

**Grand Union Business Park, Uxbridge, UB8 2SD
(Old Trimite site)**

***Archaeological Desk-Based Assessment
and
Geotechnical survey***



***Report No. 131
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1. Summary

The work undertaken by Chiltern Archaeology formed part of a Pre-determination Archaeological Assessment and Evaluation, and consisted of a desk-based study and geotechnical survey. The work followed advice and approval from English Heritage and followed previous contamination assessments by Environ and Concept Ltd. The archaeological investigation was required prior to a major development comprising industrial units as the site lies within the Colne Valley Archaeological Priority Zone and is within an area known for important Upper Palaeolithic and Mesolithic remains plus related palaeo-environmental evidence.

2. Introduction

2.1 Project background

The site had formed part of the Trimite site in part of an industrial area off Arundel road. The seven acre development area is immediately surrounded by other industry such as a chemical works, offices, parking and several engineering works.

Contamination assessment has been undertaken as the Trimite works involved paint manufacture and chemical storage. This archaeological assessment was undertaken in advance of the planning application proposing to erect two industrial units (use class B2/B8 with ancillary office space) and associated parking, servicing areas and landscaping. At the time of the start of the archaeological assessment the site had been cleared within the area indicated on Figure 1.

2.2 Site description

The National Grid reference is TQ 048 831 (postcode UB8 2SD). The site is located within an industrial area 1 km southwest of Uxbridge town centre (Figure 2) and it is surrounded by a road system with Arundel Road (southwest), Ashley Road (northwest), a small section of Cowley Mill Road ((northeast), Wallingford Road (east) and Salisbury Road (south).

The current development area is a 7.3 acre northerly portion of an approximate 10 acre industrial unit formerly known as the Trimite site. As part of this production site and adjacent engineering works with parking and road access the whole site has been previously covered by buildings or hard standing of some form. During Environs (2007-2011) and subsequently Concept's (2014) contamination assessment it was concluded that only two parts of the site (to the far northeast and the southwest extremities has bare soil. As a result these may be the only parts with soil profiles or shallow features, but they will also be the areas at risk of any past contamination.

Three tank farms located in the centre of the site were used to store solvents and resins for the paint-making process including phenyl mercuric acetate (PMA) methyl isobutyl ketone, methyl ethyl ketone, isopropyl alcohol, toluene, trichloroethene, xylene, and acetone. Other tanks were described in the Concept Engineering Consultancy report (2014) and checks to confirm that these had been cleaned prior to closure and removal had been made.

2.3 Site landscape, geology and soils

The Grand Union canal lies immediately (40 metres) to the east (as measured from the most easterly boundary of the development area. The River Colne flows 160 metres due west (as measured from the most westerly boundary). The site (at 30 mOD) thus lies within the Colne Valley at an average topographic height of c. 33 m in the valley bottom, the valley rising to c. 50 mOD either side of the site.

There are no nature reserves (LNRs or NNRs) and no Biological or Geological Sites of Special Scientific Interest (SSSIs) within a kilometre of the site. There are archaeological interests within the 1 km radius, as described below and shown on the HER map of Figure 3. However, there is no known archaeological feature or finds spot recorded for the area within the site boundaries.

The geology of the site is Shepperton Gravels over London Clay. The British Geological survey map has this recorded as river alluvium (MIS 1, Holocene age 10,000 to present-day) overlying the Lambeth Group Reading Formation (Palaeocene age, c. 55-60 million years). This is proved incorrect by this study and by the boreholes undertaken by Environ (2007). There may have been a thin layer of alluvium over the Shepperton Gravels originally, but these have long since been removed by levelling.

Alluvium is recorded locally (further west nearer the River Colne and to the east over the canal) and these are described as being composed of clays and silts. However archaeological exploration in several sites within the potential alluvial area records flinty gravel with no finer sediment such as clay, peat or horizons of potential archaeological value. The drift geology is therefore likely to change considerably across the area and to have a patchy and variable nature. The form of the Shepperton Gravels from the British Geological sheet (255, Beaconsfield) and from previous geological work by the author on these gravels in the Marlow area, are indicative of a remnant 'gravel island' formed by Quaternary palaeochannels during the last throws of the Glacial Maximum melt and cut by braided channel flows. The nature of the geological sequence will alter the style and extent of preservation of the environmental record, but also affect site contamination as it affects leaching or retention of contaminants.

The soils for this area are recorded as Frome (812a, of the Soil Survey Map Sheet 4, 1: 250000 scale) which is a series of shallow calcareous and non-calcareous loamy soils over flint gravel. However, the map shows the site to be very close to Windsor (712c) which is a clayey soil notably overlying Tertiary deposits (London Clay) where this is closer to the surface. The former (Frome) soils will be affected by groundwater and have a high leaching potential, the latter will be fairly impermeable. However, the whole area has been industrialised and the soil character will have been affected as a result. In addition, to geological information the Beaconsfield map (Sheet 255) shows made ground lying on top of the original land surface to the southeasterly end of the site and may overlap this site boundary. The nature of the made ground is not declared, but the canal is only 40 to 50 metres from this boundary and it may be excavated material forming part of the reinforcing embankment for the water channel. There is also a large quarried area of gravels to the west, now represented as infilled ground.

2.4 Planning background

Environ's report (2008-2011) listed the previous planning history available from the Planning Department of the London Borough of Hillingdon relating to the site and going back to 1977. The records are summarised below:

- **9117/R/77/0690:** Private / Public utilities – boiler room, lifts etc. Decision Date: 07/09/1977. Approved.
- **9117/W/79/0445:** Industrial Development. Decision Date: 27/04/1980. Approved.
- **9117/AB/79/2286:** Extension / Alteration to Industrial premises Decision Date: 16/01/1980. Approved Limited Time.
- **9117/AK/84/1298:** Extension / Alteration to Industrial premises Decision Date: 03/12/1984. Approved.
- **9117/DS/2003/23:** Danger Removed- Damaged wall after vehicle impact. Works carried out to support wall and prevent further collapse.

The site was recently purchased by Mentmore PLL for development. The buildings on the former Trimite site (present since the 1960s) have already been demolished (2014) and the surface and underground storage tanks decommissioned, cleaned, and with removal under way. The site lies within an area of light industry surrounding all sides – north, south, east and west, and with some housing in the northeast.

The archaeological work precedes a planning application to be submitted for the erection of two industrial units (Use Class B2/B8) with ancillary office space and associated parking, servicing areas and landscaping.

English Heritage Greater London Archaeological Advisory Service (GLAAS) were consulted regarding the archaeological requirements for the site on 7th November 2014 with a reply providing recommendations dated 1st December 2014. The GLAAS recommendations were for a Desk Based Assessment with concurrent geotechnical monitoring by means of geotechnical pits and boreholes, and consultation with the EH Science Advisor to ensure appropriate assessment of the palaeo-environmental potential.

3. Aims and objectives

The work undertaken by Chiltern Archaeology in this study covered a desk-based assessment alongside a geotechnical survey in order to:

- Assess the potential nature, importance and survival of archaeological and cultural heritage remains, including palaeo-environmental information within the area of development.
- Where appropriate to recommend any further work for a programme of archaeological investigation and recording, should important archaeology be located.
- Use the results of the investigation to identify the likely effects of the development on archaeology present or potentially present.
- Where appropriate to advise on mitigation measures for any archaeological discoveries so that they may be preserved *in situ*.

