Archaeological Watching Brief on the Arboretum Road water main replacement scheme, Worcester (Phase II)

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Summary

An archaeological watching brief of a scheme of water mains replacement was undertaken in an area north of Worcester city centre (centred on NGR 85067 55485). It was undertaken on behalf of Pick Everard in response to a brief prepared by Heritage and Design, Worcester City Council. The area extends from The Moors in the west to the Worcester and Birmingham Canal in the east, and from Back Lane North southwards to Sansome Place. The scheme was considered by the Curator to have the potential to affect archaeological sites related to the Roman town as well as the medieval and post-medieval city of Worcester.

A small number of heavily truncated in-situ deposits were recorded, the majority of which related to ground levelling in the post-medieval era to the west of the Tything. Also within this area, a subsoil was identified that is thought likely to have been formed in the backplots of medieval properties fronting The Tything. The majority of the deposits and structures recorded, however, related to former services and the subsequent road surfaces above. A single sherd of residual Roman pottery was recovered from a modern deposit.

Report

1 Background

1.1 Reasons for the project

An archaeological watching brief was undertaken at Arboretum Road water mains replacement scheme in an area north of Worcester city centre (Centred on NGR 85067 55485). It was undertaken on behalf of Pick Everard (the Client) in response to a brief (the Brief) prepared by Heritage and Design, Worcester City Council (the Curator), dated 25th June 2013. The Brief resulted from consultation undertaken in relation to a proposed water main renewal scheme in an area north of Worcester city centre, extending from The Moors in the west to the Worcester and Birmingham Canal in the east, and from Back Lane North southwards to Sansome Place. The requirement for an archaeological watching brief was in line with Severn Trent Water's code of conduct adopted under the Water Services Act 1991.

A previous archaeological watching brief was undertaken on a series of test pits excavated as a first, investigative stage of this programme of works (Arnold, G. 2013).

The scheme was considered by the Curator to have the potential to affect archaeological sites within the Roman, medieval and later city of Worcester, the significance of which may have been affected by the application.

The project conforms to the brief for which a written scheme of investigation was produced (WA 2013).

The project also conforms to the *Standard and guidance for an archaeological watching brief* (IfA 2008), and the *Statement of standards and practices appropriate for archaeological fieldwork in Worcester* (Worcester City Council 1999).

The event reference for this project, given by the HER is WCM101999.

2 Aims

The aims and scope of the project were given in the Brief (WCC 2013) and are set out below:-

The project was considered to have the potential to address the following research questions as defined in *An archaeological resource assessment and research framework for the city of Worcester* (version 2.51, dated September 2007):

- The character and development of the Frog Brook valley and stream (RP1.2)
- Documenting the extents of Roman Worcester (RP3.30)
- Character of Roman activity in the Britannia Square area (RP3.18)
- The medieval suburbs (RP5.1)
- Analysis of the city defences in the post-medieval period (RP6.14)
- The landscape of the 1651 battle (RP6.15)
- Civil War destruction (RP6.21)

3 Methods

3.1 Personnel

The project was undertaken by Tim Cornah BA (Hons), Graham Arnold BA (Hons) MSc and Peter Lovett BSc (Hons); who joined Worcestershire Archaeology in 2006, 2009 and 2012 respectively. They have been practicing archaeology since 2004, 2002 and 2004. The project manager

responsible for the quality of the project was Tom Rogers BA (Hons) MSc. Illustrations were prepared by Carolyn Hunt CMIfA.

3.2 Documentary research

Prior to fieldwork commencing a search was made of the Historic Environment Record (HER).

3.3 Fieldwork strategy

A detailed specification has been prepared by Worcestershire Archaeology (WA 2012a).

Fieldwork was undertaken between 11 September 2013 and 3rd March 2015. The site reference number and site code is WCM 101999.

3.4 Structural analysis

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

3.5 Statement of confidence in the methods and results

Having undertaken the project the following comments may be made with regard to the methods adopted. The works observed within this project were concerned with updating the water pipes of the Arboretum area. This necessitated excavating over pre-existing services, consequently all in-situ deposits predating the modern services were either partially or totally truncated. Where any such in-situ deposits were seen, access to these was limited by the service pipes and the small, confined trenches.

The ground works on Britannia Square (west), Back lane North and South and The Moors were not observed, due to a communication breakdown with the construction team. Moor Street was omitted from the works schedule of pipe replacement.

4 The application site

4.1 Topography, geology and archaeological context

The site lies close to Worcester city centre, north of the medieval city wall and near the eastern bank of the River Severn. The terrain slopes down to the west, from approximately 23.50m to 15.50m AOD, which is the level of the floodplain (somewhat built up in the modern period)

The soils of the city of Worcester are not fully mapped. The underlying drift geology is of Terrace Deposits of the Second (Worcester) Terrace of the River Severn (gravels and sand) which mainly date from the Devensian, with alluvial deposits along the floodplain of the Severn below the level of around 15.25m AOD (Carver 1980) This underlying solid geology is of the Mercian Mudstone Group, formerly known as Keuper Marl. Floodplain alluvium is of silt and clay overlying the gravels.

This area of the city has the potential to shed light on many phases of the development from its earliest uses to the present day. The key areas of development has been summarised within an archaeological assessment and research report (Worcester City Council 1999) and have been complemented by numerous subsequent pieces of field work.

The current line of Foregate Street is considered to be broadly in the same position of the former Romano-British road (WCM91115) leading from the town towards Droitwich. The western side of this road developed to some extent throughout this period though the exact extent and nature of this is largely unknown. Excavations at University of Worcester Castle Street Campus (WCM 101625; 101626) and under the Police Station, also on Castle Street (WCM100358) revealed activity, mostly dating to between the 2nd and 3rd centuries AD. Further to the north in Britannia Square, a circular building (WCM100327) was discovered in the 19th century that was considered to be a Romano-British temple, though subsequent recognised features (WCM96393,

WCM100586, WCM101178) suggests that this was part of a wider complex. The character and development of the wider area of activity in this period is largely unknown, especially on the eastern side of the Tything though some activity is suspected at Lowell Street and northwards towards Landsdowne Road.

