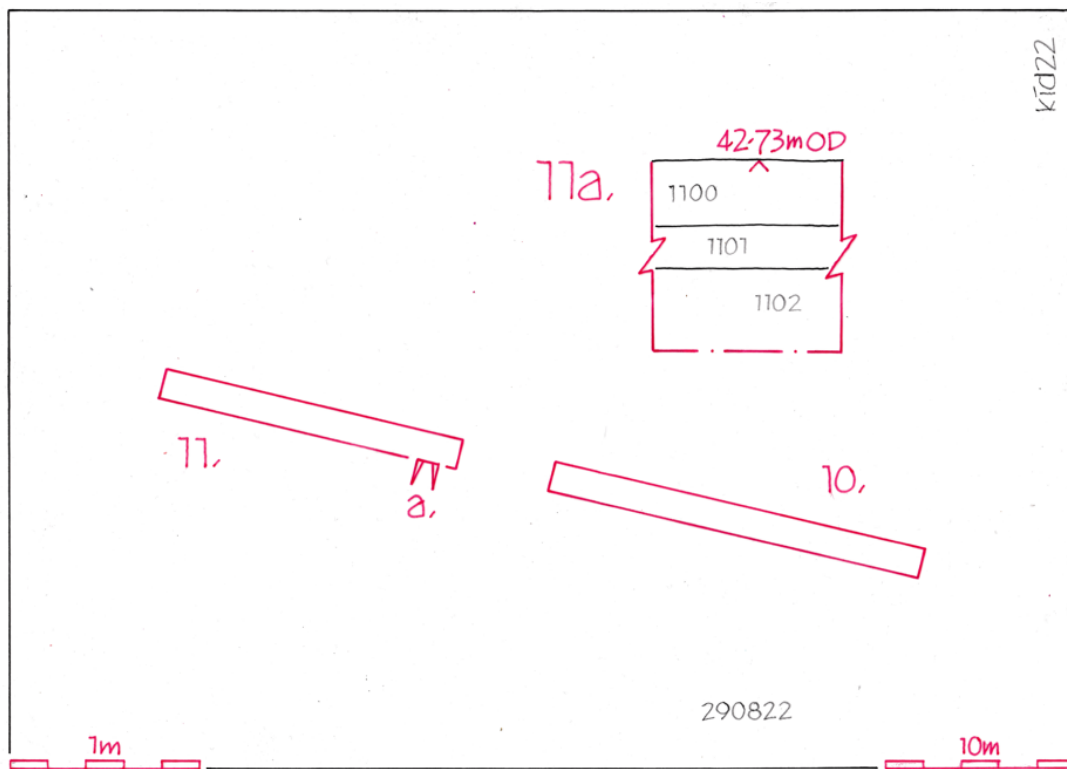


Fig. 9: Trenches 10 & 11: Plans and section.

FINDS

No finds were recovered during the investigation other than residual modern brick and tile.

Environmental data

None of the deposits identified during excavation proved suitable for palaeo-environmental sampling.

DISCUSSION

The HER shows us that the application site lies in an area of archaeological potential, it sits on an elevated position overlooking the flood plain of the River Stour where there was a strong possibility of prehistoric remains being present associated with early settlement. The site also lies adjacent to the former medieval Oldbury Farm which was documented in 1086 and remained extant in 1884.

Trenches 2-4 were located immediately north of the former farm and across a trackway and field boundary, the only notable features recorded on the OS First Edition 1884. There was no physical evidence of a former route-way and its form is likely to have been a rudimentary earth track. Previous truncation along the south side of the application site, however, appears to have been significant, in the areas where trenches 2 and 4 were located, overlying deposits appear to have levelled to the surface of the natural gravel which is now directly overlain by layers of either redeposited silt and gravel or building rubble.

