

**SITA ECO PARK, PHASE 1 WORKS AT
BENEDICT WHARF, HALLOWFIELD WAY,
MITCHAM, LONDON BOROUGH OF MERTON,
CR4**

An Archaeological Watching Brief



August 2012

SITE Eco Park, Phase 1 Works at Benedict Wharf, Hallowfield
Way, Mitcham, London Borough of Merton, CR4

An Archaeological Watching Brief

Site Code: BWH12
NGR (centre): TQ 26980 68490
Application No: 08/P2724

COMPASS ARCHAEOLOGY LIMITED
5-7 SOUTHWARK STREET
LONDON SE1 1RQ

Telephone: 020 7403 9660

Email: mail@compassarchaeology.co.uk

Author: Emma Jeffery

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Abstract

An archaeological watching brief took place during the excavation of six trial pits before the Phase 1 development of the proposed SITA Eco Park at Benedict Wharf, on 16th August 2012. This was undertaken to ascertain whether the late 19th – 20th century gravel quarrying that took place over large parts of the site also took place in this northern area, or whether earlier archaeological deposits (particularly relating to the Saxon cemetery to the south of the site, and possible Saxon – medieval settlement in the vicinity of the site), could survive.

The watching brief proved that the whole area had been subject to intensive gravel quarrying during the late 19th – early 20th century. No archaeological deposits, soil horizons, or natural deposits were encountered in any of the trial pits. Instead, a mixed grey silty-gravelly fill was observed towards the base of all of the pits (at an uppermost level of between 1.2m and 1.9m beneath the modern ground-surface and extending beyond the limit of excavations). This was clearly the infill of the gravel quarries.

Remains relating to the 20th century railway were uncovered in pits 1 and 3, and probable associated deposits / surfaces elsewhere, such as in pit 6. This included part of the timber railway sleeper, steel rail, and railway sidings, all underlain by a layer of crushed packed chalk. The silty-gravelly deposit (thought to have been the infill of the gravel quarries) was observed beneath the remains relating to the railway in both pits, proving that the gravel quarrying took place before the railway was constructed. This therefore means that no ‘spines’ of land unaffected by gravel quarrying existed.

The archaeological monitoring of these test pits has therefore shown that the whole area did undergo extensive gravel quarrying in the late 19th – early 20th century. Any archaeological remains or earlier deposits that may have once survived will have been destroyed by this quarrying, such that the archaeological potential for this area is non-existent.

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1 Introduction

- 1.1 This report details the results of an archaeological watching brief conducted on six trial pits before the Phase 1 development of a new Eco Park at Benedict Wharf (currently a recycling facility), Hallowfield Way, Mitcham, London Borough of Merton, CR4 (fig. 1). This took place on the 16th August 2012. The planning reference number for the overall development is 08/P2724.



Fig. 1: Site location based on the Ordnance Survey digital base as provided by AXIS Consultants

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Fig. 2: Current site plan (provided by Axis Consultants)

1.2 The development of Benedict Wharf forms part of the conversion of the site into a purpose-built recycling park. This involves the extension of the existing materials recycling facility, plus the provision of new buildings for a new anaerobic digestion facility, an office building, visitor education centre, waste bulking / transfer facility, new weighbridge, and new service road and ancillary infrastructure (Planning Ref: 08/P2724).

The Phase 1 part of this, to which this archaeological work applies, involves the construction of the 'Unit 1' building in the northern part of the site (fig. 3).



Fig. 3: Plan and location of the Phase 1 development, outlined in red. © Adkins 2012

1.3 This archaeological work followed the compilation of a desk-based assessment (Compass Archaeology, 2008), which showed that later 19th and 20th century gravel extraction took place over a large part of the southern and central part of the site (fig. 4). This was based on consideration of historic map evidence and the results of on-site soil investigations. This extraction was to a depth of *c.* 5m in several locations and would therefore have truncated any earlier remains that may have once survived. The report indicated that it was possible that some areas in the northern part of the site may not have been so heavily truncated, although this was unclear.