The southern end of the watching brief extent is within an area laid out within the early Norman period as a suburb with plots comprising of garden crofts along the line of the current road, and outside of the city walls. Excavations have shown (WCM101002) that the character of these suburbs was also at least partially industrial as tile production was in evidence. The exact function, extent and density of these suburbs are yet to be established though may have extended as far as St Oswalds' hospital on the Tything which is thought to have been founded c1200AD.

The post-medieval character of the area is likely to have been dominated initially by the events surrounding the Civil War. A map showing Worcester at the time of the war in 1651, illustrates the areas alongside of the Tything as devoid of buildings. The medieval suburb appears to have been cleared outside of the city walls and defences seen on this map are thought to date to this period. One of these is immediately to the west of the Foregate entrance into the city and may be located at the southern end of Sansome Walk.

By the time of the 1742 Doharty map, the Tything had been redeveloped with the street frontage being seen in much its current position. The subsequent development can be seen from later mapping sources, up to the present day.

4.2 Current land-use

The area is a collection of urban commercial and residential streets to the north of Worcester city centre that developed alongside the Tything, one of the main thoroughfares leaving the city. The general area is bounded on the west side by the river and race course and the Birmingham canal on the east side.

5 Structural analysis

The trenches and features recorded are shown in Fig 2. The results of the structural analysis are presented in Appendix 1 which gives detailed descriptions of the deposits observed.

5.1 Phase 1: natural deposits

Natural deposits were recorded in trenches 4, 5 and 7, all of which were located on Britannia Square. These consisted of rounded orange gravels and yellow sand deposits and were numbered as (406), (508) and (709) respectively. These deposits were present at depths of between about 0.60m and 1m in depth from the ground surface. These are consistent with the terrace of the River Severn as is expected within this area.

One further natural feature was recorded which was interpreted as a tree throw within trench 5 and numbered as [507]. This feature was filled by deposits (504), (505) and (506). The exact dimensions of this feature could not be observed due to its position below a service pipe but it was roughly 0.60m in width and 0.36m deep. Its edges were indistinct and still contained numerous roots, confirming its interpretation.

5.2 Phase 2: Romano-British

A sherd of Romano-British pottery was recovered from layer 102 in Trench 1, on the corner of The Moors and Back Lane South. It is described as a single highly abraded 16g body sherd of Oxidised Severn Valley Ware (fabric 12), of 1st to 4th century date (R. Hedge pers. comm.) Modern CBM was also recovered from the context and the sherd is therefore considered residual.

5.3 Phase 3: medieval deposits

Within trenches 4, 5 and 6 (on Brittania Square East, Fig 2), a deposit was recognised that though it remained undated, lay stratigraphically beneath the clearly post-medieval deposits. It composed of mid-reddish brown silty sand with rounded pebbles. This deposit was recorded at depths of

between 0.64m and 0.93m below the ground surface and was between 0.30 and 0.36m in depth. It was numbered variously as (403), (503) and (605). It was interpreted as a medieval sub-soil although this interpretation remains problematic due to it having been seen in such small areas with no dating evidence recovered.

5.4 Phase 4: post-medieval deposits

A series of other deposits were recognised that are tentatively dated to the post-medieval period. The first of these is deposit (104), within Trench 1 at the corner of The Moors and Back Lane South (Fig 2), which comprised of a compact red marl deposit with lenses of brown silty sand. It was recorded at a depth of 0.30m from the ground surface and was 0.80m deep. Its maximum width was about 0.30m. The interpretation of this feature is problematic given that only a small amount of it was observed due to having been truncated by a later pipe cut, but the fill of a cut feature such as a pit seems likely. No dateable material was recovered from this feature.

Deposit (203), within Trench 2, further north along The Moors, consisted of a mid to light orangey brown silty sand that contained frequent small rounded stones and some brick fragments. These bricks were handmade but 3 inches wide, and a later post-medieval date seems likely (Robson-Glyde pers. comm.). It was located at a depth of 0.33m and was 0.62m in depth with a maximum width of about 0.40m. The interpretation of this feature is again difficult but a post-medieval road levelling layer is probable.

Within trenches 4 and 5, on Brittania Square East (Fig. 2) a similar deposit, (402) and (502) was recorded, comprising a loose mid reddish brown silty sand with moderate rounded stones.. It was recorded at a depth of 0.30m below the ground surface, between 0.16m and 0.34m deep and extending the full lengths of each trench. No dating was recovered from this deposit but it is likely to be post-medieval in date and appears to be a ground make up or levelling layer.

Within Trench 11 (Fig. 3), a brick wall was recorded running in a north to south direction. It survived to a depth of 0.60m, in total seven courses were visible. Its width was 0.30m and only seen in section and truncated by the modern water main so its length remains unknown. The bricks were 3 inches wide so a later post-medieval date seems likely. This wall was also butted by deposit (1107) which was a loose dark grey clinker and charcoal layer of 0.30m in depth from which no dating was recovered but a late post-medieval date is likely.

5.5 Phase 5: modern deposits

All of the remaining deposits recorded during the watching brief are considered to be modern in date, primarily related to services dating to the 20th Century. This programme of works observed during the watching brief concerned updating water pipes, so the trenches were necessarily cut onto these existing water pipes. The deposits seen were mainly the pipes themselves as well as the fills of their construction trenches. Within trenches 8 and 9, modern square brick inspection chambers were noted that related to the existing services.

These modern deposits were also covered by aggregate and sand layers below the tarmac road surfaces which all of these trenches were excavated through. These layers together were between 0.15m and 0.40m in depth below the ground surface.

6 Synthesis

6.1 Phase 2: The Romano-British period

The development of this area the city of Worcester is considered to have started predominantly within the Romano-British era, potentially along the line of a road that led towards Droitwich. The main evidence for this development has been seen along the western side of the Tything, with only sporadic evidence to its east. No evidence for any activity of this period was seen within the watching brief apart from some residual pottery recovered from modern deposit (102) within Trench 1. Clearly the location from which these materials were removed is not known but their

presence may suggest the proximity of activity of this era. Any Romano-British activity within this area is likely to be of local significance.

