Archaeological Evaluation At West Midland Safari Park, Bewdley, Worcestershire.







© Worcestershire County Council

Worcestershire Archaeology

Archive and Archaeology Service The Hive, Sawmill Walk, The Butts, Worcester WR1 3PD

Status: Revision 1 Date: 25-11-14

Authors: Andrew Mann amann@worcestershire.gov.uk

Contributors:

Illustrators: Carolyn Hunt

Project reference: P4427 Report reference: 2160

HER reference: WSM 66232

Report

-	
Background	2
5.1.4 Phase 4: Modern deposits	4
2 Artefact analysis	4
B Environmental analysis	4
Synthesis	4
Undated	4
2 Modern	5
Significance	5
The impact of the development	5
•	
•	
	6
	Methods Personnel Documentary research Fieldwork strategy Structural analysis Statement of confidence in the methods and results The application site Topography, geology and archaeological context. Structural analysis 5.1.1 Phase 1: Natural deposits 5.1.2 Phase 2: Landscaping layers 5.1.3 Phase 3: Undated features 5.1.4 Phase 4: Modern deposits 6.1.4 Phase 4: Modern deposits 7.5 Artefact analysis Finvironmental analysis Synthesis Undated Modern Significance Nature of the archaeological interest in the site Relative importance of the archaeological interest in the site The impact of the development Publication summary Acknowledgements

Archaeological Evaluation at West Midland Safari Park, Bewdley, Worcestershire

Andrew Mann

Summary

An archaeological evaluation was undertaken at West Midland Safari Park, Bewdley, Worcestershire (NGR 380093, 275886). It was undertaken on behalf of RPS Planning & Development (the Consultant) acting on behalf of West Midland Safari Park Limited (the Client). The latter is seeking planning consent from Wyre Forest Hills District Council for development of land known as Bunker's Hill. The proposed development comprises a hotel, conference centre, spa and water park along with associated access, landscaping, car parking and ancillary infrastructure. The evaluation also encompassed a small field to the east of Bunker's Hill that will act as a temporary topsoil store during the development.

Only occasional small and discrete archaeological features were encountered that remain undated. These are thought to be post-medieval in date and related to agricultural activities or the clearance of heathland prior to the creation of parkland surrounding Spring Grove House, which was constructed in in the late 18th century.

Page 1

Report

1 Background

1.1 Reasons for the project

An archaeological evaluation was undertaken at West Midland Safari Park, Bewdley, Worcestershire (NGR 380093, 275886) (Fig 1). It was commissioned by RPS Planning & Development (the Consultant) acting on behalf of West Midland Safari Park Limited (the Client). The Client is seeking planning consent from Malvern Hills District Council for development of land known as Bunker's Hill. The proposed development comprises a hotel, conference centre, spa and water park along with associated access, landscaping, car parking and ancillary infrastructure.

The proposed development site does not contain any known archaeological sites or find spots but the ridge of sand and gravel of the Holt Heath Member across Bunker's Hill has the potential to contain deposits of Quaternary palaeoenvironmental interest. A small field to the east of Bunker's Hill was also evaluated as this will act as a temporary topsoil store during the development which may also affect unknown heritage assets.

The project conforms to a Written Scheme of Investigation (WSI) prepared by RPS Planning and Development (RPS 2014a) for which a project proposal (including detailed specification) was produced (WA 2014).

The project also conforms to the Standard and guidance for archaeological field evaluation (IfA 2008) Standards and guidelines for archaeological projects in Worcestershire (WCC 2010)

The event reference for this project, given by the HER is WSM 66232.

2 Aims

The aims of the evaluation were:

- to establish the presence or absence of, and describe and assess the significance of, any heritage assets with archaeological interest present within the proposed development area;
- to establish the nature, importance and extent of the archaeological site;
- to assess the impact of the application on the archaeological site.

3 Methods

3.1 Personnel

The project was undertaken by Andrew Mann (MSc); who joined Worcestershire Archaeology in 2004 and has been practicing archaeology since 2001. The project manager responsible for the quality of the project was Robin Jackson (AIFA). Illustrations were prepared by Carolyn Hunt.

3.2 Documentary research

An archaeological desk-based assessment (DBA) was undertaken by RPS Planning and Development which included a search of the Historic Environment Record (HER) (RPS 2014b). This DBA identified that the proposed development site does not contain any known archaeological sites or find spots, but that there is some potential for the presence of currently unknown archaeological remains within the proposal site.

3.3 Fieldwork strategy

A detailed specification has been prepared by Worcestershire Archaeology (WA 2014).

Fieldwork was undertaken between 20-10-14 and 31-10-14. The site reference number and site code is WSM 66232.

Twenty-nine trenches were excavated across the two areas amounting to just over 1926m² in area. Twenty trenches were excavated over Bunker's Hill totalling 1438m², representing 1.7% of the

8.4ha site. Nine trenches were excavated over the temporary topsoil storage field, representing 4.1% of the 1.2ha field. The location of the trenches is indicated in Figure 2.

Deposits considered not to be significant were removed using a 360° tracked excavator, employing a toothless bucket and under archaeological supervision. Subsequent excavation was undertaken by hand. Clean surfaces were inspected and selected deposits were excavated to retrieve artefactual material and environmental samples, as well as to determine their nature. Deposits were recorded according to standard Worcestershire Archaeology practice (WA 2012a). On completion of excavation, trenches were reinstated by replacing the excavated material.

3.4 Structural analysis

All fieldwork records were checked and cross-referenced. Analysis was effected through a combination of structural, artefactual and ecofactual evidence, allied to the information derived from other sources.

3.5 Statement of confidence in the methods and results

The methods adopted allow a high degree of confidence that the aims of the project have been achieved.

4 The application site

4.1 Topography, geology and archaeological context

The proposed development site comprises an elongated rise known as Bunker's Hill which is located to the north-west of the Safari Park and covers an area of approximately 8.4 hectares. It is bounded by the A456 to the north and west and by the safari park to the south and east. This ridge is aligned north-east to south-west and lies at approximately 50m AOD and comprises a level plateau which falls away steeply on its sides (north-west and south-east). Currently the top of the ridge is under pasture and there are some mature trees on the slopes. The ridge comprises sands and gravels of the Holt Heath Sand and Gravel Member lying on top sandstone (the Bridgnorth Sandstone Formation).

To the east of Bunker's Hill a smaller field will be required for temporary spoil storage during the development. The field is currently under pasture and slopes down from the south-east to the north-west. At its highest point it is comparable to Bunker's Hill at approximately 50m AOD.

5 Structural analysis

The trenches and features recorded are shown in Figures 3-4. The results of the structural analysis are presented in Appendix 1.

