

**ARCHAEOLOGICAL
SALVAGE RECORDING OF
STW WATER MAIN VALVE PIT,
SIDBURY WORCESTER**

WCM 100900



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Salvage recording of Severn Trent Water
water main valve pit,
Sidbury, Worcester
(WCM 100900)
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1 Summary

Archaeological salvage recording was undertaken following the excavation of a large pit for valve installation works on the line of an existing watermain at Sidbury, Worcester. The archaeological project comprised of the cleaning and recording of deposits exposed by contractors working on behalf of Severn Trent Water. The present pavement levels and street line here date to the 1950s and 1960s widening of Sidbury; the medieval street frontage was 6 meters to the north, and the area of the excavation was formerly occupied by medieval and later buildings.

The soil deposits exposed proved to consist of approximately 1.4 meters of made ground, the majority of which appeared to consist of archaeologically significant deposits of Roman to early medieval date

The earliest deposits exposed consisted of a ditch cut into natural gravel and aligned north-west to south-east. The fill of the ditch contained some staining suggestive of cattle manure, but was devoid of dating evidence. It had been sealed by a gravel and slag surface, possibly road metalling, which appeared to extend across the whole excavated area. The slag was clearly of Roman origin, however no ceramic dating evidence was recovered from the surface itself. The overlying layer was a homogenous dark grey brown silty clay and contained a single sherd of Roman pottery. The gravel and slag surface was apparently cut by a re-cut ditch (on a similar alignment to the first) devoid of artifacts except a single sherd of Roman Samian pottery.

To the south-west of the ditches the metalled surface dipped away rapidly and was less well defined, possibly as the result of cultivation of the overlying dark soils. A steep sided pit had been cut through the dark soils into the underlying gravel; the fill was greenish grey in colour and contained a number of fragments of decayed bone including horn core. This pit appeared to be a cess-pit, probably of post Roman date.

The only structural remains exposed were present within 0.6m of current ground surface and represented a sandstone and brick foundation of 17th Century date. A pit to the north of this foundation contained the only traces (in the form of coal and flecks of tile or brick) of post-medieval activity, and might actually be of 20th Century date. The absence of later foundations and floor levels, which might have been expected in this location, suggests that ground levels were reduced during road-construction and that only the deeper foundations have survived.

2 Introduction

This report represents the findings of archaeological salvage recording undertaken during excavation of a valve chamber pit at Sidbury, Worcester, by Mike Napthan Archaeology on 27th February 2002. The project was required by Worcester City Councils' Archaeology Officer in view of the known presence of archaeologically significant deposits (Sidbury Roman and medieval suburb - Archaeologically Sensitive Area No. 18). The scheme was undertaken at the request of the Dave Wood, Network Services Manager Severn Trent Water, (the Clients), following the principals set out in the Water Industry Act of 1991 and the "Code of practice on conservation access and recreation: guidance for the Environment Agency and water and sewerage undertakings" published by DETR and MAFF in Feb 2000. The site (NGR SO8518 5440: Fig 1) lies to the south-east of Worcester City Centre, just within the medieval City Walls on the main road to London and the south-west.

3 Aims

- 3.1 The aims of the archaeological salvage recording were to gather high quality data from the direct observation and recording of exposed archaeological deposits. Also, where possible, to recover artefactual material from stratified contexts in order to provide information about the sequence, nature, extent, preservation and potential of any archaeologically significant remains in the immediate area.

4 Methodology

- 4.1 The mechanical excavation of a 3x3.5x1.8m deep pit had been completed by the time the project was commissioned; the salvage recording was therefore restricted to the recording of exposed deposits. As the pit sides were deep and unstable it was not possible to do more than rudimentary cleaning of the sections, and no excavation of exposed deposits was possible. The upcast from the trench had mostly been removed, and it was not possible to recover more than a couple of artefacts from the site (both were recovered whilst cleaning sections).
- 4.2 All site recording was undertaken in accordance with the Excavation Manual (Technical Manual 3). Plans and sections were drawn at 1:20 (Figs 1 and 2). Levels were transferred from the benchmark on the Red Lion (19.24mAOD)
- 4.3 All hand-retrieved finds were examined. They were identified, quantified and dated to period.