6.2 Phase 3: The medieval period

The character of this area within the medieval period is yet to be classified with certainty but it seems likely that occupation comprised extramural linear plots fronting The Tything. Industrial activity has been noted in this area in the form of a tile kiln.

No deposits recorded within the watching brief can be securely assigned to this period but a relatively deeply buried, undisturbed layer deposit identified within trenches 4, 5 and 6 along Brittania Square East is thought likely to derive from backplot activity within properties fronting the western side of The Tything. It is thought that the area of these trenches was relatively undisturbed agricultural or garden land, as would be consistent with back plot activity.

6.3 Phase 4: The post-medieval period

In the mid-17th century the area is considered to have been largely cleared of its medieval suburb during the Civil War. At this time the city defences appear to have been modified, especially to the north of the Foregate in the approximate area of the southern end of Sansome Walk where a new defence is shown on a map of 1651. Within the watching brief, no deposits relating to these activities were recognised.

By the time of the Doharty map of 1742, plots along the Tything can be seen as reinstated with the frontage within the broadly the same position as it remains. Within Trench 11 (on Pierpoint Street), a wall, (1106) was recorded that relates closely with the front wall of these buildings. It was not possible to date the wall but it is likely to relate to the later post-medieval period, possibly the 19th century. A further deposit (1107) was seen butting this wall that probably relates to the post demolition backfilling of the building, though this cannot be suggested with certainty as only a limited amount of it was visible.

A number of other deposits were recorded that are interpreted as post-medieval ground levelling layers. These included deposits (402) and (502) within trenches 4 and 5 from which no dateable material was recovered but, from their general form and location, they are likely to be post-medieval in date. Deposit (203), within Trench 2, contained some brick fragments which were likely to date to the later post-medieval period (pers comm Robson-Glyde). The interpretation of these deposits is, again, difficult but post-medieval levelling layers are possible.

Within Trench 1, deposit (104) was interpreted as being part of a cut feature though the possibility remains that it is part of a wider layer. It was not interpreted as a soil horizon due to its high marl content. Similarly, its dating is unknown but its position directly below the modern road surface suggests a post-medieval, or even modern, date.

6.4 Phase 5: The modern period

All the remaining deposits and structures related to either the construction of services and subsequent road surfaces within the 20th century. This programme of works this project observed was concerned updating water pipes, so the trenches were necessarily cut onto these existing water pipes. As a result of this, only a small minority of the deposits recognised were undisturbed and *in-situ* and these were only seen to a very limited extent.

6.5 Research frameworks

The results of this watching brief are likely to be of a fairly limited significance to the research frameworks for the City of Worcester. Only limited activity relating to the Romano-British and post-medieval periods was recorded and as these were limited in extent and will not add to any real extent to the archaeological knowledge of the area. The presence of a possible sub-soil in the

trenches to the west of the Tything may confirm the use of the area as agricultural or gardens in the Medieval period, though the character and date of this deposit cannot be stated with certainty.

7 Publication summary

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

An archaeological watching brief of a scheme of water mains replacement was undertaken in an area north of Worcester city centre (centred on NGR 85067 55485). It was undertaken on behalf of Pick Everard in response to a brief prepared by Heritage and Design, Worcester City Council. The area extends from The Moors in the west to the Worcester and Birmingham Canal in the east, and from Back Lane North southwards to Sansome Place. The scheme was considered by the Curator to have the potential to affect archaeological sites related to the Roman town as well as the medieval and post-medieval city of Worcester.

