

ARCHAEOLOGICAL 'STRIP AND
RECORD' AND WATCHING BRIEF
AT BIRLINGHAM STW, LOWER
END, BIRLINGHAM,
WORCESTERSHIRE

Simon Griffin, Andrew Mann, Erica B Darch and Elizabeth Pearson

Illustrated by Carolyn Hunt and Simon Griffin

14 January 2003

© Archaeological Service, Worcestershire County Council

Archaeological Service,
Worcestershire County Council,
Woodbury Hall,
University College Worcester,
Henwick Grove,
Worcester WR2 6AJ



Project P2175
Report 1127
WSM 31912

Contents

Part 1 Project summary	1
-------------------------------	----------

Part 2 Detailed report

1. Background	2
1.1 Reasons for the project	2
1.2 Project parameters	2
1.3 Aims	2
2. Methods	2
2.1 Documentary search	2
2.2 Fieldwork	3
2.2.1 Fieldwork strategy	3
2.3 Structural analysis	3
2.4 Artefacts	3
2.4.1 Artefact recovery policy	3
2.4.2 Method of analysis	4
2.5 Environment	4
2.5.1 Fieldwork and sampling policy	4
2.5.2 Processing and analysis	4
2.6 The methods in retrospect	4
3. Topographical and archaeological context	4
4. Description	5
4.1 Phase 1 Natural deposits	5
4.2 Phase 2 Undated features	5
4.3 Phase 3 prehistoric	5
4.4 Phase 4 Romano-British	5
4.5 Phase 5 Post Medieval	6
5. Artefactual Analysis	6
5.1 Results	6
5.2 Significance	6
6. Environmental Analysis	6
6.1 Results	6
7. Discussion	8
7.1 Undated Features	8
7.2 Prehistoric and Romano-British	8
7.3 Post-medieval	8
8. Significance	8
9. Publication summary	9
10. The archive	9
11. Acknowledgements	10
12. Personnel	10
13. Bibliography	10
14. Abbreviations	11

Archaeological Strip and Record and Watching Brief at Birlingham STW, Lower End, Birlingham, Worcestershire

Simon Griffin, Andrew Mann, Erica B Darch and Elizabeth Pearson

Part 1 Project summary

An archaeological project consisting of 'strip and record' and a watching brief was undertaken at Lower End, Birlingham, Worcestershire (NGR SO 9326 4248). It was undertaken on behalf of Severn Trent Water Ltd, who intend to construct a sewage treatment works with access road and a pumping station for which a planning application has been submitted. The project aimed to determine if any significant archaeological site was present and if so to indicate what its location, date and nature were.

Topsoil stripping at the site of the sewage treatment works revealed deposits considered to be of archaeological interest. These consisted of a circular ditch feature, partially exposed at the norther end of the trench, with a diameter of approximately 12-15m. This was initially interpreted as a possible prehistoric ring-ditch, perhaps associated with a barrow or palisaded enclosure. However, upon further investigation a series of recuts containing limestone rubble and post-medieval artefacts, indicated a much more recent date. The exact function of this feature remains unclear, and it is possible that it may represent a foundation cut for either a windmill or dovecote or that it relates to drainage and land management.

Whilst it is difficult to assess the significance of this feature, its date would suggest that it is of only local significance and as half lies undisturbed it is possible that future work may reveal more.

There were no further deposits or artefactual evidence of any significance recovered from the areas under investigation, including the pumping station.

Part 2 Detailed report

1. Background

1.1 Reasons for the project

An archaeological project consisting of 'strip and record' and a watching brief was undertaken at Lower End, Birlingham, Worcestershire (NGR SO 9326 4248), on behalf of Severn Trent Water Ltd (the client). The client intends to construct a sewage treatment works with access road and a pumping station and has submitted a planning application to Wychavon District Council (reference W/01/1088-1094), which is considered by the curator to have the potential to affect an archaeological site (WSM 25856).

1.2 Project parameters

The project conforms to the *Standard and guidance for archaeological field evaluation* (IFA 1999) and the *Standard and guidance for an archaeological watching brief* (IFA 1999).

The project also conforms to a brief prepared by the Planning Advisory Section, Worcestershire Archaeology Service (AS 2000) and for which a project proposal (including detailed specification) was produced (AS 2002).