5.1.1 Phase 1: Natural deposits

Natural deposits were exposed in all trenches. On the top of Bunker's Hill these consisted of firm coarse yellowish orange sands created by the erosion of the natural bedrock (Bridgnorth Sandstone Formation). In places above these weathered sandstone deposits was a thin layer of intermittent sands and gravels, no more than 0.20m thick (the Holt Heath Sand and Gravel Member). On the slopes of Bunker's Hill the overlying soils lay directly onto the bedrock sandstone.

In the potential spoil storage field the natural sandstone bedrock was encountered in all trenches and again in places this was overlain by a thin band of intermittent sands and gravels, no more than 0.10m thick.

The soil profiles on top of Bunker's Hill consisted of soft and loose sandy loams. However in a number of trenches towards the east it appeared that two soil horizons were present. The upper topsoil consisted of a loose and soft sandy loam containing very few stones, this overlay an approximately 0.10m thick band of dark brownish/black loam containing frequent stones and charcoal flecks. This in turn overlay a subsoil deposit of light brownish-orange sand. The lower

Page 3

charcoal rich buried soil horizon was present in Trenches 1-6 and covered an area of approximately 0.65ha (Plate 1).

5.1.2 Phase 2: Landscaping layers

Across the eastern side (upper slope) and western side (lower slope) of the potential spoil storage field some landscaping had obviously been undertaken. Across the lower part of the field a 30m wide flat area had been created by dumping up to 0.70m of material onto the original topsoil (Plate 2). This layer was most visible in Trench 26 (context 2600) and contained modern bricks and other modern debris. On the top of the field in Trenches 21, 23 and 25 these layers were not as deep but consisted of redeposited layers of natural sands, sandstones and lenses of topsoil.

5.1.3 Phase 3: Undated features

Very few archaeological features were identified during the evaluation and none of these produced dating evidence. In Trench 2 there was a small ditch terminus [207], aligned east to west, with a V-shaped profile (Plate 3, Figs 3-4). This cut through the subsoil (202) and had been partially filled by the buried stony soil (201). Its fill was very sterile and consisted of light brown sands.

In Trench 5 there were two pits [506] and [508] and two small elongated pits or ditch termini [511] and [513]. Again these features cut the subsoil (502) and were all filled with sterile sandy fills (Plates 4 and 5, Figs 3-4). It is possible that ditch [511] continued to the north where the faint outline of another linear feature was observed, however this feature did not survive a heavy troweling and it did not appear in the north-west to south-east aligned half of Trench 5.

Within Trench 21 there was a small heavily truncated ditch aligned north to south [2108] (Plate 6, Figs 3-4). This was sealed by subsoil (2103) and was filled by a sterile greyish brown sandy fill. This ditch was also visible in Trench 22 [2208] where it had been truncated more and survived little more than a stain.

5.1.4 Phase 4: Modern deposits

The only modern features observed were an electricity service trench in Trench 2, a geological test pit in Trench 5, and a land drain in Trenches 16 and 18.

5.2 Artefact analysis

Only one sherd of pottery weighing 69g was recovered from the site from topsoil (300). This was a post-medieval red ware (Fabric 78) with a dark brown glaze, dating to the late 17th-18th centuries (Laura Griffin pers. comm).

5.3 Environmental analysis

No environmental remains were encountered that were deemed suitable for analysis and therefore no samples were taken.

6 Synthesis

6.1 Undated

All of the features identified and excavated remain undated however those on Bunker's Hill appear to cut through the subsoil layers and are therefore not thought to be of great antiquity. Some of these features also appear to be filled with the stone and charcoal rich horizon seen in Trenches 1-6. This deposit may relate to a period of heathland clearance prior to the construction of the parkland surrounding Spring Grove House during the late 18th century. This also implies the features on top of Bunker's Hill are of post-medieval date.

The ditch seen within Trenches 21 and 22 is buried below the subsoil but also remains undated but is only likely to be a field boundary ditch. As none of the excavated features contained any cultural

remains or charcoal they are thought to be some distance from any settlement and are considered most likely to have agricultural origins.

6.2 Modern

Modern remains included the services and land drains seen across Bunkers Hill and the landscaping seen on the top and lower slopes in the temporary spoil storage field. This landscaping is likely to have taken place during the construction of a flat car park at the top of the hill post 1971.

7 Significance

7.1 Nature of the archaeological interest in the site

The archaeological remains discovered are likely to be post-medieval in date and have agricultural origins or be related to the clearance of the heathland during the construction of the parkland surrounding Spring Grove House.

7.2 Relative importance of the archaeological interest in the site

These remains provide limited information regarding the historical activities occurring across the development area and have very low potential for archaeological research.

7.3 Physical extent of the archaeological interest in the site

The majority of these deposits were clustered over the eastern end of Bunker's Hill or at the top of the temporary topsoil storage field. They survive at between 0.35-0.55m below ground surface and any archaeological remains which survive at the base of the slope within the topsoil storage area will be buried beneath at least 1.0m of overburden.

8 The impact of the development

The proposed development is liable to negatively affect the buried heritage assets present but these are considered to be of low archaeological significance and potential. Their function could not be firmly established during the evaluation but they are thought to relate to agricultural or clearance activities across the site during the post-medieval period. Any other remains that may survive in the lower part of the temporary topsoil storage field will not be under threat due to the depth of overburden in that part of the site.

9 Publication summary

Worcestershire Archaeology has a professional obligation to publish the results of archaeological projects within a reasonable period of time. To this end, Worcestershire Archaeology intends to use this summary as the basis for publication through local or regional journals. The client is requested to consider the content of this section as being acceptable for such publication.

An archaeological evaluation was undertaken at West Midland Safari Park, Bewdley, Worcestershire (NGR 380093, 275886). It was undertaken on behalf of RPS Planning & Development for their client West Midland Safari Park Limited. The Client is seeking planning consent from Wyre Forest Hills District Council for development of land known as Bunker's Hill. The proposed development comprises a hotel, conference centre, spa and water park along with associated access, landscaping, car parking and ancillary infrastructure.

Only occasional small and discrete archaeological features were encountered that remain undated. These are considered to be post-medieval in date and related to agricultural activities or the clearance of heathland prior to the construction of parkland surrounding Spring Grove House in the late 18th century.

Page 5

10 Acknowledgements

Worcestershire Archaeology would like to thank the following for their kind assistance in the successful conclusion of this project, Paul Hewston (West Midland Safari Park), Mick Rawlings (RPS Group) and Mike Glyde (Worcestershire County Council curator).

