

Somerdale Factory, Recreation Grounds and Car Park, Keynsham, Bath & Northeast Somerset

NGR ST656692

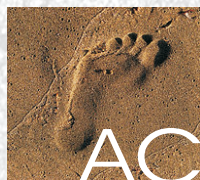
Results of archaeological evaluation

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AC archaeology

SOMERDALE FACTORY, RECREATION GROUNDS AND CAR PARK, KEYNSHAM, BATH & NORTHEAST SOMERSET: NGR ST656692

Results of archaeological evaluation

Summary

An archaeological evaluation comprising the excavation of twenty-one machine-excavated trenches was undertaken at the Somerdale Factory Recreation Grounds and Car Park, Keynsham, Bath and North East Somerset (ST656692) by AC archaeology during November / December 2012. The evaluation was designed to re-evaluate and extend results obtained by previous site investigations comprising trial pits and trenches in 1995, and geophysical survey in 2009. Data obtained by LiDAR survey was also considered. The current evaluation targeted both specific magnetic anomalies and areas of negative magnetic results. In the case of the car park, no previous surveys are recorded and the trial trenches were located across the area without specific target. A number of the magnetic anomalies investigated could not be identified as subsoil features. Of those that were present, many of these, and additional ones not indicated by the geophysical survey, are considered to represent periglacial features. The evaluation confirmed the presence of a localised concentration of Romano-British quarrying in Trench 2, undated quarry pits in Trench 15 and a probable Late Bronze Age boundary ditch in Trenches 11 and 12. The remaining activity revealed was uncertain in nature or origin (Trenches 15, 19 & 20). A small quantity of artifacts was recovered from the evaluation, including a group of Pleistocene animal bone from the river terrace gravels.

1. INTRODUCTION

- 1.1** This report sets out the results of an archaeological evaluation in support of a proposed planning application for the redevelopment of the Somerdale Factory Sports Fields site, Keynsham, Bath and North East Somerset (NGR:ST656692). The location of the site is shown on Fig. 1.
- 1.2** The investigation has been undertaken by Taylor Wimpey (Bristol), on the instruction of their archaeological consultants EDP, at the request of the Bath & Northeast Somerset Archaeological Officer (B&NESAO) in order to provide information to assist in addressing the potential archaeological issues that may arise from the proposed redevelopment of the site.
- 1.3** The site lies in an area known as the Recreation Ground, presently used as sports pitches with associated large car park. It is situated immediately southwest of the former Somerdale Factory and comprises one or more elevated terraces above the river Avon that lies between c. 25 and 16.5m OD. The underlying geology comprises river gravels (northern portion) overlying Lias Limestone (south).

2. ARCHAEOLOGICAL BACKGROUND

2.1 The following is extracted from the EDP Cultural Heritage Strategy:

Geophysical survey and trial trenching undertaken in 1995 (Yorkston & Hume 1995) focussed on the recreation ground. This located a series of undated pits, a rectilinear enclosure and a ditch, all of which are thought to relate to prehistoric settlement activity. Medieval pits and a post-medieval trackway were also recorded.

A second geophysical survey was conducted in 2009, following test pitting in 2008. This found evidence for a large enclosure ditch on the western side of the recreation ground which had previously been sampled in 1995, in addition to other features considered to be of archaeological origin, but of indeterminate date.

Evidence from the 2008 site investigation suggests that, within this zone, the level of the natural ground varies between 0.2 and 1.0 m below existing. The 2012 geotechnical investigations recorded topsoil directly overlying the natural deposits, which comprise 'river terrace gravels and alluvium on the western side of the zone and weathered blue lias' to the east. It is at the interface between the topsoil and the natural deposits that the archaeological features identified by the geophysical surveys will survive.

2.2 No further archaeological evaluation has been undertaken on this part of the Somerdale site since 2008, but LiDAR data of this area, held by the Environment Agency, have been reviewed as part of a more recent geophysical survey (Archaeological Surveys 2012).

3. METHODOLOGY

3.1 The investigation was undertaken in accordance with a project design (Cox 2012), approved by the B&NESAO prior to commencement on site. The proposals were varied subsequently, by agreement with the B&NESAO:

- a) by the exclusion of trenches 3 – 5, and 7-10, in order to reduce pitch disturbance in the very wet ground conditions; and
- b) by the inclusion of additional trenches in the car park to the NW; 5 of which were subsequently excavated (Trenches 24-25; 27, 29 & 31).
- c) reorientation and shortening of specific trenches

Trenches were located by GPS. The positions of the trenches, both proposed and as-excavated, are shown on Fig. 1.

3.2 Surface removal was undertaken under the control and direction of the Site Archaeologist. Turf/topsoil and tarmac/hoggin was removed by mechanical excavator, using a wide toothless bucket, and stored alongside each trench, separated from any subsoil as necessary. Stripping by mechanical excavator ceased at the level at which archaeological deposits or natural subsoil was exposed.

3.3 All deposits revealed were recorded using the standard AC archaeology pro-forma recording system, comprising written, graphic and photographic records, and in

accordance with AC archaeology's *General Site Recording Manual, Version 1*. Detailed sections or plans were produced at 1:10 or 1:50. All site levels relate to Ordnance Datum.

3.4 In addition an assessment of soils and sediments was undertaken on site by Mike Allen and his results are included as Appendix 1.

3.5 The archive has been prepared using the site code ACW 488.

4. RESULTS

Introduction

4.1 A total of twenty one trenches were excavated across the site. Archaeological deposits were encountered in four of the trenches (Trenches 2, 11, 12 & 15); some of these as indicated by the geophysical survey. Three trenches contained subsoil features of uncertain nature or origin (Trenches 19, 20 & 31). A further number of amorphous anomalies, some of these targeted and investigated, are all considered to be geological in nature, notably in Trench 13.

4.2 A varying depth of subsoil was encountered in some of the trenches, overlying Lias Limestone, natural river gravels, or alluvial clay (see Allen, Appendix 1). A small quantity of artefacts was recovered from a number of the trenches. Those trenches containing cut features and other deposits considered to be of archaeological origin are recorded below in sections 4.3 to 4.9. Negative trenches are recorded in Table 8, section 4.10.

Trench 2 (Fig. 2a-f; Plates 1-3)

4.3 This trench measured 25 x 1.5m in plan and was positioned on level ground, in the northern portion of the recreation ground. It was not targeted on a specific magnetic anomaly, but in an area of magnetic disturbance. A depth of between 250mm and 800mm was excavated through topsoil and partly through fill (initially thought to represent a subsoil) before the lower extent of a sequence of four pits was revealed cutting through river terrace gravels. All four of these features appeared to have been infilled at the same time as no relationships could be defined. The deposits in this trench are described in Table 1 below. Romano-British pottery was recovered from each of the pits and, on the basis of this, have been interpreted as Romano-British gravel quarry pits.

Table 1: Trench 2 deposit descriptions

Context	Depth b.g.s.	Description	Interpretation
200	0 –250mm	Dark brown silty clay loam	Topsoil /turfline
201	250 – 900mm	Dark brown sandy clay containing moderate sub-angular/rounded gravels and sparse charcoal flecks.	Upper fill of quarry pit F203
202	900mm – 1.05m	Dark brown sandy silt containing frequent small sub-rounded gravels and sparse larger	Primary fill of quarry pit F203.

		aggregates.	
F203	250mm 1.05m max	Where present in the trench, this feature was sub-linear and had minimum plan dimensions of 1.7 x1.5m, with a moderate to gentle sloping profile onto a broad slightly uneven base at a depth of 800mm. Two fills were recorded within this feature.	Part of a sequence of quarry pits and containing fills 201 & 202. A small quantity of Romano-British pottery was recovered.
204	250mm – 1m max	Dark brown sandy clay containing moderate sub-angular/rounded gravels and sparse charcoal flecks.	Upper fill of quarry pit F206.
205	1 – 1.1m max	Slightly mixed reddish brown clayey sand containing frequent small sub-rounded gravels.	Primary fill of pit F206.
F206	250mm 1.1m max	Where present in the trench, this feature was sub-linear and had minimum plan dimensions of 1.5 x1.5m, with a moderately sloping profile onto a broad slightly uneven base at a depth of 850mm. Two fills were recorded within this feature.	Part of a sequence of quarry pits and containing fills 204& 205. A small quantity of Romano-British pottery was recovered.
F208	250mm – 1m max	Where present in the trench, this feature was sub-circular and had minimum plan dimensions of 3 x1.5m, with a steep to moderately sloping profile onto a broad undulating base at a maximum depth of 750mm. A single fill was recorded within this feature.	Part of a sequence of quarry pits and containing fill 209. A small quantity of Romano-British pottery was recovered.
209	250mm – 1m	Slightly mixed dark brown sandy clay containing moderate sub-angular/rounded gravels and larger aggregates.	Fill of quarry pit F208.
210	250mm+	Light brown sand/gravels.	Natural River Terrace Deposits. Animal bones recovered from this deposit.
211	250mm -1m max	Dark brown sandy clay containing moderate sub-angular/rounded gravels and sparse charcoal flecks.	Fill of quarry pit F212.
F212	250mm -1m max	Where present in the trench, this feature was sub-circular and had minimum plan dimensions of 1 x 1.5m, with a steep to moderately sloping profile onto an undulating base at a maximum depth of 750mm. A single fill was recorded within this feature.	Part of a sequence of quarry pits and containing fill 211.A small quantity of Romano-British pottery was recovered.

Trench 11 (Fig. 3a-c; Plates 5-6)

- 4.4** This trench measured 50 x 1.5m in plan and was positioned on level ground, in the central portion of the survey area. It targeted the east arm of a possible enclosure identified by the geophysical survey and examined by the 1995 trial trenching. A maximum depth of 550mm was excavated through topsoil and subsoil before part of a northeast to southwest aligned linear feature was revealed and part of a possible further feature, both cutting through natural river terrace gravels. Bronze Age pottery was recovered from the enclosure ditch. The deposits present in this trench are described in Table 2 below.

Table 2: Trench 11 deposit descriptions

Context	Depth b.g.s.	Description	Interpretation
1100	0 - 250mm	Dark brown silty clay loam	Topsoil /turfline
1101	250 – 550mm	Mid-brown silty clay containing sparse sub-angular gravels and charcoal flecks.	Subsoil.
1102	550mm+	Dark reddish brown sandy clay / small sub-angular/rounded gravels	Natural River Terrace Deposits
F1103	550mm – 1.25m	Approximately northeast-southwest aligned linear feature, 1.35m in width, with a steep sloping profile onto a slot-like base at a depth of 700mm. A length of 1.5m was exposed	Appears as part of linear anomaly recorded on geophysical survey. Representing part of

		within the trench. Two fills were recorded within this feature.	possible former field boundary ditch and although different in dimensions, this feature is likely to be associated with F1203 in Tr 12. A small quantity of Bronze Age pottery was recovered from this feature.
1104	550 – 850mm max	Reddish brown clayey silt containing occasional sub-rounded gravels and sparse charcoal flecks.	Upper fill of ditch F1103
1105	650mm – 1.25m	Reddish brown silty containing abundant small sub-rounded/angular gravels.	Main / primary fill of ditch F1103. Possibly represents slumping of former bank material?
1106	550 – 730mm	Mid-brown silty clay containing sparse small sub-rounded gravels.	Sole fill of F1107. No dating evidence present.
F1107	550 – 730mm	Approximately northeast-southwest aligned linear feature, terminating within the confines of the trench at its southwest extent. It had plan dimensions of 0.5m in length and 0.4m in width, with a steep sloping profile and flatish base at a depth of 180mm. A single fill was recorded within this feature.	Appears as terminal of former ditch or gully. Undated.