4. Methods and constraints

The HER, English Heritage on-line databases as well as the English Heritage National Monuments Record (NMR), were consulted for further records relating to the area. The information gathered consists of historical maps, documents, secondary sources and aerial photographs. The HER record included all information on find spots, archaeological sites and other archaeological work that has occurred within a 1 km radius of the site (Figure 3).

The analysis of documentary sources was complemented by a site visit to assess the current condition of the site. The conclusion was that the whole site had undergone major surface disturbance due to the multiple building history, underground and surface storage tanks, and hard standing put in place. Made ground appeared to be up to 50 cm and probably more in places, proved to be up to 1.4 metres during the exploratory trenching. Building foundations and notably the location of eleven underground storage tanks has caused major disturbance of the ground surface and restricted the choice of trench location for the archaeological investigation.

A second factor restricting the choice of location for archaeological trenching is the location of twelve boreholes put in during contamination assessment work by Environ (2007 to 2011; 2014). This information was used to inform the choice of locations and to enhance the geoarchaeological interpretations.

A third factor restricting site choice for archaeological trenches is contamination of the ground by a variety of chemicals in a number of places on site. The contaminated areas were avoided (and mostly coincided with building or tank locations in any case).

Therefore, the archaeological potential was not only anticipated to lie in areas not affected by tanks and foundations, but at depths of at least 0.5 metres and probably more than 1 metre. Potential archaeological interests such as cut features (ditches or pits) were explored by a series of exploratory trenches. These were anticipated as being shallow features, but ultimately the depth of the trenches was limited by health and safety issues to 1.5 metres. The gravels and made ground encountered are exceptionally unstable when wet. However, the depth of the section obtained could be deepened by a series of augered sections from the trench bases.

The constraint on the choice of trench location therefore was imposed by the previous location of buildings, storage tanks, previous facility excavations for water or drains and by previous boreholes.

The project conformed to accepted archaeological good practice as detailed in the following professional documents:

Brown, D. H. 2007. *Archaeological Archives – A guide to best practice in creation, compilation, transfer and curation*, Archaeological Archives Forum.

English Heritage. 1991. MAP2, *Management of Archaeological Projects*.

English Heritage. 2008. *Our Portable Past*. Statement of English Heritage policy and good practice for Portable Antiquities. EH website Feb 2008.

English Heritage. 2010. *Waterlogged wood*. Guidelines on the recording, sampling, conservation and curation of waterlogged wood (3rd ed.)

English Heritage, 2011. *Environmental archaeology: a guide to the theory and practice of methods from sampling and recovery to post-excavation*. (2nd ed.).

Ferguson, L. and Murray, D. 1997. *The Preparation, Curation and Storage of Archaeological Documentary Archives*. IfA

IfA. 2001; 2008. *Standard and guidance for archaeological field evaluation*

IfA. 2001. *Standards and guidance for the collection, documentation, conservation and research of archaeological materials*

IfA, 2001. *Standard and guidance for archaeological excavation*

IfA. 2002. *Code of Conduct*

IfA. 2002. *Code of approved practice for the regulation of contractual arrangements in field archaeology*

IfA. 2009. *Standard and guidance for the creation, compilation, transfer and deposition of archaeological archives*. October 2009.

IfA. 2012. *Standard and Guidance for historic environment desk-based assessment*.

Museums and Galleries Commission (MGC). 1992. *Standards in the Museum Care of Archaeological Collections*.

Society of Museum Archaeologists (SMA). 1993. *Selection, Retention and Dispersal of Archaeological Collections*.

Society of Museum Archaeologists (SMA). 1995. *Towards an Accessible Archaeological Archive*

Watkinson, D. (ed.). 1987. *First Aid for Finds*, 2nd edn. UKIC.

5. Results

5.1 The potential resource

The development falls within the Colne Valley Archaeological Priority Zone, which is an area noted for its importance for Upper Palaeolithic and Mesolithic remains, and related palaeo-environmental evidence. It was particularly important therefore to investigate the potential for finds or features at depth. It is clear that any features or artefacts that may have lain within surface layers would have been removed or damaged as a result of the close-built structures of the industrial site and accompanying parking and road surfaces. The Archaeological Desk Based Assessment determined the potential resource. The accompanying geotechnical survey of pits and augers was used to establish the deposits on site and indicate the potential for archaeology at depth, notably palaeo-environmental data. The potential resource to be investigated was primarily Palaeolithic and Mesolithic – notably artefacts such as lithic scatters. There was also potential for Neolithic or Bronze Age find scatters and Bronze Age field ditches. Palaeo-environmental evidence had accompanied this archaeology nearby (as organic-rich or peaty deposits). The potential was therefore that these layers would be highly likely in this location as it was closer to the River Colne than several local finds, and the site was mapped as an area of alluvium.

5.2 Archaeological and historical background

5.2.1 Previous archaeological work

An excavation in 1989 by J. Bennett for MoL Department of Greater London Archaeology (west) proved three ditches or gullies which were interpreted as possible boundary markers for early fields. Two of the ditches were parallel to one another, about 3 to 4 metres apart. They were oriented roughly E-W. In addition, minor concentrations of flint artefacts which were found in two of the trenches. Several revealed evidence of burning. From their appearance and technique of manufacture, the flints are most likely to date from the Neolithic or early Bronze Age.

Stewart (1989) in an excavation in the Cowley Road, adjacent to the River Colne, by the West London Archaeological Field Group discovered an organic peaty silt layer overlying river terrace gravel. At the interface of the organic layer and gravel, parts of two scatters of worked flint were recovered, which was potentially assigned to the early Mesolithic period. The organic layer was similar in nature to a layer observed during other excavations at Oxford Road, Uxbridge which is half a mile from the site. At this site a layer of similar black, organic peaty silt overlay scatters of flint and animal bone of late Upper Palaeolithic and early Mesolithic date.

In 2007 L-P Archaeology undertook an Archaeological Desk Based Assessment and concluded that a nearby site at Ashley Road, Uxbridge, did not contain any known archaeological deposits of national importance and that the potential for significant remains for the medieval and post medieval periods was low. The site was developed in the 20th century and prior to this was moorland and had been used for pastoral meadow. Ken Rush Associates undertook a geotechnical survey in 2003 (referred to in CgMs, 2007) when a total of five augered trial holes and one trial pit were

excavated. A 0.8 m to 1.2 m of clayey made-ground covered the site, which in turn covered dense sand and gravels of approximately 4.7 m to 5.8 m in depth, underlain by London Clay. No finds or features were encountered.

In 2014 Oxford Archaeology produced a Desk Based Assessment for the area around Riverside Way and the area was described as having a high potential for well preserved palaeo-environmental remains, an uncertain to low potential for the Palaeolithic and Mesolithic periods. There is a low to moderate potential for the Neolithic and Bronze Age periods and an uncertain to low potential for all later periods.

5.2.2 Historical maps

A number of historical maps are available for the area dating from 1885. These show the historical landscape as being one of floodplain with enclosed fields for agricultural use, near to the Swan public house and to the canal. From the earliest 1880s a gas works was built to the east, on the other side of the canal as this is shown already present on the 1885 map (Fig. 4). By 1896 the gas works was extended eastwards and a nursery is to the north across the Cowley Mill Road, later to be added to by allotment gardens for housing lying either side of the Cowley Mill Road to the NE and northwest of the site (Fig. 5).