11 Bibliography

IfA 2008 Standard and guidance for archaeological field evaluation, Institute for Archaeologists

WA 2014 *Manual of service practice, recording manual*, Worcestershire Archaeology, Worcestershire County Council, report 1842

WA 2014 Proposal for an archaeological evaluation at West Midland Safari Park, Bewdley, Worcestershire, Worcestershire Archaeology, Worcestershire County Council, unpublished document dated 6th October 2014, P4427

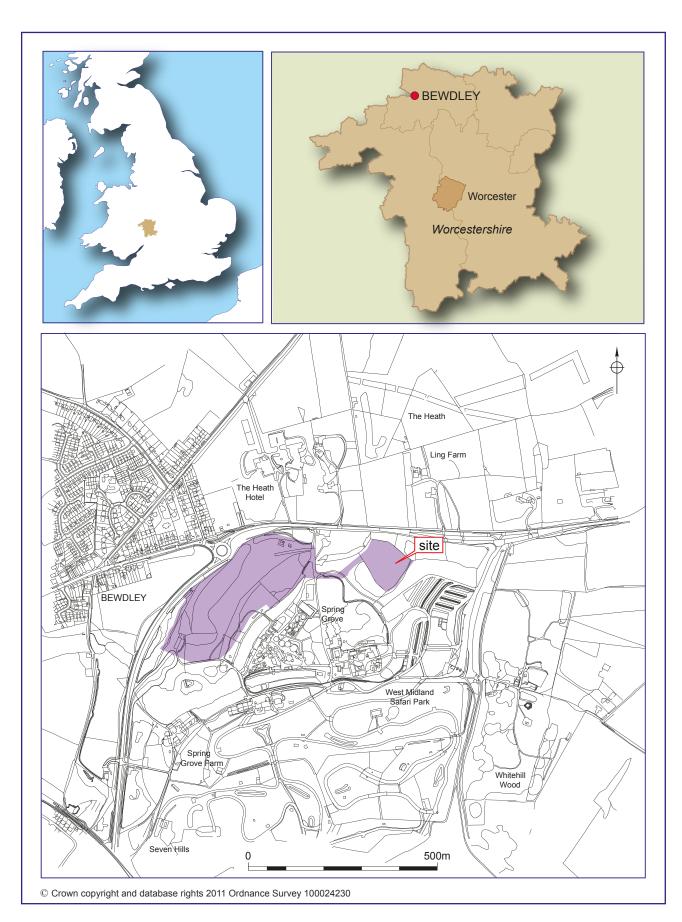
RPS 2014a Project Zanzi, West Midland Safari Park, Nr Bewdley, Worcestershire. Written Scheme of Investigation (WSI) for a Programme of Archaeological Evaluation. RPS planning and Development unpublished report JR2025B, August 2014

RPS 2014b Project Zanzi, West Midland Safari Park, Nr Bewdley, Worcestershire. Historic Envieonment Desk Based Assesment. RPS planning and Development unpublished report JR2025, August 2014

WCC 2010 Standards and guidelines for archaeological projects in Worcestershire, Planning Advisory Section, Worcestershire Archive and Archaeology Service, Worcestershire County Council unpublished report 604, amended July 2012

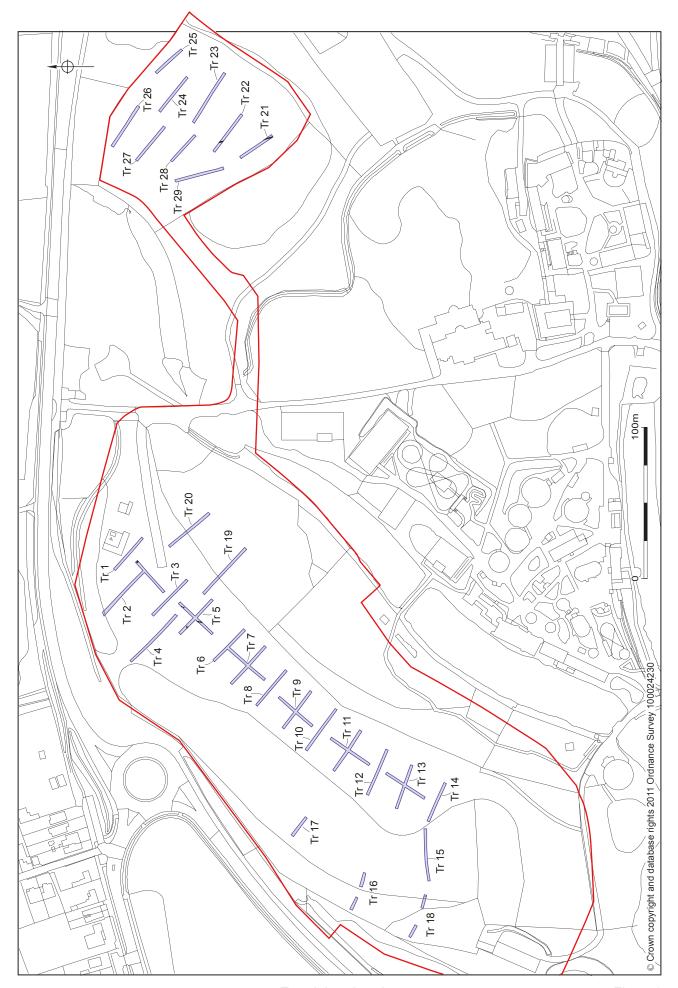
West Midland Safari Park, Bewdley, Worcestershire
Figures