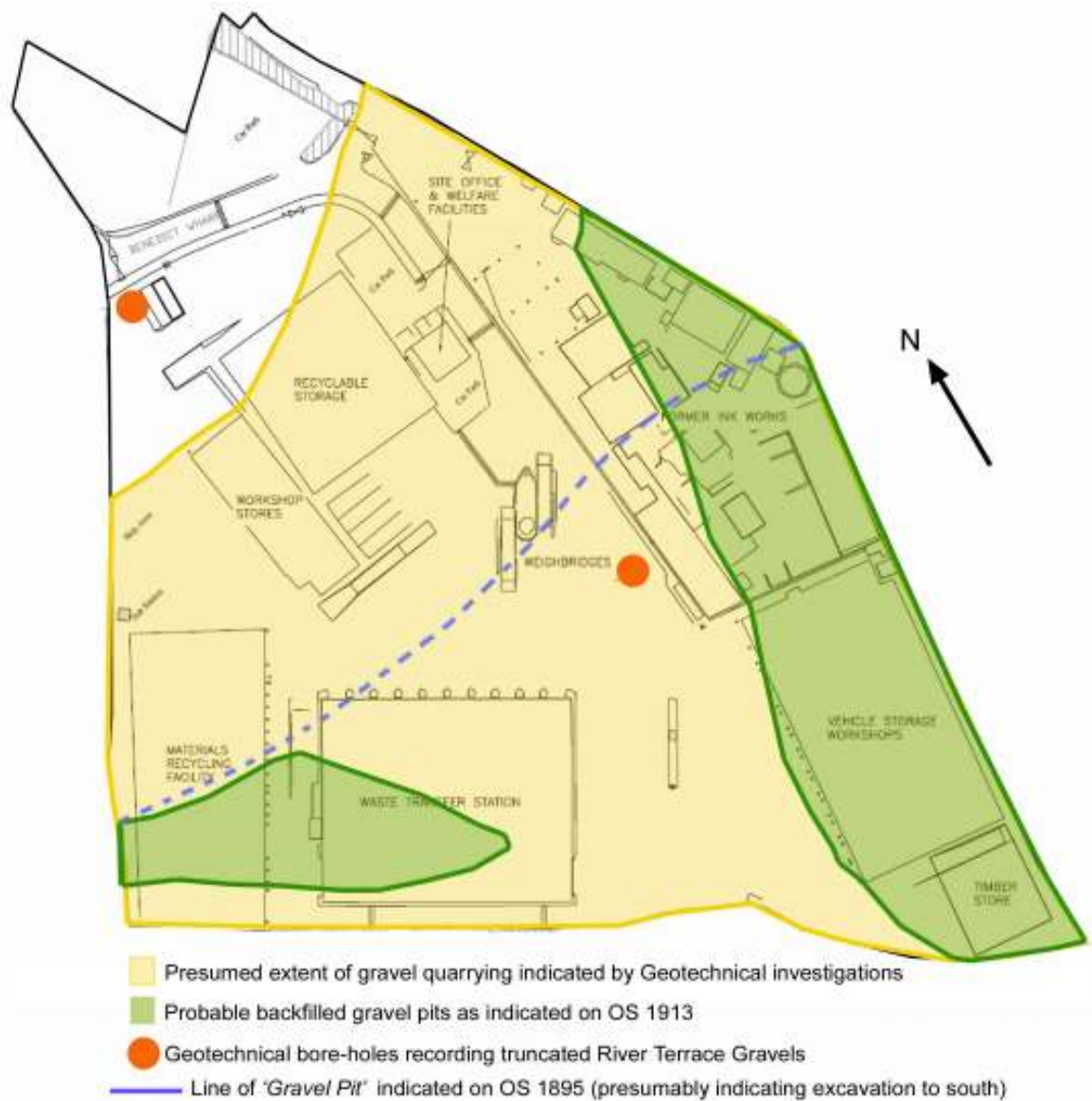


Fig. 4: Site plan showing the impact of from 19th / 20th century gravel quarrying across the site (based on original plan provided by AXIS Consultants)

As the proposed Phase 1 development involves construction within this northern part of the site, subsequent consultation with English Heritage decided that the most appropriate way forward was to monitor test-pits within this area, to ascertain whether or not the area had been truncated by gravel extraction. The aim was simply to ascertain presence or absence of gravel extraction, and therefore ascertain whether any archaeological remains may survive on the site.

1.4 Archaeological monitoring took place during contractor's groundworks in response to recommendations from Diane Abrams, English Heritage. The test-pits were excavated by Raymond Brown Construction Ltd.

It was proposed to excavate five test-pits within the footprint of the Phase 1 development (although, in the event, six were excavated). These were

positioned within the northern area – the area which was possibly not truncated by gravel extraction. Each of these pits were excavated to a depth of *c.*1.7 – 2.25m in depth (thereby ascertaining whether or not the area had been truncated by gravel extraction or whether any earlier archaeological remains may survive on site), and were *c.*1.6 – 2.1m by *c.*0.75 – 1.05m in plan.

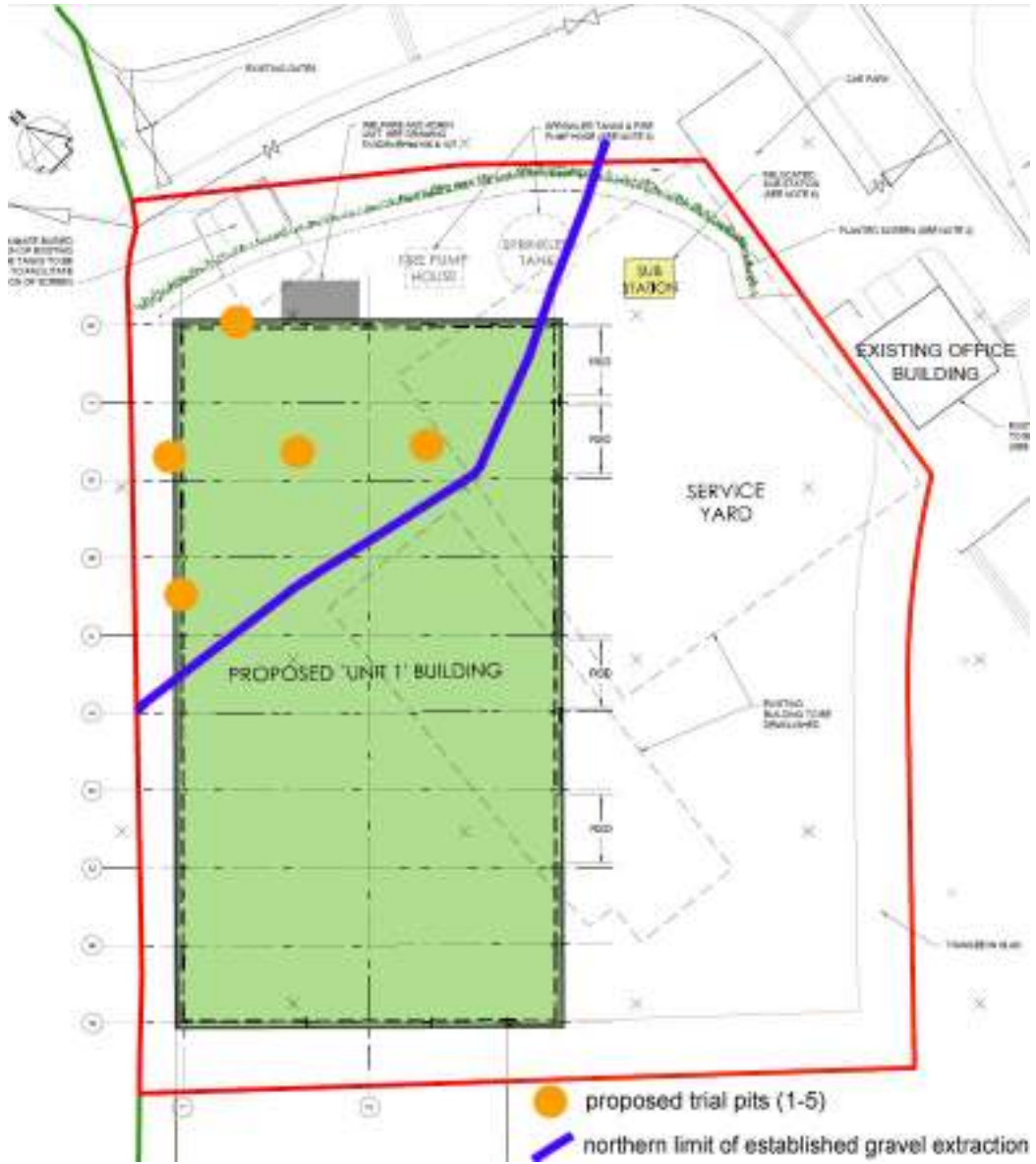


Fig. 5: Details of the Phase 1 development area, showing the approximate locations of the five trial pits to the north of the area of established gravel extraction (based on original plan provided by AXIS Consultants)

1.5 Compass Archaeology would like to thank Emma Smyth (Planning Manager) for commissioning the project on behalf of SITA UK. Thanks also to

groundworks team from Raymond Brown Construction Ltd. Further thanks to Diane Abrams, English Heritage, for her advice and recommendations.