5 Archaeological background

- 5.1 The site lies close to the line of a Roman road first identified the mid 1970s by Martin Carver (Carver 1980) during construction of City Walls road. The Roman road, which consisted of a deep sequence of iron slag and gravel surfaces, lay alongside Sidbury, close to the northern frontage, on a north-west to south-east alignment, similar to the medieval street line. The width and alignment of the Roman street are uncertain – at the City Walls Road – Sidbury junction the spread of slag and gravel was at least 40m wide. This width is unlikely to be a true reflection of the carriageway at any given point and may reflect periodic variation of the route or the presence of a metalled market area. It has also been suggested that the width of the later Roman street indicates that it was used as a drove way and assembly point for the slaughter of cattle (Carver 1980). Post Roman re-occupation of Sidbury did not occur until the 10th Century, when there is evidence of organised settlement and the establishment of plot boundaries. It is probable that the Sidbury area was initially outside the burgh defences, but the area was included in the core area of the City when the 13th C City walls were built, and a principal gate was constructed just to the west of Frog Brook. During the medieval period Sidbury was a thriving industrial area of bone and metal working (Carver 1980).
- 5.2 The area was severely affected by Civil War damage, and was largely rebuilt in the post-medieval period, retaining the medieval burgage plot pattern. Major change did not occur until the mid 20th Century when the southern frontage was demolished to permit construction of a dual carriageway and bridge widening. Further change came with the 1970s construction of City Walls road. As a result of the widening scheme the original medieval southern frontage of Sidbury now lies under the central reservation, the present southern pavement line approximates to the back building line of the medieval street (Fig 1).
- 5.3 A number of archaeological interventions have occurred in this part of Sidbury; the earliest being an investigation of Sidbury Gate in 1907 (Spackman 1907). Subsequent investigations occurred during bridge widening works in the 1950s (Richardson 1955 and Russell 1958). The most substantial investigations occurred in 1975-76 before and during construction of the City Walls Road – Sidbury junction (Carver 1980). More recent work has been restricted to small scale observations; during building works at 11 Edgar Street (WCM 100815; Napthan 2001) and at The Red Lion, Sidbury (WCM 100854; Napthan 2002) medieval deposits of probably 12th-14th C dates were present between 1 and 2 meters below current ground level, possibly also deeper, however these appeared to represent the fills of cut features rather than contemporary ground levels. The structural evidence at the Red Lion suggested that external ground level had risen approximately 0.3-0.4m since the mid 17th Century (Napthan 2002).

Stone foundations of probably 17th-18thC date observed in the Commandery Carpark, Sidbury, survived to within 0.5m of current ground level indicating little change in levels has occurred in the post-medieval period (Napthan forthcoming). A watching brief at the Kings Head, Sidbury exposed remains of the medieval City Wall close to current ground levels (Miller and Jones 2001) – the only area which has produced indications of deep modern intrusions is the King Street carpark (immediately adjacent to the location of the present test pit). Several observations, including two bore-holes (WCM00506), have indicated recent disturbance to a depth of 2.5m in several parts of the site. The most recent observation in the car park was a 1m deep camera base excavation, which exposed only modern rubble mixed with clay (WCM100855 Lockett et al 2001).

6 Results

6.1 *Natural deposits*

Deposits of soft yellow to orangey red compact sand were present throughout the excavated area, in places there remained a "cap" of more compact concreted reddish gravelly sand, all of which appeared to be naturally deposited material. The presence of natural deposits at this height is a little surprising as previous observations in the area have encountered natural only from 2.5m below current ground surfaces.