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8 Acknowledgements

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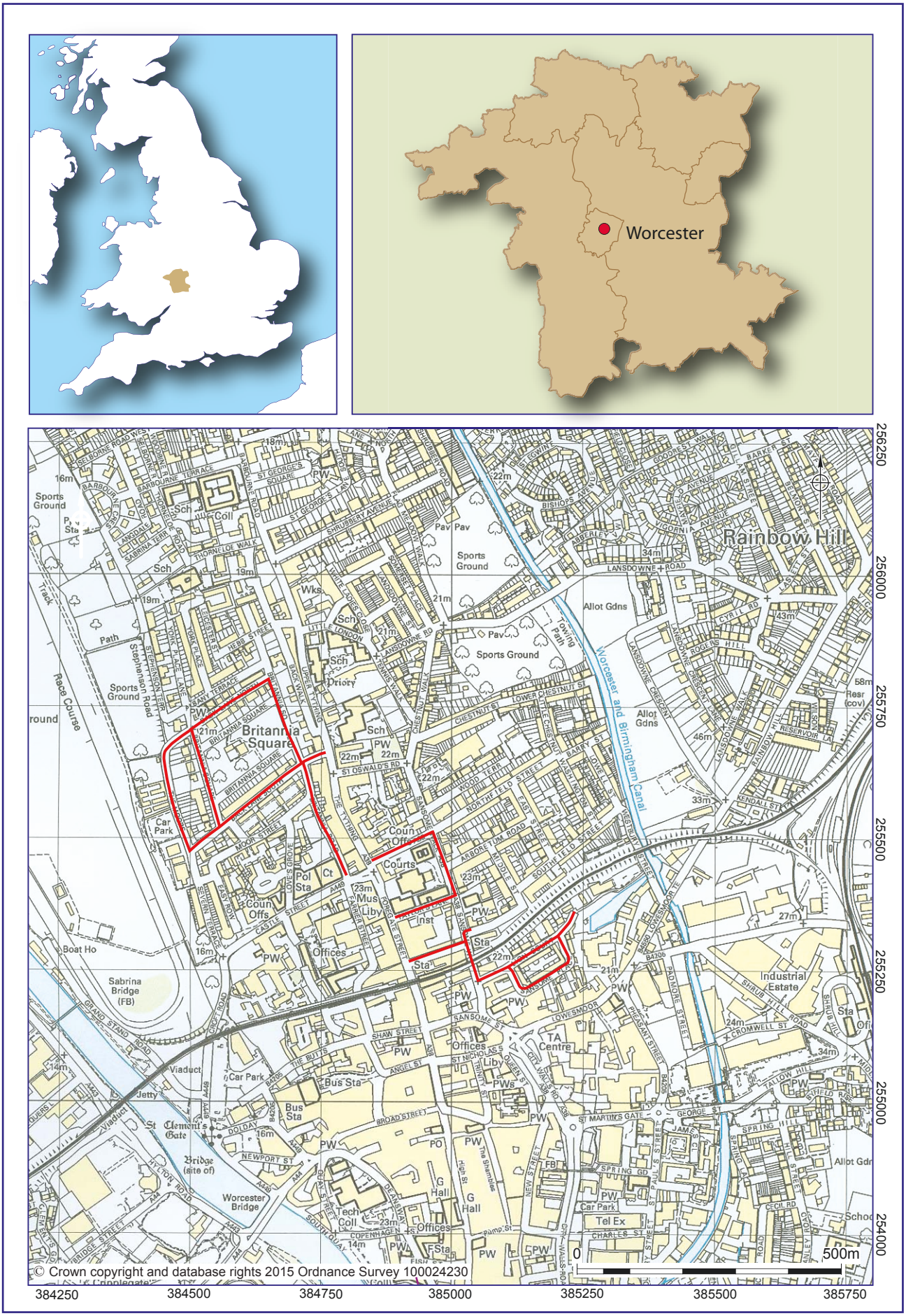
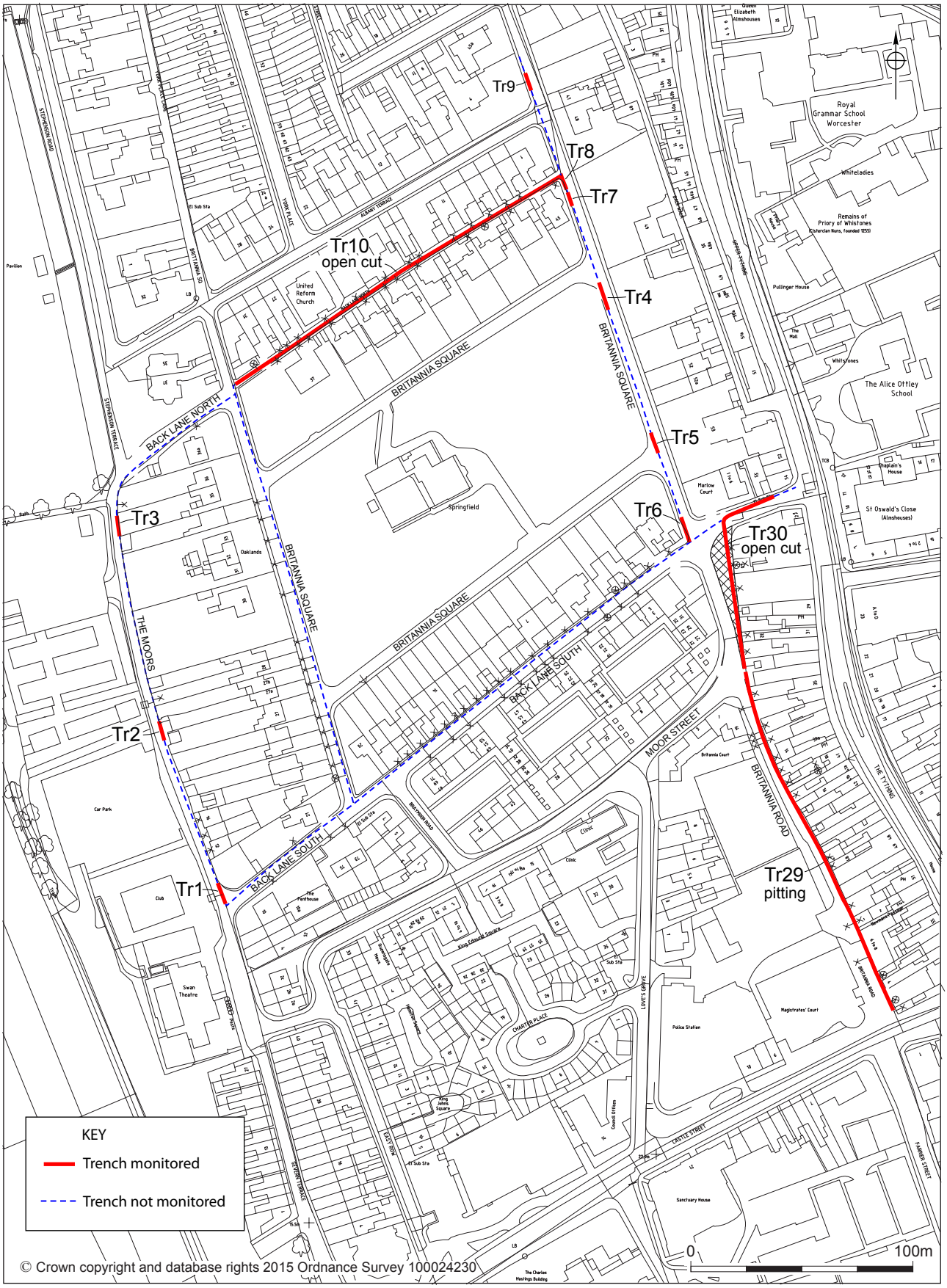
Figures