2 Site Location, Geology and Topography

- 2.1 The site is located *c.*800m south-west of Mitcham town centre, just to the north of Morden Road, and bounded by the existing Croydon Tramlink line to the south / south-west, Baron Walk and playing fields to the east, and by a continuation of Hallowfield Way, a residential area, and a school, to the north (see fig. 1).
- 2.2 The site lies on relatively level ground, at approximately 18.9mOD in the north, rising to 19.6mOD further south and sloping again at the southern limits to about 19.3mOD. The area of the trial-pits lies at approximately 18.5mOD, so is slightly lower than the surrounding ground.
- 2.3 The geological survey (British Geological Survey, South London, Sheet No.270, 1993 – fig. 6) indicates that the site lies on Taplow Gravel (a post-diversionary Thames River deposit consisting of gravel / sand / clay), overlying London Clay.

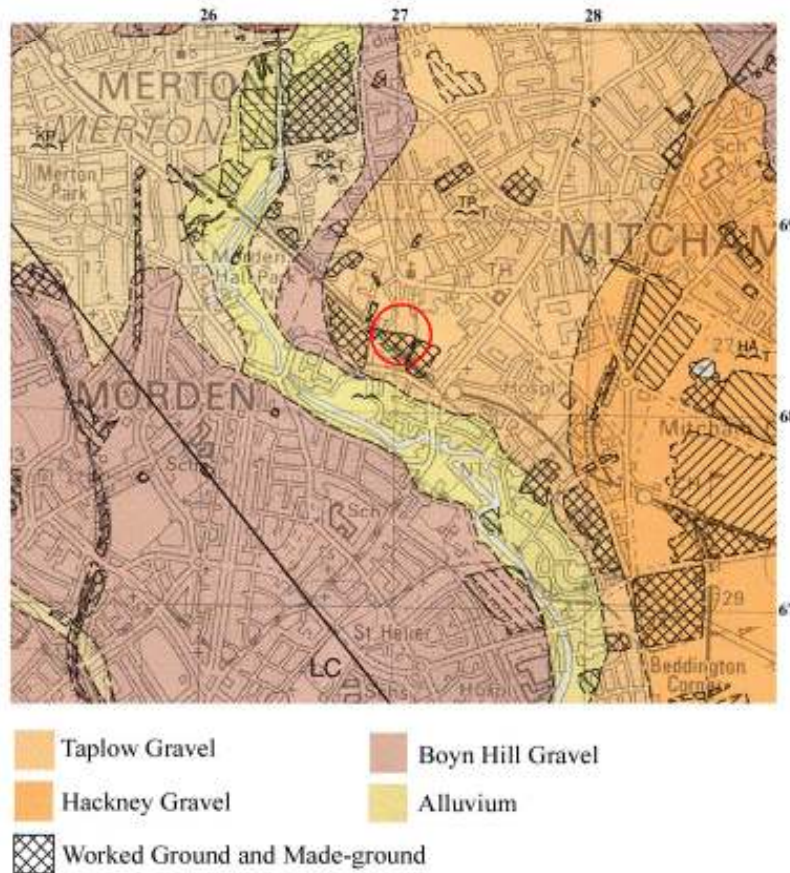


Fig. 6: Site location in relation to British Geological Survey, South London, Sheet No.270

A number of soil investigations (boreholes) have been undertaken on the site. These generally do not record River Terrace gravel deposits, but just the (truncated) London Clay deposits from a depth of c.4.5m beneath the modern ground-surface.

3 Archaeological and Historical Background

- 3.1** There have been no significant prehistoric finds within the vicinity of the site, with the majority of finds relating to this period in Mitcham being unprovenanced artefacts recovered in the 19th / early 20th century, mainly from the extensive quarrying of the area. Despite the potentially suitable landscape (close to water and situated on river-terrace gravels), the archaeological evidence suggests a low human presence in this area of Mitcham at this time.
- 3.2** The study area lies a distance from the major Roman thoroughfare of Stane Street running from London to Chichester. The archaeological evidence from the area indicates that the area was largely rural, with some limited agricultural activity and small-scale settlement.
- 3.3** The name ‘Mitcham’ is Anglo-Saxon in origin, and believed to mean ‘big settlement’, with the first documentary evidence for Mitcham in a charter of AD727 confirming a grant of lands in Mitcham to Chertsey Abbey.

Crucially, the Anglo-Saxon cemetery of Mitcham was located just to the south of the site (excavated by the Bidder family between 1888 and 1922). Approximately 230 burials were recorded, the majority of which contained grave goods such as swords, brooches, and pottery. The cemetery is believed to have been in use for approximately 150 years, from the early 5th century until around AD600. It is possible that this cemetery may have stretched north into the site-area itself, although this is less secure and is based on the field name ‘Deadman’s Close’ on the 1847 tithe map and the testimony of early 20th century gravel workers and farmers discovering remains in this area.

The existence of this Saxon cemetery leads to the question of where, and how large, the associated settlement was. No evidence for finds or features contemporary with the cemetery have been discovered, although later finds (plus the existence of the late Saxon church to the north of the study area) suggest that later Saxon settlement may have clustered around the church. It is possible that earlier Saxon settlement may have been located in the same area, although this is by no means certain.

- 3.4** Mitcham appears to have thrived from the medieval period, with the core settlement being centred around the present centres of Upper and Lower Mitcham (to the east and northeast of the site). Activity around Benedict’s Wharf, based on the recorded archaeological evidence, appears to have been smaller scale settlement and arable / pastoral activity, although there does appear to have been settlement clustered around the church just to the north of the site. No significant structures or settlement are likely to have existed on

the site, as is supported by the later cartographic sources which show this area as open fields until the late 19th century (figs. 7-11).