A sewage works was installed immediately (90 metres) to the south of the site and the filter (sludge) beds associated with this encroached into the south boundary area by the early 1900s, further encroaching as seen on the 1914 and 1932 maps (Figs 6 and 7).

Although not shown on earlier maps, an 'old gravel pit' is shown on the 1914 map to the northwest and north of the culvert, but east of the River Colne (close to Culvert Bridge, TQ 046 834, central point). This lies some 300 m from the most westerly point of the site. Between 1914 and the 1930s a second gravel pit was opened due west of the site at TQ 045 832. This shows the presence of substantial amounts of Shepperton Terrace gravels at shallow depths to the west of the site. These gravels will be buried to greater depths where alluvium and floodplain deposits from the Alder Bourne and River Colne have been deposited by palaeochannels around these deposits.

By the 1950s to 1960s the site had become industrialised into a number of chemical and engineering units identified on the 1972 map (Trimite, Allied Chemicals and the electrical engineering works, Metro; Fig. 8). It is clear from the Concept report (2014) that there were a number of above ground storage tanks associated with these businesses (ASTs) and also underground storage tanks (USTs).

The site was redeveloped during the 1990s with Trimite taking over the previous Allied Chemical works. The electro-plating works was demolished at some point between 2008 and 2011 (Concept, 2014) with this area remaining vacant since that

time. Very few changes occurred until the site was bought by Mentmore LLP who undertook demolition during 2014 in preparation for the cleaning and re-development.

5.3 Designated sites (zones, SM or listed buildings)

The HER map showing archaeology, find spots, listed buildings and other features is presented as Figure 3 (p.16) with the summary list in Table 1 (p.26). From the 14 records falling within the map, seven lie inside the 1 kilometre perimeter zone around the site and seven are just outside the kilometre boundary.

One is the 19th Century listed building of St John's Church to the north of the development site and another building close to the site is dated to c. 1939 as a Defence of Britain Project location. There are no excavation details on record for two of the excavations in the area, two further excavations had no finds although the geological sequence was recorded and one (Waterloo Road) was concluded as low archaeological potential. From the remainder there was significant archaeology and a palaeochannel located. The Cowley Business site, to the southeast, is likely to have very similar geology to this site (according to the BGS geological map) and the Cowley sites were significant in displaying Prehistoric ditches, field boundaries and lithic items. In addition, to the west of the site less than 500 m away a Mesolithic flint scatter was located within peat. Locating horizons similar to these was a major objective of the exploratory work.

5.4 Geotechnical survey

The geotechnical survey was undertaken using two techniques (trenching and augering) to explore and record the geological sequence and attempt to locate archaeological features, artefacts or deposits suitable for palaeo-environmental analysis.

Four trenches each 3 m x 2 m and 1.5 m in depth were dug by JCB fitted with a toothless bucket (Figure 9). This was treated as a watching brief for the purposes of locating archaeological features known to be in the adjacent Cowley Business Park area such as ditches and field boundaries. On encountering no archaeological features, the trench stratigraphy was then logged as a geological sequence and sampled appropriately for further observations for this purpose. At the same time evidence for archaeological activity and artefacts was sought (such as worked flint from the trench profile and spoil heap).

The geological logs for the four trench sections are shown in Figure 10 and the descriptive and interpretive record for the samples obtained from these trenches is shown as Table 2. All sections contained made ground up to a depth of 1.4 metres. The made ground was in direct contact with a levelled surface of sandy gravels forming the natural geological layers. The collection of a total of six samples of natural deposits was possible from the sections, each representative of a distinctive lithological layer. The samples taken were:

Trench	Sample no.	Description
Trench 1:	Sample 1.1	Sandy gravel with cobbles
	Sample 1.2	Sandy gravel with cobbles
Trench 2:	Sample 2.1	Sandy, pebbly clay with cobbles
	Sample 2.2	Sandy, clayey gravel
	Sample 2.3	Pebbly, sandy gravel
Trench 3:	No samples possible	
Trench 4:	Sample 4.1	Sandy gravel

Trenches 1 to 4 are shown in the photographs contained within Figures 11 to 14. Each sample was rich in quartz sand and flint pebbles. Flint gravel was mostly rounded, but some angular clasts were common. Trench 1 samples and the uppermost bed of Trench 2 contained cobbles. Trench 2 beds also contained clay indicating a very turbulent environment with rapid deposition and then a sudden discontinued current action. All gravels were very homogeneous in character, with no sedimentary structures visible in the sections and with no fossils, biological content or archaeological content. There were no finer sands, clay horizons or organic deposits encountered in the trench profile or from augering.

However, augering proved impossible for some trenches due to rapid flooding by groundwater, or to contaminated water entering one trench (Trench 3), or due to cobbles preventing further penetration. In addition, augered profiles collapsed easily due to a general lack of clay content in beds below the trench base, plus their coarse yet sandy nature and water content, all promotes free-flowing sediment which back-filled the hole as sampling was attempted, limiting the samples that were retrieved.

All these features are typical of braided river deposits and this coarse, poorly sorted sandy gravel with flint cobbles is typical of the Shepperton Terrace. Shepperton Gravels were laid down during MIS 2 to 4 during the time-span 14,000 to 71,000 years ago. These sediments were therefore laid down during and just after the last Glacial Maximum. The only potential archaeological finds would be reworked Palaeolithic tools – and none were found. The Younger Dryas and Holocene deposits, have been removed during the levelling of the site. It is these deposits which include the river alluvium, soils and any Mesolithic or later archaeology. The same sequence of made ground directly over-lying Shepperton gravels was found during the previous environmental surveying (e.g. the subsurface profile for WS1, Environ 2007 showed six metres of gravel with flint cobbles lying over the London Clay).

5.5 Results by period

No archaeological features or artefacts were located within the trenches or from the spoil. The area has been levelled and the majority of the Holocene deposits, soil and alluvium have been removed from this site.

6. Assessment of archaeological importance

The area of the Colne Valley as a whole does present itself as highly worthy of the designation of the Colne Valley Archaeological Priority Zone as important Palaeolithic and Mesolithic remains and their related palaeo-environmental evidence has been found in the past at other localities and indeed is a possibility within this Uxbridge segment of land. It is unfortunate for the archaeological record that there has been intense industrial activity since the early 1900s for the southern part of the development area and the whole area since the 1950s. The result has been levelling of the area and no remaining Holocene to Recent deposits exist in the areas of the trenches of this exploratory work nor on other parts of the site explored during the 12 subsurface boreholes by Environ (2007).

Boreholes in nearby locations indicate that suitable deposits for the survival of archaeological material within alluvium exist around the development site. For instance the British Geological Borehole to the north of Ashley Road (TQ08SW435) proved alluvium overlying London Clay. The previous archaeological work (discussed in Section 5.2) has proved the existence of alluvium and occasionally peaty beds which have preserved, or have the potential to preserve, significant archaeology. The areas of significant potential therefore lie immediately and some distance to the north, east and south of this development site. The area to the west is a further outcrop of Shepperton Gravels (part of the same terrace remnant as present on this site) and there is also large areas of infilled ground following extraction of the gravels.

