

Longford Rising Main Sewer, Gloucester. Archaeological Watching Brief.



Probable post-medieval turnpike surface

ARS Ltd Report 2014/33

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Compiled By:

Scott Williams
Archaeological Research Services Ltd
Aztec Centre, Aztec West
Almondsbury, Bristol,
South Gloucestershire BS32 4TD

admin@archaeologicalresearchservices.com
www.archaeologicalresearchservices.com

Checked By:

Chris Scott MifA
Tel: 01454 203740



Longford Rising Main Sewer, Gloucester. Results of an Archaeological Watching Brief.

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Archaeological Research Services Ltd

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Executive Summary

In September 2013, Archaeological Research Services Ltd was commissioned by NMC Nomenca to undertake an archaeological watching brief during the installation of a new rising main sewer pipe as part of the Longford and Innsworth Sewer Requisition Scheme.

A total of forty-eight trenches were recorded during the course of the watching brief, many of which were archaeologically sterile. Nineteen trenches were excavated whilst the archaeologist was not present on site, and in those instances the trenches were recorded as found. As some were shored with trench boxes and sheeting prior to arrival, very little could be said as to their contents, due to the visual limitations imposed by the safety shoring.

Eighteen trenches presented archaeological features. At various locations along Tewkesbury Road a compacted metalled surface was observed, which was interpreted as a probable Roman road, known from previous works to be near, or at this location. A soil deposit which appears to have built up over the Roman road surface suggests that the road fell out of use for a period of time before re-use in the post-medieval period. Above the soil deposit a compact stone surface comprising large cobbles and stones was encountered. This surface was interpreted as a post-medieval turnpike, known at this location from previous works. The turnpike was well constructed and compact, providing a good solid surface, which was pressed into a layer of clay directly beneath.

The modern road surface overlays a long tradition of thoroughfare at this location, dating back to at least the Roman period. If an earlier pre-Roman trackway existed, no evidence was discovered, similarly with the post-Roman period until the construction of the post-medieval turnpike. It is not beyond the realms of probability to suggest a trackway existed along the same route after the Roman road appears to have fallen out of use, and this suggestion may be supported by the conspicuously similar orientation of the later turnpike. The turnpike surface appears to have continued in use directly up until the earliest modern surface was constructed.

A well-constructed arched culvert was recorded in Trench 27 at a depth of 1.2m beneath the modern road surface. The culvert was orientated in a roughly north to south direction and was constructed of brick. Internally, the culvert was extremely silted up and was obviously no longer in use. The trench cut for the culvert was backfilled with soil containing waste material which dated to the 19th century, which suggests a possible date for the culvert itself. The culvert represented a drainage system of some function, but it was impossible to ascertain any relationships with the surroundings.

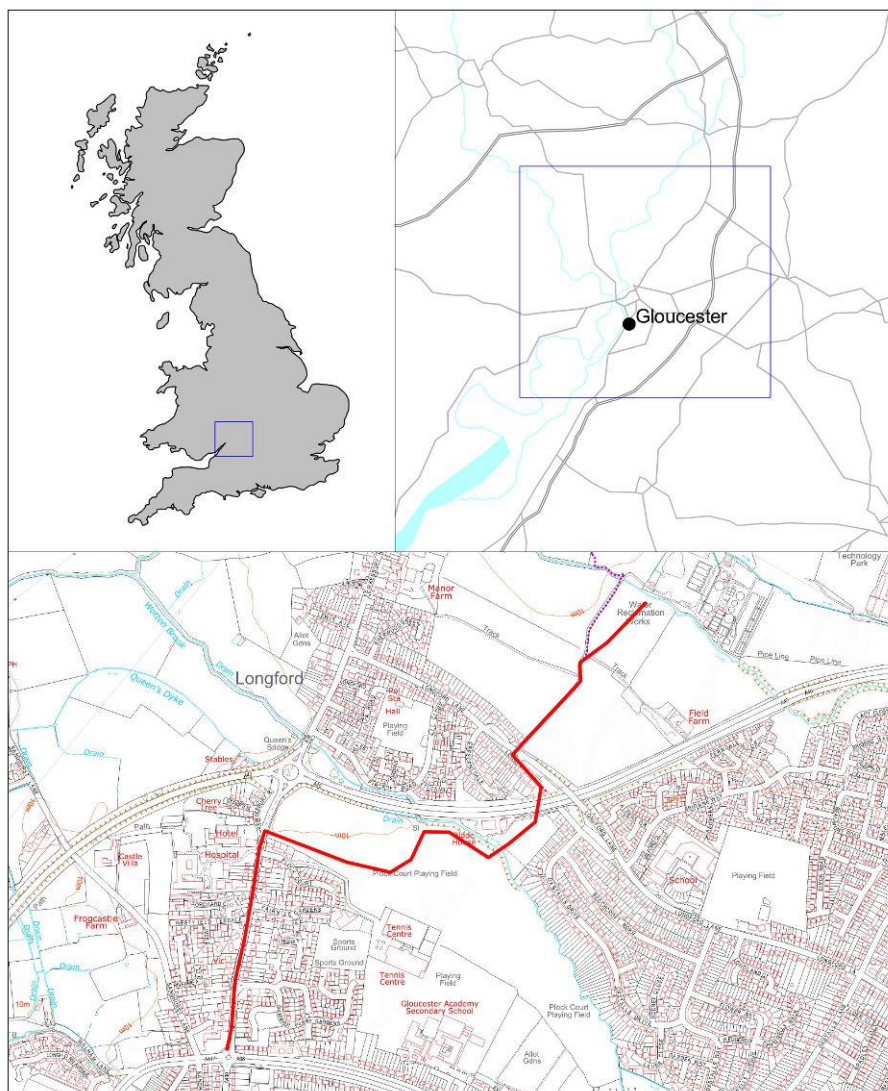
A small pit was observed in Trench 45, which was located in the field to the south of the water treatment plant, in an area where known cropmarks have indicated the probable survival of archaeological features. The lower fill of the pit was very dark and may have been a mixture of ash and clay, but due to weather conditions during excavation it was very difficult to ascertain for certain. There was, however, no evidence of in-situ burning within or around the feature.

The pit may relate to the features that are responsible for the crop-marks in the field, but as no artefacts were recovered during excavation of the feature, and no other features were encountered in the excavated area, at this time little more can be written.

1. Introduction

1.1. In September 2013 Archaeological Research Services Ltd (ARS Ltd) was commissioned by NMC Nomenca to undertake an archaeological watching brief during the installation of a new rising main sewer pipe as part of the Longford and Innsworth Sewer Requisition Scheme.

1.2. A total of forty-eight trenches were excavated along the route of the sewer installation. This report details the results of the watching brief.