Trench 12 (Fig. 3d-f; Plates 7-8)

4.5 This trench measured 25 x 1.5m in plan and was positioned on level ground, in the central portion of the study area. It also targeted the possible enclosure ditch identified on the geophysical survey and examined by the 1995 trial trenching along with a group of discrete anomalies not previously examined. A maximum depth of 500mm was excavated through topsoil and subsoil before part of an approximately northwest to southeast aligned linear feature was revealed cutting through natural river terrace gravels. A number of variations in the subsoil were also present, all of which, after investigation, were considered to be geological in origin. A single fragment of animal bone was recovered from this trench. The deposits present in this trench are described in Table 3 below.

Table 3: Trench 12 deposit descriptions

Context	Depth b.g.s.	Description	Interpretation
1200	0 - 250mm	Dark brown silty clay loam	Topsoil /turfline
1201	250 – 500mm	Mid-brown silty clay containing sparse sub-angular gravels and charcoal flecks.	Subsoil.
1202	500mm+	Dark reddish brown sandy clay / small sub-angular/rounded gravels	Natural River Terrace Deposits
F1203	500 – 850mm	Approximately northwest-southeast aligned linear feature, 1.3m in width, with a steep or gradual sloping profile onto a flat base at a depth of 350mm. A length of 1.5m was exposed within the trench. Two fills were recorded within this feature.	Appears as part of linear anomaly recorded on geophysical survey. Probably represents part of possible former field boundary ditch and although different in dimensions, this feature is likely to be associated with F1103 – Tr 11.
1204	500 – 650mm max	Mid-reddish brown clayey silt containing occasional sub-rounded gravels.	Upper fill of ditch F1203. Animal bone present.
1205	650mm – 1.25m	Reddish brown silty containing abundant small sub-rounded/angular gravels.	Main / primary fill of ditch F1203. Possibly represents former bank material?
1206	500mm+	Group number for natural features investigated – all varying in dimensions and depth and each containing reddish brown sandy clay.	Naturally formed features (as in Tr 13).

Trench 15 (Fig. 4a-c; Plates 10-12)

- 4.6** This trench measured 25 x 1.5m in plan and was positioned on level ground, in the central portion of the study area. It targeted two discrete magnetic anomalies and an area of amorphous disturbance recorded by the geophysical survey. A maximum depth of 700mm was excavated through topsoil and subsoil before three features, two representing large probable quarry pits, were revealed. Each of these was cutting through natural river terrace gravels. The deposits present in this trench are described in Table 4 below.

Table 4: Trench 15 deposit descriptions

Context	Depth b.g.s.	Description	Interpretation
1500	0 - 250mm	Dark brown silty clay loam	Topsoil /turfline
1501	250 –700mmmax	Mid-brown silty clay containing sparse sub-angular gravels and charcoal flecks.	Subsoil – thickness variable Worked flint recovered.
F1502	600mm – 1.15m	Where present in trench, this feature was sub-circular and had plan dimensions of 1.45 x 0.7m, with a steep sloping profile onto a broad flat base at a depth of 600mm. Three fills were recorded within this feature.	Part of probable large pit – function unclear. No dating evidence present.
1503	600 – 900mm max	Orange-brown silty clay containing sparse small sub-rounded gravels.	Upper fill of pit F1502
1504	600 – 750mm max	Thin horizon of grey-brown silty clay containing sparse small sub-rounded gravels and charcoal flecks.	Secondary fill of pit F1502
1505	750mm – 1.15m max	Reddish brown sandy clay containing sparse small sub-rounded gravels.	Primary fill of pit F1502.
1506	600mm – 1.5m	Dark brown silty clay containing moderate sub-rounded / angular gravels and sparse charcoal flecks.	Upper/main fill of quarry pit F1508. Small quantity of iron slag and animal bone recovered.
1507	1.5 – 1.75m	Mottled reddish brown sandy clay containing occasional small sub-rounded gravels.	Primary fill of quarry pit F1508. No dating evidence present.
F1508	600mm – 1.75m	Where present in trench, this feature had plan dimensions of 1.5 x 5m, with a steep sloping profile onto a broad flat base at a depth of 1.2m. Two fills were recorded within this feature.	Part of probable large quarry pit – date uncertain.
1509	600mm – 1.1m	Dark silty/sandy clay containing moderate sub-rounded / angular gravels.	Upper/main fill of quarry pit F1511. No dating evidence present.
1510	1.1 – 1.3m	Mixed reddish brown sandy/silty clay containing sparse small sub-rounded gravels and charcoal flecks.	Primary fill of F1511. No dating evidence present.
F1511	600mm -1.3m max	Where present in trench, this feature had plan dimensions of 1.5 x 7. 5m+, and with a steep sloping profile onto a broad flat base at a maximum depth of 700mm. Two fills were recorded within this feature.	Part of probable large quarry pit –extent to the east unknown. Date uncertain.
1512	500mm+	Dark reddish brown sandy clay / small sub-angular/rounded gravels	Natural River Terrace Deposits

Trench 19 (Fig. 5a-b; Plate 14)

- 4.7** This trench measured 25 x 1.5m in plan and was positioned in the south of the study area, on ground sloping down to the north. It was positioned to target linear anomalies recorded on the geophysical survey, one of which was apparent as a slight east-west earthwork. A maximum depth of 600mm was excavated through topsoil and subsoil before part of an approximate east to west aligned linear feature

was revealed cutting through natural Lias Limestone. The deposits present in this trench are described in Table 5 below.

Table 5: Trench 19 deposit descriptions

Context	Depth b.g.s.	Description	Interpretation
1900	0 - 350mm max	Dark brown silty clay loam, containing ashy lenses and occasional large limestone pieces.	Topsoil /turfline. Becomes deeper towards SW extent, due to probable C20th dumping of material in this area
1901	350 – 600mm max	Dark greyish brown silty clay containing moderate angular limestone pieces and sparse charcoal flecks.	Subsoil.
1902	600mm+	Weathered limestone within a yellow/orange-brown clay in places.	Natural Lias Limestone. Periglacial disturbance in places.
1903	600 – 700mm max	Dark greyish brown silty clay containing occasional sub-angular limestone pieces and sparse charcoal flecks	Fill of linear feature F1904. Same soil matrix as subsoil (1901). Contains Medieval pottery.
F1904	600 – 700mm max	Approximately east-west aligned, slightly irregular linear feature, 0.6m maximum width, with a steep to gradual sloping profile, onto a slightly uneven base at a maximum depth of 100mm. A length of 1.6m was exposed within the trench. A single fill was recorded within this feature.	Appears as part of linear anomaly recorded on geophysical survey. Unclear what depth this feature was cut from due to similarity in fill to the subsoil. This feature is undetermined in nature.

Trench 20 (Fig. 5c-f; Plate 15)

4.8 This trench measured 50 x 1.5m in plan and was positioned on level ground in the south portion of the study area. The trench was designed to target a linear magnetic anomaly and an area of magnetic disturbance recorded on the geophysical survey. A maximum depth of 400mm was excavated through topsoil and subsoil before three possible post-hole features, almost in line, were revealed at the western extent of the trench, each cutting through natural Lias Limestone. No dating evidence was recovered from any of these features, although it is considered that these are relatively modern and possibly associated with former allotment plots in this area of the site. The deposits present in this trench are described in Table 6 below.

Table 6: Trench20 deposit descriptions

Context	Depth b.g.s.	Description	Interpretation
2000	0 - 200mm max	Dark brown silty clay loam.	Topsoil /turfline.
2001	200 – 400mmmax	Dark greyish brown silty clay containing moderate angular limestone pieces and sparse charcoal flecks.	Subsoil. Worked flint recovered.
2002	400mm+	Weathered limestone within a yellow/orange-brown clay in places.	Natural Lias Limestone. Periglacial disturbance in places.
2003	400 – 650mm max	Greyish brown silty clay containing three large sub-angular limestone pieces, possibly representing packing. Sparse charcoal flecks	Fill of possible former post-hole feature F2004.
F2004	400 – 650mm max	Poorly defined, sub-circular feature, with dimensions present of 0.4 x 0.5m in plan. It had a gentle to moderately sloping profile onto a flatish base, at a maximum depth of 250mm. A single fill was recorded within this feature.	Possible former post-hole. Undated.
2005	400 –500mm max	Greyish brown silty clay containing sparse small limestone pieces and charcoal flecks.	Fill of possible former post-hole feature F2006.

F2006	400 – 500mm max	Circular feature, with diameter of 0.35m in plan and a gentle to moderately sloping profile and rounded base at a maximum depth of 100mm. A single fill was recorded within this feature.	Possible former post-hole. Undated.
2007	400 – 500mm max	Greyish brown silty clay containing sparse small limestone pieces and charcoal flecks.	Fill of possible former post-hole feature F2008.
F2008	400 – 500mm max	Poorly defined, sub-circular/irregular feature, with maximum diameter of 0.3m in plan. It had a gentle / irregular sloping profile onto an uneven base, at a maximum depth of 100mm. A single fill was recorded within this feature.	Possible former post-hole. Undated.

Trench 31 (Fig. 5g-h; Plates 19-20)

- 4.9** This trench measured 8 x 1.5m in plan and was positioned in the Fry's Club Car Park, on ground sloping gently down to the north-west. A maximum depth of 800mm was excavated through surface make-up (tarmac and hoggin) and two subsoil horizons, before part of a weathered limestone surface and a linear feature were revealed. No artefacts were recovered. The deposits present in this trench are described in Table 7 below.

Table 7: Trench 31 deposit descriptions

Context	Depth b.g.s.	Description	Interpretation
3100	0 - 300mm	Tarmac / hoggin	Car park surface make-up.
3101	300 – 600mm max	Slightly mottled dark grey silty clay with no coarse components.	Buried topsoil.
3102	600 - 800mm	Mid-brown gritty silty clay containing occasional small limestone pieces and gravels.	Layer – undetermined in origin
3103	800mm – 1m	Light orange brown sandy clay containing abundant small sub-angular / rounded gravels and occasional small limestone pieces.	Deposit filling feature F1304
F3104	800mm – 1m	Approximately northwest-southeast aligned linear feature, with a maximum width in plan of 2.6m. It had a gentle to moderately sloping profile onto a slightly uneven base at a depth of 200mm. A length of 1.5m was exposed within the trench.	Undetermined feature in nature or origin. Possibly naturally formed hollow? filled by 1303.
3105	800 - 950mm max	Area of densely packed sub-angular / rounded / tabular limestone pieces up to 400mm in size – weathered in appearance and present within most of the trench length.	Represents part of a weathered limestone surface, possibly used as a trackway
3106	900mm+	Angled or level sub-angular / rounded / tabular limestone pieces up to 500mm in size and within a light grey clay matrix.	Natural Lias limestone.

Negative trenches

- 4.10** Several trenches revealed amorphous soil variations, striping or banding, which appeared to represent possible archaeological features. After manual excavation of a sample of these, and a review by Allen Environmental (Appendix 1) it was considered that these subsoil variations were most probably naturally formed and periglacial in origin (particularly Trenches 13, 14, 17 & 18). Trench 21 was positioned to investigate a broad low linear bank-like earthwork. However this feature was also naturally formed, partly enhanced by relatively modern activity, possibly a headland or lynchet dividing arable and pasture land.