7. Assessment of impact

The development proposed for the Grand Union Business Park (Old Trimite site) for industrial units with parking and landscaping will have no negative impact on the archaeological record or visual amenity of this site. This statement is supported by the results from four trial trenches and associated boreholes from previous studies, showing that all potential features, finds or deposits of palaeo-environmental interest have already been removed by levelling of the ground surface. This statement holds for both parts of the development (e.g. the two areas defined in Figure 1 by both the blue and the red lines).

8. Confidence rating

High confidence due to good coverage of the site and representative samples successfully obtained.

9. Conclusions and recommendations

The development site (Old Trimite site) now to be known as the Grand Union Business Park was last occupied by Trimite Ltd for the manufacture of industrial coatings and pre-treatment chemicals for metal and plastics. Historically, filter beds associated with a nearby sewage works were present in the southeast of the site (between approximately 1900 and 1960), an Engineering and Plating Works was present in the southwest of the site (from 1960) subsequently acquired by Trimite, although the date of acquisition is unknown), and a Chemical Works was present in the southern area of the site (from c. 1960) which was also subsequently acquired by Trimite and the date of this acquisition is also unknown. Paint manufacturing has been carried out at the site for approximately 50 years, with several major bulk storage tank farms including numerous underground and aboveground storage tanks (containing fuels, solvents and caustic) on-site from the time of the original development of the site.

During each of the building phases and the redevelopment of the site the ground was levelled and intrusive structures and facilities emplaced. Any alluvium that may have been present, and all original soil, was removed from the parts of the site investigated during this study and also other parts of the site investigated as an environmental survey by Environ (during 2007-2011; 2014).

The archaeological assessment undertaken here for the proposed development has shown no listed sites and no known archaeological finds or features within the site boundaries. Some prehistoric (possibly field boundary) ditches, along with a small collection of worked flints, have been found within a half kilometre radius. The locations of these finds are to the northwest and close to the River Colne (and the source of alluvium) or to the east, on the other side of the canal, where further alluvium is present over gravel terrace deposits.

This development site lies directly on Shepperton Gravels of Palaeolithic date (14,000 to 71,000 years old). No younger deposits containing the Holocene to Recent record now exist on the site. The only archaeological potential lies in the chance find of the exceptionally rare occurrence of reworked Palaeolithic tools (given that there is no evidence to suggest ditches or other features have been dug into these deposits).

The conclusion is therefore that the development presents no risk to the archaeological record and therefore no mitigating measures need be put into place as a result. The recommendation is that no further work need be undertaken to assess further archaeological potential. However, other developments, if proposed in future, for the areas north or east of this site might present an archaeological interest.

10. Figures and photographs

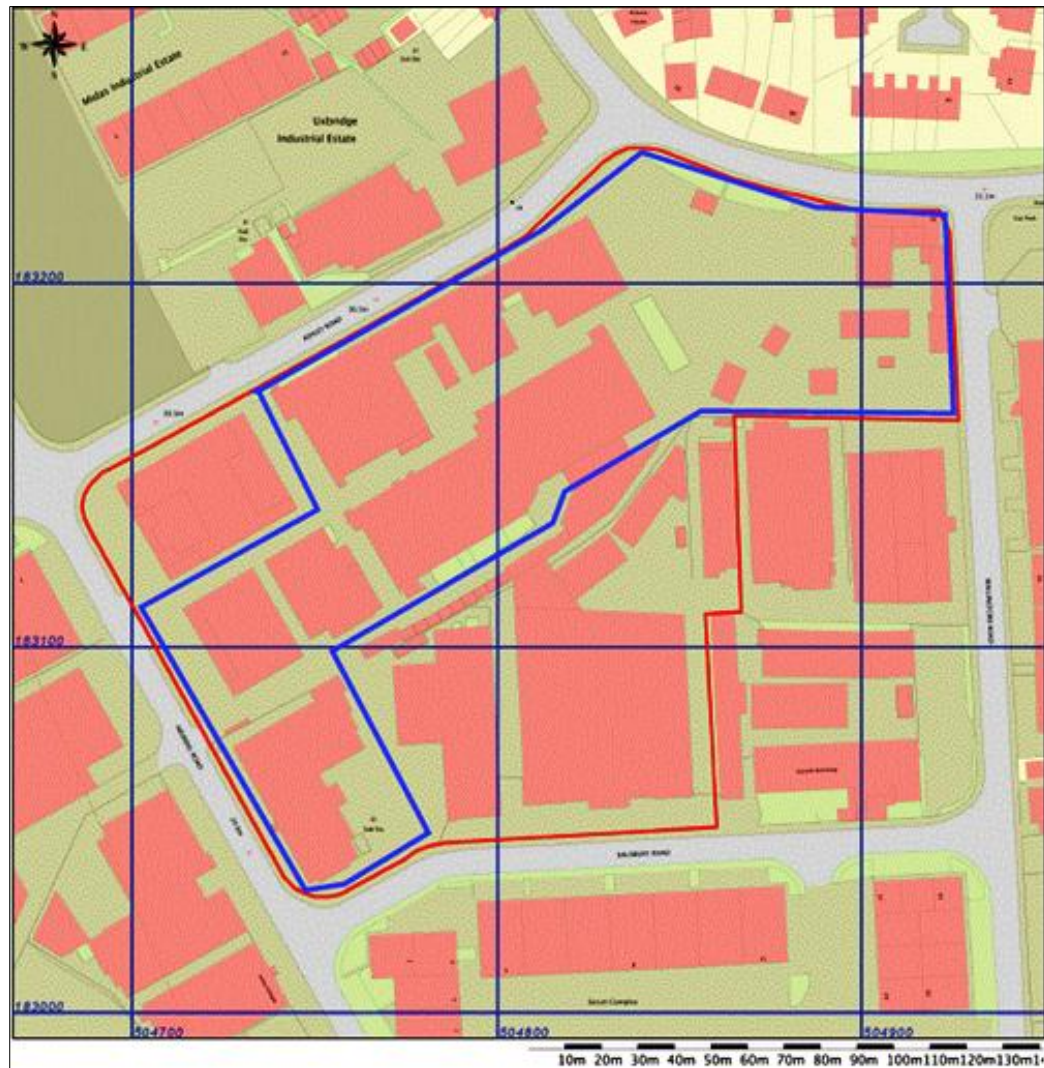


Figure 1 the development area for the Grand Union Business Park
The blue line encloses the area for the first development; the red line for the second outline planning application.