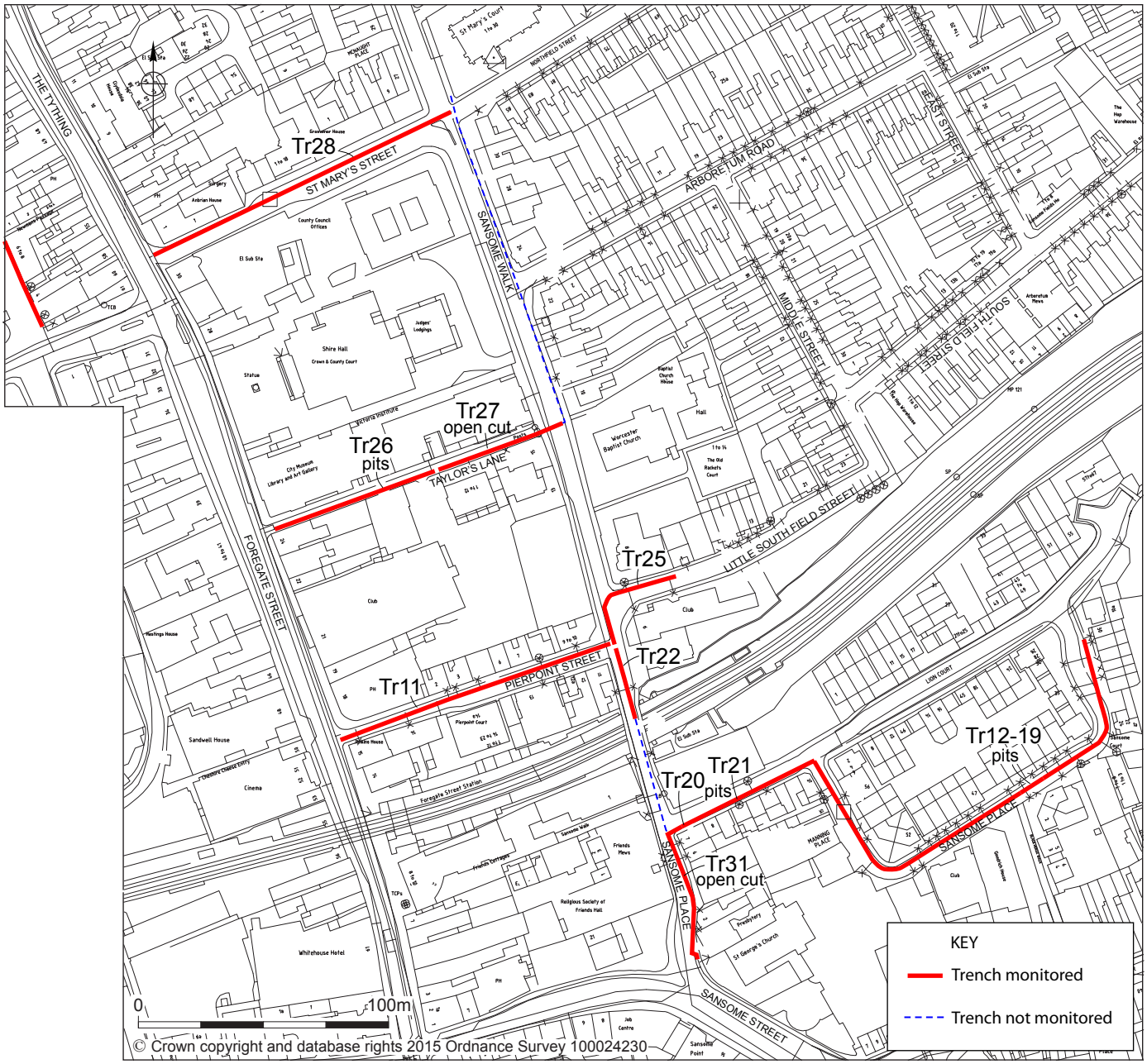


Location of the route *Figure 1*



Trench locations: Britannia Square (based upon Morgan Sindal Drg No 120288/C/408 *Figure 2*

(see Fig 2)



Trench locations: Arboretum south (based upon Morgan Sindal Drg No 120288/C/408 *Figure 3*

Plates

Plate 1 Trench 1

Plate 2 Trench 4, looking west

Plate 3 Trench 5 section showing tree throw (507), looking west.

Plate 4 Trench 7section, looking east.

Plate 5 Trench 8, looking north.

Plate 6 Trench 10, looking north east.

Plate 7 Trench 11, looking west.

Plate 8 Trench 11, wall (1106), looking south.

Plate 9 Trenches 15 to 18, looking west.

Plate 10 Trench 21, looking west.

Plate 11 Trench 22, looking west.

Appendix 1 Trench descriptions

Trench 1

Maximum dimensions: Length: 3.00m Width: 1.80m Depth: 1.05m

Orientation: North-south

Main deposit description

Context	Classification	Description	Depth below ground surface (b.g.s) – top and bottom of deposits
100	Road surface	Tarmac surface.	0-0.15m
101	Layer	Stone aggregate deposit below 100.	0.15-0.30m
102	Layer	Mid grey brown silty sand with occasional small rounded stones and modern brick pieces as well as residual Romano-British pottery and CBM. Contains a metal water pipe.	0.30-0.80m
103	Pipe cut	Cut for a water pipe, filled by 102.	0.30-0.80m
104	Deposit	Moderately compact mid reddish marl with lenses of brown silty sand and small CBM fragments. Below (101).	0.30-0.80m

Trench 2

Maximum dimensions: Length: 3.50m Width: 1.30m Depth: 0.95m

Orientation: North-south

Main deposit description

Context	Classification	Description	Depth below ground surface (b.g.s) – top and bottom of deposits
200	Road surface	Tarmac surface.	0-0.10m
201	Layer	Stone aggregate deposit below 200.	0.10-0.15m
202	Layer	Brown silty sand containing a high level of oyster shells, CBM and 19th century pottery.	0.15-0.0.28m
203	Layer	Mid to light orangey brown silty sand with frequent small rounded stones. Contained CBM.	0.28-0.95m

Context	Classification	Description	Depth below ground surface (b.g.s) – top and bottom of deposits
204	Fill of 205	Mid grey brown silty sand with occasional small rounded stones. Contains a metal water pipe.	0.28-0.95m
205	Pipe cut	Cut for a water pipe, filled by 202.	0.28-0.95m