Fig. 7: Rocque's Map, 1746, with site location marked

3.5 Post-Medieval activity on the site largely reflects industrial development from the early 19th century. The first significant development was the construction of the Surrey Iron Railway in 1803, which ran through the site on a north-south line (fig. 9). Following the closure of the Surrey Iron Railway in the mid-19th century, the site was extensively quarried for gravel. This appears to have covered a large proportion of the site, with the possible exception of the northern-most area, as indicated by historic maps and recent soil investigations (see figs. 9, 10, and 4). Following the infilling of these quarries, a variety of industries established themselves on the site, including coal yards, contractors, chemical works, synthetic resin manufacturers, and a surgical instrument factory (fig. 11).



Fig. 8: 1847 Mitcham Tithe Map, with site outline marked. The line of the Surrey Iron Railway is marked

Fig. 9: 2nd Edition 25inch OS Map, 1895, with site outline marked. The gravel pit, in the southern part of the site, is marked





Fig. 10: 1913 25inch OS Map, with site outline marked. Various gravel pits, and the railway line, is marked.

Fig. 11: 1971-3 1:1250 OS Map, with site outline marked. The general industrial development of the area is depicted.



4 Archaeological research questions

The main reason for digging these trial pits was to establish the presence or absence of late 19th to 20th century gravel quarrying in this area, and therefore whether any earlier archaeological remains may survive. If no indication of soil horizons / earlier deposits were encountered in the trial pits, with them just consisting of deep and relatively modern backfill, it could be proved that gravel quarrying had taken place and that therefore no earlier archaeological remains survived.

Were it proved that no gravel quarrying had taken place, the following research questions could be addressed in these works.

- *Is there any evidence for prehistoric or Roman activity in the site-area?*
- *Is there any evidence for Saxon activity in the site-area? This particularly concerns possible evidence for the large Saxon cemetery known to have been located just to the south of the site, plus any evidence for the Saxon settlement possibly located to the north of the site?*
- *Is there any evidence for medieval activity (probably small-scale and agricultural) on the site?*
- *Is there any evidence for the Surrey Iron Railway, or the post-medieval industries which were located on the site?*
- *At what levels do any archaeological or geological deposits survive across the area? In particular, how has this been affected by the late 19th / 20th century gravel quarrying of the area?*
- *Can the watching brief works inform on the research questions of the Museum of London and English Heritage's 'A Research Framework for London Archaeology' publication 2002?*

5 Methodology

5.1 Fieldwork

The fieldwork was carried out in accordance with current English Heritage guidelines (in particular, *GLASS Standards, Paper 3: Fieldwork, Consultation Draft, 2009*) and to the standards of the Institute for Archaeologists (*Standard and Guidance for An Archaeological Watching Brief, 2008*). Overall management of the project was undertaken by a full member of the Institute.

Adequate time was given for investigation and recording of the observed trial-pits, although every effort was made not to disrupt the contractors' programme. Observations were recorded on *proforma* trench sheets, and drawn in plan with measured sketches taken of sample sections. The investigations were recorded on a general site plan and related to the Ordnance Survey grid. The fieldwork record was supplemented as appropriate by digital photography.

5.2 Post-excavation work

The fieldwork was followed by off-site assessment and compilation of a report, and by ordering and deposition of the site archive.

Finds were treated in accordance with the appropriate guidelines, including the Museum of London's *'Standards for the Preparation of Finds to be permanently retained by the Museum of London'*.

Copies of this report will be supplied to the Client, English Heritage and the local planning authority. A short summary of the fieldwork has been appended to this report using the OASIS Data Collection Form, and in paragraph form suitable for publication within the 'excavation round-up' of the *London Archaeologist*.