2. Location and Geology

2.1. The proposed new sewer (Figure 1) follows a linear route northwards along Tewkesbury Road on the north side of Gloucester city centre, eastwards across Plock Court playing field, heading east alongside the A40 up to Longford Lane, departing from Longford Lane across the fields to just beyond the Horsbere Brook and terminating at

the Innsworth Water Reclamation Works. The route runs between NGR SO85324 19776 in the south and NGR SO 84875 21201 to the north. The southern section of the sewer route is within the City of Gloucester, whilst that to the north of the A40 is situated within the Parishes of Longford and Innsworth which are outside the City boundary and under the jurisdiction of Tewkesbury Borough Council. The proposed new sewer was inserted using direct drilling techniques to minimize impacts to archaeological deposits. However, a number of reception/drive pits were required to be excavated to facilitate the directional drilling, and these had the potential to impact upon archaeological deposits.

2.2. The underlying solid geology of the study area comprises mudstones, siltstones, limestones and sandstones of the Lias Group and this is overlain by superficial Quaternary deposits of Cheltenham Sand and Gravel, with bands of alluvium following the two watercourses that cross the study area (Wotton Brook and Horsbere Brook) (<http://maps.bgs.ac.uk>).

3. Historical and Archaeological Background

3.1. The project traverses an area rich in archaeological remains. The southern stretch of the pipeline follows the line of Tewkesbury Road which fossilizes the course of the Roman road from Gloucester to Worcester and on to Methley (Margary 1967, 180). Excavations a short distance to the west of this road on Sandhurst Lane recorded a stone-lined feature of Late Iron Age date and early Roman boundary ditches, c.20m from the line of the proposed new sewer. To the east of the Roman road, excavations during redevelopment at the former Gambier Parry Lodge site in the 1980s recorded an extensive Roman cemetery containing an estimated 2000 interments.

3.2. Excavations further to the north along the Roman road have recorded two successive road metallings at a depth of c.1m below ground level overlying 1st century pottery, attesting to the likely survival of buried structural elements relating to the Roman road along the course of the proposed sewer. A pipe trench excavated further to the north along the edge of Plock Court playing field also produced a Roman tankard sherd, and a Roman burial was discovered in 1967 in the garden of a house at Longford towards the northern end of the sewer route (NMR SO 82 SW 8). A cropmark of a rectilinear enclosure of possible Iron Age or Roman-British date has also been recorded through aerial photography in the vicinity of the route of the sewer to the east of Longford (NMR SO 82 SW 20), indicating that Roman or earlier remains could be expected anywhere along the route of the proposed sewer.

4. Aims of the Project

4.1. The aim of the watching brief was to ensure that any archaeological features encountered during the ground works in the specified area as outlined in the desk-based assessment were recorded and interpreted.

5. Methodology

5.1. All relevant ground works were undertaken by a suitable mechanical excavator fitted with a toothless ditching bucket or by hand once any overburden had been removed. Archaeological monitoring did not entail excavation beyond the total areas exposed by the development works. If significant archaeological features were identified, both the City Archaeologist at Gloucester City Council and the Gloucestershire County Council Archaeologist were to be notified and a decision taken as to the best method of proceeding.

5.2. ARS Ltd provided a suitably qualified archaeologist during ground works on the site. The on-site archaeologist was given the opportunity to stop site work in order to investigate potential archaeological features and adequate time was allowed for recording any such features.

5.3. A written, drawn and photographic record was maintained during the watching brief and all significant archaeological remains were recorded and/or retrieved. All excavations were recorded in accordance with the normal principles of archaeological evaluation upon pro forma context sheets. All significant architectural features were photographed *in situ* (with a metric scale and north arrow) and their location recorded on a plan of the site.

5.4. Where archaeological features and/or deposits were identified during the watching brief, then a sufficient quantity of the said features were investigated by hand to allow their date, nature and degree of survival to be ascribed. All features thus investigated were recorded in plan and section and any significant archaeological finds recovered were retained for analysis. Archaeological features were photographed and drawn in plan and at a scale of 1:20 where appropriate. The stratigraphy, where relevant and apparent, was recorded.

5.5. The watching brief was undertaken in accordance with the Institute for Archaeologists' *Standards and Guidelines for Archaeological Watching Briefs* (2008) and *Code of Conduct* (2012). The records follow standard conventions set by the Museum of London Archaeological Services (MoLAS) (2002).

5.6. Contractors and plant operators were notified that any observations of archaeological remains must be reported immediately to the archaeologist on site.

5.7. A risk assessment was undertaken before commencement of the work and health and safety regulations was adhered to at all times.

6. Results

6.1. Tewkesbury Road

6.1.1. Trench 1

This trench (Figure 10) was re-excavated prior to arrival on site, having been previously excavated under archaeological supervision, during a previous phase of the project. The trench, which had side support plates in place, was recorded as found.

6.1.2. Trench 1A

This slip trench (Figure 11 and Figure 12), measuring approximately 1.07m x 2m in size was excavated at the southern end of the Tewkesbury Road (A38) immediately to the south of *Trench 1*, for which it was to provide access for the drilling rig. The trench was excavated through approximately 0.60m of modern surface deposits (101), comprising various layers of tarmac and gravel hardcore. Situated immediately beneath the modern surface layers was a laid surface (102) comprising a combination of squared and rounded stones or cobbles, measuring not greater than 0.30 x 0.25 x 0.10m. The stone surface was limited to a single course in depth and was laid out in a haphazard manner. The surface, which was possibly a post-medieval turnpike, was pressed down into a bedding deposit (103) beneath. The deposit was no greater in depth than 0.12m, and comprised a green-grey fine clay. A dark-reddish-brown buried soil horizon (104) was situated beneath the clay bedding layer, which sealed it. This soil was a slightly sandy clayey silt with limited inclusions which overlaid a very hard compact stone layer (105) measuring approximately 0.20m in depth and comprising pebbles and angular stones (Figure 13) which measured not greater than 0.08m in size. The pebbles were compacted within a sandy silty soil matrix with some evidence of clay lenses. This feature was interpreted as being a Roman road, which is known to have been at this location. Directly beneath the probable Roman road was the mixed sand and gravel natural substratum (106).

6.1.3. Trench 2

This trench (Figure 14), located towards the southern end of the Tewkesbury Road, was excavated and shored prior to arrival on site. Trench plates used to shore the sides meant that any undamaged stratigraphy could not be discerned. The trench was excavated to a depth of 1.94m, and measured 2.05m x 2.45m in size. The trench was recorded as found.