Worcestershire Archaeology	Worcestershire County Council



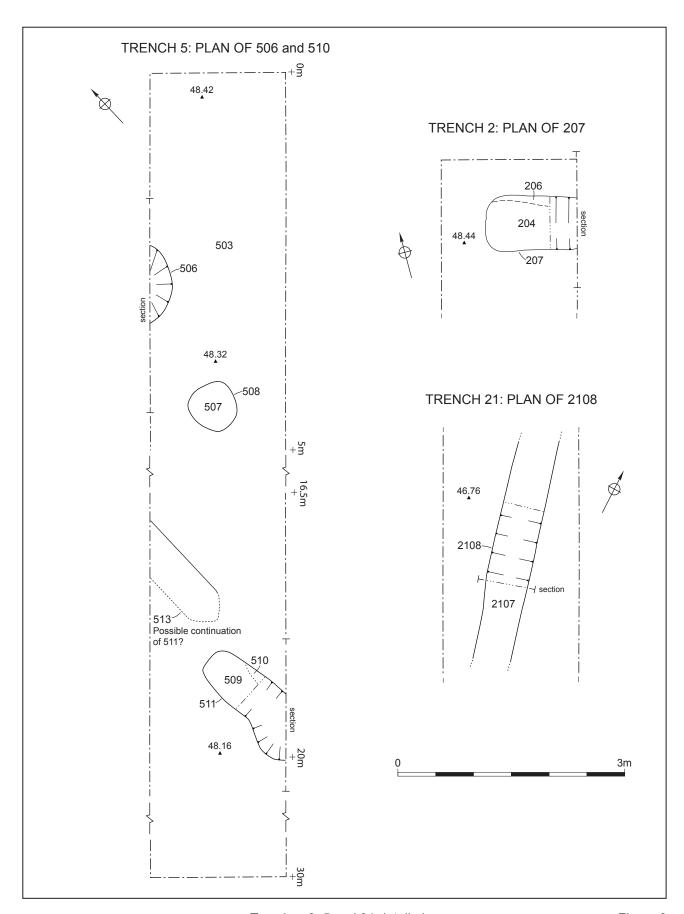
Location of the site

Figure 1



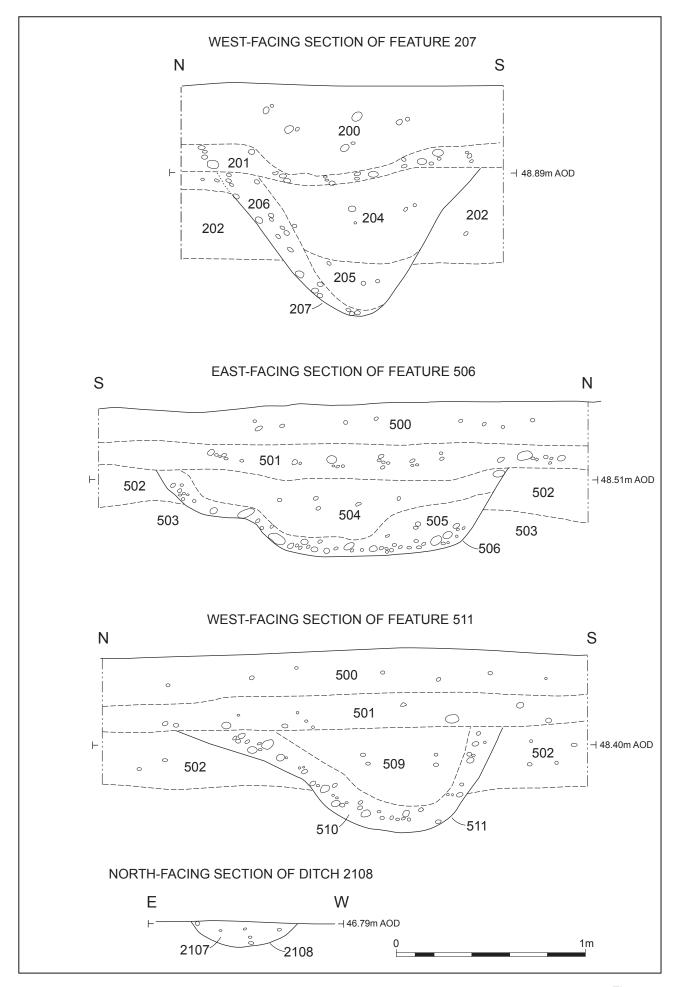
Trench location plan

Figure 2



Trenches 2, 5 and 21 detail plans

Figure 3



Sections Figure 4

Worcestershire Archaeology	Worcestershire County Council
Plates	



Plate 1: Typical soil profile in Trenches 1-6, 1.0m scale

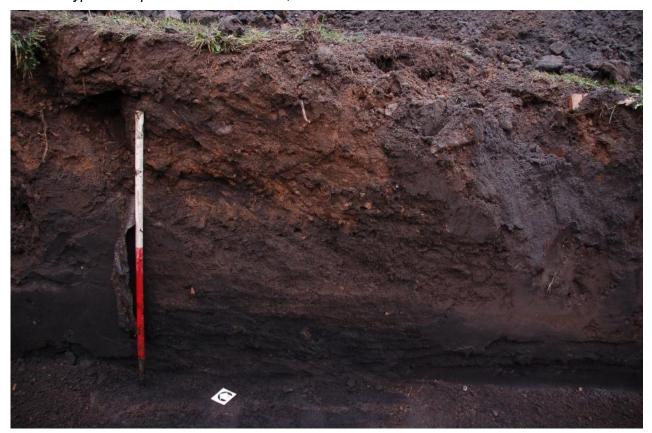


Plate 2: Levelling layers in Trench 26, 1.0m scale



Plate 3: Ditch/pit [207], 1.0m scale



Plate 4: Pit [506], 1.0m scale



Plate 5: Ditch/pit [511], 1.0m scale



Plate 6: Ditch [2108] facing north, 0.50m scale

Worcestershire Archaeology	Worcestershire County Council

Appendix 1 Trench descriptions

Trench 1

Site area: Bunker's Hill

Maximum dimensions: Length: 29m Width: 1.9m Depth: 0.65m

Orientation: E-W Main deposit description

Context	Classification	Description	Depth below ground surface (b.g.s) – top and bottom of deposits
100	Topsoil	Dark brown soft and friable silty sand. Rare medium sub-rounded stone, occ charcoal flecks and frq roots.	0.00-0.30m
101	Subsoil	Dark brown/black soft and friable silty sand. Moderate small-medium sub-rounded stones and occasional fire-cracked stones, moderate charcoal flecks and occ roots.	0.30-0.40mm
102	Subsoil	Mid to light brownish orange soft and friable sand. Rare small to medium sub-rounded stones.	0.40-0.65m
103	Natural	Light orange/yellow firm sand. Contains occasional areas of sandstone outcrop and mottles resulting from the bedrock.	0.65m+

Trench 2

Site area: Bunker's Hill

Maximum dimensions: Length: 29m + 41.5m Width: 1.9m Depth: 0.70m

Orientation: E-W and N-S

Context	Classification	Description	Depth below ground surface (b.g.s) – top and bottom of deposits
200	Topsoil	Dark brown soft and friable silty sand. Occasional medium sub-rounded stone, occ charcoal flecks and frq roots.	0.00-0.24m
201	Subsoil	Mid brown soft and friable silty sand. Occ small medium to small sub-rounded stones, occ roots.	0.24-0.40m
202	Subsoil	Mid to light brownish orange soft and friable sand. Rare small to medium sub-rounded	0.40-0.70m

Context	Classification	Description	Depth below ground surface (b.g.s) – top and bottom of deposits
		stones.	
203	Natural	Light orange/yellow firm sand. Contains occasional areas of sandstone outcrop and mottles resulting from the bedrock sandstone. Towards the north end of the trench the sand becomes more compacted and eventually gives way to bedrock sandstone.	0.70m+
204	Fill	Upper fill of ditch [207]. Similar to subsoil (202), mid brown soft silty sand. Rare small subrounded stone.	
205	Fill	Secondary fill of ditch [207]. Light brown sand soft and uncohesive. Rare small sub-rounded stones.	
206	Fill	Primary fill of ditch [207]. Very similar to layer (201), dark brown silty sands and gravels containing occasional charcoal flecks.	
207	Cut	Cut of ditch terminus/pit aligned E-W. Cuts subsoil layer (202) and is sealed by charcoal rick gravel deposit (201). Has steep slightly concave sides breaking sharply to a concave base. Has a slightly square end/terminus in plan.	