Trench 3

Maximum dimensions: Length: 2.70m Width: 1.30m Depth: 1.25m

Orientation: North-south

Main deposit description

Context	Classification	Description	Depth below ground surface (b.g.s) – top and bottom of deposits
300	Road surface	Tarmac surface.	0-0.10m
301	Layer	Stone aggregate deposit below 300.	0.10-0.40m
302	Fill of 303	Mid grey brown silty sand with occasional small rounded stones and modern brick fragments. Contains a metal water pipe.	0.40-1.30m
303	Pipe cut	Cut for a water pipe, filled by 102.	0.40-1.30m

Trench 4

Maximum dimensions: Length: 3.70m Width: 0.76m Depth: 1.00m

Orientation: North-south

Main deposit description

Context	Classification	Description	Depth below ground surface (b.g.s) – top and bottom of deposits
400	Road surface	Tarmac surface.	0-0.10m
401	Layer	Stone aggregate deposit below 400.	0.10-0.30m
402	Layer	Soft dark reddish brown silty sand with frequent rounded pebbles.	0.30-0.64.m

Context	Classification	Description	Depth below ground surface (b.g.s) – top and bottom of deposits
403	Layer	Loose mid reddish brown silty sand with moderate round pebbles	0.64-1.00m
404	Fill of 205	Mixed grey brown sands and gravels.	0.30-1.00m
405	Pipe cut	Cut for a water pipe, filled by 404.	0.30-1.00m
406	Natural substrate	Bright orange gravels.	1.00m-unkown

Trench 5

Maximum dimensions: Length: 1.78m Width: 0.84m Depth: 1.20m

Orientation: North-south

Main deposit description

Context	Classification	Description	Depth below ground surface (b.g.s) – top and bottom of deposits
500	Road surface	Tarmac surface.	0-0.14m
501	Layer	Stone aggregate deposit below 500.	0.10-0.20m
502	Layer	Firm mid reddish brown silty sand with frequent pebbles.	0.16-0.30.m
503	Layer	Soft mid reddish brown silty sand with moderate round pebbles	0.46-0.76m
504	Fill of 507	Loose mid reddish brown silty sand with moderate round pebbles	0.76-0.85m
505	Fill of 507	Loose mid yellow sand	0.85-1.07m
506	Fill of 507	Loose dark brownish grey silty sand with frequent charcoal flecks	1.07-1.17m
507	Cut	Cut of a possible tree throw	0.76-1.17m
508	Natural substrate	Soft mid yellow sand	1.17m-unknown
509	Fill	Mixed grey brown sands and gravels.	0.30-1.17m

Context	Classification	Description	Depth below ground surface (b.g.s) – top and bottom of deposits
510	Cut	Cut for a water pipe, filled by 509.	0.30-1.17m

Trench 6

Maximum dimensions: Length: 2.26m Width: 0.78m Depth: 1.20m

Orientation: North-south

Main deposit description

Context	Classification	Description	Depth below ground surface (b.g.s) – top and bottom of deposits
600	Road surface	Tarmac surface.	0-0.10m
601	Layer	Stone aggregate deposit below 600.	0.10-0.28m
602	Layer	Alternating layers of brick rubble and dark greyish brown silty sands.	0.28-1.18m
603	Fill of 604	Mixed grey brown sands and gravels.	0.28-1.18m
604	Cut	Cut for a water pipe, filled by 603.	0.28-1.18m
605	Layer	Soft mid reddish brown silty sand	1.18m -1.20m

Trench 7

Maximum dimensions: Length: 3.17m Width: 0.84m Depth: 1.20m

Orientation: North-south

Main deposit description

Context	Classification	Description	Depth below ground surface (b.g.s) – top and bottom of deposits
700	Road surface	Tarmac surface.	0-0.12m
701	Layer	Stone aggregate deposit below 700.	0.12-0.30m
702	Fill	Mixed stone hardcore deposit, fill of 703	
703	Cut	Construction cut for a modern inspection	

Context	Classification	Description	Depth below ground surface (b.g.s) – top and bottom of deposits
		chamber	
704	Fill	Backfill of pipe cut 705	
705	Cut	Construction cut a modern sewer pipe	
706	Fill	Backfill of pipe cut 707	
707	Cut	Construction cut a modern water pipe	
708	Layer	Mixed soft mid greyish brown and light yellow orange silty sands.	
709	Natural substrate	Soft light orangey yellow sands	C1m BGS

Trench 8

Maximum dimensions: Length: 5.70m Width: 0.90m Depth: 0.98m

Orientation: North-south

Main deposit description

Context	Classification	Description	Depth below ground surface (b.g.s) – top and bottom of deposits
800	Road surface	Tarmac surface.	0-0.12m
801	Layer	Stone aggregate deposit below 800, same as 808.	0.12-0.30m
802	Fill	Soft mid reddish brown silty sand with frequent small rounded stones, same as 809.	0.28m BGS
803	Cut	Modern brick inspection chamber	0.28m BGS
804	Fill	Backfill of pipe trench 805	0.28m BGS
805	Cut	Modern pipe trench cut	0.28m BGS
806	Fill	Backfill of pipe trench 807	0.28m BGS
807	Cut	Modern pipe trench cut	0.28m BGS

Context	Classification	Description	Depth below ground surface (b.g.s) – top and bottom of deposits
808	Layer	Stone aggregate deposit below 800, same as 801.	0.28m BGS
809	Natural substrate	Soft mid reddish brown silty sand with frequent small rounded stones, same as 801.	0.28m BGS

Trench 9

Maximum dimensions: Length: 1.80m Width: 0.75m Depth: 1.02m

Orientation: North-south

Main deposit description

Context	Classification	Description	Depth below ground surface (b.g.s) – top and bottom of deposits
900	Road surface	Tarmac surface.	0-0.10m
901	Layer	Stone aggregate deposit below 900.	0.10-0.37m
902	Fill	Soft yellow sand, backfill of modern service beyond limit of excavation.	0.37-1.02m
903	Fill	Soft mid brown silty sand, fills 904	0.10m-1.02m
904	Cut	Construction cut for 905	0.10m-1.02m
905	Structure	Modern brick inspection chamber.	0.10m-1.02m