1.3 Aims

The aims of the project were to locate archaeological deposits and determine, if present, their extent, state of preservation, date, type, vulnerability and documentation. The purpose of this was to establish their significance, since this would make it possible to recommend an appropriate treatment which may then be integrated with the proposed development programme.

More specifically the following aims were identified:

- To investigate the area of the sewage treatment works through metal detector survey, and sample excavation following the topsoil strip.
- To observe and record any archaeological deposits exposed during groundworks for the sewage pumping station.

2. Methods

2.1 Documentary search

Prior to fieldwork commencing a search was made of the Sites and Monuments Record (SMR). In addition the following sources were also consulted:

Cartographic sources

- *A Map of the New Inclosure of certain lands within the parish of Nafford and Chapelry of Birlingham, 1774* (W.R.O B.A. 5068/3)
- Tithe Map of Birlingham, 1842
- Ordnance Survey, 1888, 1st edition (Worcestershire sheet XLVIII NW)

-
- Ordnance Survey, 1905, 2nd edition (Worcestershire sheet XLVIII NW)
 - Ordnance Survey, 1924, 3rd edition (Worcestershire sheet XLVIII NW)
 - Ordnance Survey, 1954, (Worcestershire sheet XL VIII NW)
 - Ordnance Survey, 1972, (SO 94NW)

Documentary sources

- County histories (VCH IV).

2.2 **Fieldwork**

2.2.1 **Fieldwork strategy**

A detailed specification has been prepared by the Service (AS 2002). Initial investigation of the sewage treatment works site (Fig 1 and 3) following topsoil stripping revealed deposits of archaeological potential. This led to the instigation of controlled strip and record of the footprint of the treatment works. A watching brief was carried at the site of the pumping station and in places along the route of the sewer pipeline through the village.

Sewage treatment works

Fieldwork was undertaken between 8th July and 19th July 2002.

A single trench covering the footprint of the sewage treatment works, amounting to just over 950m² in area, was excavated (Fig 3).

Deposits considered not to be significant were removed using a 180° wheeled 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 Service practice (AS 1995).

Sewage Pumping station (Watching brief)

A watching brief was undertaken on the construction of a sewage pumping station (Fig 3). Fieldwork was carried out intermittently between 15th August and 6th November 2002.

2.3 **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.

2.4 **Artefacts**

2.4.1 **Artefact recovery policy**

The artefact recovery policy conformed to standard Service practice (AS 1995; appendix 2).

2.4.2 **Method of analysis**

All hand-retrieved finds were examined. Artefacts were identified, quantified, dated and recorded on a Microsoft Access 97 database. A *terminus post quem* (TPQ) date was assigned to each stratified context. The pottery was examined and recorded by fabric type according to the fabric reference series maintained by the Service (Hurst and Rees 1992).

2.5 **Environment**

2.5.1 **Fieldwork and sampling policy**

The environmental sampling policy was as defined in the County Archaeological Service Recording System (1995 as amended). Samples of 10 litres were taken from 11 contexts.

2.5.2 **Processing and analysis**

For samples from waterlogged contexts (141 and 142) a sub-sample of 0.5 - 1 litre was processed by the wash-over technique as follows. The sub-sample was broken up in a bowl of water to separate the light organic remains from the mineral fraction and heavier residue. The water, with the light organic fraction was decanted onto a 300µ sieve and the residue washed through a 1mm sieve. The remainder of the bulk sample was retained for further analysis.

The remaining samples were processed by flotation followed by wet-sieving using a Siraf tank. The flots were collected on a 300µm sieve and the residues retained on a 1mm mesh. This allows for the recovery of items such as small animal bones, molluscs and seeds.

The residues were fully sorted by eye and the abundance of each category of environmental remains estimated. The flots were scanned using a low power EMT stereo light microscope and remains identified using modern reference collections housed at the County Archaeological Service.

2.6 **The methods in retrospect**

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

3. **Topographical and archaeological context**

The site of the sewage treatment works is located 300m to the north-west of Birlingham manor house and approximately 400m from the centre of Lower End, Birlingham within farmland between the villages of Birlingham and Defford. It is situated on the brow of a hill, forming a distinctive promontory. The land slopes considerably to the south, west and east sides and flattens out onto the floodplain of the River Avon, which is approximately 230m from the site. The river forms a natural meander called Swans Neck where a quay serves the village of Birlingham, connected by a trackway which passes close to the site. The sewage pumping station is located on the corner of the road adjacent to Lower End Farm approximately 650m to the south-east of the sewage treatment works.