Probable Roman deposits

- 6.2 A ditch [114] aligned north-west to south-east was the earliest feature observed. The alignment appeared to be slightly diverging from the present street alignment at its southern end. Approximately 3m of this feature was seen lengthwise (Fig 3) and a partial cross-section in the south-east facing section (Fig 2). The north-west facing section was too disturbed for meaningful interpretation. The lower fill of [114] was a slightly greenish clay loam (104), very homogenous except for a marked increase in gravel towards the base of the feature. The upper fill (103) was a homogenous dark grey silty clay, very compact. The interface between (103) and (104) was marked by a dark greenish tinge more reminiscent of cattle manure than cess. No artefacts were visible within the fills of [114], and there were only minimal traces of bone and charcoal flecks.
- 6.3 The deposits to the south-west of the existing service trench broadly resembled those to the north-east, but the stratigraphic relationships had all been destroyed by the service trench. The earliest deposits on this side of the pit (Figure 4) were a grey sandy clay layer (120) devoid of finds and deposit of buff-brown sandy clay (113); Figs 2 and 4. Within (113) was a clear band of gravel; this possibly represented a gravel surface, but insufficient was visible in section to confirm this – the deposit appeared homogenous above and below the gravel. Layer (120) was overlaid by (119), a grey-brown gravelly clay loam, again devoid of finds.
- 6.4 Both (113) and (120) appeared to be cut by a shallow irregular feature [116] with a mid brown clay loam fill (115). The upper limits of this feature were hard to distinguish and it is possible that it was cut from a higher level than appears in Figure 4.
- 6.5 Sealing (103) was a thin, but well defined gravel and slag surface (102); Fig 3, noticeably sloping away to the south-west. The surface was predominantly small rounded pebbles, but included occasional small fragments of iron-rich slag, up to 0.05m diameter. All the slag appeared to be typical Roman tap-slag. The surface appeared to have originally extended across the whole excavated area, but had been destroyed by a group of service trenches cut down to the underlying natural. To the south west the surface was distinguishable only as a band of gravel with occasional slag (118); Fig 4, evidently disturbed by later cultivation.
- 6.6 A possible ditch or pit cut [110] was visible in the south-east facing section only (Fig 2). The feature had apparently been cut through (118), but may have been contemporary with the gravel surface. The lower fill was a mid grey clay layer with rare gravel pebbles (109) devoid of artefacts other than occasional decayed bone flecks. The upper fill was a soft mid brown loamy clay, slightly humic in places. A single small sherd of Roman Samian ware was recovered from this deposit.

6.6 *Late Roman or Post-Roman deposits*

Context (101) sealed the probably Roman gravelled surfaces. This layer (Figs 2 and 3) was a compact mid to dark grey brown clay loam with occasional small pebbles and rare charcoal flecks. The deposit was visually homogenous but had localised patches of sandy texture and patches of silty clay. Only one artefact, a base sherd in dark grey coarseware, was recovered from this layer. The sherd was tempered with grog, coarse grits and fossil shell and is tentatively identified as Roman, although an early medieval date is also possible.

- 6.7 A steep sided pit [122]; Fig 4 was cut through gravel layer (118); its fill (121) was a light greenish grey slightly silty sandy loam containing a number of fragments of very soft decayed bone and horn core. Small areas of ferric concretion were also noted. No dating evidence was recovered from this feature.
- 6.8 Context (117); Fig 4 was a dark grey brown sandy clay loam with occasional to rare gravel. This layer was without any visible artefacts, containing only rare charcoal flecks. The soil was less compact than (101) and appeared to be a well mixed cultivated soil.

Post Medieval deposits.

- 6.9 A sandstone and brick foundation within a cut [112]; Fig 2 represented the only structure for which evidence remained in the excavated area. The red sandstone block footing was coarsely diagonally tooled ashlar, and might well derive from the nearby medieval City Wall. The bricks were soft red unfrogged and hand made, measuring 230x46x110mm. This size of brick suggests a 17thC date for the structure. The foundation did not continue to the north, and possibly represents the north-east corner of a structure lying entirely to the west of the excavated area.
- 6.10 A steep sided pit cut [107] lay to the north of [112], but no relationship was discernible. The lower fill (106) contained soft black coal or clinker like material in a dark grey silty sandy matrix. The upper fill (105) was a very mixed loose dark grey clay with lenses of sand and fine gravel, charcoal and tile or brick flecks were also noted. This feature might be of 19th or 20thC origin.