6.1.4. Trench 3

This trench (Figure 15), located towards the southern end of the Tewkesbury Road, was excavated and backfilled prior to arrival on site. Trench 3 was a trial hole to determine the presence of services, and measured 1.80m x 1.60m, excavated to an unknown depth. The trench was recorded as found.

6.1.5. Trench 4

This trench (Figure 16 and Figure 17), located towards the southern end of the Tewkesbury Road, was excavated prior to arrival on site. The trench was neither backfilled, nor shored and so could be fully recorded. The trench measured 1.8m x 2.4m and was excavated through approximately 0.50m of modern surface deposits (401). The presumed post-medieval turnpike surface (402) was encountered immediately below the modern deposits, with its construction appearing the same as context (402). However, the stone surface was laid directly on top of a buried soil horizon (403), without the clay interface that was observed in *Trench 1*. The buried soil did display some lenses of sand, though it was unclear if they were mixed with the soil or added for a specific purpose

(such as levelling the ground). The probable Roman road surface (Figure 18) was observed directly beneath the buried soil horizon, measuring not greater than 0.20m in depth, and comprising very compacted pebbles in a sandy matrix. Fragments of CBM and mortar were recovered from this layer and the interface with (403) above. It was unclear whether a possible wheel rut had been present in the metallised surface, with a possible shallow ditch to the side, as was suggested by the north and south facing sections of the trench (Figure 6). As previously this metallised surface sat atop the natural sand and gravel substrate (405).

6.1.6. *Trench 4A*

This trench (Figure 19 and Figure 20), located approximately 2m to the south of *Trench 4*, was a trial hole to determine the presence of services, and measured 1.06m x 1.02m. The trench was excavated and partially backfilled prior to arrival on site, but the visible stratigraphy showed approximately 0.50m of modern surface deposits, beneath which the presumed post-medieval turnpike was situated, which sat atop the buried soil horizon, as observed in *Trench 4*. The trench was recorded as found.

6.1.7. *Trench 5*

This trench (Figure 21 and Figure 22), located towards the southern extent of the Tewkesbury Road, was partially excavated prior to arrival on site, down through approximately 0.90m of modern surface deposits (501), which revealed the probable post-medieval turnpike surface (502), beneath which a clay bedding deposit (503) was situated. Excavation then continued under archaeological supervision. The buried soil horizon (504), which was situated beneath the clay bedding deposit, appeared to be truncated and very disturbed, and continuing excavation revealed a number of modern services; an electric cable, a drainage pipe, and a water main. Excavation was terminated at this location. There was no evidence of the Roman road surface at this location, probably due to the large amount of truncation from the modern services.

6.1.8. *Trench 6*

This trench (Figure 23 and Figure 24), located around the middle of the Tewkesbury Road, was excavated down through approximately 0.70m of modern surface deposits (601). The probable post-medieval turnpike surface (602) (Figure 25) was situated directly beneath the modern deposits, and comprised poorly sorted stones measuring not greater than 0.30m x 0.30m x 0.10m at their largest, and assorted smaller cobbles measuring not greater than 0.10m in size. A clay 'bedding' deposit (604) with areas of sandy silt (603) was situated directly beneath the stone surface. The clay deposit measured approximately 0.10m in depth at this location. A buried soil horizon (605) was observed directly above the hard metallised surface of the probable Roman road (606) (Figure 26). A noticeable depression (607) (Figure 27) was observed in the metallised surface, which measured 0.22m in width by 0.03m deep, and was interpreted as a possible wheel rut in the road surface. The metallised surface directly overlaid the natural mixed sand and gravel substrate (608).

6.1.9. *Trench 9*

This trench (Figure 32 and Figure 33) was located towards the northern extent of the Tewkesbury Road, and was badly disturbed by modern services towards the northern and eastern extents. Where undisturbed stratigraphy was observed within the trench it followed the same pattern as recorded in the other trenches opened along the Tewkesbury Road, with approximately 0.60m of modern surface deposits (901) overlying the probable post-medieval turnpike surface (902), which in turn sat atop an approximately 0.12m deep clay bedding deposit (903). Beneath the clay deposit was a

buried soil horizon (904) which measured approximately 0.50m in depth and overlaid the probable Roman road surface (905), which was laid directly on top of the natural substratum (906).

6.1.10. *Trench 15*

This trench (Figure 44) was excavated towards the southern extent of the Tewkesbury Road, between *Trenches 4* and 5. The trench measured 2.2m by 3m, and was excavated and backfilled without archaeological supervision. The trench was recorded as found.

6.1.11. *Trench 16*

This trench (Figure 45) was excavated towards the central extent of the Tewkesbury Road, between *Trenches 5* and 6. The trench measured 1.5m by 4.3m, and was excavated without archaeological supervision. A trench box was fitted into the trench prior to recording, obscuring and damaging the stratigraphy. At least 0.80m of modern road surface deposits were present, and the presumed turnpike road surface and the underlying clay foundation deposit were partially visible. The trench was recorded as found.

6.1.12. *Trench 17*

This trench (Figure 46 and Figure 47) was excavated towards the central area of the Tewkesbury Road, between *Trenches 6* and 9. The trench originally measured 0.85m by 4m, but was extended at its southern extent towards the east and west. The extension was required to locate a subsurface electrical cable and junction box. This trench was excavated without archaeological supervision. The trench was excavated down through approximately 0.80m of modern road surface deposits (1701). The probable post-medieval turnpike surface (1702) was situated directly beneath the modern deposits, and comprised rounded and angular cobbled stones. A clay foundation deposit (1703) which measured approximately 0.10m in depth was situated directly beneath the stone surface. A buried clayey silt soil horizon (1704) of unknown depth was observed beneath the foundation deposit. The trench was not excavated beyond this soil horizon.

6.1.13. *Trench 18*

This trench (Figure 48 and Figure 49) was excavated towards the central extent of the Tewkesbury Road, between *Trenches 17* and 9. The trench measured 0.68m by 2.9m and was heavily truncated by modern subsurface services along its eastern side, with services also running across the trench from east to west. This trench was excavated without archaeological supervision. The trench was excavated down through approximately 0.80m of modern road surface deposits (1801). The probable post-medieval turnpike surface (1802) was situated directly beneath the modern deposits, and comprised rounded and angular cobbled stones. A clay foundation deposit (1803) which measured approximately 0.10m in depth was situated directly beneath the stone surface. A buried clayey silt soil horizon (1804) of unknown depth was observed beneath the foundation deposit. The trench was not excavated beyond this soil horizon.