The underlying drift geology consists of first and second terrace deposits of the River Avon, with possible areas of undifferentiated head deposits (Geological Survey of England and Wales 1:50,000 map, sheet 199). The overlying soils are non-calcareous Pello-alluvial gleys of the Fladbury series, stagnogleyic argillic brown earths of the Bishampton series and typical brown earths of the Wick series (Soil Survey of England and Wales 1:50,000 map, sheet 150; Beard *et al* 1984).

The name Birlingham or *Byrlingahamme* refers to ‘the *hamm* of Byrle’s people’ and derives its name from land lying within a great bend in the River Avon. In 1086 it existed as a 10 mansus estate with 5 hides and 2 virgates divided between two landowners (Hooke 1990:188).

There has been little archaeological work carried out within the village or adjacent areas (Fig 2). Within the Sites and Monuments record there is reference to a possible Romano-British occupation site near Hall farm, and to isolated artefacts dating to the prehistoric and Romano-British periods (WSM 07752, 07729, 25856). The manor house is recorded as being post medieval in date (WSM 03640). Palaeoenvironmental studies at Gwen Finch Nature Reserve (WSM 27827), to the south west of the village, have identified evidence for human occupation of the Avon valley from the prehistoric period onwards (Bretherton and Pearson 2000).

At the site of the sewage treatment works the land is currently under cultivation for market gardening. The pumping station is on rough ground adjacent to the main road through the village.

4. Description

The results of the structural analysis are presented in Table 1. The trenches and features recorded are shown in Figs 2-4.

Sewage Treatment Works

4.1 Phase 1 Natural deposits

Natural deposits are represented as distinctive friable orangey brown silty sand, derived from the river terrace gravels. This was clear in the northern part of the site and occurred between 0.2 and 0.3m below the ground surface (bgs). To the south, on the steep slope, the depth of subsoil and topsoil thinned considerably, natural gravels were found at 0.10 to 0.20m (bgs). At the base of the slope, where the topography levelled off, a large deposit of alluvium and clays occurred (Figs 3 and 7). This may represent an undated channel (context 141) or a change in the drift associated with the edge of the floodplain. An auger survey was carried out to reveal a profile through to natural gravels (Fig 7).

4.2 Phase 2 Undated features

This phase is represented by a number of features seemingly associated with water management. A possible channel (141) runs in an east west direction at the base of the slope, on the edge of the floodplain. This appears as a shallow gully possibly cutting into a broader sandier deposit (143) which is distinctive from the surrounding natural and is likely to be associated with repeated flooding of the low lying ground. Organic deposits (142) were recovered from this area, although there was no artefactual material or other dateable material.

A number of amorphous deposits of seemingly well sorted sandy material occur across the site, these have been interpreted as being either ice wedges or tree throws.

4.3 Phase 3 Prehistoric

This phase is represented by unstratified flint recovered during machine stripping.

4.4 Phase 4 Romano-British

This phase is represented by a brooch recovered during the metal detector survey following machine stripping of the site. A piece of lead was also recovered and probably relates to this phase.

4.5 **Phase 5 Post-medieval**

The majority of the activity on the site falls into this category. This phase is represented by a curvilinear ditch across the northern part of the site (Fig 3), the northern half of the feature lies outside of the trench. Its shape suggests that it forms part of a circular feature with an internal diameter of approximately 12-15m. The ditch curves around the top of a promontary clearly visible in the local landscape, with a significant slope to the south, east and west of the feature.

The feature consists of a complicated series of ditch cuts (Figs 4-5). The earliest phase is represented by a truncated V shaped cut (121), this is steep sided on the inside of the curve with a flattened base and a more gently sloping outer side. Within the primary fill of this feature a single brick was recovered. This deposit sequence can be traced around the entire excavated length of the feature, with some local variations in profile – probably associated with weathering or differential construction techniques. Towards the north-western end of the linear it appears to split into two distinctive gullies, and appears to have been less affected by ploughing or truncation. The ditch sequence is also much deeper in this section, up to 0.60m (bgs).

This feature is cut by a narrow vertically sided cut (125) filled with well sorted limestone rocks (127). This mirrors the earlier feature and forms a curve. Its profile and nature of fill would suggest that it is a land drain of some description, although being circular in plan makes it unusual.

Pumping Station

No deposits of archaeological interest were revealed in this area.