Recent deposits

- 6.11 Several recent features were present, however, with the exception of a group of service trenches in the centre of the pit, these had not had a great impact on the underlying deposits. The most disturbed section was the north-west facing section, which was also the most irregularly machined section and therefore not recorded. The main group of service trenches ran parallel with Sidbury and included electric, ?telephone, redundant gas and the Severn Trent Water Main. All the trenches were cut to natural deposits.

7 Discussion

- 7.1 The sequence of deposits exposed appears to largely represent material laid down before the development of the medieval Sidbury roadside suburb. The documented presence of medieval and later buildings on this plot means that the site was effectively sealed from later intrusions from the medieval period until the 1960s road widening.
- 7.2 The near total absence of traces of the medieval and later buildings almost certainly reflects a reduction of ground levels when Sidbury was widened. The deposits observed did not include any former floor levels or internal structures, and these would be expected under a former building line. The valve pit also straddled a former plot boundary (Fig 1) which was not apparent in the surviving deposits.
- 7.3 The dating evidence for the features exposed must remain tentative as it is almost entirely based on stratigraphic sequence rather than artefactual evidence. The observation conditions considerably limited the opportunities for artefactual recovery and it is probable that the assemblage recovered is unrepresentative of the area as a whole, however there was a distinct paucity of artefactual evidence including ceramic and stone building materials.
- 7.4 In the absence of any contradictory evidence it has been assumed that the majority of the deposits below the gravel and slag (102), (118) surface are Roman. The surfaces are almost certainly mid Roman or later as they contain Roman iron slag which is not common in earlier Roman contexts in Worcester. If the perceived near total absence of Roman pottery and building materials truly represents the nature of the deposits (see 7.3 above) it probably reflects the fact that the deposits were laid down outside the core area of the Roman settlement and off the main Roman road line identified by Carver (1980).
- 7.5 The presence of ditch [114] may indicate an original boundary parallel with the Roman road line. This boundary ditch filled with silty clay and was subsequently covered by surfacing (102). The gravel and slag surface (102) is of considerable interest as it may represent the very edge of the Roman roadway or an adjacent metalled area. Cut [110] might also represent a later roadside ditch, but there was no clear evidence for its alignment.
- 7.6 There remains a distinct possibility that some of the exposed deposits are post-Roman, particularly the soils above the graveled surfaces, which appear, (especially on the southern side of the valve pit), to have been cultivated after the surface became disused.
- 7.7 The known later medieval and post-medieval occupation of the site is under-represented in the exposed deposits – there were no recognizable fragments of pottery or ceramic roof tile from these periods despite a general abundance of medieval and later deposits in the area. The buildings which formerly

stood on the site clearly had fairly shallow foundations, and this may be indicative of timber frame construction.

- 7.5 Unfortunately the initial excavation of the valve pit without archaeological monitoring did have an impact on significant deposits – particularly the missed opportunity to examine the soil deposits above and below the graveled surface for conclusive dating evidence. The prompt instigation of a salvage-recording exercise did, however enable the identification of a full sequence of deposits from the natural gravel through to modern surfaces.

8 Conclusions

- 8.1 The project has identified significant archaeological deposits surviving almost immediately below current pavement levels. Whilst the precise nature of the deposits cannot be conclusively proven, they appear to represent one or more Roman roadside boundary ditches and an overlying gravel and slag surface also of Roman date. The deposits above the surfacing represent a late Roman or post-Roman accumulation of cultivated soil which was subsequently sealed beneath the buildings of the medieval Sidbury suburb.
- 8.2 Whilst the Sidbury area was previously known to contain extensive areas of archaeologically significant deposits this project has been the first to locate apparently Roman deposits very close to modern ground surfaces. These deposits are therefore very vulnerable to piecemeal destruction by comparatively shallow groundworks. The extent of the area in which deposits are likely to survive at high level is presently unclear, but probably includes most of the former southern building line where deposits are unaffected by later cellarage.