Table 8: Summary of trenches with no subsoil archaeological features

Trench No	Depth below ground	Contexts	Description	Comment
1	0 - 350mm 350mm+	Topsoil/turfline - context 100 Natural – context 101	Trench positioned on level ground adjacent to football pitch, in the northern portion of the survey area. Topsoil composed of dark brown silty clay loam. Natural comprised River Terrace Deposits composed of light brown sand and gravels.	No finds were recovered from this trench. The trench was located in an area of magnetic disturbance. No evidence for dumping, plough scars or truncation.
6 (see plate 4)	0 - 200mm 200 – 850mm 850mm+	Topsoil/turfline - context 600 Layer – context 601 Surface 602	Trench positioned on level ground adjacent to football pitch and existing avenue, in the northern portion of the survey area. This trench was not fully excavated due to the presence of a buried gas main running along much of the proposed trench length. Topsoil composed of dark brown silty clay loam. Layer 601 comprised redeposited topsoil and subsoil composed of a mixed reddish brown and dark brown silty/sandy clay and representing a depth of modern made-up ground. Surface 602 represents part of buried former tarmac road or pathway with associated edging stones.	No finds were recovered from this trench. The trench was located in an area of magnetic disturbance. No evidence for dumping, plough scars or truncation.
13 (see plate 9)	0 - 250mm 250mm – 550mm 550mm+	Topsoil/turfline - context 1300 Subsoil - context 1301 Natural – context 1304 Natural features – contexts 1303 - 1317	Trench positioned on level ground on football pitch, in the central portion of the survey area. Topsoil composed of dark brown silty clay loam. Subsoil composed of mid-brown silty clay containing sparse sub-angular gravels and charcoal flecks. Natural comprised dark reddish brown sandy clay / small rounded gravels, representing River Terrace Deposits. A number of possible features were investigated. Some of these were stake-like in profile and some gully-like. All of these features composed of the same soil matrix, comprising reddish brown sandy clay with no coarse components.	No finds were recovered from this trench. The trench was located to investigate two linear features. No evidence for dumping, plough scars or truncation. All of these features are considered to be naturally formed, representing probable small solution hollows and run-off gullies.
14	0 - 250mm 250mm – 600mm 600mm+	Topsoil/turfline - context 1400 Subsoil - context 1401 Natural – context 1402	Trench positioned on level ground on football pitch, in the central portion of the survey area. Topsoil composed of dark brown silty clay loam. Subsoil composed of mid-brown silty clay containing sparse sub-angular gravels and charcoal flecks. Natural comprised dark reddish brown sandy clay / small rounded gravels, representing River Terrace Deposits. A number of naturally formed features	No finds were recovered from this trench. The trench was located to investigate two linear features. No evidence for dumping, plough scars or truncation. All of these features are considered to be naturally formed, representing probable small solution hollows and run-off gullies.

			were investigated, all of these composed of the same soil matrix, comprising reddish brown sandy clay with no or few coarse components.	
16	0 - 200mm 200 - 300mm 300mm+	Topsoil/turfline - context 1600 Subsoil - context 1601 Natural – context 1602	Trench positioned on gentle sloping ground to the north, adjacent to football pitch, in the central portion of the survey area. Topsoil composed of dark brown silty clay loam. Subsoil composed-brown silty clay containing sparse sub-angular gravels and charcoal flecks. Natural comprised weathered Lias Limestone. A single sub-linear feature was investigated. On excavation this feature appeared periglacial in nature.	No finds were recovered from this trench. The trench was located to investigate several linear features and a large discrete anomaly. No evidence for dumping, plough scars or truncation. NB Gas main located at east end of trench on a NW-SE alignment
17	0 - 300mm 300 -400mm 400mm+	Topsoil/turfline - context 1700 Subsoil - context 1701 Natural – context 1702	Trench positioned on gentle sloping ground to the north, adjacent to football pitch, in the central portion of the survey area. Topsoil composed of dark brown silty clay loam. Subsoil composed-brown silty clay containing moderate sub-angular limestone pieces and charcoal flecks. Natural comprised weathered Lias Limestone. A single sub-linear feature was investigated.	No finds were recovered from this trench. The trench was located to investigate several linear and rectilinear anomalies. No evidence for dumping, plough scars or truncation. This feature is considered to be periglacial in nature.
18 (see plate 13)	0 - 300mm 300 -400mm 400mm+	Topsoil/turfline - context 1800 Subsoil - context 1801 Natural – context 1802	Trench positioned on gentle sloping ground to the north, adjacent to football pitch, in the central portion of the survey area. Topsoil composed of dark brown silty clay loam. Subsoil composed-brown silty clay containing moderate sub-angular limestone pieces and charcoal flecks. Natural comprised weathered Lias Limestone. A single sub-linear feature was investigated.	An iron horseshoe and a piece of post-medieval pottery were recovered from the top of the subsoil. The trench was located to investigate several linear and rectilinear anomalies. No evidence for dumping, plough scars or truncation. This feature is considered to be periglacial in nature.
21 (see Plate 16)	0 - 250mm 250 -700mm max 250mm+	Topsoil/turfline - context 2100 Subsoil - context 2101 Natural – context 2102	Trench positioned across broad linear bank-like feature, on gentle sloping ground to the north, close to cricket square ,towards the south portion of the survey area. Topsoil composed of dark brown silty clay loam. Subsoil composed of mid-brown silty clay containing moderate sub-angular limestone pieces and charcoal flecks. Natural comprised weathered Lias Limestone. A single large linear trench was partly revealed directly below the turfline, its nature unclear, but clearly modern in origin.	No finds were recovered from this trench. The trench was located to investigate a linear anomaly that was also evident as a low mound on the crest of the slope. No evidence for dumping, plough scars or truncation. The surface feature is considered to be an accumulation of soil, possibly a lynchet or headland, without any ditch (see Appendix 1).
22	0 - 250mm 250mm+	Topsoil/turfline - context 2200 Natural – context 2201	Trench positioned on level ground, adjacent to cricket square towards the south portion of the survey area. Topsoil composed of dark brown silty	No finds were recovered from this trench. The trench was located to investigate a group of linear and discrete anomalies. The

			clay loam. Natural comprised weathered Lias Limestone. Subsoil was not present in this trench.	discrete anomalies were shown to be a row of modern ferrous spikes. No evidence for dumping, plough scars or truncation.
23	0 - 200mm 200mm+	Topsoil/turfline - context 2300 Natural – context 2301	Trench positioned on level ground, close to cricket square and in the most southerly portion of the survey area. Topsoil composed of dark brown silty clay loam. Natural comprised weathered Lias Limestone. Subsoil was not present in this trench.	No finds were recovered from this trench. The trench was located to investigate a group of linear anomalies. No evidence for dumping, plough scars or truncation.
24 (see plate 17)	0 - 400mm max 400 – 500mm 500mm+	Tarmac / hoggin - context 2400 Interface – context 2402 Natural – context 2405	Trench positioned on ground sloping down gently to the north-west and situated in the south portion of the car park. Interface 2402 composed of dirty / trampled clay. No buried soils present. Two stone filled land drains (F2401 & 2404) of probable 19th century date present cutting natural clay. One of these was investigated (F2404). Natural comprised Lias Clay with gravel pockets.	No finds were recovered from this trench. The trench was not located to investigate magnetic anomalies. Possible evidence for truncation as no alluvium or gravels present.
25 (see plate 18)	0 - 250mm max 250 – 450mm 450mm – 1.4m+	Tarmac / hoggin - context 2500 Buried topsoil – context 2501 Natural – context 2502	Trench positioned on ground sloping down gently to the north-west and situated in the south portion of the car park. Buried topsoil comprised slightly mixed dark grey brown silty clay. Natural comprised very disturbed Lias Clay with gravel pockets. Initially thought to represent modern infilling. Two machine excavated sondages excavated at either end of trench to a maximum depth of 1.4m confirmed that context 2502 was natural.	No finds were recovered from this trench. The trench was not located to investigate magnetic anomalies. Possible evidence for truncation as no alluvium or gravels present.
27	0 - 400mm max 400 – 600mm 600mm +	Tarmac / hoggin - context 2700 Buried topsoil – context 2701 Natural – context 2702	Trench positioned on ground sloping down gently to the north-west and situated in the central portion of the car park. Buried topsoil comprised slightly mixed dark grey brown silty clay. Natural comprised Lias Clay with gravel pockets. Periglacial features present.	No finds were recovered from this trench. The trench was not located to investigate magnetic anomalies. Possible evidence for truncation as no alluvium or gravels present.
29	0 - 300mm max 300 – 600mm 600mm +	Tarmac / hoggin - context 2900 Buried topsoil – context 2901 Natural – context 2902	Trench positioned on ground sloping down gently to the north-west and situated in the central portion of the car park. Buried topsoil comprised slightly mixed dark grey brown silty clay. Natural comprised Lias Clay with gravel pockets. Periglacial disturbance present.	No finds were recovered from this trench. The trench was not located to investigate magnetic anomalies. Possible evidence for truncation as no alluvium or gravels present.

5. FINDS

Summary

- 5.1** The principal finds groups consist of a small number of Romano-British pottery sherds recovered from Trench 2 and a small number of flints and pottery of Early to Middle Bronze Age date recovered from the fill of a ditch within Trench 11. Other finds were recovered from subsoil contexts, and include local medieval and post- medieval sherds (Trenches 18 &19). A number of iron objects were also recovered from topsoil contexts. A most unusual find was the bones and teeth of Pleistocene animals in the river gravels in Trench 2.

Methodology

- 5.2** All finds site have been retained, cleaned and marked where appropriate. Finds were then quantified according to material type within each context. The assemblage was then scanned by context to extract information regarding the range, nature and date of artefacts represented. This information is briefly discussed below. Table 9 quantifies finds by context and material type. All metalwork has been stabilised by suitable packaging to prevent further corrosion, although iron objects have active corrosion present on their surfaces. Dr Sheila Hamilton-Dyer has been consulted for species identification of the Quaternary bone and the Romano-British pottery was examined with Mark Corney.

Iron Objects

- 5.3** Nine iron objects was recovered, of which only four objects were from dateable contexts; the remaining were from subsoil contexts and are of indeterminate date (Table 10). The dated objects include two nails recovered from the fill of quarry pit F206 and a two unidentified objects recovered from the fill of linear feature F1904. The objects recovered from the subsoil include a complete 18th century keyhole horseshoe, four nails and a two unidentified objects. All the objects show moderate corrosion, and one nail from context 204 shows evidence of active corrosion. The nails are of uncertain date, all are handmade and they may be of either Romano-British date or medieval date, although given the quantity of Romano-British pottery present, the earlier date is more likely.

Worked Flint

- 5.4** Seven pieces (24g) of flint were recovered, of which two pieces are residual in features containing pottery of either Romano-British date or medieval date (Table 11). Two tools are present, including an end scraper which was residual within quarry pit F208 and a broken possible scraper which was residual within linear ditch F1904. This possible scraper is quite distinctive from the rest of the flint assemblage, in that it has white patination indicating a different source from the rest of the flint, and one which is not

local in origin. Three pieces of flint were recovered from the upper fill of ditch F1103, and includes two chips and a snapped blade tool with a serrated edge. These flints are associated with a small number of Early Bronze Age pottery sherds. The flint has all been tentatively assigned a late Neolithic/early Bronze Age date, although the end scraper is possibly of Mesolithic date.