Trench 10

Maximum dimensions: Length: c100m Width: c0.50m Depth: 0.60m

Orientation: East-west

Main deposit description

Context	Classification	Description	Depth below ground surface (b.g.s) – top and bottom of deposits
1000	Road surface	Tarmac surface.	0-0.11m

Context	Classification	Description	Depth below ground surface (b.g.s) – top and bottom of deposits
1001	Layer	Stone aggregate deposit below 1000.	0.11-0.19m
1002	Fill	Mid to dark brown silty sand with occasional medium stones filling a modern pipe trench	0.19->0.50m

Trench 11

Maximum dimensions: Length: c109m Width: c1.00m Depth: c1.00m

Orientation: East-west

Main deposit description

Context	Classification	Description	Depth below ground surface (b.g.s) – top and bottom of deposits
1100	Surface	Tarmac surface.	0.00-0.15m
1101	Layer	Stone aggregate deposit below 1100.	0.15-0.30m
1102	Fill	Mid to dark brown silty sand with occasional medium stones filling a modern pipe trench	0.30-0.70m
1103	Surface	Concrete footpaths slabs	0.00-0.10m
1104	Surface	Concrete slab	0.10-0.25m
1105	Fill	Mid to dark brown silty sand with occasional medium stones filling a modern pipe trench	0.25-0.65m
1106	Structure	Brick wall structure running north to south made with un-frogged, handmade bricks measuring 0.10m by 0.08m by 0.20m, mortared with lime.	0.30-0.90m
1107	Layer	Loose dark greyish black clinker and charcoal deposit. Butts wall 1106.	0.60-0.90m
1108	Structure	Modern brick inspection chamber	0.15-0.75m

Trench 12

Maximum dimensions: Length: 2.40m Width: 0.60m Depth: 1.00m

Orientation: North-south

Main deposit description

Context	Classification	Description	Depth below ground surface (b.g.s) – top and bottom of deposits
1200	Surface	Tarmac surface.	0.00-0.08m
1201	Layer	Stone aggregate deposit below 1200.	0.08-0.29
1202	Fill	Mid to dark brown silty sand with occasional medium stones filling a modern pipe trench	0.37-1.00m

Trench 13

Maximum dimensions: Length: 1.15m Width: 0.90m Depth: 1.00m

Orientation: North-south

Main deposit description

Context	Classification	Description	Depth below ground surface (b.g.s) – top and bottom of deposits
1300	Surface	Tarmac surface.	0.00-0.08m
1302	Fill	Mid to dark brown silty sand with occasional medium stones filling a modern pipe trench	0.08-0.92m

Trench 14

Maximum dimensions: Length: 3.00m Width: 1.20m Depth: 1.00m

Orientation: North-south

Main deposit description

Context	Classification	Description	Depth below ground surface (b.g.s) – top and bottom of deposits
1400	Surface	Tarmac surface.	0.00-0.10m
1401	Fill	Soft orange sand within a modern pipe trench	0.10-0.90m

Context	Classification	Description	Depth below ground surface (b.g.s) – top and bottom of deposits
1402	Fill	Mid to dark brown silty sand with occasional medium stones filling a modern pipe trench	0.10-0.90m

Trench 15

Maximum dimensions: Length: 0.70m Width: 0.60m Depth: 0.50m

Orientation: North-south

Main deposit description

Context	Classification	Description	Depth below ground surface (b.g.s) – top and bottom of deposits
1500	Surface	Tarmac surface.	0.00-0.10m
1501	Fill	Mid to dark brown silty sand with occasional medium stones filling a modern pipe trench	0.10-0.50m

Trench 16

Maximum dimensions: Length: 1.00m Width: 0.80m Depth: 0.85m

Orientation: North-south

Main deposit description

Context	Classification	Description	Depth below ground surface (b.g.s) – top and bottom of deposits
1600	Surface	Tarmac surface.	0.00-0.10m
1601	Fill	Mid to dark brown silty sand with occasional medium stones filling a modern pipe trench	0.10-0.85m

Trench 17

Maximum dimensions: Length: 0.90m Width: 0.75m Depth: 0.55m

Orientation: North-south

Main deposit description

Context	Classification	Description	Depth below ground surface (b.g.s) – top and bottom of deposits
1700	Surface	Tarmac surface.	0.00-0.09m
1701	Fill	Mid to dark brown silty sand with occasional medium stones filling a modern pipe trench	0.09-0.45m

Trench 18

Maximum dimensions: Length: 1.20m Width: 1.10m Depth: 0.60m

Orientation: East-west

Main deposit description

Context	Classification	Description	Depth below ground surface (b.g.s) – top and bottom of deposits
1800	Surface	Tarmac surface.	0.00-0.10m
1802	Fill	Mid to dark brown silty sand with occasional medium stones filling a modern pipe trench	0.10-0.60m

Trench 19

Maximum dimensions: Length: 2.60m Width: 1.60m Depth: 1.00m

Orientation: East-west

Main deposit description

Context	Classification	Description	Depth below ground surface (b.g.s) – top and bottom of deposits
1900	Surface	Tarmac surface.	0.00-0.15m
1901	Fill	Mid to dark brown silty sand with occasional medium stones filling a modern pipe trench	0.15-0.85m

Trench 20

Maximum dimensions: Length: 1.00m Width: 1.00m Depth: 1.00m

Main deposit description

Context	Classification	Description	Depth below ground surface (b.g.s) – top and bottom of deposits
2000	Surface	Tarmac surface.	0.00-0.10m
2001	Layer	Stone aggregate deposit below 2000.	0.10-0.30m
2002	Fill	Mid to dark brown silty sand with occasional medium stones filling a modern pipe trench	0.30-0.70m

Trench 21

Maximum dimensions: Length: 4.00m Width: 1.00m Depth: c1.00m

Orientation: East-west

Main deposit description

Context	Classification	Description	Depth below ground surface (b.g.s) – top and bottom of deposits
2101	Surface	Brick surface.	0.00-0.10m
2102	Layer	Stone aggregate deposit below 2101.	0.10-0.30m
2103	Fill	Mid to dark brown silty sand with occasional medium stones filling a modern pipe trench	0.30-c0.70m