6.1.14. *Trench 19*

This trench (Figure 50 and Figure 51) was located towards the northern extent of the Tewkesbury Road, and was excavated without archaeological supervision. The trench, which measured approximately 2.75m by 1.65m in size, was excavated down through approximately 0.65m of modern road surface deposits (1901). The probable post-medieval turnpike surface (1902) was situated directly beneath the modern deposits. A clay foundation deposit (1903) which measured approximately 0.08m in depth was

situated directly beneath the stone surface. A buried clayey silt soil horizon (1904) of unknown depth was observed beneath the foundation deposit. The trench was not excavated beyond this soil horizon.

6.1.15. Trench 20

This trench (Figure 52 and Figure 53) was located towards the northern extent of the Tewkesbury Road, and measured 3m by 1.5m in size. The trench was excavated down through approximately 0.75m of modern road surface deposits (2001). The probable post-medieval turnpike surface (2002) (Figure 54) was situated directly beneath the modern deposits. A clay foundation deposit (2003) which measured approximately 0.08m in depth was situated directly beneath the stone surface. Beneath the foundation deposit, a buried clayey silt soil horizon (2004) of approximately 0.60m depth was observed which sat atop the natural substratum (2005).

6.1.16. Trench 21

This trench (Figure 55 and Figure 56) was located towards the central area of the Tewkesbury Road, between trenches 9 and 19, and measured approximately 4m long by 0.8m wide. This trench was excavated to locate the depth of a known service. The trench was excavated down through approximately 0.56m of modern road surface deposits (2101). The probable post-medieval turnpike surface (2102) was situated directly beneath the modern deposits, and comprised rounded and angular cobbled stones. A clay foundation deposit (2103) which measured approximately 0.10m in depth was situated directly beneath the stone surface. A buried clayey silt soil horizon (2104) of unknown depth was observed beneath the foundation deposit. The trench was not excavated beyond this soil horizon.

6.1.17. Trench 22

This trench (Figure 57 and Figure 58) was located towards the central area of the Tewkesbury Road, between trenches 18 and 9, and measured approximately 1.9m long by 0.8m wide. This trench was excavated as a shot trench for the insertion of the drill head. The trench was excavated down through approximately 0.55m of modern road surface deposits (2201). The probable post-medieval turnpike surface (2202) was situated directly beneath the modern deposits. A clay foundation deposit (2203) which measured approximately 0.12m in depth was situated directly beneath the stone surface. A buried clayey silt soil horizon (2104) of unknown depth was observed beneath the foundation deposit. The trench was not excavated beyond this soil horizon.

6.1.18. Trench 23

This trench (Figure 59 and Figure 60) was located towards the central area of the Tewkesbury Road, and measured approximately 2.17m long by 0.65m wide. The trench was excavated to locate the depth of known services at this location. The trench was not excavated beyond the limits of the modern surface deposits (2301).

6.1.19. Trench 24

This trench (Figure 61 and Figure 62) was located towards the northern extent of the Tewkesbury Road, and was irregular in plan, but measured approximately 4.5m by 2.4m in size. The trench was very truncated by modern services to both the eastern and western sides, and was excavated down through approximately 0.90m of modern road surface deposits (2401). The probable post-medieval turnpike surface (2402) was situated directly beneath the modern deposits, and comprised rounded and angular cobbled stones. A clay foundation deposit (2403) which measured approximately 0.08m in depth

was situated directly beneath the stone surface. A buried clayey silt soil horizon (2404) of unknown depth was observed beneath the foundation deposit. The trench was not excavated beyond this soil horizon.

6.1.20. Trench 25

This trench (Figure 63 and Figure 64) was located towards the northern extent of the Tewkesbury Road between trenches 20 and 24, and measured approximately 2.95m by 0.60m in size. This trench was excavated to locate the depth of known services at this location. The trench was not excavated beyond the limits of the modern surface deposits (2501).

6.1.21. Trench 26

This trench (Figure 65 and Figure 66) was located towards the northern extent of the Tewkesbury Road between trenches 20 and 24, and measured approximately 2.5m by 0.80m in size. This trench was excavated to locate the depth of known services at this location. The trench was not excavated beyond the limits of the modern surface deposits (2601).

6.1.22. Trench 27

This trench (Figure 67, Figure 68, and Figure 69) was located towards the northern extent of the Tewkesbury Road, by the entrance to Plock Court. The trench measured 1.95m wide by 1.57m long, with another trench measuring 1.76m long by 0.56m wide extending from its western side. This trench was excavated to locate the depth of known services at this location. The trench was excavated down through approximately 0.60m of modern road surface deposits (2701), beneath which a buried topsoil (2702) was observed. The topsoil was truncated towards the eastern side of the trench by cut [2707] which was made for the installation of an arched culvert (2705) (Figure 70 and Figure 71). The culvert, which was orientated in a roughly north to south direction, comprised flat faced bricks, with no evidence of frogging, each measuring approximately 0.23m x 0.12m x 0.07m in size. The bricks were English bonded and regularly coursed, with five courses being extant up to the arch of the culvert. The culvert had partially collapsed, and some of the structure was removed by machine. The culvert had silted up (2706) to within approximately 0.20m of the top of the arch (internal). The culvert trench was backfilled with soil (2703) containing waste material which probably dates to the 19th century, suggesting a possible date for the culvert itself. Towards the western side of the trench, the subsoil (2708), which was cut by [2707], sat atop the natural substratum (2704).

6.1.23. Trench 28

This trench (Figure 72) was located towards the central area of the Tewkesbury Road, between trenches 19 and 23, and measured approximately 3.6m long by 1.7m wide. This was an emergency trench, excavated to free the drill head, whilst the archaeologist was not on site. The trench was recorded as found. The trench was excavated down through approximately 0.70m of modern road surface deposits (2801). The probable post-medieval turnpike surface (2802) was situated directly beneath the modern deposits. A clay foundation deposit (2803) which measured approximately 0.15m in depth was situated directly beneath the stone surface. A buried clayey silt soil horizon (2804) of 0.60m depth was observed beneath the foundation deposit, and sat atop the natural substratum (2005).

6.1.24. *Trench 29*

This trench (Figure 73 and Figure 74) was located towards the central area of the Tewkesbury Road, between trenches 24 and 27, and measured approximately 3.7m long by 0.96m wide. The trench was heavily truncated by services running both east to west and north to south. The trench was excavated down through approximately 0.86m of modern road surface deposits (2901). Directly beneath the modern road surface a buried clay deposit (2902) was observed, beneath which was a silty clay deposit (2903) which was heavily truncated by service pipes. No archaeological features were observed within this trench.