Table 9: Summary of finds by type and context

Trench	Context	Fill Of	Iron		Flint		Glass		Slag		Bronze Age Pot		Romano-British Pottery		Med Pottery		Post Med		Animal Bone	
			no	wt	no	wt	no	wt	no	wt	no	wt	no	wt	No	wt	no	wt	no	wt
2	201	F203	-	-	-	-	-	-	-	-	-	-	7	69	-	-	-	-	2	275
	204	F206	2	-	-	-	-	-	-	-	-	-	3	3	-	-	-	-	1	3
	205	F206											1	2						
	209	F208	-	1	2	-	-	-	-	-	-	-	2	29	-	-	-	-	3	11
	210	nat river terraces	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	157	660
	211	F212	-	-	-	-	-	-	-	-	-	2	8	-	-	-	-	3	24	
11	1104	F1103	-	3	4	-	-	-	-	5	5	-	-	-	-	-	-	-	-	
	1105	F1103	-	-	-	-	-	-	-	5	9	-	-	-	-	-	-	3	302	
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
12	1204	F1203	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	34	
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
15	1501	subsoil	-	1	12	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	1506	F1508	-	-	-	-	-	3	419	-	-	-	-	-	-	-	-	1	17	
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
18	1801	subsoil	1	-	-	-	-	-	-	-	-	-	-	-	-	-	1	18	-	-
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
19	1901	subsoil	3	-	-	2	1	-	-	-	-	-	-	1	6	1	1	7	46	
	1903	F1904	2	1	4	-	-	1	8	-	-	-	-	2	5	-	-	-	-	
20	2001	subsoil	1			-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Grand Total			9	6	22	2	1	4	427	10	14	15	114	3	11	2	19	178	1372	

Table 10: Summary of Iron Objects

Context	Trench	Fill Of	Comments
204	20	F206	Two nails, one round headed possibly handmade nail.
1801	18	Subsoil	18th century keyhole pony shoe, fullered and with six square nail holes, 175mm long x 110mm wide, nails still in situ, wear evident at toe.
1901	19	Subsoil	Small round headed nail, larger square sectioned nail with indeterminate head, two undiagnostic lumps of iron.
1903	19	F1904	Undiagnostic iron objects; possibly hobnails?
2001	20	subsoil	Square section large handmade nail with pyramidal head, 130mm long.

Table 11: Summary of Worked Flint

Trench	Context	Fill Of	Comments
20	209	F208	Single blade (2g) with end on scraper retouched at end and along one edge, residual
11	1104	F1103	Three pieces of worked flint (4g) Chip (x2) one small and one larger. Snapped blade tool, pale grey flint, with serrated edge and found with Bronze Age pottery
15	1501	subsoil	Long, snapped blade (12g), retouched on both sides, cortex, dark grey chalk derived flint
19	1903	F1904	Broken tool (4g), possibly a scraper, patinated white with retouched along one edge, residual

Glass

- 5.5** Two very small pieces (1g) of glass were recovered from the subsoil in Trench 19. The glass comprises a single shard of green bottle glass and a single piece of clear modern vessel glass.

Slag

- 5.6** Four pieces (426g) of slag were recovered, comprising a single amorphous lump and a larger undiagnostic fragment. The slag recovered from the fill of linear F1904 is associated with medieval pottery and the slag recovered from the main fill of F1508 is undated.

Early Bronze Age Pottery

- 5.7** A small assemblage (10 sherds, 14g) of Early Bronze Age pottery was recovered from the fills of linear feature F1103. The pottery includes nine sherds of a locally made, grog-tempered, fabric recovered from contexts 1104 and 1105. The sherds are thought to all derive from the same thin walled vessel and are quite friable and small. A sherd recovered from context 1105 is also grog tempered this sherd is from a thicker walled vessel, although the form is unknown.

Romano-British Pottery

Identification by Mark Corney

- 5.8** The assemblage of Romano-British pottery comprises 16 sherds (114g) and is summarised in Table 12. The pottery has a mean sherd weight of 7g and much of the pottery is abraded. All the pottery was recovered from quarry pits F203, F206, F208 and F212 within Trench 2. The assemblage is similar to that recovered from the evaluation of the sports field on the Keynsham Hams (ACW486), as is again dominated by Severn Valley type wares (micaceous sandy wares) and local sandy coarsewares, with a small amount of Samian, North Wiltshire colour coated and BB1 sherds also present. The Severn Valley type wares include a small number of sherds of a reduced

Table 12: Summary of Pottery, by Period and by Context

Context	Fabric	Form	no	wt	EVE	Comment
BRONZE AGE						
1104	grog tempered	plain body sherd	5	5	1	grog tempered fine wall fabric, reduced interior and core, oxidised surfaces same as 1105
1105	grog tempered	plain body sherd	4	3	1	grog tempered fine wall fabric, reduced interior and core, oxidised surfaces same as 1104
1105	grog tempered	plain body sherd	1	6	1	thicker walled vessel, sandy
Total Bronze Age Pottery			10	14	3	
ROMANO-BRITISH						
201	Samian	decorated bowl	2	7	1	decorated Samian bowl ?DR37 2nd century central Gaulish
201	BB1	small jar	1	10	1	everted rim
201	North Wiltshire Colour Coated	closed form jar	1	10	1	Cornice rimmed beaker, North Wilts colour coat 2nd century
201	Sandy coarseware	plain body sherd	3	42	3	large quartz grains visible on the surface
204	Samian type ware	plain body sherd	2	2	1	very small indeterminate body sherds, Central Gaulish
204	Severn Valley type ware	plain body sherd	1	2	1	Fine sandy micaceous possible colour coat beaker
205	Severn Valley type ware	plain body sherd	1	2	1	very abraded, possibly beaker 2nd/3rd
209	Severn Valley type ware	plain body sherd	2	29	2	abraded body sherds
211	Severn Valley type ware	base	1	2	1	Fine sandy micaceous small base
211	fineware ?Severn Valley	flange	1	8	1	flange of a copy of DR38 (but not Oxford), mid 3rd/4th possibly earlier with white trailed slip decoration
Total Romano-British Pottery			15	114	13	
MEDIEVAL						
1901	Ham Green ware	decorated jug	1	6	1	Jug with green glaze
1903	whiteware	plain body sherd	1	5	1	thin walled vessels, pale cream fabric Surrey whiteware type
Total Medieval Pottery			2	11	2	
LATE MEDIEVAL/POST MEDIEVAL						
1903	redware	rim	1	5	1	red fine fabric with internal green glaze, late Medieval/Early Post Medieval
Total Medieval Pottery			1	5	1	
POST MEDIEVAL						
1801	red earthen ware	rim of bowl	1	18	1	Flowerpot
1901	Raeren Stoneware	tankard rim	1	1	1	Tiny sherd, cobalt blue glaze, rim possibly from tankard
Total Post Medieval			2	19	2	

sandy micaceous fabric, which are possibly Gloucester type fabric 5 (Corney, pers comm.). The diagnostic material include a decorated body sherd from a 2nd century Central Gaulish D37 Samian bowl, a 2nd century North Wilts colour coated cornice rimmed beaker and a flange from a copy of DR38 (but not Oxford), mid 3rd/4th (possibly earlier) bowl with white trailed slip decoration. Though few diagnostic rims were present, it is likely that several of the Severn Valley wares derive from tankards.

- 5.9** The pottery has a broad date range from the early to mid second century to the 3rd and 4th centuries AD.

Medieval Pottery

- 5.10** Two (11g) medieval pottery sherds were recovered from Trench 19. A sherd from a Ham Green jug, dating from the 13th century, was recovered from subsoil in this trench and a tiny sherd of what is possibly a glazed Surrey White ware was recovered from the fill of linear F1904. Both sherds are plain, glazed body sherds, and the sherd of possible Surrey Whiteware derives from a thin walled vessel but it is too small to make any further comment.

Post-medieval Pottery

- 5.11** Two sherds (19g) of post-medieval pottery were recovered from subsoil contexts within Trenches 19 and 18. They comprise a tiny rim sherd from a 18th century Raeren Stoneware vessel (with cobalt blue glaze) and a small sherd of glazed red earthenware which is of late medieval/early post medieval date.

Animal Bone

By Michael J. Allen and Sheila Hamilton-Dyer

- 5.12** A small assemblage of bone was recovered from the evaluation and preservation of those recovered was moderate. The lack of bone in many evaluation trenches is in part due to the paucity of bone-rich archaeological contexts, but this is tempered by the variable geology of the site, some of which was not conducive for the preservation of bone. The presence of large femoral or humeral head of a large ungulate and of the tooth of a large carnivore from the top of the gravels (context 201) were considered to be of particular significance and rapid species identification was obtained along with a comment on their significance. The assemblage of animal bone from the archaeological contexts was small and species identification is given below.
- 5.13** The species presence for each context is given in Table 13. The following summarises the contexts containing animal bone, by type.

Pleistocene contexts

Context 210: Natural River Terrace Deposits - light brown sand/gravels
Femoral head of very large mammal, caput depth of c.90 mm, weight 244g
Upper right 3rd premolar of Spotted Hyaena *Crocuta crocuta*, weight 20g
Approximately 70 large mammal fragments weighing 360g

Archaeological Contexts

Trench 2

Context 201: Upper fill of quarry pit F203 (over primary fill)
Horse humerus and portion of sheep/goat rib

Context 204: Upper fill of quarry pit F206 (over primary fill)
Portion of sheep/goat rib

Context 209; Fill of quarry pit F208
Large mammal limb fragment and skull fragment

Context 211: Fill of quarry pit F212
Very thick large mammal limb fragment similar in character to those in 210

Trench 11

Context 1105: Main / primary fill of ditch F1103. Possibly represents former bank material ?Cattle tibia, domestic size

Trench 12

Context 1204: Upper fill of ditch F1203
Bovid humerus fragment, domestic size

Trench 15

Context 1506: Upper/main fill of quarry pit F1508.
Lower part of sheep/goat tibia

Trench 19

Context 1901: Subsoil
Parts of sheep/goat mandible, maxilla and humerus

Table 13: List of species by context

	210	211	201	204	209	1105	1204	1506	1901
<i>Pleistocene fauna</i>									
V. large ungulate (?woolly rhinoceros)	+	-	-	-	-	-	-	-	-
Crocuta crocuta (spotted hyaena)	+	-	-	-	-	-	-	-	-
Large mammal	-	+	-	-	-	-	-	-	-
<i>Holocene fauna</i>									
Large mammal	-	-	-	-	+	-	-	-	-
Horse	-	-	-	-	-	-	-	-	-
Cow	-	-	-	-	-	+	+	-	-
Sheep/goat	-	-	+	+	-	-	-	+	+

Comment on animal bone

- 5.14** The material from context 210 is almost mineralised but brittle; most are indeterminate large mammal limb bone fragments. The largest individual piece best matches the femoral head of a very large ungulate mammal. With a caput depth of c. 90 mm it is too large for aurochs. The tooth can be positively identified as an upper premolar from a large hyaena. These do not appear in the British fauna beyond the Devensian. In the Mendips animal bones from the hyaena cave at Pickens Hole have been C14 dated to 34,000 B.P. (Yalden 2009). The femoral head could therefore be of woolly rhinoceros.
- 5.15** The fragment from context 211 has the same texture and density as those from 210 and could be of similar date. Animal bones from the other contexts all appear to be from domestic stock and could derive from features of a wide date range from the Neolithic onwards. Some are quite well preserved and offer data on size and age of the animals.
- 5.16** The Pleistocene femur is considered regionally important and it is recommended that its identification is confirmed by comparison with material at a suitable museum. If required for long term storage and display, the hyaena tooth requires consolidation as the roots are already in the process of splitting away from the crown.