Site area: Bunker's Hill

Maximum dimensions: Length: 33m Width: 1.9m Depth: 0.73m

Orientation: E-W Main deposit description

Context	Classification	Description	Depth below ground surface (b.g.s) – top and bottom of deposits
300	Topsoil	Dark brown soft and friable silty sand. Rare medium sub-rounded stone, occ charcoal flecks and frq roots.	0.0-0.32m
301	Subsoil	Dark brown/black soft and friable silty sand. Moderate small-medium sub-rounded stones and occasional fire-cracked stones, moderate charcoal flecks and occ roots.	0.32-0.44m

Context	Classification	Description	Depth below ground surface (b.g.s) – top and bottom of deposits
302	Subsoil	Mid to light brownish orange soft and friable sand. Rare small to medium sub-rounded stones.	0.44-0.50m
303	Natural	Light orange/yellow firm sand. Contains occasional areas of sandstone outcrop and mottles resulting from the bedrock.	0.50m+

Site area: Bunker's Hill

Maximum dimensions: Length: 43m Width: 1.9m Depth: 0.72m

Orientation: E-W Main deposit description

Context	Classification	Description	Depth below ground surface (b.g.s) – top and bottom of deposits
400	Topsoil	Dark brown soft and friable silty sand. Rare medium sub-rounded stone, occ charcoal flecks and frq roots.	XXXX-XXXXm
401	Subsoil	Dark brown/black soft and friable silty sand. Moderate small-medium sub-rounded stones and occasional fire-cracked stones, moderate charcoal flecks and occ roots.	XXXX-XXXXm
402	Subsoil	Mid to light brownish orange soft and friable sand. Rare small to medium sub-rounded stones.	XXXX-XXXXm
403	Natural	Light orange/yellow firm sand. Contains occasional areas of sandstone outcrop and mottles resulting from the bedrock.	

Site area: Bunker's Hill

Maximum dimensions: Length: 31m + 32m Width: 1.9m Depth: 0.73m

Orientation: E-W and N-S

Context	Classification	Description	Depth below ground surface (b.g.s) – top and bottom of deposits
500	Topsoil	Dark brown soft and friable silty sand. Rare medium sub-rounded stone, occ charcoal flecks and frq roots.	0.00-0.28m
501	Subsoil	Dark brown/black soft and friable silty sand. Moderate small-medium sub-rounded stones and occasional fire-cracked stones, moderate charcoal flecks and occ roots.	0.28-0.49m
502	Subsoil	Mid to light brownish orange soft and friable sand. Rare small to medium sub-rounded stones.	0.49-73m
503	Natural	Light orange/yellow firm sand. Contains occasional areas of sandstone outcrop and mottles resulting from the bedrock.	0.73m+
504	Fill	Upper fill of pit [506]. Light-mid brown sand. Occasional small sub-rounded stones, very similar to subsoil (502).	
505	Fill	Primary fill of pit [506]. Very firm and compact gravels with occasional patches of dark brown silty sand. Very sterile.	
506	Cut	Cut of sub-oval pit, with steep irregular- concave sides breaking sharply to an irregular base. Cuts subsoil (502).	
507	Fill	Fill of pit [508]. Very firm and compact gravels with occasional patches of dark brown silty sand. Very sterile. Same as (505)	
508	Cut	Cut of sub-circular pit, with shallow irregular-concave sides breaking gradually to an irregular base. Cuts subsoil (502).	
509	Fill	Upper fill of ditch/pit [511]. Mid-brown, soft sand. Rare small rounded stones, very sterile.	
510	Fill	Primary fill of ditch/pit [511]. Mid-brown, moderately compact sands and gravels.	

Context	Classification	Description	Depth below ground surface (b.g.s) – top and bottom of deposits
		Frequent sands and gravels.	
511	Cut	Cut of ditch/pit aligned NW-SE. has moderately steep sides, approx 40-50° slightly concave. Breaks gradually to a concave base.	
512	Fill	Fill of ditch/pit [513]. Mid-brown, soft sand. Rare small rounded stones, very sterile.	
513	Cut	Cut of ditch/pit aligned NW-SE. Heavily truncated, only base seen. Filled by (512).	

Site area: Bunker's Hill

Maximum dimensions: Length: 30m Width: 1.5m Depth: 0.80m

Orientation: E-W Main deposit description

Context	Classification	Description	Depth below ground surface (b.g.s) – top and bottom of deposits
600	Topsoil	Dark brown soft and friable silty sand. Occasional medium sub-rounded stone, occ charcoal flecks and frq roots.	0.00-0.34m
601	Subsoil	Mid brown soft and friable silty sand. Occ small medium to small sub-rounded stones, occ roots.	0.34-61m
602	Subsoil	Light brown soft and friable sand. Rare small to medium sub-rounded stones.	0.61-0.80m
603	Natural	Light orange/yellow firm sand. Contains occasional areas of sandstone outcrop and mottles resulting from the bedrock sandtone.	0.80m+

Trench 7

Site area: Bunker's Hill

Maximum dimensions: Length: 31m + 32m Width: 1.9m Depth: 0.78m

Orientation: N-S and E-W

Context	Classification	Description	Depth below ground surface (b.g.s) – top and bottom of deposits
700	Topsoil	Dark brown soft and friable silty sand. Occasional medium sub-rounded stone, occ charcoal flecks and frq roots.	0.00-0.40m
701	Subsoil	Mid brown soft and friable silty sand. Occ small medium to small sub-rounded stones, occ roots.	0.40-63m
702	Subsoil	Mid to light brownish orange soft and friable sand. Rare small to medium sub-rounded stones.	0.63-85m
703	Natural	Light orange/yellow firm sand. Contains occasional areas of sandstone outcrop and mottles resulting from the bedrock sandtone.	0.85m+

Site area: Bunker's Hill

Maximum dimensions: Length: 31m Width: 1.9m Depth: 0.79m

Orientation: E-W Main deposit description

Context	Classification	Description	Depth below ground surface (b.g.s) – top and bottom of deposits
800	Topsoil	Dark brown soft and friable silty sand. Occasional medium sub-rounded stone, occ charcoal flecks and frq roots.	0.00m-0.35m
801	Subsoil	Mid brown soft and friable silty sand. Occ small medium to small sub-rounded stones, occ roots.	0.35-0.58m
802	Subsoil	Mid to light brownish orange soft and friable sand. Rare small to medium sub-rounded stones.	0.58-0.79m
803	Natural	Light orange/yellow firm sand. Contains occasional areas of sandstone outcrop and mottles resulting from the bedrock sandtone.	0.79m+

Trench 9

Site area: Bunker's Hill

Maximum dimensions: Length: 30m + 31m Width: 1.9m Depth: 0.83m

Orientation: N-S and E-W

Main deposit description

Context	Classification	Description	Depth below ground surface (b.g.s) – top and bottom of deposits
900	Topsoil	Dark brown soft and friable silty sand. Occasional medium sub-rounded stone, occ charcoal flecks and frq roots.	0.00-0.40m
901	Subsoil	Mid brown soft and friable silty sand. Occ small medium to small sub-rounded stones, occ roots.	0.40-0.66m
902	Subsoil	Mid to light brownish orange soft and friable sand. Rare small to medium sub-rounded stones.	0.66-0.83m
903	Natural	Light orange/yellow firm sand. Contains occasional areas of sandstone outcrop and mottles resulting from the bedrock sandtone.	0.83m+