6.1.25. *Trench 30*

This trench (Figure 75 and Figure 76) was located towards the northern end of the Tewkesbury Road, and measured approximately 2m long by 1.36m wide. The trench was excavated to locate the depth of known services at this location. The trench was excavated down through approximately 0.60m of modern deposits relating to the road surface (3001). Beneath the modern road deposits a buried topsoil horizon (3002), measuring 0.16m in depth, was observed, which sat atop a buried subsoil (3003). The trench was not excavated beyond this soil horizon, and no archaeological features were observed.

6.1.26. *Trench 33*

This trench (Figure 82 and Figure 83) was located towards the northern end of the Tewkesbury Road, with an extension crossing into Plock Court playing fields. The main trench measured 2.9m by 2.9m in size, and the curvilinear extension was excavated through its northern end, turning east towards Plock Court field. The trench was excavated through modern road surface deposits (3301) measuring 0.74m in depth. A probable buried topsoil (3302) was located beneath the road surface, and measure no greater than 0.42m in depth. This topsoil was quite disturbed by small to medium sized plant/tree root intrusion. A shallow depth of clayey silt subsoil (3303) measuring 0.25m was observed beneath the topsoil, and was also heavily disturbed by tree and plant root intrusion. A discontinuous interface (3304) measuring no more than 0.03m in depth was observed between the subsoil and the natural substratum (3305). A small amount of brick debris was observed at the northern end of the trench during excavation.

6.1.27. *Trench 33 extension*

The extension (Figure 84, Figure 85, Figure 86, and Figure 87) can be divided into three sections: road, pavement, and verge, which differ in character from the main trench. The north to east curving trench extending from the north side of Trench 33 in the road presented a discontinuous deposit of brick fragments (3306) immediately beneath the modern road surface. These fragments overlaid a soil deposit (3307) that was rich with coal fragments and coal dust. This soil was probably the same as topsoil (3302). Subsoil (3303) was observed beneath soil (3307). The brick surface may represent a demolition event, or an area of hard standing. The trench continued through the Tewkesbury Road pavement, where a depth of no greater than 0.30m of modern surfacing deposits (3310) were encountered. A mixed clayey silt deposit (3309) with inclusions of modern brick waste, bottles, and ceramic fragments, which was attributed to a ground make-up event, was observed beneath the pavement surface, and extended approximately 3m beyond the pavement into the verge area to the east. Topsoil (3302) was observed below this deposit. In the area of the roadside verge, a topsoil (3308) overlaid the ground make-up deposit.

6.1.28. *Trench 34*

This trench (Figure 88 and Figure 89) was located towards the northern end of the Tewkesbury Road, and measured 1.84m by 0.60m in size. The trench was excavated through a depth of 0.90m of modern surface deposits (3401), directly beneath which a brick surface (3402) (Figure 90) was situated. The bricks were flat faced, measuring approximately 0.23m x 0.12m x 0.07m, and at least two were observed to be frogged. Although the bricks were roughly laid they presented a solid surface in the small area observed. This brick surface likely relates to the brick fragments observed in the Trench 33 extension, which was located approximately 8m to the south. The trench was not excavated beyond this horizon. This trench was excavated as a shot trench for the drilling rig.

6.2. *Plock Court Playing Fields*

6.2.1. *Trench 7*

This trench (Figure 28 and Figure 29) was located towards the eastern end of Plock Fields, close to the public car park. The trench was excavated prior to arrival on site and left open, and so had partially filled with rain water. The trench was excavated down through mid-grey-brown sandy silty topsoil (701) which measured approximately 0.26m in depth. Below the topsoil was a mid-beige-brown silty sandy subsoil horizon (702) that measured 0.50m in depth, at its maximum. Below this deposit was a mid-orangey-brown silty sand (703) which was visibly disturbed by root penetration, and appeared to be mixed with the natural substratum (704) below. No archaeological features were observed within this trench.

6.2.2. *Trench 8*

This trench (Figure 30 and Figure 31) was located at the western extent of Plock Field, close to the Tewkesbury Road. The trench was excavated down through grey-brown sandy silt topsoil (801) which measured approximately 0.30m in depth, below which was an orangey-brown sandy silt subsoil (802), measuring no greater than 0.60m deep. Below the subsoil was the reddish-orange-brown natural sand substratum (803). No archaeological features were observed within this trench.

6.2.3. *Trench 10*

This trench (Figure 34 and Figure 35) was located at the western extent of Plock Court field, close to the eastern end of the wetlands conservation area. The trench was excavated down through grey-brown clayey silt topsoil (1001) which measured approximately 0.30m in depth, below which was a slightly orangey-grey silty clay subsoil (1002), measuring no greater than 0.34m deep. Below the subsoil was the orangey-brown natural clay substratum (1003). No archaeological features were observed within this trench.

6.2.4. *Trench 11*

This trench (Figure 36 and Figure 37) was located at the western extent of Plock Court field, close to the north-eastern end of the wetlands conservation area. The trench was excavated down through dark grey-brown clayey silt topsoil (1101) which measured approximately 0.34m in depth, below which was a light grey-brown silty clay subsoil (1102), measuring no greater than 0.35m deep. Below the subsoil was the light orangey-grey natural clay substratum (1103). No archaeological features were observed within this trench.

6.2.5. *Trench 12*

This trench (Figure 38 and Figure 39) was located along the northern boundary of Plock Court field, close to the A40 dual carriageway. The trench was excavated down through dark grey-brown clayey sandy silt topsoil (1201) which measured approximately 0.25m in depth, below which was a mid-orangey-brown silty clay subsoil (1202), measuring no greater than 0.23m deep. Below the subsoil was a discontinuous dark grey sandy silt deposit (1203), which measured no greater than 0.13m in depth, and was probably the result of root disturbance. Situated beneath the discontinuous soil was the grey-green-brown natural clay substratum (1204). A single field drain running north to south was observed within this trench.

6.2.6. *Trench 13*

This trench (Figure 40 and Figure 41) was located along the northern boundary of Plock Court field, close to the Wotton Brook. The trench was excavated down through dark grey-brown sandy silt topsoil (1301) which measured approximately 0.45m in depth. The greater depth of topsoil at this location is likely to be the result of making ground, which has been landscaped to create a bank along the brook. Below the topsoil was a light orangey-brown clayey silt subsoil (1302), measuring no greater than 0.23m deep, that was quite diffuse at its base. Situated beneath the subsoil was an alluvial soil (1303) measuring approximately 0.55m in depth. This alluvial soil was likely to be the result of the proximity to the Wotton Brook. The light green-grey natural clay substratum (1304) was situated beneath the alluvial soil.