6. COMMENT

- 6.1** The principal aim of the evaluation was to provide an assessment of the geophysical survey data, assess the potential for Romano-British, and possibly earlier, remains associated with this as identified elsewhere on the wider Somerdale site, and attempt to provide dating evidence for undated features previously identified by the 1995 evaluation.
- 6.2** It is first necessary to consider the topography of the site. A description of the geology and soils is set out in Appendix 1, but here it is necessary to note that in the southern portion of the site, effectively south and southwest from Trench 16 there are relatively shallow soils overlying lias limestone 'brash'. This zone is generally level but there is a distinct break in slope, effectively the edge of the river valley, which is exaggerated by the formation of a slight bank (probably a lynchet or headland) between Trenches 19 and 21. This bank is clearly evident, as feature L18 on LiDAR survey (Archaeological Surveys Ltd. Fig. 38), with traces of ridge and furrow to the south (L20) on the limestone bedrock. There is no evidence (from trenches 19 and 21) for a ditch associated with the bank and it is therefore difficult to suggest that it formed any specific function as might be anticipated if, for example, it was an ecclesiastical circuit associated with Keynsham Abbey. On the lower ground there is at least one river terrace above the floodplain (The Keynsham Hams) although its lower edge definition is not readily apparent at ground level and may be obscured by ground shaping for the former factory structures, car parks etc.
- 6.3** The evaluation has provided evidence that within the sports pitch area there is no evidence for any significant truncation associated with former factory development or landscaping for sports pitches; here any archaeological deposits should survive well. On the car park area to the northwest, however, there is evidence that truncation and modern dumping have removed much of the pre-existing river terrace deposits, down to the underlying clays and hence any trace of all but the deepest archaeological deposits. Only at the northern end of the car park (Trench 31) is there any hint of in situ deposits surviving, but there was a lack of dating evidence for the deposits encountered.
- 6.4** As an assessment of the results of the geophysical survey, the evaluation can confirm the existence of a truncated? Ditched enclosure to the south of the Fry Club Pavilion also recorded by the previous evaluation? Further Bronze Age finds from the ditch may confirm a prehistoric date. There is no evidence for a return of this enclosure in Trench 24 where it has been completely removed by the creation of the car park? Few other anomalies across the area of the evaluation can be shown to be derived from archaeological features; the broad area of magnetic disturbance (also apparent on the LiDAR survey as feature L23) that runs northeast to southwest through the site and which was sampled in trenches 15 and 2 can be shown to derive from quarrying activity. While finds are sparse within the excavated quarry features, the presence of Romano-British pottery in quarry backfill in Trench 2 indicates a Romano-British or later date for

this activity. The need to use gravel for roads and general construction on the adjacent Romano-British settlement site would point strongly to a Roman period date for the quarrying.

- 6.5** The re-appraisal of the previous trench evaluation on the site (Yorkston & Hume) set out in Appendix 1 suggest that on balance the large number of postholes identified in Trenches 3, 5, and 6 of the previous evaluation may be considered to be of natural origin and explains the lack of cultural material associate with them. They lie in the same topographic position as the current Trenches 12-15 where these periglacial features predominate. It is noteworthy that the previous Trench 6 also revealed the present of at least one feature considered to be extraction pit.
- 6.6** The discovery of prehistoric worked flint tools and waste flakes is noteworthy. Although much of the material is residual within Romano-British or later features, the presence of these artefacts raises the possibility for early occupation, possibly associated with the Bronze Age enclosure. The Pleistocene faunal remains are of regional importance and their presence helps confirm the interpretation of the Quaternary stratigraphy on the site.

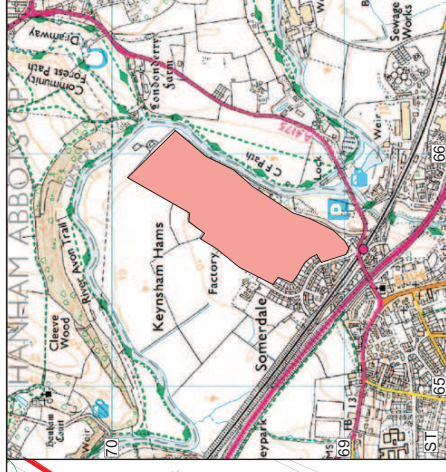
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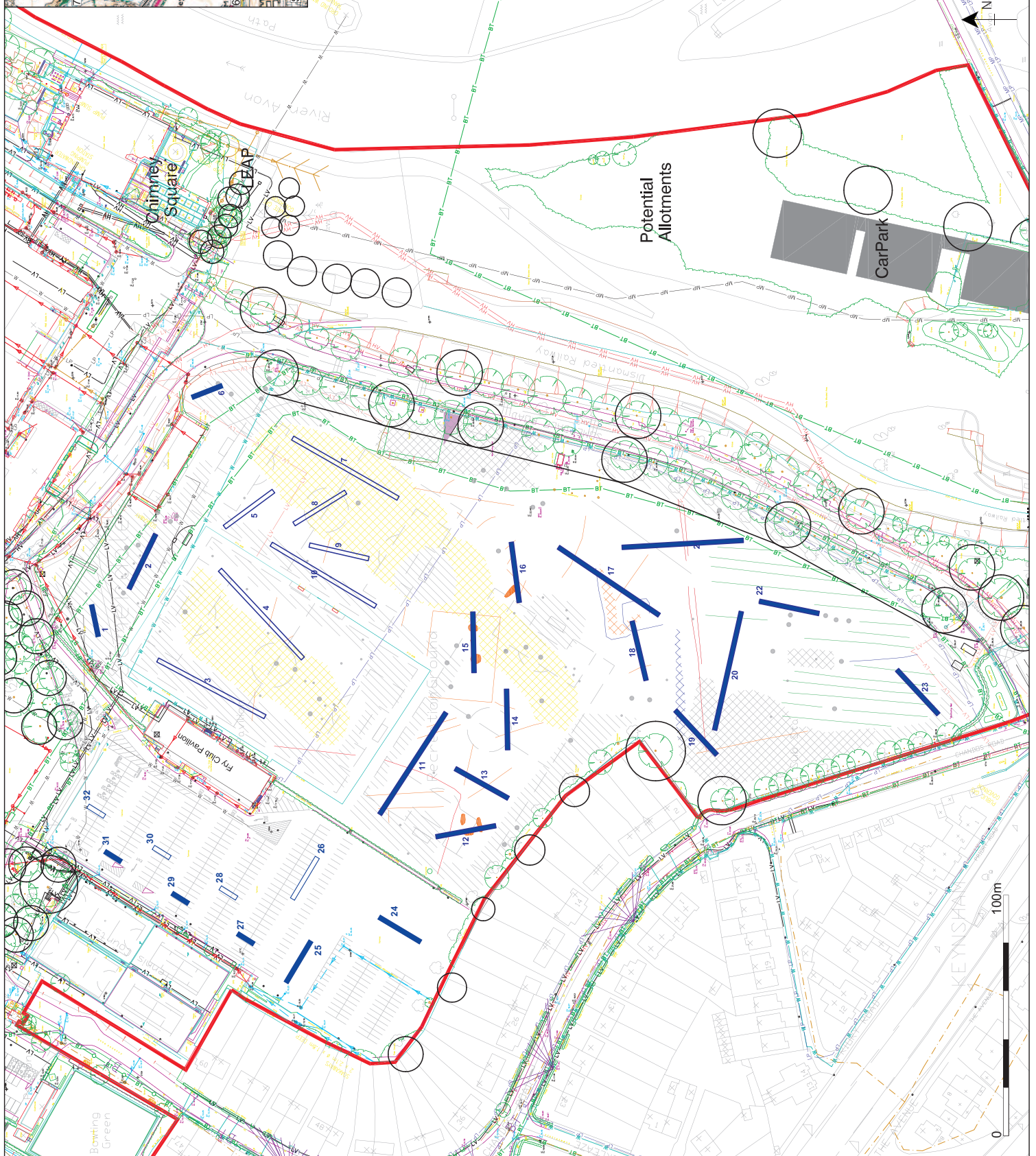
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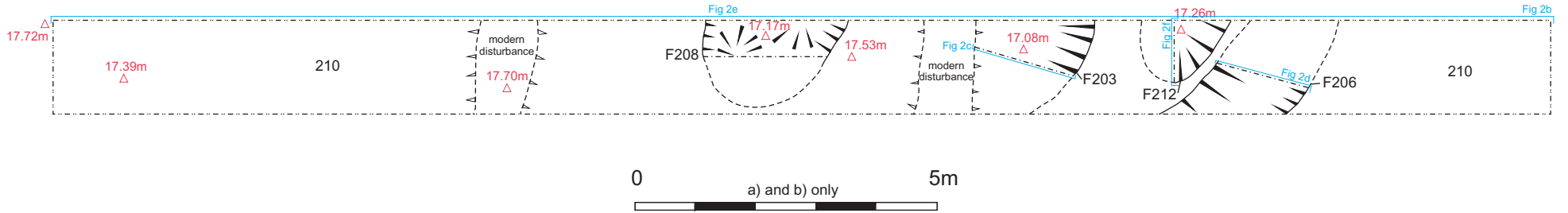
Yorkston, D.E. and Hume, L. 1995. *Archaeological Evaluation at Cadbury Ltd, Somerdale, Keynsham*. (on behalf of Cadbury Ltd). Avon Archaeological Unit. Unpubl. Client report dated July 1995.



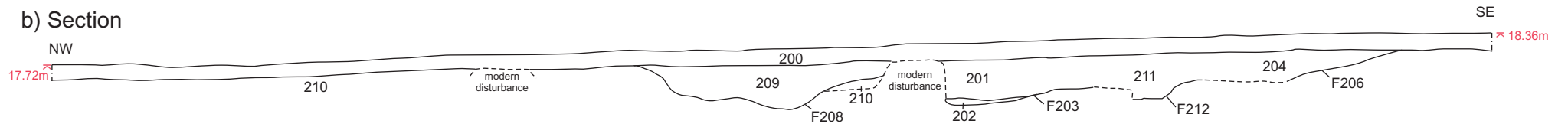
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- Evaluation trench (not excavated)



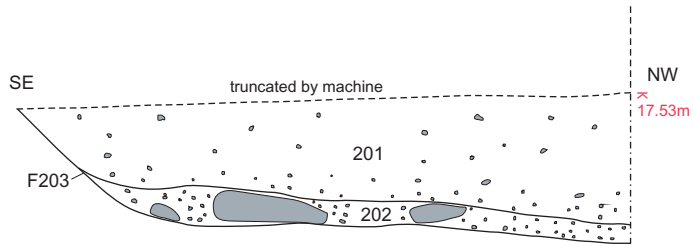
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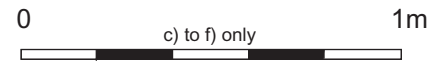
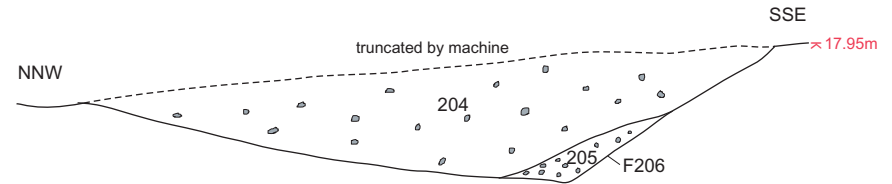
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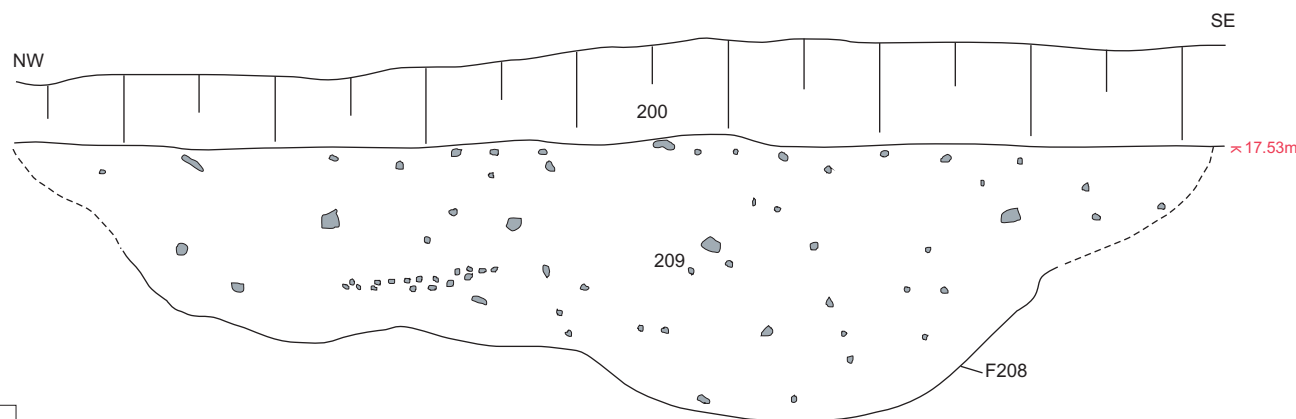
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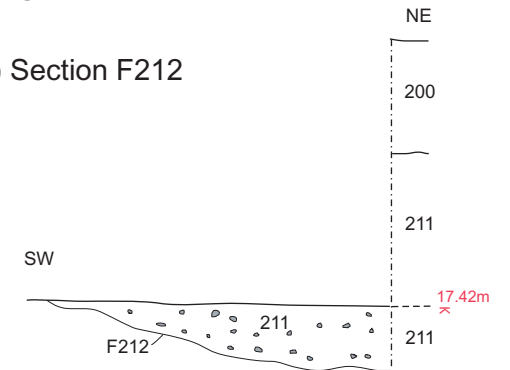
d) Section F206