The application site was historically in agricultural use until the 1960s when the site was utilised as a metal processing facility ('Folkes Foundry'), which operated until 2000. A waste management license was reportedly issued for the site in May 1977 allowing on-site infilling of foundry waste in the eastern portion of the site. It is understood that these infilling operations ceased in 1993. A borehole survey carried out prior to the archaeological investigation (Schofield, 2015) showed that made ground comprising hard standing overlying sub-base gravel materials with occasional fragments of bricks and/or ash was encountered within all the exploratory holes across the site, generally to a depth of 0.25–0.40m below ground level (bgl). Materials generally considered to represent foundry waste were noted within the former landfill area in the east of the site and were recorded to depths of between 0.3m bgl and 0.5m bgl, with deeper deposits recorded at two locations indicating made ground amounting to at least 1.0m bgl and more.

The results of archaeological work were broadly similar with the borehole survey, but because of the much greater level investigation, it was possible to characterise with more accuracy the former historic landscape of the application site. The depth of deposits overlying the natural gravel substrate within trenches 1-4 compared with the results in trenches 5-11 suggests a significant drop in the surface height of this deposit between the eastern end of trench 3 and the west end of trench 11. This may indicate the location of a former scarp or series of

terraces along the edge of the former flood plain. In trenches 1, 2 and 4 the gravel was less than half a metre below ground level whilst the results from the trenches 6-11 at the eastern end of the site suggests substantial ground consolidation. This was particularly evident in trench 6 where redeposition was recorded at a depth 1.80m (bgl) and at the end of trench 8 where a machine excavated sondage to a depth of 2.0m revealed the tip lines created during deposition (see plate 16). The adjacent canal to the west, beyond the large bund marking the edges at the eastern end of the site, is at a significantly lower level and a further indication of how much the site has increased in height during last sixty years.

Although significant truncation of the underlying deposits was evident in the areas where trenches 2 and 4 were located, the presence of a relict subsoil in trenches 1 and 3 (albeit somewhat truncated in 3), shows this deposit survives in places and that truncation associated with the modern development of the site did not extend across the whole of the site. This relict subsoil deposit clearly extended eastwards, at least to the end of where trench 3 is located and may indicate the location of the historical boundary between this parcel of land and the edge of the floodplain.

The negative results of the investigation showed little historical human activity within the site prior to the C20 other than that associated with the periodical use of the land for agricultural activities, the absence of residual artefacts found across the site during the excavation pre-dating the modern period supports this hypothesis.

Summary of results

Archaeological investigation of the application site produced no evidence of early settlement activity associated with prehistoric occupation of the river corridor or medieval activity connected with the former Oldbury Farm to the south documented in 1086. Traces of a relict subsoil within the western and southern parts of the site are the remains of agricultural land historically connected with the farm, the eastern extent of this deposit may indicate the boundary of the former land parcel at the edge of the flood plain, perhaps as a scarp or series of terraces marking the edge of the floodplain of the River Stour. The site was extensively developed for industrial use in the C20 initially as a waste management site which resulted in the eastern edge of the site being consolidated with redeposited waste material up to 2m in depth of between. The

negative results of the investigation showed that archaeological deposits are unlikely to be present within the application area and that the development will have no impact.

Significance

The negative results of the investigation showed that there is little evidence within the application site to indicate prehistoric settlement overlooking the river corridor. There was also no evidence of medieval occupation associated with Oldbury Farm formerly situated to the south site and it appears that the site continued as agricultural land until it was developed in the C20. Traces of an undated relict subsoil overlying the natural gravel and sand survive in parts of the southern and western areas of the site and represent the remains of the historic landscape. The evidence suggests little human activity within the site other than that associated with the use of the land for agricultural purposes. This hypothesis is supported by the absence of residual finds from across the application site.

Impact of development

The results of the investigation suggest that the construction of an energy and resource park within the application site is unlikely to impact on archaeological deposits.

Archive Location

The digital archive arising from the work will be deposited with the Archaeology Data Service (ADS) via the online portal OASIS.

BIBLIOGRAPHY

Geological Survey of Great Britain, 1976. *Worcester, sheet 199; 1:50,000 solid and drift edition*).

CIfA, 2019. *Code of Conduct*, Chartered Institute for Archaeologists.

CIfA, 2020. *Standard and Guidance for an Archaeological Evaluation*, Chartered Institute for Archaeologists.

Geological survey of Great Britain, 1976. *Droitwich, sheet 182; 1:50,000 series (solid and drift edition)*).