5. **Artefactual analysis**

5.1 **Results**

The assemblage consisted of post-medieval brick, two small fragments of tile, two pieces of flint and a snail shell. One piece of flint and the shell were probably natural. The other flint may have been worked, and was unstratified. The fragments of tile were very small, but were probably post-medieval flat roof tile. The brick was 2.5 inches thick and 4.25 inches wide, which indicated an early 18th century date (L Griffin, pers comm).

5.2 **Significance**

The date of the artefacts suggests a post-medieval *terminus post quem* for contexts 122 and 103. However, the assemblage is too small to draw further conclusions about activities which may have taken place on the site.

6. **Environmental analysis**

6.1 **Results**

Mollusc remains

Seven samples contained molluscan remains, these all originated from within the curvilinear ditch. Of these, sample 11, context 140 can be discarded as only three specimens of *Cecilioides acicula* were recovered. These molluscs are of little use as they are regarded as modern contaminants of the archaeological assemblage (Evans 1972). This species is present within all samples containing molluscs, and will be disregarded from the following discussion.

Sample 3, context 105, the second largest molluscan assemblage, originates from the primary fill of the curvilinear feature. This assemblage appears to suggest the immediate environment of, and probably within, the ditch was one of moist grassland with areas of shade. *Vallonia* sp and *Vallonia pulchella* inhabit grassland environments with the later preferring moist meadows. *Trichia hispida* and *Carychium tridentatum* the two most abundant species in the assemblage also have a preference for moist habitats. Although they are often regarded as catholic they commonly thrive in similar environments. Other molluscs of importance within the assemblage are *Vitrea crystallina*, *Vitrea contracta*, *Ena obscura* and *Clausilia bidentata*. These species are often regarded as shade loving species, however *Vitrea* sp can again be found in long grassland as well as under leaf litter in hedges or woods. The final two species are *Ena obscura* and *Clausilia bidentata*. Both of these are rupestral (living on a firm substrate). They are essentially hedgerow or woodland species, living on the tree trunks or logs, within such habitats.

It is also worth mentioning that within this sample two ostracods were discovered. Ostracods are minute Crustacea whose body is enclosed by two valves. They are aquatic in nature and may as a result suggest the curvilinear ditch held water. However with so few other species supporting this they must be regarded as contaminants.

Sample 4, context [112], originates from the primary fill of a secondary ditch running parallel to the larger curvilinear [106]. This sample contains the largest molluscan assemblage, which is dominated by one main species *Trichia hispida*. Although this species is classed as catholic in nature it is commonly found in moist meadows. *Carychium tridentatum* the next most common species is also favourable to similar environments, but can also be found within woods or well vegetated places. This species is also intolerant of dry environments and as such its presence gives an indication that the habitat was not under heavy grazing or cultivation. The next most common species in the assemblage is *Clausilia bidentata*. This species again prefers shaded environments, living on a firm substrate particularly walls, rocks and tree trunks. The remaining species in the assemblage are split between those, which prefer shaded environments and those, which inhabit grassland. *Vallonia* sp favours grassland environments while, *Carychium minimum*, *Ena obscura* and *Oxychilus cellarius* are commonly found in moist shaded environments, particularly woods or hedgerow.

Samples 1,2 and 7, contexts [103], [104] and [118] respectively originated from the secondary fill of the curvilinear feature and contained the least numbers of molluscs. Sample 5, context [109] originated from a post hole and again contained few molluscs. These assemblages appear to indicate an environment of moist grassland with some patches of shade, probably as a result of long grass meadow.

In summary it would appear as if the immediate environment of the curvilinear ditch was a moist meadow with patches of shade provided by trees or hedgerow. This appears to be constant throughout the samples and although two ostracods were discovered within the ditch fill it does not appear as if this feature contained water, even periodically.

Plant macrofossil remains

There was very little evidence from the plant macrofossil remains for human occupation on the site. The samples contained only low levels of charcoal, and only one unidentifiable charred cereal grain was recovered from the circular ditch (103). This is likely to have been charred either as a result of crop processing (for example, parching of grain prior to storage or consumption) or as a result of crop waste being disposed of on to fires, probably as a source of tinder.

The uncharred plant remains from the circular ditch are considered to be intrusive as they are unlikely to have survived for long in a sandy, gravelly fill which was not deeply buried. However, in context 141, interpreted as a channel, plant remains were well preserved as a result of waterlogging. This deposit was rich in woody material which was mostly unidentifiable. Willow buds (*Salix* sp) and seeds of fool's watercress (*Apium nodiflorum*) were moderately abundant. These both grow in wet ditches, shallow ponds, or in the case of willow, rivers.