6 Results

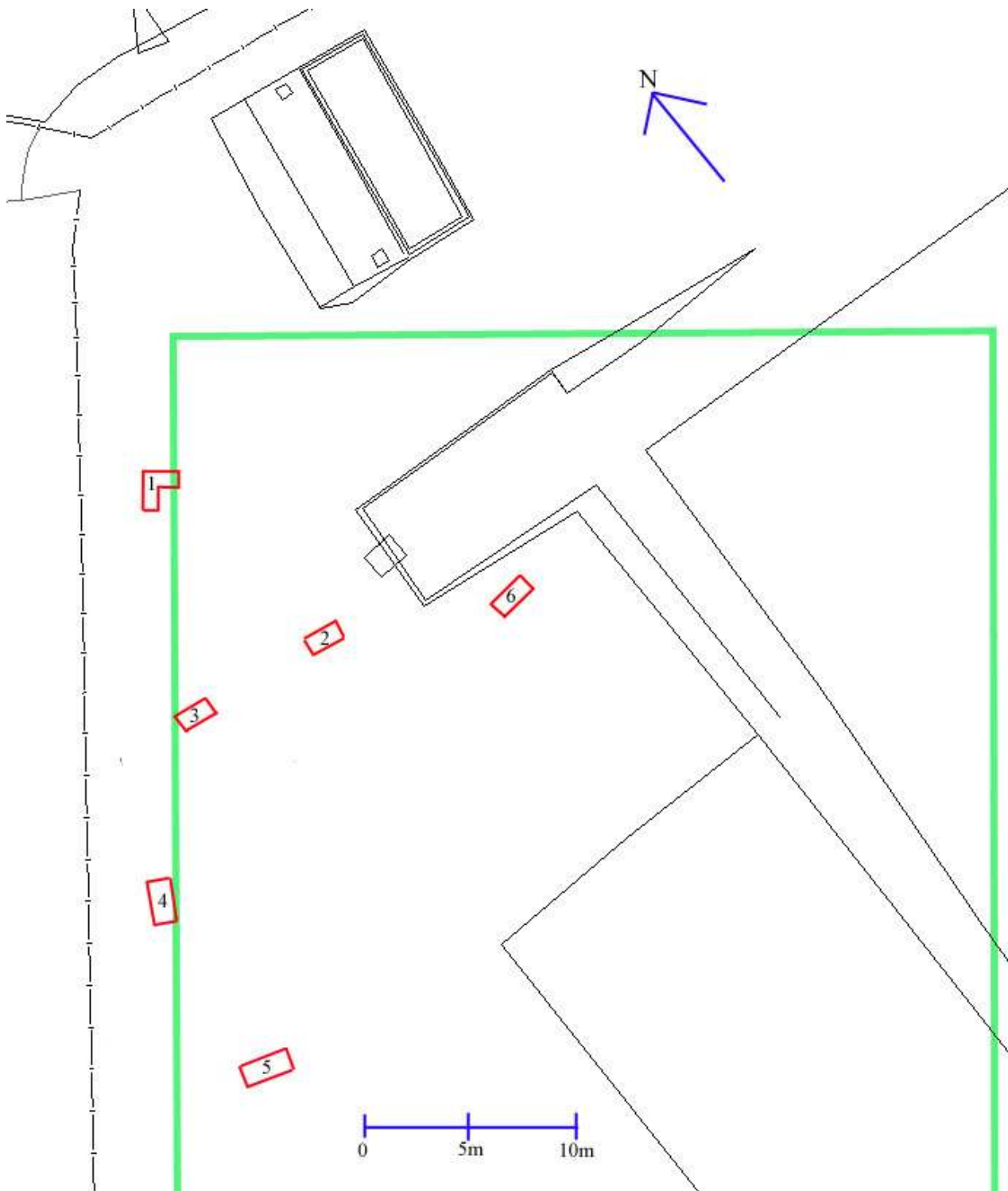


Fig. 12: Plan showing location of trial-pits, and outline of the proposed Phase 1 redevelopment

6.1 Archaeological monitoring took place on the 16th August 2012, on six trial pits, as plotted on figure 12. The trial pits were excavated using a JCB, to a general depth of *c.* 1.75 – 2.25m in depth. The results of the watching brief are detailed below in the order in which they were observed. (refer to fig. 12 throughout).

6.2 Trial Pit 1

Trial pit 1 (the northern-most pit) measured a maximum of 1.9m (north-south) by a maximum of 1.9m east-west, although it was L-shaped with a cut-out in its south-eastern corner. It was excavated to a depth of 2m.

Beneath the concrete slab (*c.* 0.2m thick), was a general black silty-gravelly deposit, filled with pieces of concrete and brick rubble. This appears to be a mixed modern made-ground deposit, and was *c.* 0.5m thick. It clearly post-dated the railway, which was demolished at some point between 1953 and 1971 (according to OS Maps).

This overlay the remains of a timber railway sleeper and steel rail – part of the railway siding depicted on OS Maps from 1913 to 1953 (see fig.10). The timber sleeper was observed in the western part of the pit, running east-west at *c.* 0.88m beneath the modern ground-surface. The western end of this was observed, *c.* 0.72m west from the steel rail, and it had a width of 0.25m and depth of 125mm. The steel rail was also observed in the central part of the pit, with a cleat fixing the sleeper into it. This ran north-south, was 70mm thick, and was observed for *c.* 0.5m in length (at *c.* 0.69m beneath the modern ground-surface).



Fig. 13: Photograph of railway sleeper (under scale) and steel rail and cleat (right of image) in trial-pit 1

Beneath the railway sleeper and rail was a dark grey / black silty layer, very disturbed with chunks of brick rubble, etc, in. This stretched down to *c.*1.3m beneath the modern ground-surface (thickness of *c.*0.5m). This layer was disturbed in the southern section by a 100mm salt-glazed pipe (drain), which was surrounded by sandy-gravel service backfill.

Beneath this was a layer of packed crushed chalk. This was presumably the make-up for the railway, and stretched down to *c.*1.9m beneath the modern ground-surface (for a thickness of *c.*0.6m).

Beneath the packed crushed chalk layer was a more mixed black-grey silty-gravelly deposit. This was observed at *c.*1.9m beneath the modern ground-surface. This was clearly not natural deposits, nor earlier soil horizons / archaeological layers and, instead, is believed to have been infill following the gravel quarrying of this area. Chalk fragments and pieces of clinker were retrieved from this deposit. Although not a great deal of this was exposed (only 0.1m), the low level at which this was found (almost 2m beneath the present ground-surface), combined with the fact that the present ground-surface in this area is some 0.5m lower than the surrounding areas to the north and west, suggests that this is probably the infill of the gravel quarries. This is therefore useful in indicating that gravel quarrying had taken place in this area before the construction of the railway, something which was unclear from cartographic evidence.

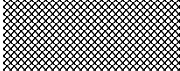
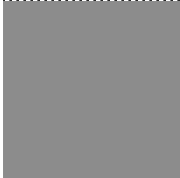


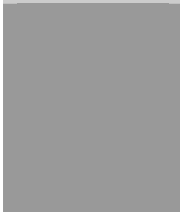
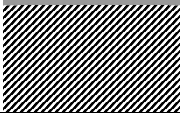
Trial Pit 1			
Approx. dimensions of pit: 1.9m x 1.9m	Ground level: c. 18.5mOD	Orientation: N-S	Date: 16.08.12
Description	Reduced level (m)	Legend	Depth (m) (thickness)
Concrete	18.5		0 (0.2)
Mixed black silty-gravelly deposit, with concrete and brick rubble (modern)	18.3		0.2 (0.5)
Timber sleeper and iron rail	17.8		0.7 (0.1)
Disturbed dark grey / black silty layer, with brick rubble	17.7		0.8 (0.5)
Packed crushed chalk (under railway)	17.2		1.3 (0.6)
Loose mixed dark grey / black gravelly deposit (infill of gravel pits).	16.6		1.9 (0.1)
Limit of excavation	16.5		



Fig. 14: Photograph of western section in pit 1. The drain and associated disturbance can be seen in the left of the image, and the layer of crushed chalk towards the base of the section on the right-hand side

6.3 Trial Pit 2

Trial pit 2 measured 1.6m in length (east-west) by 0.75m in width (north-south), and was excavated to a depth of *c.* 1.7m.

The modern concrete slab (0.13m thick) overlay a couple of services and associated service backfill. This consisted of a large (900mm) pipe in the south-eastern section of the trench, stretching out into the trench by at least 400mm, and with its top at *c.* 0.67m beneath the modern ground-surface. Another service (a 225mm salt-glazed pipe) was observed in the north-west corner of the pit, running north-east to south-west, and with its top at *c.* 1.2m beneath the modern ground-surface. Both of these were surrounded by sandy and stony backfill, which had heavily disturbed any stratigraphy in the pit.