9 Bibliography

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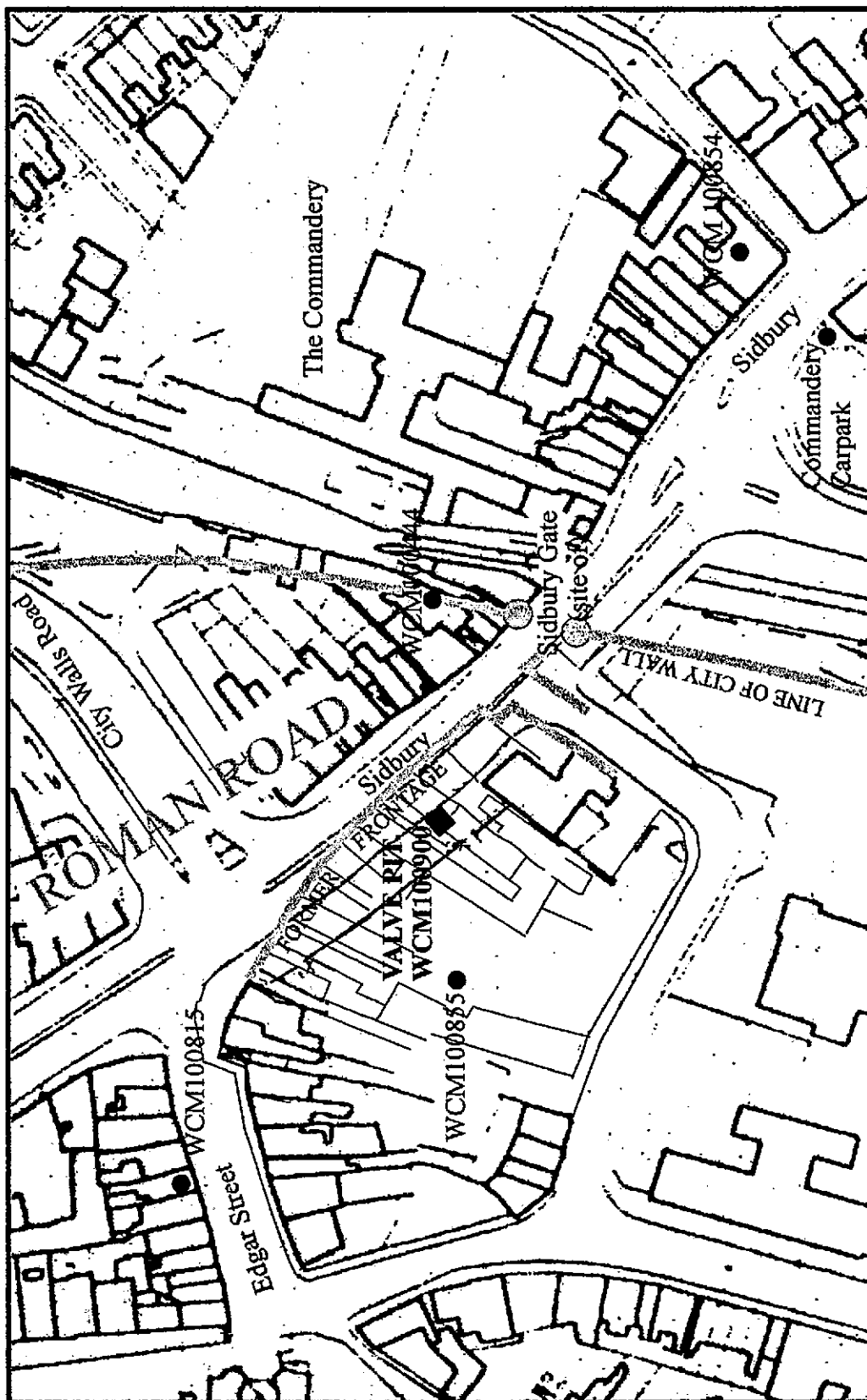