Although less common, sedge (*Carex* sp) and rush (*Juncus* sp) also suggest a well vegetated wet ditch or channel. Abundant fragmented woody material was similarly noted in a sample of a possible alluvial flood deposit (142), although no other identifiable remains were present.

Insect remains

Occasional insect remains were recovered from context 141, but not identified.

7. Discussion

7.1 Undated deposits

These largely seem to relate to deposits on the edge of the floodplain. It is possible that there may have been some man management of the area, possibly associated with drainage of fields. It is possible that there may have been some deliberate channelling of floodwater but this is largely speculative.

7.2 Prehistoric and Romano-British activity

These phases are represented by unstratified finds uncovered during topsoil stripping and metal detecting. There is known Romano-British settlement evidence to the north of the site and it is possible that the natural bend in the river at Swans Neck may have been utilised as a crossing point and there may have been a trackway or minor road may have existed. However, it is likely that these artefacts became incorporated into the topsoil during manuring.

7.3 Post-medieval

No firm identification for the circular feature has been possible. Initially it was thought to represent a prehistoric monument such as a barrow or ring ditch. The profile of the earliest phase was very similar to a middle Bronze Age palisaded enclosure excavated on the gravel terrace of the River Severn at Perdiswell, Worcester (Griffin *et al* 2002). However, the presence of a brick within a clearly sealed context and the unusual recut containing limestone suggests a much more recent date. There was no evidence of any features of archaeological significance within the ditch. However, the centre was not exposed and this cannot be ruled out.

The land to the north of the sewage treatment works formed part of Birlingham Mansion formal garden and park, constructed *c*1830 (Lockett 1997). It is possible that the feature may relate to an outlying structure associated with this landscape such as a dovecote or windmill. There is no cartographic or documentary evidence for this, however dovecotes are often found on the outskirts of manoral estates, although the diameter suggested by the ring ditch here appears too large (English Heritage: Monument Class Descriptions, 1989). It is possible that it may relate to some form of defence against soil erosion, perhaps a barrier to control hillwash down onto the floodplain. This may explain the presence of the limestone filled cut, and this is supported by the environmental evidence. Again the circular plan is unusual and without further excavation or survey it is impossible to firmly identify this feature. However, it appears unlikely to be any earlier than post-medieval in date and probably relates to some form of agricultural or land management activity.

8. Significance

In considering significance, the Secretary of State's criteria for the scheduling of ancient monuments (DoE 1990, annex 4), have been used as a guide.

These nationally accepted criteria are used to assess the importance of an ancient monument and considering whether scheduling is appropriate. Though scheduling is not being considered

in this case they form an appropriate and consistent framework for the assessment of any archaeological site. The criteria should not, however, be regarded as definitive; rather they are indicators which contribute to a wider judgement based on the individual circumstances of a case.

The deposits at the sewage treatment works can be considered to have limited significance. The deposits appear to date to the post-medieval *period* and relate to agricultural or land management activities, and are therefore relatively common. The deposits appear to have been only slightly truncated by ploughing and those outside of the building footprint are unlikely to be affected by the development. The environmental deposits are considered to be of limited potential and therefore not significant.

9. **Publication summary**

The Service has a professional obligation to publish the results of archaeological projects within a reasonable period of time. To this end, the Service 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.

A programme of archaeological works was undertaken on behalf of Severn Trent Water at Lower End, Birlingham, Worcestershire (NGR ref SO 9326 4248; SMR ref WSM 31912). Topsoil stripping revealed half of a circular 'ring ditch' feature. This was initially interpreted as being prehistoric, however it was filled with limestone rubble which would suggest a possible drainage feature. The only dating material found from within the ditch was a brick which dated the feature to the post-medieval period. No firm interpretation has been possible. It may represent a drainage feature or it may have structural origins perhaps for a windmill or a dovecote.