Trench 22

Maximum dimensions: Length: 4.70m Width: 0.90m Depth: 1.10m

Orientation: East-west

Main deposit description

Context	Classification	Description	Depth below ground surface (b.g.s) – top and bottom of deposits
2200	Surface	Tarmac surface.	0.00-0.13m
2201	Layer	Stone aggregate deposit below 2200.	0.13-0.33m
2202	Fill	Mid to dark brown silty sand with occasional medium stones filling a modern	0.33-0.77m

Context	Classification	Description	Depth below ground surface (b.g.s) – top and bottom of deposits
		pipe trench	

Trench 23

Maximum dimensions: Length: 2.90m Width: 0.80m Depth: 1.10m

Orientation: North-south

Main deposit description

Context	Classification	Description	Depth below ground surface (b.g.s) – top and bottom of deposits
2300	Surface	Tarmac surface.	0.00-0.13m
2301	Layer	Stone aggregate deposit below 2300.	0.13-0.38m
2302	Fill	Mid to dark brown silty sand with occasional medium stones filling a modern pipe trench	0.72-1.10m

Trench 24

Maximum dimensions: Length: 6.20m Width: 0.90m Depth: 0.80m

Orientation: North-south

Main deposit description

Context	Classification	Description	Depth below ground surface (b.g.s) – top and bottom of deposits
2400	Surface	Tarmac surface.	0.00-c0.15m
2401	Layer	Stone aggregate deposit below 2400.	C0.15-c0.30m
2402	Fill	Mid to dark brown silty sand with occasional medium stones filling a modern pipe trench	c0.30m-0.80m

Trench 25

Maximum dimensions: Length: c22m Width: 0.80m Depth: c1.10m

Orientation: North-south turning to run east to west

Main deposit description

Context	Classification	Description	Depth below ground surface (b.g.s) – top and bottom of deposits
2500	Surface	Tarmac surface.	0.00-0.15m
2501	Layer	Stone aggregate deposit below 2500.	0.15-0.35m
2502	Fill	Mid to dark brown silty sand with occasional medium stones filling a modern pipe trench	0.35-0.75m

Trench 26

Maximum dimensions: Length: Test pits: 0.80m Depth: 1.00m

Orientation: East - West

Main deposit description

Context	Classification	Description	Depth below ground surface (b.g.s) – top and bottom of deposits
2600	Surface	Tarmac surface.	0.00-0.15m
2601	Layer	Stone aggregate deposit below 2500.	0.15-0.35m
2602	Fill	Mid to dark brown silty sand with occasional medium stones filling a modern pipe trench	0.35-0.75m

Trench 27

Maximum dimensions: Length: c22m Width: 0.80m Depth: c1.10m

Orientation: East - West

Main deposit description

Context	Classification	Description	Depth below ground surface (b.g.s) – top and bottom of deposits
2700	Surface	Tarmac surface.	0.00-0.15m
2701	Layer	Stone aggregate deposit below 2500.	0.15-0.35m
2702	Fill	Mid to dark brown silty sand with	0.35-0.75m

Context	Classification	Description	Depth below ground surface (b.g.s) – top and bottom of deposits
		occasional medium stones filling a modern pipe trench	

Trench 28

Maximum dimensions: Length: Various test pits 1.00m deep

Orientation: East - West

Main deposit description

Context	Classification	Description	Depth below ground surface (b.g.s) – top and bottom of deposits
2500	Surface	Tarmac surface.	0.00-0.15m
2501	Layer	Stone aggregate deposit below 2500.	0.15-0.35m
2502	Fill	Mid to dark brown silty sand with occasional medium stones filling a modern pipe trench	0.35-0.75m

Trench 29

Maximum dimensions: Length: Various teast pits 1m square, 1.0m deep

Orientation: North – South pitting

Main deposit description

Context	Classification	Description	Depth below ground surface (b.g.s) – top and bottom of deposits
2500	Surface	Tarmac surface.	0.00-0.15m
2501	Layer	Stone aggregate deposit below 2500.	0.15-0.35m
2502	Fill	Mid to dark brown silty sand with occasional medium stones filling a modern pipe trench	0.35-0.75m

Trench 30

Maximum dimensions: Length: 30m Width 0.40m Depth 1.20m

Orientation: North south open cut trench

Main deposit description

Context	Classification	Description	Depth below ground surface (b.g.s) – top and bottom of deposits
2500	Surface	Tarmac surface.	0.00-0.15m
2501	Layer	Stone aggregate deposit below 2500.	0.15-0.35m
2502	Fill	Mid to dark brown silty sand with occasional medium stones filling a modern pipe trench	0.35-0.75m

Appendix 2 Technical information

The archive (site code: WCM 101999)

The archive consists of:

9	Context records AS1
15	Field progress reports AS2
4	Photographic records AS3
274	Digital photographs
1	Drawing number catalogues AS4
3	Scale drawings
30	Trench record sheets AS41

1 Copy of this report (bound hard copy)

The project archive is intended to be placed at:

Worcester City Museum and Art Gallery,
Foregate Street,
Worcester WR1 2PW

Summary of data for Worcester City HER

An archaeological watching brief of a scheme of water mains replacement was undertaken in an area north of Worcester city centre (centred on NGR 85067 55485). It was undertaken on behalf of Pick Everard in response to a brief prepared by Heritage and Design, Worcester City Council. The area extends from The Moors in the west to the Worcester and Birmingham Canal in the east, and from Back Lane North southwards to Sansome Place. The scheme was considered by the Curator to have the potential to affect archaeological sites related to the Roman town as well as the medieval and post-medieval city of Worcester.

A small number of heavily truncated in-situ deposits were recorded, the majority of which related to ground levelling in the post-medieval era to the west of the Tything. Also within this area, a deposit of subsoil was identified that is thought likely to have been formed in the backplots of medieval properties fronting The Tything. The majority of the deposits and structures recorded, however, related to former services and the subsequent road surfaces above. A single sherd of residual Roman pottery was recovered from a modern deposit.