Figure 1: Site location STW valve pit, Sidbury, Worcester

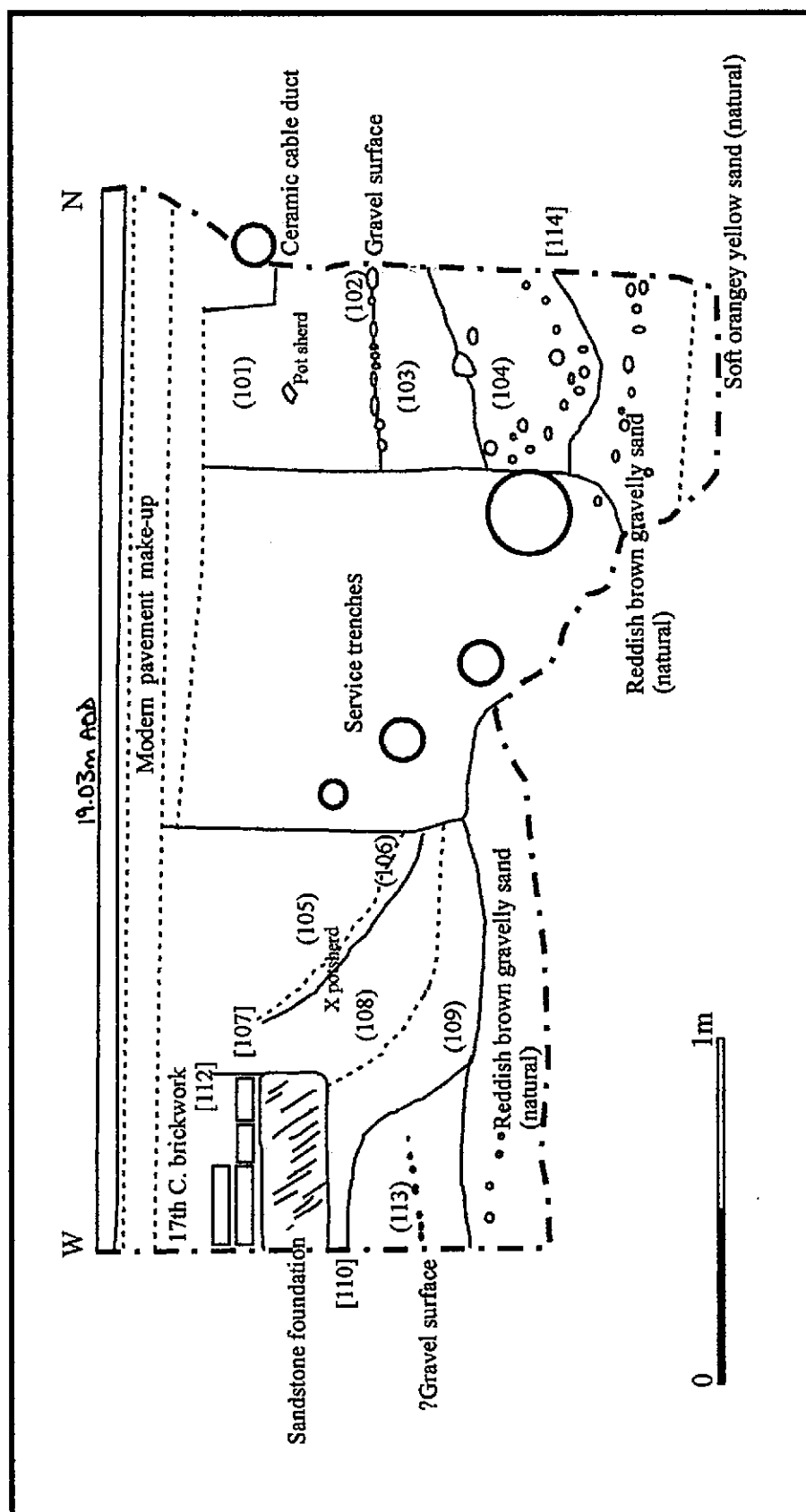


Figure 2: South-east facing section