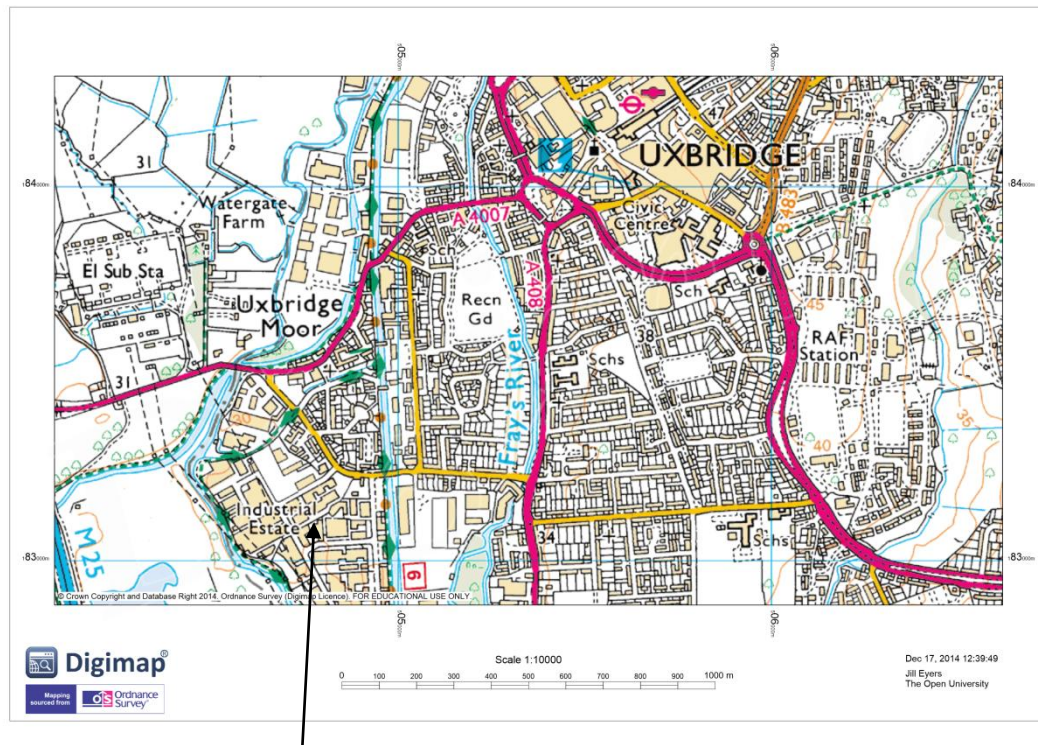


Figure 2 The location of the site southwest of Uxbridge, flanked by the Grand Union canal and Fray's River to the east and the River Colne to the west.



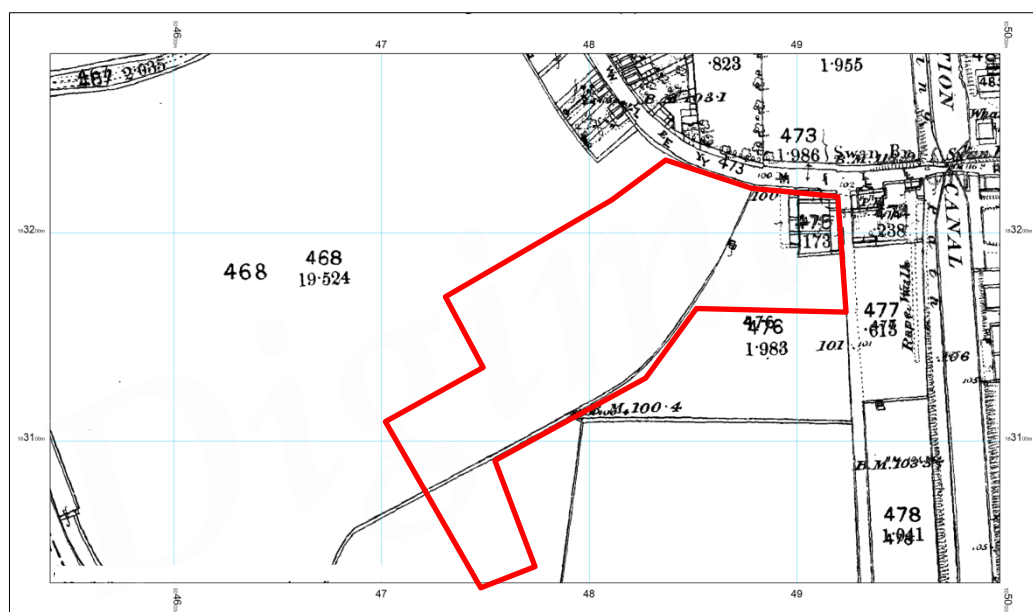


Figure 4 Extract from the 1885 map scale 1: 1800 with site location shown in red.

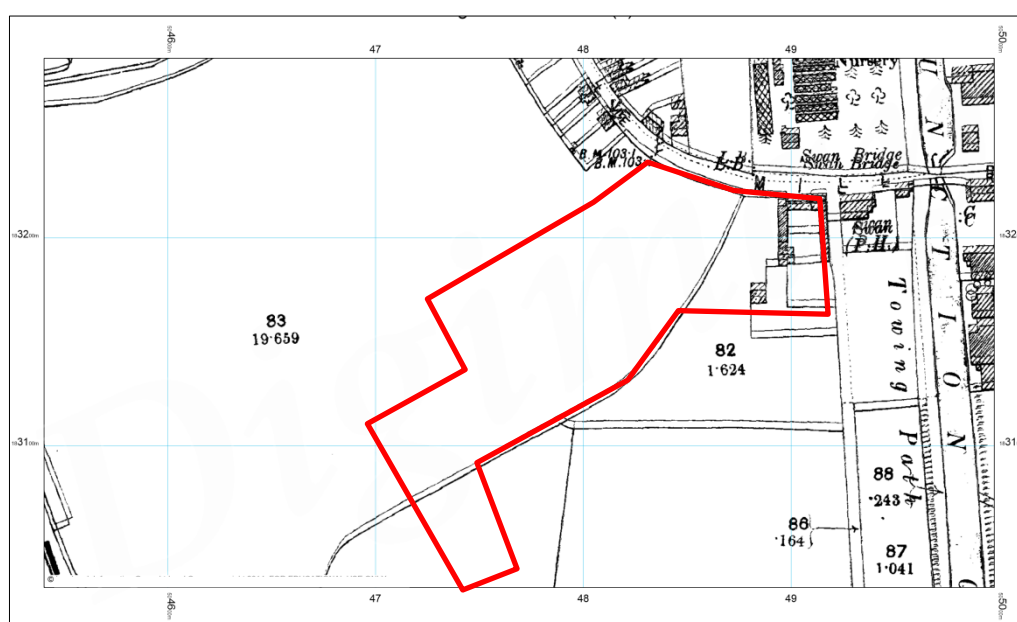
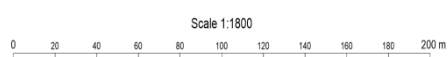


Figure 5 Extract from the 1896 map, scale 1:1800 with site location shown in red.



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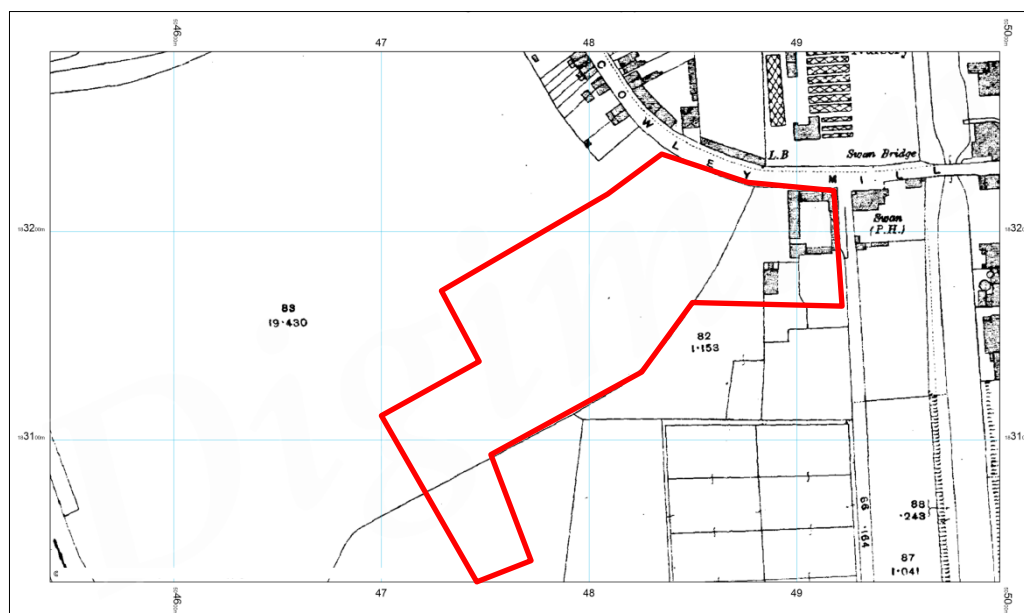


Figure 6 Extract from the 1914 map, scale 1:1800 with site location shown in red.