Trench 10

Site area: Bunker's Hill

Maximum dimensions: Length: 32m Width: 1.9m Depth: 0.74m

Orientation: E-W

Context	Classification	Description	Depth below ground surface (b.g.s) – top and bottom of deposits
1000	Topsoil	Dark brown soft and friable silty sand. Occasional medium sub-rounded stone, occ charcoal flecks and frq roots.	0.00-0.36m
1001	Subsoil	Mid brown soft and friable silty sand. Occ small medium to small sub-rounded stones, occ roots.	0.36-0.58m
1002	Subsoil	Mid to light brownish orange soft and friable sand. Rare small to medium sub-rounded stones.	0.58-74m
1003	Natural	Light orange/yellow firm sand. Contains occasional areas of sandstone outcrop and mottles resulting from the bedrock sandtone.	0.74m+

Site area: Bunker's Hill

Maximum dimensions: Length: 31m +31m Width: 1.9m Depth: 0.86m

Orientation: N-S and E-W

Main deposit description

Context	Classification	Description	Depth below ground surface (b.g.s) – top and bottom of deposits
1100	Topsoil	Dark brown soft and friable silty sand. Occasional medium sub-rounded stone, occ charcoal flecks and frq roots.	0.00-0.36m
1101	Subsoil	Mid brown soft and friable silty sand. Occ small medium to small sub-rounded stones, occ roots.	0.36-0.53m
1102	Subsoil	Mid to light brownish orange soft and friable sand. Rare small to medium sub-rounded stones.	0.53-86m
1103	Natural	Light orange/yellow firm sand. Contains occasional areas of sandstone outcrop and mottles resulting from the bedrock sandtone.	0.86m+

Trench 12

Site area: Bunker's Hill

Maximum dimensions: Length: 32m Width: 1.9m Depth: 0.70m

Orientation: E-W Main deposit description

Context	Classification	Description	Depth below ground surface (b.g.s) – top and bottom of deposits
1200	Topsoil	Dark brown soft and friable silty sand. Occasional medium sub-rounded stone, occ charcoal flecks and frq roots.	0.00-0.32m
1201	Subsoil	Mid brown soft and friable silty sand. Occ small medium to small sub-rounded stones, occ roots.	0.32-0.58m
1202	Subsoil	Mid to light brownish orange soft and friable	0.58-0.70m

Context	Classification	Description	Depth below ground surface (b.g.s) – top and bottom of deposits
		sand. Rare small to medium sub-rounded stones.	
1203	Natural	Light orange/yellow firm sand. Contains occasional areas of sandstone outcrop and mottles resulting from the bedrock sandtone.	0.70m

Site area: Bunker's Hill

Maximum dimensions: Length: 30m +30m Width: 1.9m Depth: 0.84m

Orientation: N-S and E-W

Main deposit description

Context	Classification	Description	Depth below ground surface (b.g.s) – top and bottom of deposits
1300	Topsoil	Dark brown soft and friable silty sand. Occasional medium sub-rounded stone, occ charcoal flecks and frq roots.	0.00-43m
1301	Subsoil	Mid brown soft and friable silty sand. Occ small medium to small sub-rounded stones, occ roots.	0.43-0.70m
1302	Subsoil	Mid to light brownish orange soft and friable sand. Rare small to medium sub-rounded stones.	0.70-0.84m
1303	Natural	Light orange/yellow firm sand. Contains occasional areas of sandstone outcrop and mottles resulting from the bedrock sandtone.	0.84m+

Trench 14

Site area: Bunker's Hill

Maximum dimensions: Length: 29m Width: 1.9m Depth: 0.76m

Orientation: E-W

Context	Classification	Description	Depth below ground surface (b.g.s) – top and bottom of deposits
1400	Topsoil	Dark brown soft and friable silty sand. Occasional medium sub-rounded stone, occ charcoal flecks and frq roots.	0.38m
1401	Subsoil	Mid brown soft and friable silty sand. Occ small medium to small sub-rounded stones, occ roots.	0.38-0.60m
1402	Subsoil	Mid to light brownish orange soft and friable sand. Rare small to medium sub-rounded stones.	0.60-0.76m
1403	Natural	Light orange/yellow firm sand. Contains occasional areas of sandstone outcrop and mottles resulting from the bedrock sandtone.	0.76m+

Site area: Bunker's Hill

Maximum dimensions: Length: 35m Width: 1.9m Depth: 0.50m

Orientation: NE-SW

Context	Classification	Description	Depth below ground surface (b.g.s) – top and bottom of deposits
1500	Topsoil	Dark brown soft and friable silty sand. Occasional medium sub-rounded stone, occ charcoal flecks and frq roots.	0.35m
1501	Subsoil	Mid brownish orange soft and friable sand. Occ small medium to small sub-rounded stones, occ roots.	0.35-0.50m
1502	Natural	Mid-brownish orange sandstone bedrock.	0.50m+

Site area: Bunker's Hill

Maximum dimensions: Length: 9.5m + 9.5m Width: 1.9m Depth: 0.55m

Orientation: E-W Main deposit description

Context	Classification	Description	Depth below ground surface (b.g.s) – top and bottom of deposits
1600	Made ground	Dumps of manure and modern rubbish mixed within and buried by soil. More common towards the west of the trench.	0.00-0.30-60m
1601	Topsoil	Top soil partially buried by made ground (1600). Dark brown soft and friable silty sand. Occasional medium sub-rounded stone, occ charcoal flecks and frq roots.	0.30-0.46m
1602	Subsoil	Mid brownish orange soft and friable sand. Occ small medium to small sub-rounded stones, occ roots. Becomes grey towards the west of the trench where it is waterlogged.	0.46-0.55m
1603	Natural	Towards the east it is Mid-brownish orange sandstone bedrock. Towards the west it is a very firm and compact sands and gravels.	0.55m+

Trench 17

Site area: Bunker's Hill

Maximum dimensions: Length: 15m Width: 1.9m Depth: 0.66m

Orientation: E-W Main deposit description

Context	Classification	Description	Depth below ground surface (b.g.s) – top and bottom of deposits
1701	Topsoil	Top soil partially buried by made ground (1600). Dark brown soft and friable silty sand. Occasional medium sub-rounded stone, occ charcoal flecks and frq roots.	0.30m
1702	Subsoil	Mid brownish orange soft and friable sand. Occ small medium to small sub-rounded stones, occ roots. Becomes grey towards the west of the trench where it is waterlogged.	0.30-66m
1703	Natural	Soft and loose mid-brownish sand.	0.66m+