10. **The archive**

The archive consists of:

- 13 Fieldwork progress records AS2
- 1 Trench Record sheets AS41
- 1 Colour transparency film
- 1 Black and white photographic films
- 1 Sample records AS18
- 21 Abbreviated context records AS40
- 9 Scale drawings
- 1 Box of finds

The project archive is intended to be placed at:

Worcestershire County Museum
Hartlebury Castle
Hartlebury
Near Kidderminster
Worcestershire DY11 7XZ
Tel Hartlebury (01299) 250416

11. Acknowledgements

The Service would like to thank the following for their kind assistance in the successful conclusion of this project, Brian Whipp, the Resident Engineer for Severn Trent Water, Roger Wiggins of Droicon and Mike Glyde the Planning Archaeologist for Worcestershire County Council.

12. Personnel

The fieldwork and report preparation was led by Simon Griffin. The project manager responsible for the quality of the project was Hal Dalwood. Fieldwork was undertaken by Simon Griffin, Chris Patrick, James Goad, Adam Mindykowski and Andrew Mann, finds analysis by Erica Darch, environmental analysis by Andrew Mann and Elizabeth Pearson, metal detector survey by Dean Crawford. The watching brief at the pumping station was carried out by James Goad and illustration by Simon Griffin and Carolyn Hunt.

13. Bibliography

AS, 2000 *Brief for a programme of archaeological work at Land Opposite Lower End Farm, Birlingham, Worcestershire* Archaeological Service, Worcestershire County Council unpublished document dated 7 August 2000

AS, 2002 *Proposal for an archaeological watching brief at Birlingham STW, Lower End, Birlingham, Worcestershire* Archaeological Service, Worcestershire County Council, unpublished document dated 21 February 2002, **P2175**

Barclay, W J, Green, G W, Holder, M T, Moorlock, B S P, Smart, J G O, Strange, P J, and Wilson, D, 1988 *Bristol Channel (sheet 51°N-04°W): solid geology*, 1:250,000 map, British Geological Survey, Keyworth

Beard, G R, Ragg, J M, George, H, Heaven, F W, Hollis, J M, Jones, R J A, Palmer, R C, Reeve, M J, Robson, J D, and Whitfield, W A D, 1984 *Soils and their use in midland and western England*, Soil Survey of England and Wales, **12**

Bretherton, J, and Pearson, E, 2000, *Watching Brief at Gwen Finch Nature Reserve, Birlingham, Worcestershire*, County Archaeological Services, Worcestershire County Council, report **893**

CAS, 1995 (as amended) *Manual of Service practice: fieldwork recording manual*, County Archaeological Service, Hereford and Worcester County Council, report, **399**

English Heritage, 1988-89, *Monument Class Descriptions*, web address: <http://www.english.gov.uk/mpp/mcd>

Evans, J G, 1972, *Land Snails in Archaeology*, Seminar Press, London

Griffin, S, Dalwood, H, Hurst, D and Pearson, E, 2002, *Excavation at Perdiswell Park and Ride, Droitwich Road, Worcester*, Transactions of the Worcestershire Archaeological Society, 3rd series vol 18

Hooke, D, 1990, *Worcestershire Anglo-Saxon Charter-Bounds*, The Boydell Press, Woodbridge

IFA, 1999 *Standard and guidance for archaeological field evaluation*, Institute of Field Archaeologists

IFA, 1999 *Standard and guidance for an archaeological watching brief*, Institute of Field Archaeologists

Lockett, R, 1997 *A survey of historic parks and gardens in Worcestershire*, Hereford and Worcester Gardens Trust

VCH I, Page, W (ed), 1913 *Victoria History of the County of Worcestershire, I*

14. **Abbreviations**

WSM Numbers prefixed with 'WSM' are the primary reference numbers used by the Worcestershire County Sites and Monuments Record.

SMR Sites and Monuments Record.