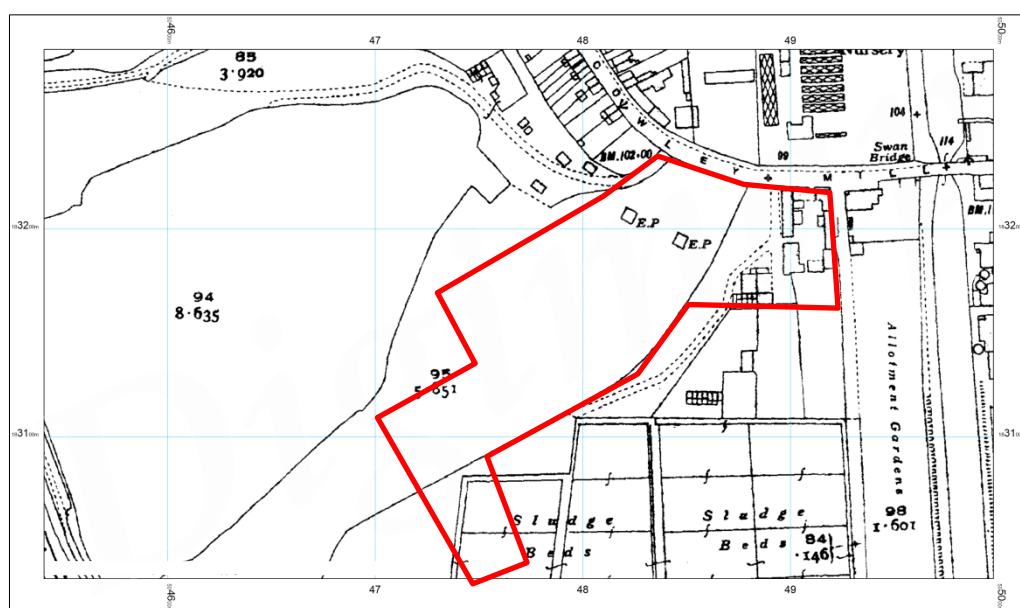


Figure 7 Extract from the 1932 map, scale 1:1800, with site location in red.



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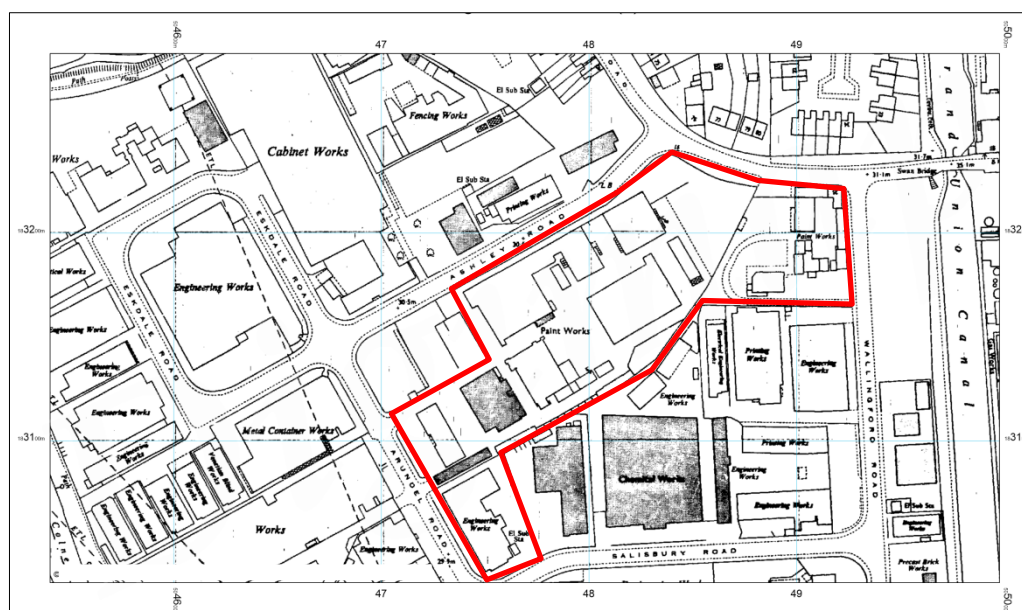


Figure 8 Extract from the 1972 OS map, scale 1:1800, site location shown in red.



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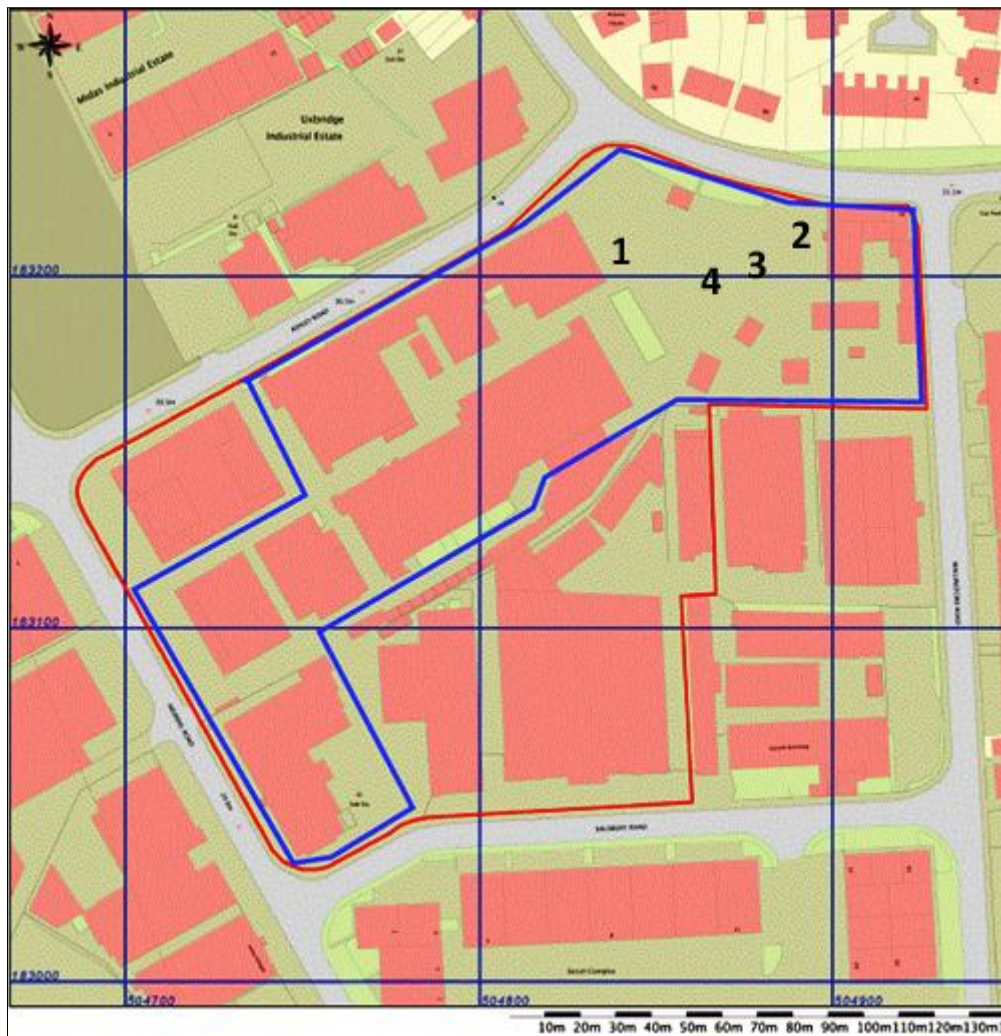