e) Section F208



f) Section F212



PROJECT

Somerdale Factory:
Recreation Ground and Car Park

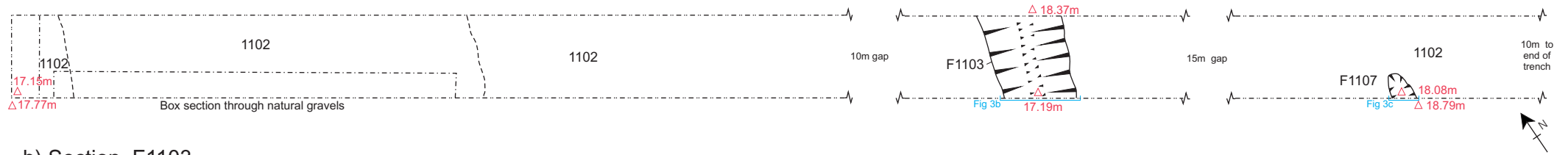
TITLE

Fig. 2: Detailed plan and sections, Trench 2

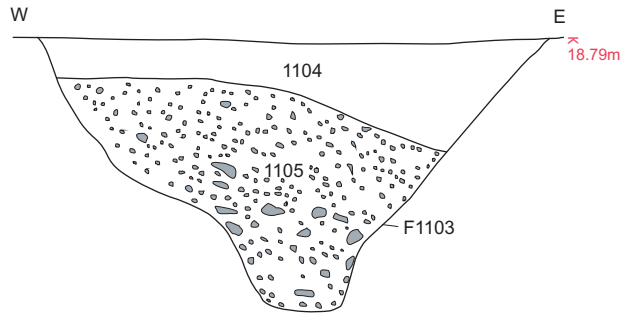


Trench 11

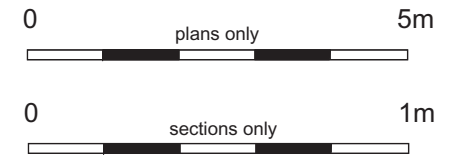
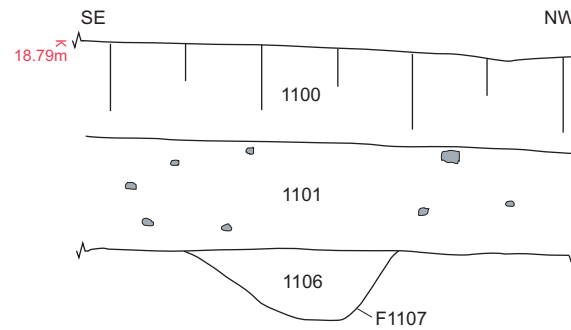
a) Plan



b) Section, F1103

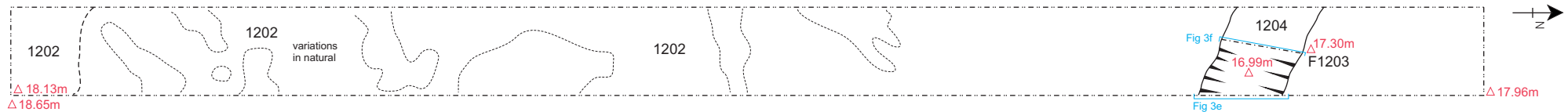


c) Section, F1107

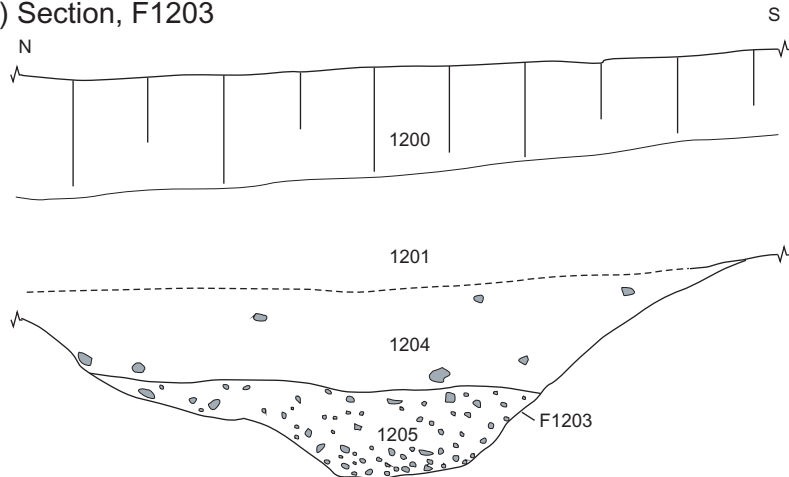


Trench 12

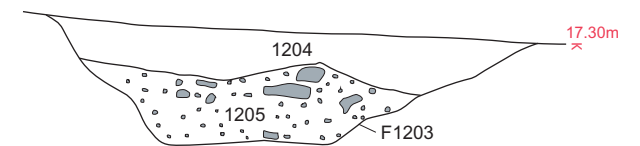
d) Plan



e) Section, F1203



f) Section, F1204



PROJECT

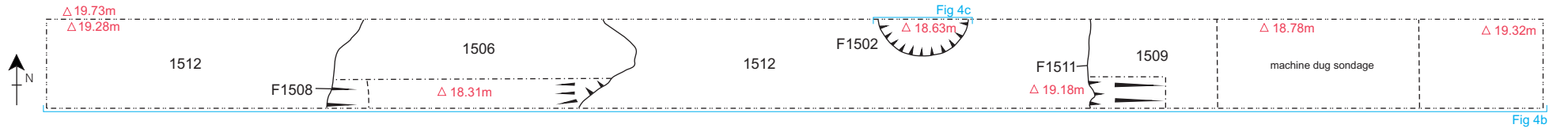
Somerdale Factory:
Recreation Ground and Car Park

TITLE

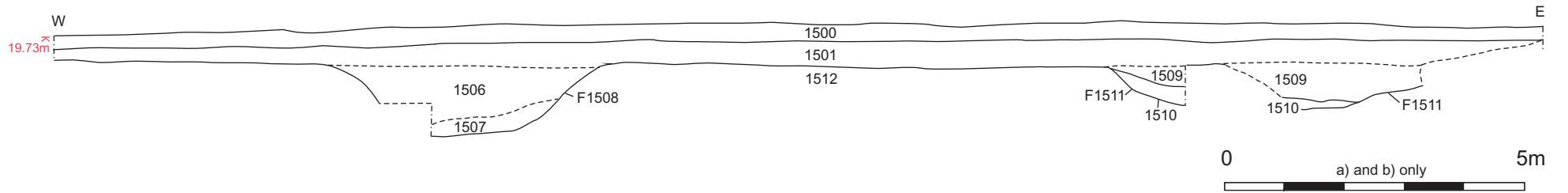
Fig. 3: Detailed plan and sections, Trenches 11 and 12



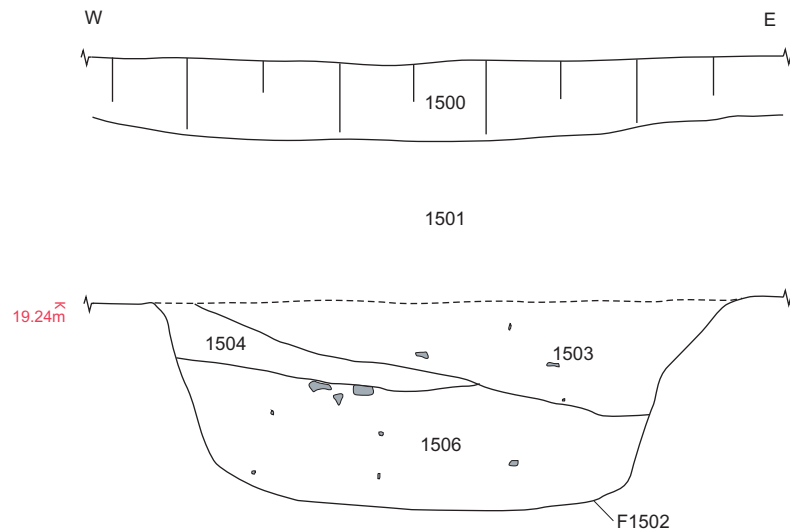
Trench 15
a) Plan



b) Section



c) Section F1502



 Gravel

PROJECT

Somerdale Factory:
Recreation Ground and Car Park

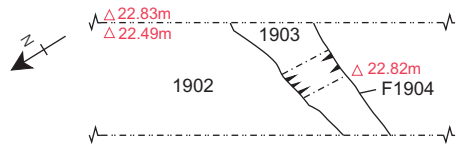
TITLE

Fig. 4: Detailed plan and sections, Trench 15

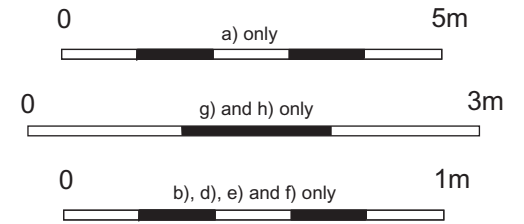


Trench 19

a) Plan

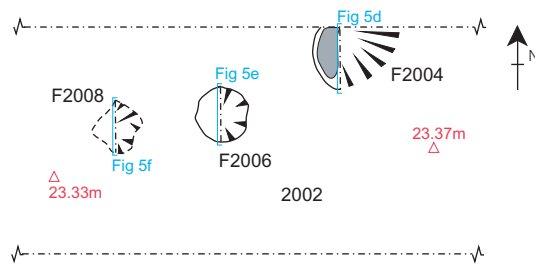


b) Section F1904

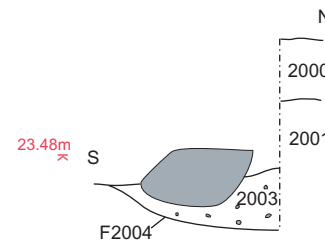


Trench 20

c) Plan



d) Section F2004



e) Section F2006

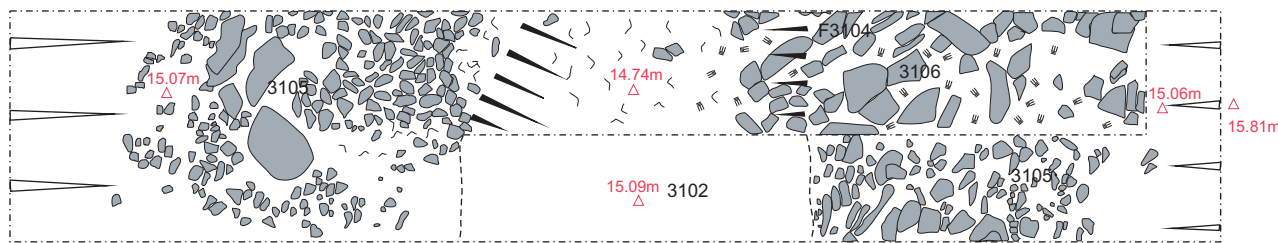


f) Section F2008

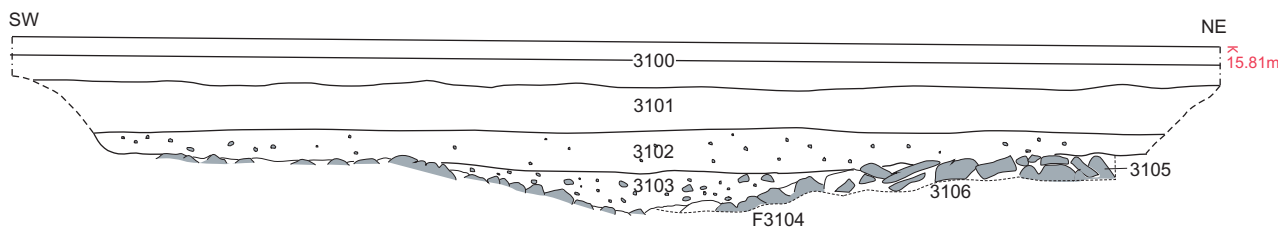


Trench 31

g) Plan



h) Section



PROJECT

Somerdale Factory:
Recreation Ground and Car Park

TITLE

Fig. 5: Detailed plans and sections, Trenches 19, 20 and 31





Plate 1:
Trench 2, viewed from the east
(scales 2m and 1m)