6.2.7. *Trench 14*

This trench (Figure 42 and Figure 43) was located along the northern boundary of Plock Court field, close to the Wotton Brook, and a small bridge that lead into a smaller area of the field to the north-east of the brook. The trench was excavated down through dark grey-brown sandy clayey silt topsoil (1401) which measured approximately 0.20m in depth, beneath which were three layers of probable ground make up: an orangey-brown sandy silt deposit (1402) which was approximately 0.20m in depth; a dark brown slightly sandy silt (1403) which was approximately 0.18m in depth; and a red-orangey-brown silty sand (1404) which contained a high percentage of gravel inclusions. A dark grey-brown clayey silt buried subsoil horizon (1405) measuring approximately 0.48m in depth was beneath the probable ground make up deposits, which overlay the natural light reddish-beige sand substratum (1406). The ground make up at this location, which is observable at surface level, appears to relate to the bridge crossing the Wotton Brook, which the ground level is raised to meet.

6.2.8. *Trench 32*

This trench (Figure 79, Figure 80, and Figure 81) was located to the north of the Wotton Brook, in a small annex to Plock Field, close to the A40 and Longford Lane. The trench measured 2.3m by 1.7m in size and was excavated whilst the drill head was in place. The trench was excavated through dark brown sandy clayey silt topsoil (3201) which was not greater than 0.22m in depth. A coarse gravelly subsoil (3202) was located beneath the topsoil, and measured approximately 0.56m in depth. Below the subsoil was a green-grey clay substratum (3203) which was presumed to be natural at this location. No archaeological features were observed within this trench.

6.2.9. *Trench 35*

This trench (Figure 91) was located to the north of the Wotton Brook, in a small annex to Plock Field, close to the A40 and Longford Lane. The trench, which measured 1.7m

by 3.2m in size, was excavated whilst the archaeologist was not present on site, and was shored with a trench box and sheeting prior to recording. The trench was recorded as found. From the small area of section that was visible between the sheeting, it was observed that the trench was excavated through approximately 0.40m of depth of topsoil (3501). An orangey brown subsoil (3502) measuring not greater than 1.40m in depth was observed beneath the topsoil. The sandy natural substratum (3503) was located directly beneath the subsoil.

6.2.10. Trench 38

This trench (Figure 100 and Figure 101) was located to the north of the Wotton Brook, in a small annex to Plock Field, close to the A40 and Longford Lane. The trench was mainly excavated whilst the archaeologist was not present on site. The trench, which measured 1.4m by 4m in size, was excavated down through a dark grey brown topsoil (3801) measuring 0.20m in depth. An orangey brown subsoil (3802) measuring not greater than 1.0m in depth was observed beneath the topsoil, with a 0.30m deep clay deposit (3803) beneath. The sandy natural substratum (3503) was located directly beneath the clay deposit. No archaeological features were observed.

6.2.11. Trench 41

This trench (Figure 105 and Figure 106) was located along the northern boundary of Plock Court field, close to the Wotton Brook, and a small bridge that lead into a smaller area of the field to the north-east of the brook. The trench was excavated down through dark brown clayey silt topsoil (4101) which measured approximately 0.46m in depth, beneath which were two layers of probable ground make up: a mid-brown sandy silt deposit (4102) which was approximately 0.40m in depth, and a darker mid-brown sandy clayey silt (4103) which was approximately 0.50m in depth which levelled out the drop in the natural down to the brook. Beneath the ground-levelling deposits was the natural substratum, comprising a coarse mid-orangey brown sand (4104). No archaeological features were observed.

6.3. Longford Lane

6.3.1. Trench 31

This trench (Figure 77 and Figure 78) was located in a small wooded area at the southern end of a cul-de-sac of Longford Lane, immediately to the north of the A40. The trench measured approximately 9.3m long by 0.40m in width, and was excavated through mid-dark-brown clayey silt topsoil (3101) which measured approximately 0.28m in depth. A discontinuous deposit of waste material (3102), containing bottles, plastic bags and other modern rubbish was located beneath the topsoil. Below this rubbish tip, an undisturbed reddish brown sandy silt subsoil (3103) was observed. The trench was not excavated beyond this soil horizon, and no archaeological features were observed. This trench was excavated to locate the depth of known services at this location.

6.3.2. Trench 36

This trench (Figure 92, Figure 93, Figure 94, Figure 95, Figure 96, and Figure 97) was located in a small wooded area at the southern end of a cul-de-sac of Longford Lane, immediately to the north of the A40. The trench was irregular in shape due to repeated extensions and comprised various dimensions. The trench was generally excavated down through dark-brown clayey silt topsoil (3601) which measured approximately 0.35m in depth towards the southern end, and approximately 0.28m in depth towards the north. A mid-brown silty subsoil (3602) measuring 0.45m in depth was observed below the

topsoil, beneath which was a compact and dry light beige/reddish brown sandy silt (3603) which measured approximately 0.90m in depth. The natural sand substrate (3604) was observed below. No archaeological features were observed.

6.3.3. Trench 37

This trench (Figure 98 and Figure 99), which measured 2.7m by 2.9m in size was located along the cul-de-sac of Longford Lane, and was excavated down through approximately 0.36m depth of tarmac and hardcore (3701). Situated below the modern road surface was a very compacted probable buried topsoil (3702) which measured approximately 0.10m in depth. A discreet spread of brick debris (3703) measuring no greater than 0.18m in depth, was sealed beneath the topsoil, and probably represented a ground levelling event as it existed within a slight depression in the dark reddish-brown clayey silt (3704) beneath. A coarse sandy silt (3705) was situated directly above the clean natural sand substratum (3706). No archaeological features were observed.

6.3.4. Trench 39

This trench (Figure 102 and Figure 103), which measured 2.7m by 3.1m in size, was located along the cul-de-sac of Longford Lane, towards the wooded end, and was excavated down through approximately 0.46m depth of modern road surface (3901). Below the modern road surface was a very compacted probable buried topsoil (3902) which measured approximately 0.56m in depth. A very compacted probable buried subsoil measuring 1.59m in depth with situated beneath the topsoil, and above the coarse natural sand substratum (3904). No archaeological features were observed.

6.3.5. Trench 40

This trench (Figure 104) was located along an unnamed road which branches off of Longford Lane towards a water treatment plant. The trench measured 1.4m by 3.6m in size, and was excavated whilst the archaeologist was not present on site, and was shored with a trench box and sheeting prior to recording. The trench was recorded as found.

6.3.6. Trench 42

This trench (Figure 107) was located along an unnamed road which branches off of Longford Lane towards a water treatment plant. The trench measured 1.4m by 3.6m in size, and was excavated whilst the archaeologist was not present on site, and was shored with a trench box and sheeting prior to recording. The trench was recorded as found.