Appendix 1 Trench descriptions

Trench 1 –Sewage Treatment works

Maximum dimensions: Length: 42m Width: 26m Depth: <0.40m

Orientation: N-S

Main deposit description

Context	Classification	Description	Depth below ground surface (b.g.s) – top and bottom of deposits
101	Topsoil	Dark brown silty clay, loosely compacted. Moderate amount of igneous pebble inclusions. Active roots and worms. A well ploughed and watered topsoil.	0.35m deep
102	Subsoil	Orangey-brown Silty clay more compact than 101, less stone inclusions. A well developed subsoil.	<0.2m deep 0.35m (bgs)
103/131	Re-cut feature	103: dark reddish brown firmly compacted silty sand loam, occasional small sub rounded stones, occasional patches of sand. Frequent snail shell fragments and post med CBM. 131: Cut – re cut of circular feature. Gentle break of slope at surface and sides – concave profile.	0.23m deep 1.8m wide, 0.23m deep
104	Secondary fill of 106	Light orange-brown firmly compacted sandy Redeposited natural. Moderate sub rounded stones and moderate contamination/disturbance from rooting/worm action.	0.10m deep, 0.15-0.20m (bgs)
105	Primary silt of 106	Medium yellow-brown moderately compacted sandy loam. Occasional small sub rounded stones, occasional medium sub rounded stones, occasional snail shell fragments.	0.15-0.20m deep 0.33-0.17m (bgs)
106	Cut of circular ditch feature	Irregular sided U shaped cut. BOS at surface invisible due to recut by 131; sides: steep –	0.30m deep, 0.50m wide, 0.20m bgs

			sloping to vertical; base: gentle at north end becomes sharper to the south; base is flat – slightly concave.	
107	Fill of 108		Mixed backfill of well sorted irregular white limestone rocks. Capped with a well mixed redeposited natural with some contamination from leaching from 103. Possible evidence for a stakehole on the northern side – clear lens of sand.	0.57m deep, 0.15m bgs
108	Gully cut		Vertical sides, appears to follow the line of 106 and is truncated by 131. Flat based. May be a drain, or structural or robbing cut of 106 feature?	
109	Fill of posthole?	of	Light greyish brown mottled orange, firmly compacted silty sand. Moderate small to medium sub-rounded stones.	0.14m deep
110	Cut filled by 109		Cut of circular shallow feature – possible posthole. BOS surface – sharp, sides – gentle sloping forming a concave base. Truncated to the north by 108.	0.40 by 0.30 by 0.14m
111	Cut		Field drain?	0.70m wide, 0.22m deep
112	Fill of 111		Moderately compact mid brown-orange silty sand containing frequent medium sized stones.	
113	Drain? cut		Vertical sided cut, flat bottomed. Runs in an east-west direction. Cuts drainage feature 111	0.23m wide, 0.43m deep
114	Fill of 113		Loosely compacted frequent moderate/large limestone rocks. ID as possible field drain or defence against soil erosion.	
115	Cut		Vertical sided feature on south side of curvilinear feature 117. Orientated N-S	
116	Fill of 115		Mid brown silty sand with large/medium sized angular	

		white limestone rocks approx 0.30m bgs	
117	Cut	Shallow curvilinear feature – truncated from above and on either side by field drains and tree boles.	0.75m wide, 0.20m deep
118	Fill of 117	Friable mid-brown silty sand. Distinct from 133,134 – further along same ditch	0.35m wide, 0.06m deep
119	Linear cut	Small narrow, shallow linear feature appearing as an offshoot from major curvilinear 117 – which probably cuts this feature. Probably gully maybe an earlier version of 117 feature	0.33m wide, 0.14m deep
120	Fill of 119	Mid brown silty sand with abundant small rounded stones – loosely compacted.	
121	Cut	Same as 117. Primary feature within the curvilinear complex	
122	Primary fill of 121	Friable, mid grey silty clay. Frequent small sub rounded pebbles and occasional pea grits.	
123	Fill	Friable dark grey black silty clay. Occasional small sub rounded pebbles with some ashy inclusions – slumping within the deposits	
124	Redeposited fill	Mid brown orangey – light grey loosely compacted silty sand. Frequent pebbles and grits. Appears as redeposited natural – possibly dragged across the top of the ditch.	
125	Cut	Cut for stone filled slot – seen around curvilinear feature possibly as a drain or maybe has some structural origins. Vertical sided cut, which appears to cut 121 – but its top fill (126) is sealed by 128.	
126	Fill of 125	Silty clay sand – slightly higher clay content than 123. Loosely compacted with pebbles, sands and occasional	

		gravel flint
127	Limestone Fill of 125	Primary fill of 125. Well sorted limestone rubble – possibly even graded – a loose backfill.
128	Surface fill of curvilinear feature	Compact dark grey-brown silty clay. Frequent gravels and pea grits -small and medium sized. Fragments of ashy material and stained yellow brown sand. Probable C18-19 th levelling of the earlier ditch – some CBM.
129	Fill/ natural feature	Friable dark brown-grey/black silty clay. Tree bole - ashy stoney plus irregular shaped bowl – is cut by curvilinear ditch 121.
130/138	Natural	Friable orangey brown silty sand –with a high sand content. Very high gravel content – derived from river terrace gravels.