CIfA, 2019. *Code of Conduct*, Chartered Institute for Archaeologists.

CIfA, 2020. *Standard and Guidance for an Archaeological Evaluation*, Chartered Institute for Archaeologists.

Kelly, H., 2020. *Rear of the Forge, Stourport Road, Kidderminster; Historic Environment Baseline Report*, Heritage Archaeology.

Schofield, D., 2015. *The Forge, Stourport Road, Kidderminster: Supplementary Phase II Environmental Site Assessment*, Environ Birmingham UK.

Worcs., CC, 2019. *Standards and Guidelines for Archaeological Projects in Worcestershire*.

VCH, 1913. *Kidderminster: Introduction, borough and manors, in a History of the County of Worcester, Victoria County History, vol.3, 158-173, London*.

PLATES



Plate 1: trench 1, view northeast.



Plate 2: section 1a.



Plate 3: trench 2, view east



Plate 4: section 2a.



Plate 5: trench 3, view east

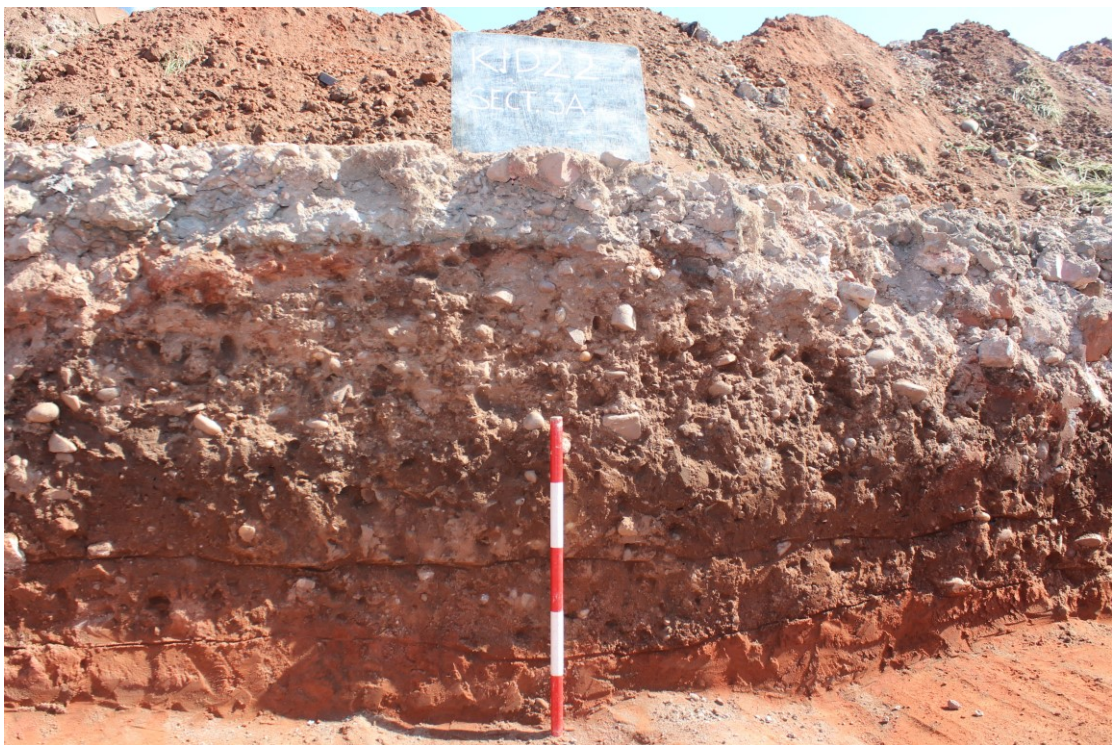


Plate 6: section 3a



Plate 7: section 3b



Plate 8: trench 4, view west



Plate 9: section 4a



Plate 10: trench 5, view south



Plate 11: trench 6, view northwest



Plate 12: section 6a



Plate 13: trench 7, view northeast



Plate 14: section 7a



Plate 15: trench 8, view northwest



Plate 16: section 8a



Plate 17: trench 9, view west



Plate 18: trench 10, view southwest



Plate 19: trench 11, view west



Plate 20: section 11a