Plate 2: Trench 2, general view showing quarry pits. View from the northeast (Scale 1m)



Plate 3: Trench 2. General view showing quarry pits. View from the southwest (Scale 1m)



Plate 4: Trench 6, viewed from the northwest
(scales 2m and 1m)



Plate 5: Trench 11, viewed from the southeast (scales 2m and 1m)



Plate 7: Trench 12, viewed from the north (scales 2m and 1m)



Plate 6: Trench 11, north facing section of ditch F1103 (scale 1m)



Plate 8: Trench 12, west facing section of ditch F1203 (scales 2m and 1m)



Plate 9:
Trench 13, viewed
from the southwest
(scales 2m and 1m)



Plate 10:
Trench 15, viewed from the
east (scale 2m)



Plate 11: Southwest facing section of pit F1502 (scale 1m)



Plate 12:
Trench 15, showing quarry
pit F1508, view from the
north (scales 2m and 1m)



Plate 13: Trench 18,
viewed from the east
(scales 2m and 1m)



Plate 14:
Trench 19, viewed from
the southwest
(scales 2m and 1m)



Plate 15:
Trench 20, general view from the
southeast (scales 1m and 2m)



Plate 16:
Trench 21, general view
of trench (scale 2m)



Plate 17:
Trench 24, viewed from the southwest (scale 2m)



Plate 18:
Trench 25, viewed from the southeast (scale 2m)



Plate 19:
Trench 31, viewed from the south (scale 2m)



Plate 20: Trench 31, southwest facing section of F3104 (scale 1m)

APPENDIX 1: Assessment of soils and sediments



AEA 196: Somerdale factory, Keynsham (ACW 488)

The site was visited on 14th and 16th November 2012 specifically to examine features on the gravel terrace (evaluation trench 13). These are circular pipe- or post- or stake-like features cut into the gravel. The principal aim was to determine if these are natural (i.e. periglacial) or anthropogenic (i.e. stakeholes or postholes). In addition the description and interpretation of the 'bank' in trench 21 was made.

The site is located on the second terrace of the River Avon within a large meander core. It comprises a relatively complex solid and drift geology, comprising, among others mudstones of the Salford Shale Member and Blue Anchor Formation, but also interbedded limestones and mudstones of the Rugby Limestone Member. The higher mudstones at the top of the meander core (Salford Shale Member) are mapped as River Terrace Deposits (Terrace 2) comprising sands and gravel which were observed in the field to be coarse to medium subangular stone gravels in a greyish brown (19YR 5/2) silty loam matrix, becoming clayey in places. On the meander core northern slope, the superficial Head deposits comprising clay, silt, sand and gravel are mapped over the Blue Anchor Formation mudstones. The meander core is mapped as typical brown calcareous earths of the Badsey 1 Association (Findlay *et al.* 1983). The superficial deposits are Quaternary and probably about 2 million years old (<http://mapapps.bgs.ac.uk/geologyofbritain/home.html>).

Basic Geological and Pedological Observations

The higher part of the meander core supported shallow brown rendzinas (0.25m thick) over loose coarse to medium stones gravels in a greyish brown silt loam matrix which equates to the River Terrace Deposits over the Salford Shale Member. In contrast deeper typical brown earths and brown earths about 0.75m thick overlie finer small and medium stone gravels set in dark reddish brown (5YR 3/2) silty clay (sand) loam (evaluation trench 13) probably representing superficial Head deposits. The gravel surface (evaluation trench 13) was covered by a dark reddish brown silty clay loam with some gravel. The gravels contained a few linear runoff gullies about 0.4m wide and 0.28 to 0.30 m deep, as well as shallow amorphous features 0.9 × 0.8m in plan and only 0.06m deep.

FEATURES IN EVALUATION TRENCH 13

Several small circular features ranging from 11 to 23cm in diameter with clear vertical V-shaped profiles were noted and excavated in evaluation trench 13 (Fig. 1). The majority are 'cut' through the top of the gravels or the fines above the gravels (see soil profile description), while one is clearly in the base of a shallow gully. These are uniformly filled with the stone-free dark reddish brown silty clay loam forming the base of the brown earth soil profile. Seven of these had been excavated and were rapidly measured. Several others lay unexcavated within the evaluation trench.

<i>∅</i>	<i>depth</i>	<i>profile and comment</i>
14cm	18cm	V-shaped
11cm	12cm	V-shaped
15cm	25cm	Almost parallel sided, V-shaped
16cm	22cm	Broad but V-shaped
23cm	19cm	Broad but V-shaped
16cm	6cm	V-shaped
16cm	8cm	Almost vertical sided, in base of shallow (28cm) gully



Fig. 1. The features considered (see list of measurements)

The features were all almost perfectly circular or only slightly sub-oval. All were vertically orientated single steep V-shaped features reminiscent in shape to stakeholes. They all had a single fill (the B2 horizon material of the lower portion of the brown earth - see below).

The brown earth soil profile (evaluation trench 13)

To place these features into context the full soil profile within evaluation trench 13 (Fig. 2) was cleaned back and described, following standard notation (Hodgson 1976).

The evaluation trenching is on the playing fields of the former Cadbury/Fry factory. Although the area is under well-maintained turf of a sports field comprising several football pitches, they lie on gently sloping ground and there is no topographical or sediment evidence that any terracing, dumping or landscaping was performed. There is no evidence of any dumping or made ground (as reported by the archaeologists or as observed in trench 13), nor obvious import of modern A horizon material ('topsoil') though the turf may have been laid. There is possible evidence of maintenance of the turf.

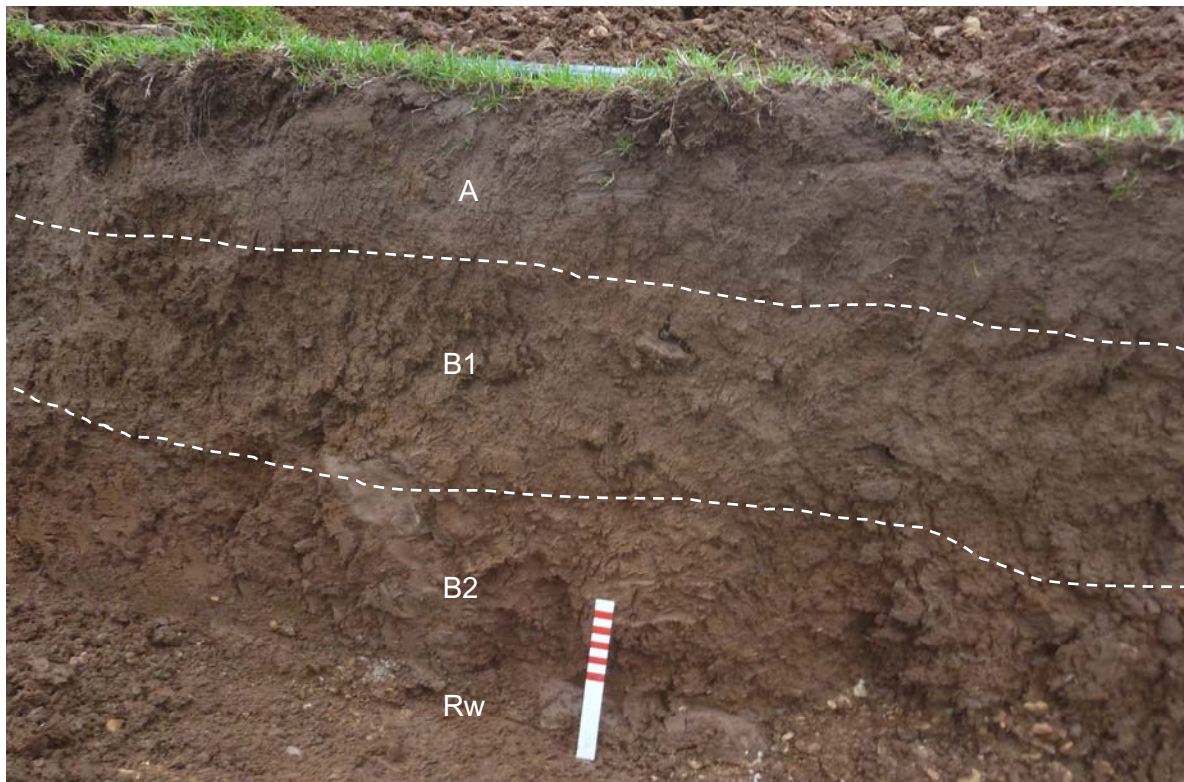


Fig 2. The brown earth soil profile (evaluation trench 13)

This is a typical brown earth profile developed on weathered drift geology and deposits overlying the Head (soliflucted gravels). This soil thickness is common on this type of geology. Limited colluviation may have contributed minimally to the overall depth. The sandier texture (and sand inclusions) in the Ah (and to a lesser extent the A) horizon was examined under a hand lens and stereo-binocular microscope and compared with sand from the lower profile. That in the 'topsoil' is larger and more angular and may be a product of the management of the playing field pitches. Addition of sand increases aeration and drainage.

Typical brown earth profile (evaluation trench 13)

Depth	Horizon	Description
0-7cm	Ah	Very dark brown to dark brown (10YR 3/2-3) humic earthworm-worked (worm casts on surface), fine silty (sand) loam, with weak, compacted crumb structure, stone-free, common fine fleshy roots, clear boundary (under mown grass)
7-13cm	A	As above - but massive and less roots ... dark brown (10YR 3/2-3) massive humic earthworm-worked fine silty (sand) loam, stone-free, few fine fleshy roots, clear boundary
13-44cm	B1	Brown (10YR 4/3) massive firm <u>silt</u> loam, essentially stone-free with very rare subangular medium stone, rare very small charcoal flecks, clear boundary
44-74cm	B2	Dark reddish brown (5YR 3/2) massive, silty clay (sand) loam, stone-free (but one large rounded to sub-rounded stone noted), clear to abrupt boundary
74+ cm	Rw	Small and medium sub-rounded and subangular stones (gravel) in dark reddish brown silty clay (sand) loam matrix - fines from gravel
	R	Gravel- small and medium sub-rounded and subangular stones in a brown variable silty and sandy matrix

Discussion of the possible natural or anthropogenic features

The northern slope (evaluation trench 13) revealed a typical brown earth soil profile over gravelly head. The gravel surface is scored by shallow run-off gullies, and amorphous features. This surface has suffered post-depositional alteration; though no obvious larger periglacial features (brodel pockets, cryoturbations, involutions etc) were noted.