of STW valve pit - Sidbury, Worcester

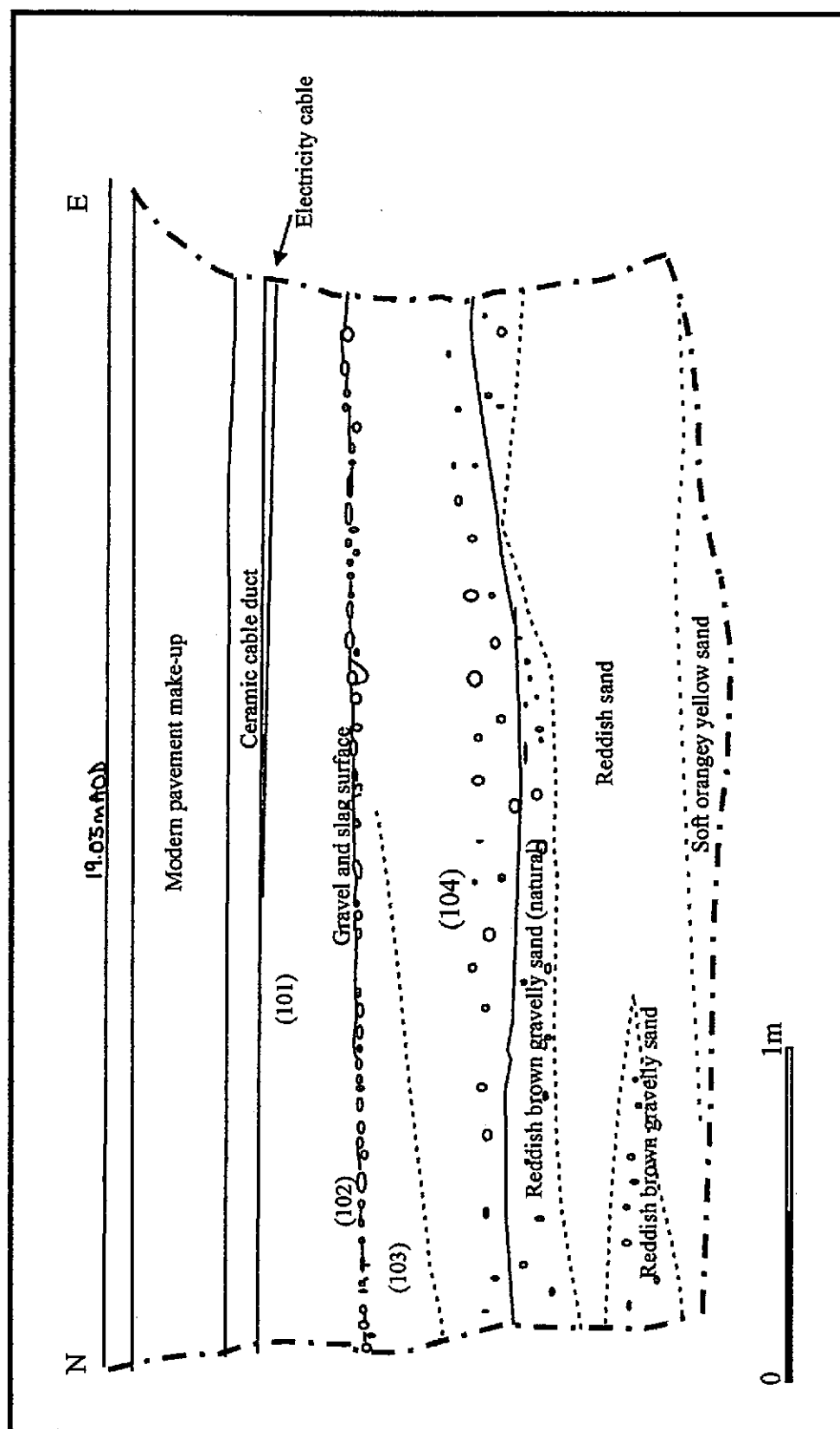


Figure 3: South-west facing section of STW valve pit - Sidbury, Worcester

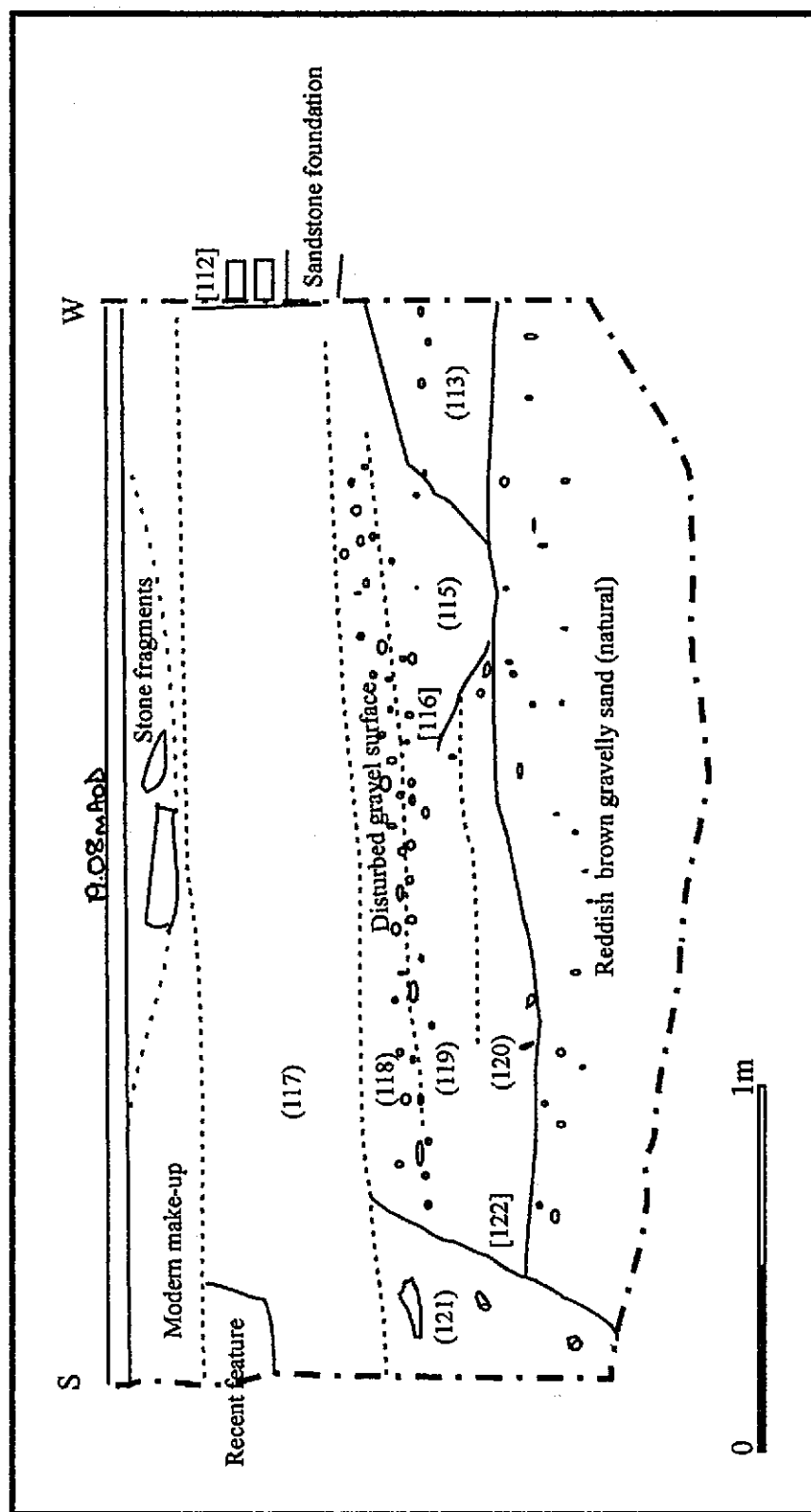


Figure 4: North-east facing section of STW valve pit - Sidbury, Worcester