Adjacent to and beneath these services, at *c.* 1.2m beneath the modern ground-surface, was a dark grey-brown silty-gravel deposit, with occasional ceramic building fragments, concrete, pebbles, and clinker-type material in. This is believed to have been backfill following quarrying activities, similar to that observed in pit 1. No sign of archaeological deposits, soil horizons, or natural deposits were noted.

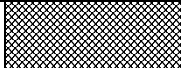

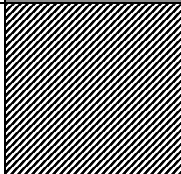
Trial Pit 2			
Approx. dimensions of pit: 1.6m x 0.75m	Ground level: <i>c.</i> 18.5mOD	Orientation: E-W	Date: 16.08.12
Description	Reduced level (m)	Legend	Depth (m) (thickness)
Concrete	18.5		0 (0.13)
Mixed sandy and stoney service backfill	18.37		0.13 (1.07)
Loose mixed dark grey-brown silty-gravelly deposit, with ceramic building material, concrete, pebbles, clinker (infill of gravel pits).	17.3		1.2 (0.5)
Limit of excavation	16.8		



Fig. 15: Photograph of pit 2, looking south-west. The large pipe in the south-eastern corner of the pit is visible, alongside the dark grey-brown silty-gravel deposit (behind the scale)

6.4 Trial Pit 3

Trial pit 3 measured 1.7m in length (east-west) by 0.85m in width (north-south), and was excavated to a depth of *c.* 1.85m.

The modern concrete slab and underlying reinforced concrete (0.15 – 0.25m thick) overlay *c.* 0.6m of mixed rubble / gravel made-ground. This is believed to have been modern in date, and represent the make-up for the yard surface.

Underlying this was 0.25m of very compact dark grey-black silt, with occasional pebbles and some coal fragments. Because of the compact nature of this deposit, combined with its position in relation to the remains of the railway in pit 1, it is believed that this was part of the railway sidings. Under this was *c.* 0.2m of granite make-up (granite fragments in a dark clay / silt matrix) – presumably the basal make-up for the sidings. This overlay *c.* 50mm of compact yellow / light brown gravel, over *c.* 0.45m of packed crushed chalk. This is similar to that observed in pit 1, and observed at the same depth as the chalk in pit 1, such that it seems likely that this was also part of the make-up for the railway (the sidings, in this case).

This overlay a darker more gravelly deposit (observed for *c.* 0.1m down to the limit of excavation). This is the infill following the quarrying of the area, providing further evidence of such quarrying in this area and the fact that this occurred before the railway was constructed.



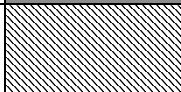
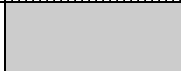


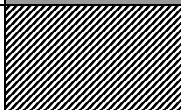
Trial Pit 3			
Approx. dimensions of pit: 1.7m x 0.85m	Ground level: c. 18.5mOD	Orientation: E-W	Date: 16.08.12
Description	Reduced level (m)	Legend	Depth (m) (thickness)
Concrete	18.5		0 (0.2)
Mixed rubble / gravel made-ground (modern)	18.3		0.2 (0.6)
Compact dark grey-black silt, with pebbles and coal fragments (railway sidings)	17.7		0.8 (0.25)
Granite fragments in dark clay / silt matrix (basal make-up for sidings)	17.45		1.05 (0.2)
Compact yellow / light-brown gravel	17.25		1.25 (0.05)
Packed crushed chalk (under railway sidings)	17.2		1.3 (0.45)
Loose mixed dark grey gravelly deposit (infill of gravel pits). Limit of excavation	16.75 16.65		1.75 (0.1)



Fig. 16: Photograph of pit 3, looking north-east. The deposits associated with the railway (grey-black silt surface, with underlying granite, yellow gravel, and chalk) can be seen to the right of the scale

6.5 Trial Pit 4

Trial pit 4 measured 1.9m in length (north-south) by 1.05m in width (east-west), and was excavated to a depth of 2.05m.

0.2 – 0.25m of reinforced concrete was observed overlying 0.85 – 0.9m of mixed dark clayey-silt deposit, with ceramic building material rubble and some patches of clay, etc. This appears to be general mixed and disturbed modern fill, probably deposited for the modern yard surface.

*c.*0.65m of dark brown firm sandy-silt, with occasional pieces of chalk, scattered pebbles, and occasional ceramic building material fragments, was then observed. This seemed relatively mixed and disturbed, and was a relatively modern deposit.

Underneath this (observed at *c.*1.75m beneath the modern ground-surface), and stretching to the limit of excavation, was a loose dark grey gravelly - silty deposit. Within this were pieces of chalk, occasional ceramic building material and glass fragments, and frequent clinker pieces. It seems likely that this represents infill following gravel quarrying in this area, and is similar to the deposits found towards the base of all of the pits. The lack of archaeological horizons, soil horizons, or natural deposits in this pit, and at this depth, suggest that the area has been heavily gravel quarried.

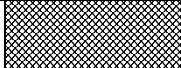

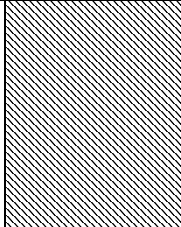
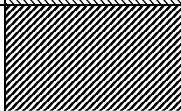
Trial Pit 4			
Approx. dimensions of pit: 1.9m x 1.05m	Ground level: c.18.5mOD	Orientation: N-S	Date: 16.08.12
Description	Reduced level (m)	Legend	Depth (m) (thickness)
Concrete.	18.5		0 (0.2)
Mixed dark clayey-silt deposit, with ceramic building material rubble and clay patches (modern).	18.3		0.2 (0.9)
Mixed firm dark sandy-silt, with occasional chalk, pebbles, and ceramic building material fragments (modern).	17.4		1.1 (0.65)
Loose mixed dark grey gravelly –silty deposit (infill of gravel pits). Limit of excavation	16.75 16.45		1.75 (0.3)



Fig. 17: Photograph of the southern section in pit 4, showing the generally disturbed modern deposits in it

6.6 Trial Pit 5

Trial pit 5 measured 2.1m in length (east-west) by 1.05m in width (north-south), and was excavated to a depth of 2m.