6.3.7. Trench 43

This trench (Figure 108 and Figure 109) was located along an unnamed road which branches off of Longford Lane towards a water treatment plant, and measured 1.6m by 3m in size. This trench was excavated in order to free the drill head which had become stuck in the coarse natural substratum. The trench was excavated down through approximately 0.50m of depth of dark brown topsoil (4301), which was situated atop a mid-orangey brown sandy silt subsoil (4302) measuring 0.80m in depth. A discontinuous deposit (4303) which contained quartz like stone and shells was situated beneath the subsoil, and was very diffuse towards the base of the deposit, which measured 0.12m in depth at its maximum. Below the quartz and shell deposit was a mid-brown silt measuring 0.25m in depth, which may have represented a silting event that may have been related to the discontinuous deposit directly above it. The natural sand substratum (4305) was observed beneath the silt deposit.

6.3.8. *Trench 44*

This trench (Figure 110 and Figure 111) was located along an unnamed road which branches off of Longford Lane towards a water treatment plant, and measured 1.8m by 3.2m in size. The trench was excavated down through 0.50m of depth of topsoil (4401) which was mixed with modern brick waste and hardcore material to form a hard-standing access to a field gate. A silty sand subsoil measuring 1.10m in depth was observed below the topsoil which was disrupted by tree root penetration towards its upper surface. The natural sand substratum (4403) was situated directly beneath the subsoil. No archaeological features were observed.

6.3.9. *Trench 45*

This trench (Figure 112, Figure 113, and Figure 114) was located in a field adjoining the unnamed road which branches off of Longford Lane towards a water treatment plant, and measured 4m by 5m in size. The trench was excavated down through approximately 0.50m of depth of dark grey-brown topsoil (4501), continuing through 0.40m of sandy silt subsoil (4502), to the mixed clay natural substratum (4503) below. A small pit feature (F4504) was cut into the natural substrate, and was sealed by the subsoil. The pit measured 0.60m x 0.71m by 0.20m in depth, and comprised a reddish-orange-brown fill (4504), which was situated atop a dark grey-black silty clay (4505), which may have been ash mixed with clay. There was no evidence of *in-situ* burning. The cut was steep sided with a slightly uneven base. Conditions during excavation were particularly poor, with driving rain saturating the already muddy ground. No archaeological artefacts were recovered.

6.3.10. *Trench 46*

This trench (Figure 115) was located in a field adjoining the unnamed road which branches off of Longford Lane towards a water treatment plant. The trench measured approximately 1.8m by 4m in size and was excavated whilst the archaeologist was not present on site, and was shored with a trench box prior to recording. The trench was recorded as found.

6.3.11. *Trench 47*

This trench (Figure 116 and Figure 117) was located at the northern end of a field adjoining the unnamed road which branches off of Longford Lane, close to the Horsebere Brook, and originally measured 4m by 4m in size. This part of the trench was excavated whilst the archaeologist was not on site, however, a 3m long extension was dug whilst the archaeologist was present and so was recorded prior to the installation of the trench box. The trench was excavated down through approximately 0.30m of depth of dark brown topsoil (4701), which was situated atop a light-beige-brown silty clay subsoil (4702) measuring 1.10m in depth. This subsoil was diffuse at both its upper and lower interfaces. Below the subsoil the natural clay substrate (4703) was observed. No archaeological features were observed.

6.3.12. *Trench 48*

This trench (Figure 118) was located in the central area of the field adjoining the unnamed road which branches off of Longford Lane, and measured 5m by 4m in size. The trench was excavated whilst the archaeologist was not present on site, and was shored with a trench box and sheeting prior to recording. The trench was recorded as found.

7. Discussion

7.1. A total of forty-eight trenches were recorded during the course of the watching brief, many of which were archaeologically sterile, although several trenches presented archaeological features which are discussed below. A number of trenches were excavated and shored with trench boxes and sheeting whilst the archaeologist was not present on site, and in those instances the trenches were recorded as found. However, very little could be said as to their contents, due to the visual limitations imposed by the safety shoring.

7.2. Probable Roman road surface

7.2.1. At various locations along Tewkesbury Road, and at a depth of between 0.90m and 1.32m, a compacted metalled surface was observed, comprising small rounded pebbles pressed into a clayey silty deposit overlaying the natural substrate. This surface was interpreted as a probable Roman road which was known from previous works (ARS 2013, 10) to be near, or at this location. The modern road, towards its southern, end overlaid and followed the orientation of the Roman surface.

7.2.2. The furthest trench in which the probable Roman road surface was observed was Trench 9, after which the alignment of Tewkesbury Road reoriented marginally towards the northwest. This may suggest that the Roman surface survives to the east of Tewkesbury Road beneath the pavement, or further to the north, residential house gardens.

7.2.3. In Trench 6 a singular depression which was interpreted as a wheel rut, which followed the orientation of the road, was observed pressed into the pebbled surface. The pebbles within the rut were very compacted and worn, and this would seem to suggest a reasonable length of use of this thoroughfare.

7.2.4. A soil deposit which appears to have built up over the Roman road surface suggests that the road fell out of use for a period of time before re-use in the post-medieval period. A post-Roman trackway along the same orientation may have existed, but no evidence of this remains.

7.3. Probable post-medieval turnpike surface

7.3.1. Along the length of Tewkesbury Road, at a depth of between 0.50m and 0.90m, a compact stone surface comprising large cobbles and stones was encountered. This surface was interpreted as a post-medieval turnpike which is known at this location from previous works (ARS 2013, 11). The turnpike was well constructed and compact, providing a good solid surface, which was pressed into a layer of clay directly beneath. The clay was interpreted as having been deposited for the purpose of providing a bedding foundation for the road surface. It was difficult to determine if the use of sand to create a level surface in certain areas of the clay foundation was due to an uneven distribution of the clay when laid, or represented an area of repair where the road surface may have become depressed over time.

7.3.2. The furthest trench in which the turnpike road was observed was Trench 24, located toward the northern end of Tewkesbury Road. The road widens at this location, and as the sewer trenches were placed along the east side of the road they may have been out of alignment with the turnpike which could explain why it was not observed any further north.

7.4. The modern road surface overlays a long tradition of thoroughfare at this location, dating back to at least the Roman period. If an earlier pre-Roman trackway existed, no evidence was discovered, similarly with the post-Roman period until the construction of the post-medieval turnpike. It is not beyond the realms of probability to suggest a trackway existed along the same route after the Roman road appears to have fallen out of use, and this suggestion may be supported by the conspicuously similar orientation of the later turnpike. The turnpike surface appears to have continued in use directly up until the earliest modern surface was constructed.