Site area: Bunker's Hill

Maximum dimensions: Length: 9m + 6m Width: 1.9m Depth: 0.97m

Orientation: E-W Main deposit description

Context	Classification	Description	Depth below ground surface (b.g.s) – top and bottom of deposits
1800	Topsoil	Top soil partially buried by made ground (1600). Dark brown soft and friable silty sand. Occasional medium sub-rounded stone, occ charcoal flecks and frq roots.	0.00-0.47m
1801	Subsoil	Mid brownish orange soft and friable sand. Occ small medium to small sub-rounded stones, occ roots. Becomes grey towards the west of the trench where it is waterlogged.	0.47-73m
1802	Made ground	Dumps of manure and modern rubbish mixed within and buried by soil. More common towards the west of the trench.	0.00-0.60m
1803	Natural	Towards the east it is Mid-brownish orange sandstone bedrock. Towards the west it is a very firm and compact sands and gravels.	0.73m+

Trench 19

Site area: Bunker's Hill

Maximum dimensions: Length: 41.5m Width: 1.9m Depth: 0.65m

Orientation: E-W Main deposit description

Context	Classification	Description	Depth below ground surface (b.g.s) – top and bottom of deposits
1900	Topsoil	Dark brown soft and friable silty sand. Occasional medium sub-rounded stone, occ charcoal flecks and frq roots.	0.35m
1901	Subsoil	Mid brown soft and friable silty sand. Occ small medium to small sub-rounded stones, occ roots.	0.35-47m
1902	Subsoil	Mid to light brownish orange soft and friable sand. Rare small to medium sub-rounded	0.47-65m

Context	Classification	Description	Depth below ground surface (b.g.s) – top and bottom of deposits
		stones.	
1903	Natural	Mid-brownish orange sandstone bedrock.	0.65m+

Site area: Bunker's Hill

Maximum dimensions: Length: 35m Width: 1.9m Depth: 0.58m

Orientation: E-W

Main deposit description

Context	Classification	Description	Depth below ground surface (b.g.s) – top and bottom of deposits
2000	Topsoil	Dark brown soft and friable silty sand. Occasional medium sub-rounded stone, occ charcoal flecks and frq roots.	0.00-0.38m
2001	Subsoil	Mid brown soft and friable silty sand. Occ small medium to small sub-rounded stones, occ roots.	0.38-0.58m
2002	Natural	Mid-brownish orange sandstone bedrock.	0.58m

Trench 21

Site area: Potential Spoil Field

Maximum dimensions: Length: 26m Width: 1.8m Depth: 0.65m

Orientation: NW-SE

Context	Classification	Description	Depth below ground surface (b.g.s) – top and bottom of deposits
2100	Topsoil	Dark brown, soft and uncohesive sandy loam. Contains occ small rounded stones and frequent roots.	0.00-0.20m
2101	Layer	Mixture of redeposited natural and topsoil mix, dumped during a period of landscaping.	0.20-0.43m

Context	Classification	Description	Depth below ground surface (b.g.s) – top and bottom of deposits
2102	Buried topsoil	Thin dark brown/black soft sandy loam. Soft but moderately cohesive. Occ small rounded stones and roots, moderate charcoal flecks.	0.43-0.54m
2103	Buried subsoil	Subsoil to (2102). Dark grey silty sand, moderately compact and cohesive. Contains occ small-medium rounded stones.	0.48-0.65m
2104	Layer	Levelling/landscaping layer above buried topsoil towards the northern end of the trench. Dark grey/brown silty sand, very sterile.	0.19-0.11m
2105	Layer	Levelling/landscaping layer above buried topsoil towards the northern end of the trench. Light orange/brown sand containing occasional small rounded stones and small sandstone fragments. Soft and friable.	0.20-0.32m
2106	Natural	Red sandstone bedrock. Fragmented by weathering and partially filled with top and subsoils.	0.65m+
2107	Fill	Fill of ditch cut [2108]. Mid-greyish brown sandy loam. Moderately compact and cohesive containing occasional small rounded stones. Sealed by (2103).	
2108	Cut	N-S aligned ditch cut. Heavily truncated only base seen. Has moderate 45° concave sides gradually breaking to a concave base. Same as [2208]. 0.46m wide, 0.15m deep.	

Site area: Potential Spoil Field

Maximum dimensions: Length: 31.5m Width: 1.8m Depth: 0.65m

Orientation: NW-SE

Context	Classification	Description	Depth below ground surface (b.g.s) – top and bottom of deposits
2200	Topsoil	Dark brown, soft and uncohesive sandy loam. Contains occ small rounded stones and frequent roots.	0.00-0.26m
2201	Layer	Mixture of redeposited natural and topsoil mix, dumped during a period of landscaping.	0.26-0.41m
2202	Buried topsoil	Thin dark brown/black soft sandy loam. Soft but moderately cohesive. Occ small rounded stones and roots, moderate charcoal flecks.	0.41-0.50m
2203	Buried subsoil	Subsoil to (2102). Dark grey silty sand, moderately compact and cohesive. Contains occ small-medium rounded stones.	0.20-0.62m
2204	Layer	Levelling/landscaping layer above buried topsoil towards the northern end of the trench. Dark grey/brown silty sand, very sterile.	0.17-0.33m
2205	Layer	Levelling/landscaping layer above buried topsoil towards the northern end of the trench. Light orange/brown sand containing occasional small rounded stones and small sandstone fragments. Soft and friable.	0.43-0.55m
2206	Natural	Red sandstone bedrock. Fragmented by weathering and partially filled with top and subsoils.	0.46-0.65m+
2207	Fill	Fill of ditch cut [2208]. Mid-greyish brown sandy loam. Moderately compact and cohesive containing occasional small rounded stones. Sealed by (2103).	
2208	Cut	N-S aligned ditch cut. Heavily truncated only very base seen. Same as [2208]. 0.20m wide, 0.02m deep.	