0.2 – 0.25m of reinforced concrete overlay *c.*0.2m of light – mid brown clay, with bits of ceramic building material and rubble in. This overlay *c.*1m of dark brown fairly compact silt, with some ceramic building material fragments, pebbles, and little pieces of timber. These deposits all appeared relatively modern, and were presumably associated with the modern construction of the yard.

At *c.*1.4m beneath the modern ground-surface (and continuing down to the limit of excavation at 2m and beyond), was a looser dark grey deposit. This was gravelly-silty in nature, with occasional pieces of ceramic building material and pieces of clinker. This is presumably the infill from the late 19th – 20th century gravel quarrying, similar to that observed in other pits. The depth to which this extended suggests that such gravel quarrying has removed any archaeological deposits that may have once existed.

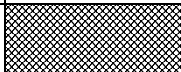

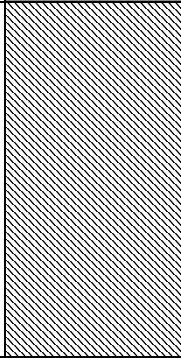
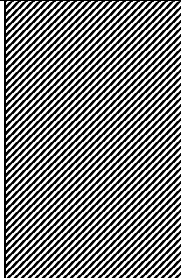
Trial Pit 5			
Approx. dimensions of pit: 2.1m x 1.06m	Ground level: <i>c.</i> 18.5mOD	Orientation: E-W	Date: 16.08.12
Description	Reduced level (m)	Legend	Depth (m) (thickness)
Concrete.	18.5		0 (0.2)
Light – mid brown clay, with bits of ceramic building material and rubble (modern).	18.3		0.2 (0.2)
Compact dark brown silt, with ceramic building material, pebbles, and timber (modern).	18.1		0.4 (1.0)
Loose mixed grey gravelly-silt deposit, with frequent gravel inclusions, and bits of ceramic building material, clinker (infill of gravel pits).	17.1		1.4 (0.8)
Limit of excavation	16.3		



Fig. 18: Photograph of the southern section of pit 5, showing the modern deposits at the upper levels overlying the grey gravelly deposit towards the base of the scale

6.7 Trial Pit 6

Trial pit 6 measured 1.8m in length (east-west) by 0.85m in width (north-south), and was excavated to a depth of 2.25m.

The upper 0.2m of this pit consisted of concrete, overlying a compact dark grey mixed sandy-silty-gravel (0.35m thick). This was a very disturbed deposit, with metal fragments, etc, in it, and presumably modern. A more homogeneous firm silty deposit, dark grey-black in colour, and with occasional gravel and coal fragments, was observed for *c.*0.35m in thickness. This overlay a compact layer of ceramic building material and mortar rubble – clearly relatively modern in date and possibly associated with the railway, and *c.*0.3m thick.

Beneath this, observed at an uppermost level of 1.2m beneath the modern ground-surface and stretching to the limit of excavation, was a mixed grey silty deposit, with frequent gravel inclusions. Also in this deposit were occasional chalk fragments, wood, ceramic building material, glass, and 19th century pot. The presence of such pottery, combined with the depths of this deposit and similarity of it to that in the other pits, suggests that this was the infill of the 19th – 20th century gravel pits.

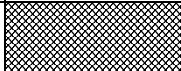
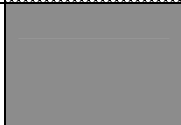
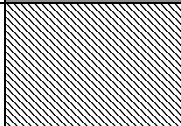
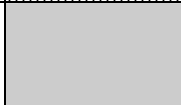
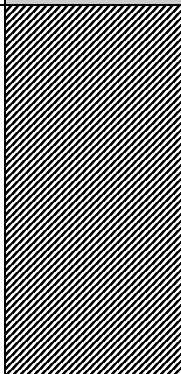
Trial Pit 6			
Approx. dimensions of pit: 1.8m x 0.85m	Ground level: c. 18.5mOD	Orientation: E-W	Date: 16.08.12
Description	Reduced level (m)	Legend	Depth (m) (thickness)
Concrete.	18.5		0 (0.2)
Compact dark grey mixed sandy-silty-gravel (modern disturbed deposit).	18.3		0.2 (0.35)
Firm dark grey-black silty deposit, with occasional gravel and coal fragments.	17.95		0.55 (0.35)
Compact layer of ceramic building material and mortar rubble (modern).	17.6		0.9 (0.3)
Mixed grey silty deposit, with frequent gravel inclusions, and bits of chalk, wood, CBM, glass, pottery (infill of gravel pits).	17.3		1.2 (1.05)
Limit of excavation	16.25		



Fig. 19: Photograph of the northern section of pit 6

7 Conclusions

7.1 The Trial Pits

It is clear from the observations made during the excavation of these trial-pits that the whole area has been subject to intensive gravel quarrying. This means that no archaeological deposits, finds, or features will survive in this area.

The extensive gravel quarrying has meant that no natural deposits were observed in any of the pits – despite the fact that many of them were excavated to depths in excess of 2m and from an already relatively low ground-surface, some 0.5 – 0.8m below that to the north and west. Such natural deposits had been cut away by the gravel quarrying.

No archaeological deposits were observed in any of the pits, nor any indication of soil horizons / a soil profile. Such archaeological deposits / soil horizons would be expected to be found at far higher levels than those reached during the excavation of the trial pits, such that it is clear that they must have been dug away during the gravel quarrying.

Instead of such archaeological deposits, soil horizons, or natural deposits, there was a general mixed grey silty-gravelly fill, observed towards the base of all of the pits. Late 19th century pottery was recovered from this deposit in pit 6, and ceramic building material, clinker, glass, and chalk elsewhere, suggesting that it is infill following gravel quarrying. This deposit was observed at depths of between 1.2m and 1.9m beneath the modern ground-surface, and extending to beyond the limit of excavation in all trenches.

In some of the pits, remains relating to the early 20th century railway which crossed the site (depicted on OS Maps between 1913 and 1953) were found. This consisted of part of a timber railway sleeper and steel rail in pit 1, a hard surface presumably part of the railway sidings in pit 3, and another probable associated surface in pit 6. In pits 1 and 3, the remains were underlain by a layer of packed crushed chalk. Interestingly, the mixed silty-gravelly deposit (the infill of the gravel quarries) was observed beneath this chalk deposit in both pits. This therefore proves that the gravel quarrying took place in these areas before the railway was constructed. The suggestion that ‘spines’ of land unaffected by gravel quarrying (and therefore yielding archaeological potential) may survive is therefore void.