Figure 9 The location of the four exploratory trenches. Coordinates:

Trench 1: 504833,183213. NGR TQ04833 83212. Depth 1.5 metres.

Trench 2: 504887,183213. NGR TQ04886 83213. Depth 1.7 metres.

Trench 3: 504875,183206. NGR TQ04875 83206. Depth 1.5 metres.

Trench 4: 504862,183205. NGR TQ04861 83204. Depth 1.83 metres

All trench coordinates are NE corner. All trenches are 2 m x 3 m orientation N-S.

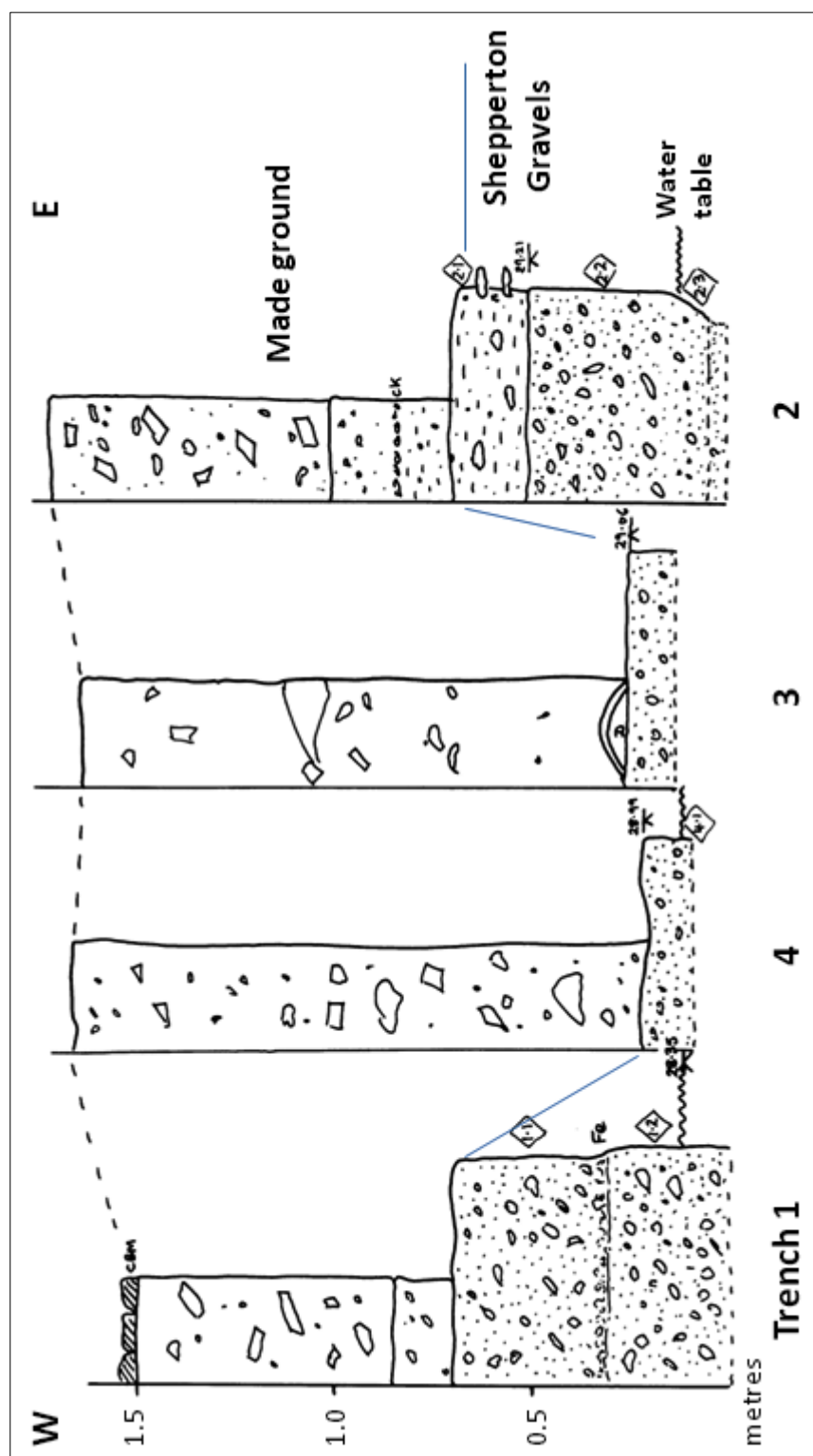
Figure 10 Correlation of the geological sections for the four trenches

Figure 11 a and b. Trench 1**Site code: GUBP15. Grid Ref: TQ 0483 8321****Grand Union Business Park, Arundel Road, Uxbridge, UB8 2SD.****Interpretive comments:**

Two layers of sandy gravels dug into by modern features (the cut on the right side of the trench was carrying service pipes. Photographs: above looking NE; below looking west. The trench filled with water rapidly and recording with sampling had to be rapid. Two samples were taken (one above and one below the diagenetic iron stained horizon).



Figure 12 a and b. Trench 2

Site code: GUBP15. **Grid Ref:** TQ 0489 8321.

Grand Union Business Park, Arundel Road, Uxbridge, UB8 2SD.



Interpretive comments:

Two layers of made ground: upper with CBM and the darker lower layer with a middle crushed chalk horizon over natural clayey pebbly sand (20 cm) over sandy gravels (>43 cm). Three samples taken.

Looking NE



Figure 13 a and b. Trench 3.

Site code: GUBP15. **Grid Ref:** TQ 0488 8321

Grand Union Business Park, Arundel Road, Uxbridge, UB8 2SD



Interpretive comments:

Made ground to 1.45 metres depth. Drain/conduit struck by JCB and pungent fluid filling the trench. No augering or samples were possible, but the gravels had just been reached by the bucket at 1.45 metres.

Figure 14 a and b. Trench 4

Site code: GUBP15. **Grid Ref:** TQ 0486 8320

Grand Union Business Park, Arundel Road, Uxbridge, UB8 2SD



Interpretive comments:

Trench 4 looking northwest. Made ground to 1.4 metres depth. Gravel just touched in trench base. One sample was taken from just below the surface of the trench base. Augering failed due to the water table and cobbles encountered.