Site area: Potential Spoil Field

Maximum dimensions: Length: 40m Width: 1.8m Depth: 0.45m

Orientation: NW-SE

Main deposit description

Context	Classification	Description	Depth below ground surface (b.g.s) – top and bottom of deposits
2300	Topsoil	Mid-greyish brown, soft and friable sandy loam. Contains occ small rounded stones and frequent roots.	0.00-0.30m
2301	Buried topsoil	Thin dark brown/black soft sandy loam. Soft but moderately cohesive. Occ small rounded stones and roots, moderate charcoal flecks.	0.30-0.45m
2302	Subsoil	Mid-dark brownish orange sand. Moderately compact and cohesive. Contains occ small-medium rounded stones.	0.45-0.55mm
2303	Natural	Red sandstone bedrock. Fragmented by weathering and partially filled with top and subsoils.	0.36-0.55m+

Trench 24

Site area: Potential Spoil Field

Maximum dimensions: Length: 30m Width: 1.9m Depth: 0.79m

Orientation: NW-SE

Context	Classification	Description	Depth below ground surface (b.g.s) – top and bottom of deposits
2400	Topsoil	Mid-dark brown, soft and friable sandy loam. Contains occ small rounded stones and frequent roots.	0.00-0.24m
2401	Layer	Mixture of redeposited natural and topsoil mix, dumped during a period of landscaping.	0.24-0.47m
2402	Buried topsoil	Thin dark brown/black soft sandy loam. Soft but moderately cohesive. Occ small	0.47-0.81m

Context	Classification	Description	Depth below ground surface (b.g.s) – top and bottom of deposits
		rounded stones and roots, moderate charcoal flecks.	
2403	Subsoil	Mid-dark brown sand with patches of silty sand. Moderately compact and cohesive. Contains occ small-medium rounded stones.	0.67-0.79m
2404	Layer	Patch of sands and gravels laying above bedrock at the northern end of the trench. Orangey brown sand very firm and cohesive containing frequent small-medium rounded stones.	0.36-0.44m
2405	Natural	Red sandstone bedrock. Fragmented by weathering and partially filled with top and subsoils.	0.36-0.55m+

Site area: Potential Spoil Field

Maximum dimensions: Length: 23.5m Width: 1.9m Depth: 0.47m

Orientation: NW-SE

Context	Classification	Description	Depth below ground surface (b.g.s) – top and bottom of deposits
2500	Topsoil	Mid-dark brown, soft and friable sandy loam. Contains occ small rounded stones and frequent roots.	0.00-0.26m
2501	Buried topsoil	Thin dark brown/black soft sandy loam. Soft but moderately cohesive. Occ small rounded stones and roots, moderate charcoal flecks.	0.26-0.36m
2502	Subsoil	Mid-dark brownish orange sand. Moderately compact and cohesive. Contains occ small-medium rounded stones.	0.36-0.58m
2503	Natural	Red sandstone bedrock. Fragmented by weathering and partially filled with top and subsoils. Above the bedrock there are occasional patches of natural sands and gravels that are very compact and cohesive.	0.58m+

Site area: Potential Spoil Field

Maximum dimensions: Length: 32.5m Width: 1.9m Depth: 1.35m

Orientation: NW-SE

Main deposit description

Context	Classification	Description	Depth below ground surface (b.g.s) – top and bottom of deposits
2600	Layer	Made ground levelling layer at base of slope. Consists of topsoil and natural mix and contains modern bricks and rubbish.	0.00-0.70m
2601	Topsoil	Mid-dark brown, soft and friable sandy loam. Contains occ small rounded stones and frequent roots. Becomes buried beneath (2600) to the north where it is located approx. 0.70m B.G.S.	0.00-0.40m
2602	Subsoil	Mid-dark brownish orange sand. Moderately compact and cohesive. Contains occ small-medium rounded stones.	0.40-0.65m
2603	Natural	Red sandstone bedrock. Fragmented by weathering and partially filled with top and subsoils. Above the bedrock there are occasional patches of natural sands and gravels that are very compact and cohesive.	0.65-1.35m

Trench 27

Site area: Potential Spoil Field

Maximum dimensions: Length: 30m Width: 1.9m Depth: 0.65m

Orientation: NW-SE

Context	Classification	Description	Depth below ground surface (b.g.s) – top and bottom of deposits
2700	Topsoil	Mid-dark brown, soft and friable sandy loam. Contains occ small rounded stones and frequent roots. Becomes buried beneath (2600) to the north where it is located approx. 0.70m B.G.S.	0.00-0.37m
2701	Buried topsoil	Thin dark brown/black soft sandy loam. Soft but moderately cohesive. Occ small	0.37-0.55m

Context	Classification	Description	Depth below ground surface (b.g.s) – top and bottom of deposits
		rounded stones and roots, moderate charcoal flecks.	
2702	Subsoil	Mid-dark brownish orange sand. Moderately compact and cohesive. Contains occ small-medium rounded stones.	0.55-65m
2703	Natural	Red sandstone bedrock. Fragmented by weathering and partially filled with top and subsoils. Above the bedrock there are occasional patches of natural sands and gravels that are very compact and cohesive.	0.65m+

Site area: Potential Spoil Field

Maximum dimensions: Length: 24m Width: 1.9m Depth: 0.65m

Orientation: NW-SE

Context	Classification	Description	Depth below ground surface (b.g.s) – top and bottom of deposits
2800	Topsoil	Mid-dark brown, soft and friable sandy loam. Contains occ small rounded stones and frequent roots. Becomes buried beneath (2600) to the north where it is located approx. 0.70m B.G.S.	0.00-0.37m
2801	Buried topsoil	Thin dark brown/black soft sandy loam. Soft but moderately cohesive. Occ small rounded stones and roots, moderate charcoal flecks.	0.37-0.55m
2802	Subsoil	Mid-dark brownish orange sand. Moderately compact and cohesive. Contains occ small-medium rounded stones.	0.55-65m
2803	Natural	Red sandstone bedrock. Fragmented by weathering and partially filled with top and subsoils. Above the bedrock there are occasional patches of natural sands and gravels that are very compact and cohesive.	0.65m+

Site area: Potential Spoil Field

Maximum dimensions: Length: 34m Width: 1.8m Depth: 0.79m

Orientation: NW-SE

Context	Classification	Description	Depth below ground surface (b.g.s) – top and bottom of deposits
2900	Topsoil	Mid-dark brown, soft and friable sandy loam. Contains occ small rounded stones and frequent roots. Becomes buried beneath (2600) to the north where it is located approx. 0.70m B.G.S.	0.00-0.34m
2901	Buried topsoil	Thin dark brown/black soft sandy loam. Soft but moderately cohesive. Occ small rounded stones and roots, moderate charcoal flecks.	0.51-0.63m
2902	Subsoil	Mid-dark brownish orange sand. Moderately compact and cohesive. Contains occ small-medium rounded stones.	0.63-79m
2903	Natural	Red sandstone bedrock. Fragmented by weathering and partially filled with top and subsoils. Above the bedrock there are occasional patches of natural sands and gravels that are very compact and cohesive.	0.79m+

Appendix 2 Technical information

The archive (site code: WSM 66232)

The archive consists of:

- 12 Context records AS1
- 1 Field progress reports AS2
- 4 Photographic records AS3
- 213 Digital photographs
- 1 Drawing number catalogues AS4
- 6 Scale drawings
- 29 Trench record sheets AS41
- 1 CD-Rom/DVDs
- 1 Copy of this report (bound hard copy)

The project archive is intended to be placed at:

Worcestershire County Museum

Museums Worcestershire

Hartlebury Castle

Hartlebury

Near Kidderminster

Worcestershire DY11 7XZ

Tel Hartlebury (01299) 250416

Worcestershire Archaeology	Worcestershire County Council