It should be noted that examination of the deeper deposits in these pits was made tricky by substantial water ingress (below *c.* 1.75m beneath the modern ground-surface, as can be seen in all of the photographs).

7.2 The rest of the Phase 1 Development?

The excavated trial pits were concentrated in the western part of the Phase 1 development, however consideration of other evidence shows that the whole of this area has been gravel quarried.

Firstly, the north-eastern corner of the Phase 1 development is depicted as being within an area of gravel pits on the 1913 OS Map (see fig. 20).



Fig. 20: 1913 OS Map, with outline of the Phase 1 redevelopment plotted on. The north-eastern corner is clearly shown as being gravel-pitted

Secondly, the results of the borehole survey undertaken by Terra Consultancy Ltd in 2008 recorded 3.45m of made-ground in a borehole to the north of the north-west corner of the Phase 1 footprint (borehole no. 32 on fig.48 in Compass Archaeology's 2008 desktop).

Finally, the results of previous soil investigations have shown that the whole southern part of the Phase 1 development was gravel quarried, as is discussed in Compass Archaeology's 2008 desktop assessment.

7.3 Conclusions

In conclusion, archaeological monitoring of these test pits and consideration of other evidence has shown that the whole area of the Phase 1 redevelopment of this site did undergo extensive gravel quarrying in the late 19th – early 20th century. Any archaeological remains or earlier deposits that may once have survived will have been destroyed by this quarrying, such that the archaeological potential for this area is non-existent.

8 Bibliography

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Appendix I: Oasis data collection form

OASIS ID: compassa1-132406

Project details

Project name	Benedict Wharf, Hallowfield Way, Mitcham
Short description of the project	An archaeological watching brief took place during the excavation of six trial pits before the Phase 1 development of Benedict Wharf, on 16th August 2012. This was undertaken to ascertain whether the late 19th – early 20th century gravel quarrying that took place over large parts of the site also took place in this northern area, or whether earlier archaeological deposits (particularly relating to the Saxon cemetery to the south of the site, and possible Saxon - medieval settlement in the vicinity of the site), could survive. The watching brief proved that the whole area had been subject to intensive gravel quarrying during the late 19th – early 20th century. No archaeological deposits, soil horizons, or natural deposits were encountered in any of the trial pits. Instead, a mixed grey silty-gravelly fill was observed towards the base of all of the pits (at an uppermost level of between 1.2m and 1.9m beneath the modern ground-surface and extending beyond the limit of excavation). This was clearly the infill of the gravel quarries. In pits 1 and 3, remains relating to the 20th century railway were found, including part of the timber railway sleeper, steel rail, and railway sidings, all underlain by a layer of crushed packed chalk. The silty-gravelly deposit (thought to have been the infill of the gravel quarries) was observed beneath the remains relating to the railway in both pits, proving that the gravel quarrying took place before the railway was constructed. This therefore means that no 'spines' of land unaffected by gravel quarrying existed. The archaeological monitoring of these test pits has therefore shown that the whole area did undergo extensive gravel quarrying in the late 19th – early 20th century. Any archaeological remains or earlier deposits that may have once survived will have been destroyed by this quarrying, such that the archaeological potential for this area is non-existent.
Project dates	Start: 16-08-2012 End: 16-08-2012
Previous/future work	No / No
Type of project	Recording project
Site status	Area of Archaeological Importance (AAI)
Significant Finds	POT Post Medieval
Investigation type	"Watching Brief"
Prompt	Planning condition

Project location

Country	England
Site location	GREATER LONDON MERTON MITCHAM Benedict Wharf
Postcode	CR4
Study area	1000.00 Square metres
Site coordinates	TQ 26980 68490

Project creators

Name of Organisation	Compass Archaeology
Project brief originator	English Heritage/Department of Environment
Project design originator	Compass Archaeology
Project director/manager	Compass Archaeology
Project supervisor	Compass Archaeology
Type of sponsor/funding body	Developer

Project archives

Physical Archive Exists?	No
Digital Archive Exists?	No
Paper Archive recipient	Museum of London Archive
Paper Media available	"Correspondence", "Miscellaneous Material", "Notebook - Excavation", ' Research', ' General Notes', "Photograph", "Plan", "Report", "Section", "Unpublished Text"

Project bibliography 1

Publication type	Grey literature (unpublished document/manuscript)
Title	SITA ECO PARK, PHASE 1 WORKS AT BENEDICT WHARF, HALLOWFIELD WAY, MITCHAM, LONDON BOROUGH OF MERTON, CR4 An Archaeological Watching Brief
Author(s)/Editor(s)	Jeffery, E
Date	2012
Issuer or publisher	Compass Archaeology
Place of issue or publication	5-7 Southwark Street, London, SE1 1RQ
Description	Short report detailing the results of the watching brief on six trial pits. Includes discussion of background, photographs, sections, a plan, and conclusions.

Entered by	Emma Jeffery (emma@compassarchaeology.co.uk)
Entered on	17 August 2012

Appendix II: London Archaeologist summary

Site Address: SITA Eco Park, Benedict Wharf, Hallowfield Way, Mitcham,
London Borough of Merton, CR4

Project type: Watching Brief

Dates of Fieldwork: 16th August 2012

Site Code: BWH12

Site Supervisor: Compass Archaeology

NGR: TQ 26980 68490

Funding Body: SITA UK

An archaeological watching brief took place during the excavation of six trial pits before the Phase 1 development of Benedict Wharf, on 16th August 2012. This was undertaken to ascertain whether the late 19th – early 20th century gravel quarrying that took place over large parts of the site also took place in this northern area, or whether earlier archaeological deposits (particularly relating to the Saxon cemetery to the south of the site, and possible Saxon – medieval settlement in the vicinity of the site), could survive.

The watching brief proved that the whole area had been subject to intensive gravel quarrying during the late 19th – 20th century. No archaeological deposits, soil horizons, or natural deposits were encountered in any of the trial pits, aside from a few remains relating to the 20th century railway which ran across the site. Instead, a mixed grey silty-gravelly fill was observed towards the base of all of the pits (at an uppermost level of between 1.2m and 1.9m beneath the modern ground-surface and extending beyond the limit of excavation). This was clearly the infill of the gravel quarries.