11. Tables and appendices

Table 1 List of archaeological features, buildings or find spots

There are no archaeological features (as yet known), find spots or listed buildings within the development area. This lists those falling within the 0.5 km search zone around the site. The HER record is shown as Figure 3.

<u>Site name</u>	<u>Grid reference</u>	<u>Brief details</u>
St John's Church	TQ 0481 8351 (point)	C19th Parish church
Cowley Business Park	TQ 0508 8287 (point)	Prehistoric lithic item (500,000 to 43 AD)
Cowley Business Park	TQ 0508 8287 (point)	Excavation proving: 3 Prehistoric ditches ?field boundaries.
Cowley Business Park	TQ 0511 8275 (centroid)	Palaeochannel, no finds.
Near River Colne	TQ 0460 8340 (point)	Mesolithic lithic scatter, In peat, 10,000-7000 BC.
Cowley, nr Grand Union	TQ 0510 8280 (point)	Trys Site excavation: Prehistoric ditch & track; Late Bronze Age ditch; Late Bronze Age track.
Cowley Mill Road	TQ 0500 8325 (point)	Defended building c.1939 Defence of Britain Project
Cowley Mill Road	TQ 0509 8304 (centroid)	Site evaluation; Wessex Arch. No finds/features.
Riverside Way	TQ 0476 8367 (centroid)	Oxford Arch DBA
Diesel former site	TQ 0508 8287 (centroid)	Excavation, no details.
Trys site (rear of)	TQ 0510 8280 (centroid)	Excavation, no details.
145 Waterloo Road	TQ 0506 8349 (centroid)	DBA, CgMs Consulting Low archaeol potential.
145 Waterloo Road	TQ 0506 8349 (centroid)	Borehole survey. No finds Geological sequence.
Ashley Road	TQ 0468 8324 (centroid)	L-P Archaeology DBA

Table 2 Descriptive and interpretive sheet for sediment samples from trenches 1 to 4, GUBP15, Uxbridge. (Sample numbers = trenchnumber.bednumber)

Sample number (trench/bed)	1.1	1.2	2.1	2.2	2.3
Composition: <i>Grains (in order of abundance)</i>	Quartz, Flint, Vein qtz	Quartz, Flint, Vein qtz	Clay, quartz, flint	Quart, flint, clay	Quartz, flint
<i>Matrix:</i>	None	None	Clay	Clay	None
Texture of grains: <i>Size (range: cm, mm, μm)</i> <i>Size average (cm)</i> <i>Shape</i> <i>Roundness</i> <i>Sphericity</i> <i>Fabric</i> <i>Surface texture (quartz)</i>	8 cm to 187 μ m - Variable Rounded & angular Low - Glassy	9.5 cm to 187 μ m - Variable Rounded & angular Low - Glassy	8.4 cm to 63 μ m - Variable Rounded & angular Low - Glassy	6 cm to 63 μ m 3-4 cm Variable Rounded Low - Glassy	4 cm to 250 μ m 3 cm Variable Rounded Low - Glassy
Maturity: <i>Compositional</i> <i>Textural</i>	Mature Immature	Mature Immature	Mature Immature	Mature Immature	Mature Immature
Fossils	None	None	None	None	None
Sedimentary structures	None	None	None	None	None
Energy of environment	High	High	Turbulent, then low	High, turbulent	High- moderate
Time in transport (all stages)	Long then rapid deposition	Long then rapid deposition	Long then rapid deposition	Long then rapid deposition	Long then rapid deposition
Bed/suspension load deposit	Bed	Bed	Bed then suspension	Bed	Bed
Wind or water deposition: <i>Evidence?</i>	Water Qtz, size	Water Qtz, size	Water Qtz, clay	Water Qtz, clay	Water Quartz
Diagenetic features	Iron migration	Iron migration	None	None	None
Sediment classification	Sandy gravel & cobbles	Sandy gravel & cobbles	Sandy pebbly clay with cobbles	Sandy clayey gravel	Pebbly sandy gravel
Archaeological component?	No	No	No	No	No
Biological component?	No	No	No	No	No

(1 of 2)

(2 of 2)

Sample number	4.1	
Composition: <i>Grains (in order of abundance)</i> <i>Matrix:</i>	Flint, quartz None	
Texture of grains: <i>Size (range: cm, mm, μm)</i> <i>Size average (cm)</i> <i>Shape</i> <i>Roundness</i> <i>Sphericity</i> <i>Fabric</i> <i>Surface texture (quartz)</i>	4.5 cm to 250 μ m 3 cm Variable Rounded & angular Low - Glassy	
Maturity: <i>Compositional</i> <i>Textural</i>	Mature Immature	
Fossils	None	
Sedimentary structures	None	
Energy of environment	High	
Time in transport (all stages)	Mixed: long (rounded); short (angular)	
Bed/suspension load deposit	Bed	
Wind or water deposition: Evidence?	Water Quartz, size	
Diagenetic features	None	
Sediment classification	Sandy gravel	
Archaeological component?	No	
Biological component?	No	

12. Bibliography and sources

Bennett, J. 1989. *Excavations at Cowley Business Park, Cowley, MIDDX*. Site Code: CMU89. Unpublished document from the Excavation archive: Museum of London DGLA (W).

CgMs Consulting. 2007. *Archaeological Assessment Report: 145 Waterloo Road, Uxbridge*. Unpublished document.

Concept. 2014. *Ground Contamination Assessment: Trimite, Arundel Road, Uxbridge*. Concept report 13/2582 ER01. 6th Feb 2014.

Cotton, C. 1994. *Uxbridge Past: A Visual History*. London.

Department of the Environment (DoE) 1990 *Planning Policy Guidance Note 16: Archaeology and Planning* London

Department of the Environment (DoE) 1994 *Planning Policy Guidance Note 15: Planning and the Historic Environment* London

Environ 2007. *Phase I & II Environmental Assessment*, November 2007. Report Ref: 67-C12466 / 67-C12520.

Environ 2008. *Additional Environmental Assessment, July 2008*. Report Ref.67-C12790.

Francis, J. 1990. 'Rise of the Gasworks' in: *Uxbridge Gazette*, September 26, 1990.

Heathcote, J. 1989. *Excavation round-up..* Excavation serial 1989, p.189.

Institute of Field Archaeologists (IFA) 2001 *Standards and Guidance for Archaeological Desk-based Assessments* Reading

L-P Archaeology. 2007. *Archaeological Desk Based Assessment of Land off Ashley Road, Uxbridge*. Unpublished document.

Pearce, K. R. 1999. *A Century of Uxbridge: Events, people and places over the last one hundred years*. Stroud.

Pevsner, N. (ed.) 1974. *The Buildings of England: West London*. London.

Pugh, R. B. 1971. *The Victoria County History for the County of Middlesex: Volume 4* London.

Stewart, I. 1989. Cowley Mill Road site record. Excavation archive: DGLAW; site code: CMU89.

Abbreviations:

BGS British Geological Survey
EH English Heritage
GLAAS Greater London Archaeological Advisory Service
Ka thousand years
Ma millions of years
MIS Marine Isotope Stage (Oxygen isotope)
mOD Metres Ordnance Datum
SSSI Site of Special Scientific Interest

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