The archaeological features (Bronze Age enclosure ditch, Romano-British or undated quarries etc.) are all seen to cut the dark reddish brown B2 horizon.

The features examined (listed above) were all first noticed by the archaeologists beneath the dark reddish brown silty clay (B2 horizon) and all were essentially filled with this material. The features probably largely sealed by this horizon.

Anthropogenic pointers

The features are largely symmetrical and reminiscent of stakeholes. (They are not postholes; they have no post voids, no packing stones and most have a narrowing or pointed base).

Natural/geological pointers

If anthropogenic, then they are early (i.e. Mesolithic) as the fills are not the darker more humic fills seen in other archaeological features, but the minerogenic material of the B2 horizon of the brown earth.

Despite hand cleaning, no artefacts (flints) were recovered.

Examination of the fills did not reveal any fine flecks of charcoal, in contrast to the B horizon of the soil and archaeological features all of which contains or are reported to contain rare fine charcoal flecks.

Despite the symmetrical and consistently vertical orientation of the single features, these are more reminiscent of small solution hollows.

On balance there features are likely to be natural. They only occur in trenches around Trench 13 in this evaluation exercise. They are in a footslope location where there is increased local

groundwater and the receipt of surface runoff. As such this topographical location would be more prone to periglacial, and other weathering, processes. These are likely to be localised pockets of stone-free material which with greater water ingress and prone to freezing and expansion, increasing local water flow, solution processes, and exacerbating further freeze thaw processes. Drainage and seepage of water by gravity through the largely matrix supported gravels leads to a single exit location for the water, creating a point which is reminiscent of a stake.

Suggested history

1. Soliflucted or geliflucted gravels creating the superficial Head on lower terrace slopes
2. Runoff and erosion creating shallow gullies in the gravel surface, and localised periglacial and solution creating amorphous features filled with reddish brown silty clay loams
3. Localised solution and localised small ice capture features creating vertical tubes in the head gravel surface and within the head gravels. Subsequent infilling of these features with fines from the gravel matrix and the fines above the gravels (B2 horizon).
4. Development of a soil within the fine minerogenic material overlying the gravels
5. Development of a well-developed brown earth soil during the Holocene

Review or previous evaluation (Avon Archaeology 1995)

Previous evaluation by Avon Archaeological Unit (Yorkston and Hume 1995) included a number of trenches (1 to 6) on the terrace slopes adjacent to, and north of, the area currently evaluated, and trenches 7 to 10 on the plateau to the south of current evaluation trenches. The evaluation records a number of steep V-shaped stakeholes with single 'homogenous' fills described as brown silty clay. These occur in a number of the trenches in different locations (Table 1). Unfortunately the soil and geological descriptions are not clear nor detailed enough to precisely define the soils, or in fact the drift geology accurately. The colour balance in the photographs is inconsistent (e.g. trench 9 shows the drift geology in the same trench with a reddish brown matrix and very dark brown matrix). It is unclear if some of the 'terrace gravels' described are in fact the soliflucted head. Although superficially pedantic, this is particularly important with regard to the definition of origin of the stakehole-like features. It seems likely, however, that a number of these features are similar to the natural features recorded in ACW evaluation trench 13, and are not archaeological features. Trenches 1, 2, 3 and the northern end of 6 in particular seem to fall into the terrace slope and footslope location; the latter being the topographical zone of ACW evaluation trench 13.

Some of the features are clearly larger than those reported in the AC evaluation (e.g. photographs of trench 3 and 6). Feature 627 (trench 6) was reported to have limestone packing - though the report of the features in this trench is particularly confused with duplicated feature numbers. However a number of the postholes and stakeholes may be natural, and the report of a number of features (trench 6) being under the river gravels would also indicate natural features. Some doubt exists over their distinction between the various drift deposits, and between the drift geology and subsequent Holocene (colluvial) deposits. In conclusion, a number of the archaeological postholes and stakeholes reported in the 1995 evaluation may be natural.

The following table provides a review of the soils and subsoils present in the Yorkston and Hume (1995) report.

Trench	Soil (interpreted by M. Allen)	Drift Geology	no of V-shaped stakeholes / poss natural features	U-shaped stakehole (?archaeology)
terrace slope – footslope				
1	Rendzina (25cm)	'river gravels'	8; including single, paired and one double	-
2	Calcareous Brown Earth (95cm)	'river gravels' and 'limestone brash'	0	1
3	?? (37cm)	'river gravels'	4: 2 single and 2 paired steep U-shaped	
4	? Rendzina (27cm)	'river gravels' and 'brashy limestone'	0	0
5	?? (60cm)	'river gravels'	3	
6	?? (27-57cm)	'river gravels' and 'fragmentary limestone'	19-21 including some sealed under 'river gravels' duplicated numbers and confusion here	
Plateau				
7	Rendzina (30cm)	'bedded limestone'	0	0
8	Rendzina (36cm)	bedded limestone' and 'limestone brash'	4	
9	Rendzina (30cm)	'limestone brash'	0	0
10	Rendzina (15cm)	'bedded limestone'	0	0

Conclusions (AC evaluation trench 13)

These features in the AC evaluation trench 13 are at least of Mesolithic age. In all probability they are solution and ice features in the surface of the gravels. [Editor's note: This was written prior to the identification of the pleistocene animal bones from the river gravels]

These features are local to evaluation trench 13, and have not been recorded in adjacent, or other trenches, though similar features were reported in the earlier (1995) evaluation (Yorkston and Hume 1995).

If these features are anthropogenic, then they are largely artefact-free as is the area in which they occur. The area in which they may occur seems to be confined to that around evaluation trench 13, and not impinge on any of the adjacent trenches.

BANK FEATURE (SECTIONED IN TRENCH 21)

The top of the meander core is relatively level and contains coarse subangular limestone gravels with a brown rendzina soil developing into a shallow brown earth on the plateau slopes. At the break of slope is a large broad bank feature which curves around the edge of the plateau. This was sectioned by evaluation trench 21 to determine its character, date and

origin. The profile was described both through the main 'bank' feature, and at the soil profile at the north-western end of the trench.



Fig. 3. The low broad 'bank' in evaluation trench 21

Profile through the 'bank' (evaluation trench 21)

Depth	Horizon	Description
0-9cm	Ah	Very dark brown to dark brown (10YR 3/2-3) humic earthworm-worked (worm casts on surface), fine silty (sand) loam, with weak, compacted crumb structure, stone-free, common fine fleshy roots, gradual boundary (under mown grass)
7-27cm	A	As above - but massive and less roots ... dark brown (10YR 3/2-3) massive humic earthworm-worked fine silty (sand) loam, stone-free, few fine fleshy roots, clear boundary
27-71cm	B bank	Dark brown (10YR 3/3) massive firm <u>silt</u> loam, some medium subangular limestone inclusions, fragment of bone (small mammal sheep/goat-sized), rare occasional fine charcoal fleck, clear to abrupt boundary
71-92cm	Rw	Dark reddish brown (5YR 3/2) massive, silty clay (sand) loam, stone-free, abrupt boundary
92+ cm	R	Gravel- medium and large subangular limestone gravel in a yellowish brown (10YE 5/6) to dark greyish brown (10YR 4/2) variable silty clay matrix

The 'bank' is very broad and shallow (>1m) displaying a brown earth profile with medium stones (Figs 3 & 4). It is not obviously a dumped feature, but the stones are probably anthropogenic. We can suggest that this is a headland, or plateau-edge deposit (Fig 5; *sensu* Bell 1981, fig.5.1). which has been anthropogenically enhanced i.e. the inclusion of medium subangular stones. The bank may have been exacerbated by limited colluviation and field edge (lynchet) accumulation; differing past land-use on the plateau (agriculture and allotments) vs the terrace slope (predominantly pasture, and possibly may have been a hedged, or even tree-lined, boundary. This is not a created feature, but a natural feature that has been directly and indirectly enhanced by human activity and may have been adopted as a boundary (field, land, or political).

Rendzina soil profile to north-west (downslope) of bank (evaluation trench 21)

Depth	Horizon	Description
0-28cm	Ah & A	Very dark brown to dark brown (10YR 3/2-3) humic earthworm-worked (worm casts on surface), fine silty (sand) loam, stone-free, common fine fleshy roots in upper 10cm, clear to abrupt (under mown grass)
28-37cm	Rw	Dark reddish brown (5YR 3/2) massive, silty clay (sand) loam, stone-free, abrupt boundary
37+ cm	R	Gravel- medium and large subangular limestone gravel in a yellowish brown (10YE 5/6) to dark greyish brown (10YR 4/2) variable silty clay matrix



Fig. 4. The bank profile

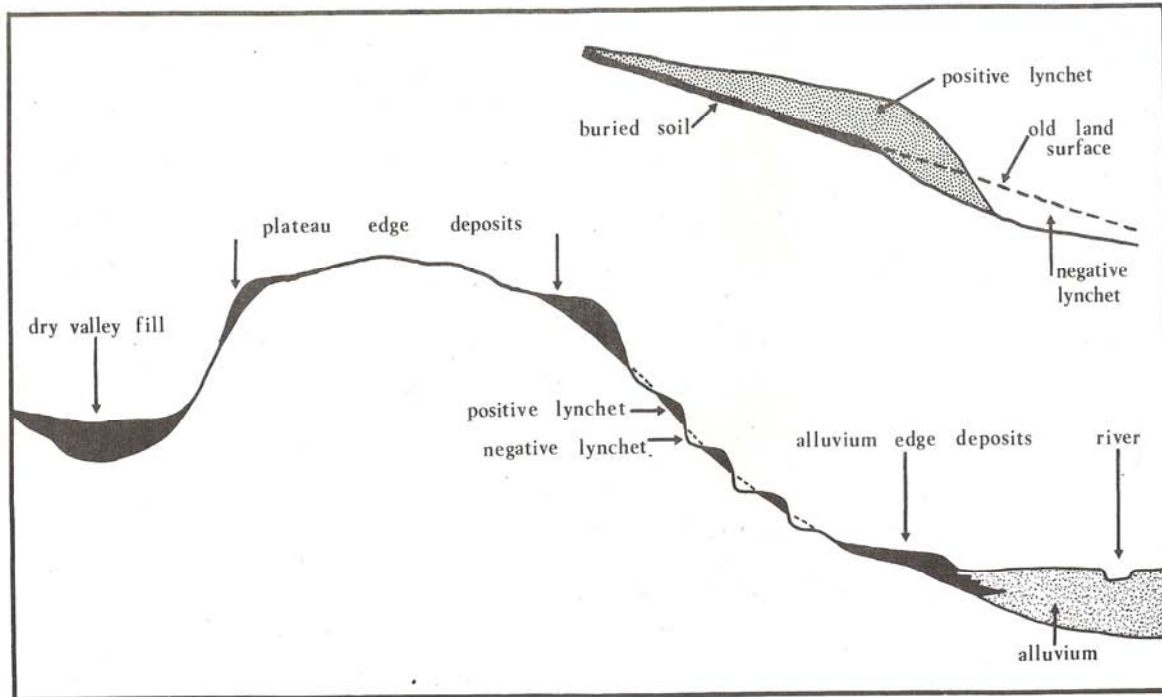


Fig. 5. Schematic diagram to show the main situations in which colluvial deposits consistently occur (from Bell 1981, fig. 5.1). Note the plateau edge deposits

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