7.5. *Brick built culvert*

7.5.1. A well-constructed arched culvert was recorded in Trench 27 at a depth of 1.2m beneath the modern road surface. The culvert was orientated in a roughly north to south direction and was constructed of brick. Internally, the culvert was extremely silted up and was obviously no longer in use. The trench cut for the culvert was backfilled with soil containing waste material which dated to the later 19th century, which suggests a possible date for the culvert itself. The culvert represented a drainage system of some function, but it was impossible to ascertain any relationships with the surroundings.

7.6. *Pit feature*

7.6.1. A small pit measuring 0.60m x 0.71m by 0.20m in depth was observed in Trench 45, which was located in the field to the south of the water treatment plant, in an area where known cropmarks have indicated the probable survival of archaeological features. The lower fill of the pit was very dark and may have been a mixture of ash and clay, but due to weather conditions during excavation it was very difficult to ascertain for certain. There was, however, no evidence of *in-situ* burning within or around the feature.

7.6.2. The pit may relate to the features that are responsible for the crop-marks in the field, but as no artefacts were recovered during excavation of the feature, and no other features were encountered in the excavated area, at this time little more can be written.

8. Publicity, Confidentiality and Copyright

8.1. Any publicity will be handled by the client.

8.2. Archaeological Research Services Ltd will retain the copyright of all documentary and photographic material under the Copyright, Designs and Patent Act (1988).

9. Statement of Indemnity

9.1. All statements and opinions contained within this report arising from the works undertaken are offered in good faith and compiled according to professional standards. No responsibility can be accepted by the author/s of the report for any errors of fact or opinion resulting from data supplied by any third party, or for loss or other consequence arising from decisions or actions made upon the basis of facts or opinions expressed in any such report(s), howsoever such facts and opinions may have been derived.

10. Acknowledgements

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11. References

Archaeological Research Services (ARS). 2013. *An Archaeological Desk-Based Assessment of the Longford Rising Main, Gloucester*. Unpublished report.

British Geological Survey. 2012. Geology of Britain Viewer [online]. Available at: <http://www.bgs.ac.uk/discoveringGeology/geologyOfBritain/viewer.html?src=topNav> [Accessed 14th January 2014].

Department for Communities and Local Government. 2012. *National Planning Policy Framework*. Available online at: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/6077/2116950.pdf [Accessed 14th January 2014].

Institute of Field Archaeologists (IfA). 2008. *Standard and Guidance for an Archaeological Watching Brief*. Available online at: http://www.archaeologists.net/sites/default/files/node-files/ifa_standards_watching.pdf [Accessed August 2013].

Institute of Field Archaeologists. 2012. *Code of Conduct*. Reading, Institute for Archaeologists.

Margary, I.D. 1967. *Roman Roads in Britain*.

Museum of London Archaeological Services (MoLAS). 2002. *Site Manual*. London, Museum of London.

Appendix 1. Figures

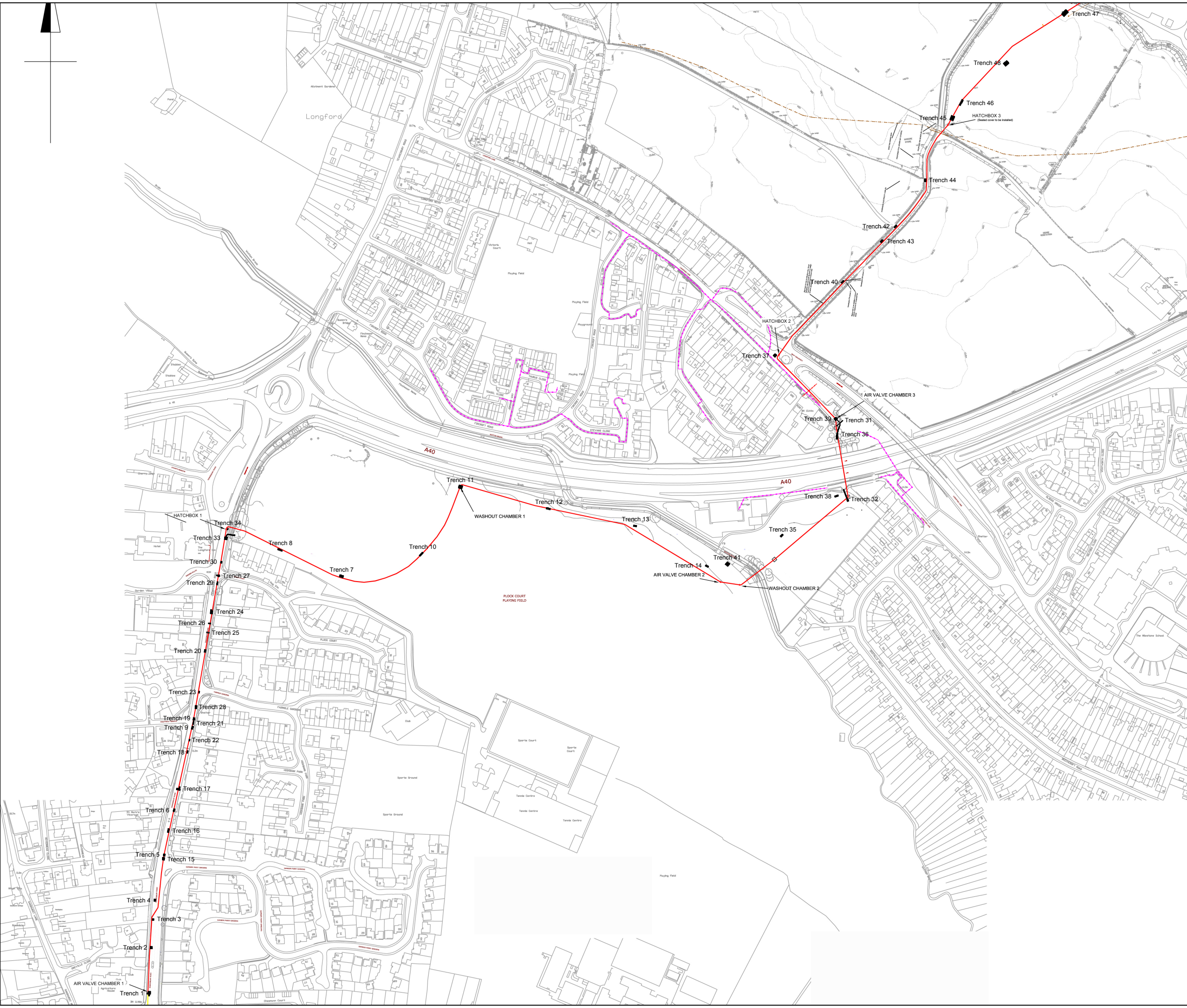


Figure 2. General trench location plan.

Scale: 1:4250 at A3

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Figure 3. Trench locations along
Tewkesbury Road

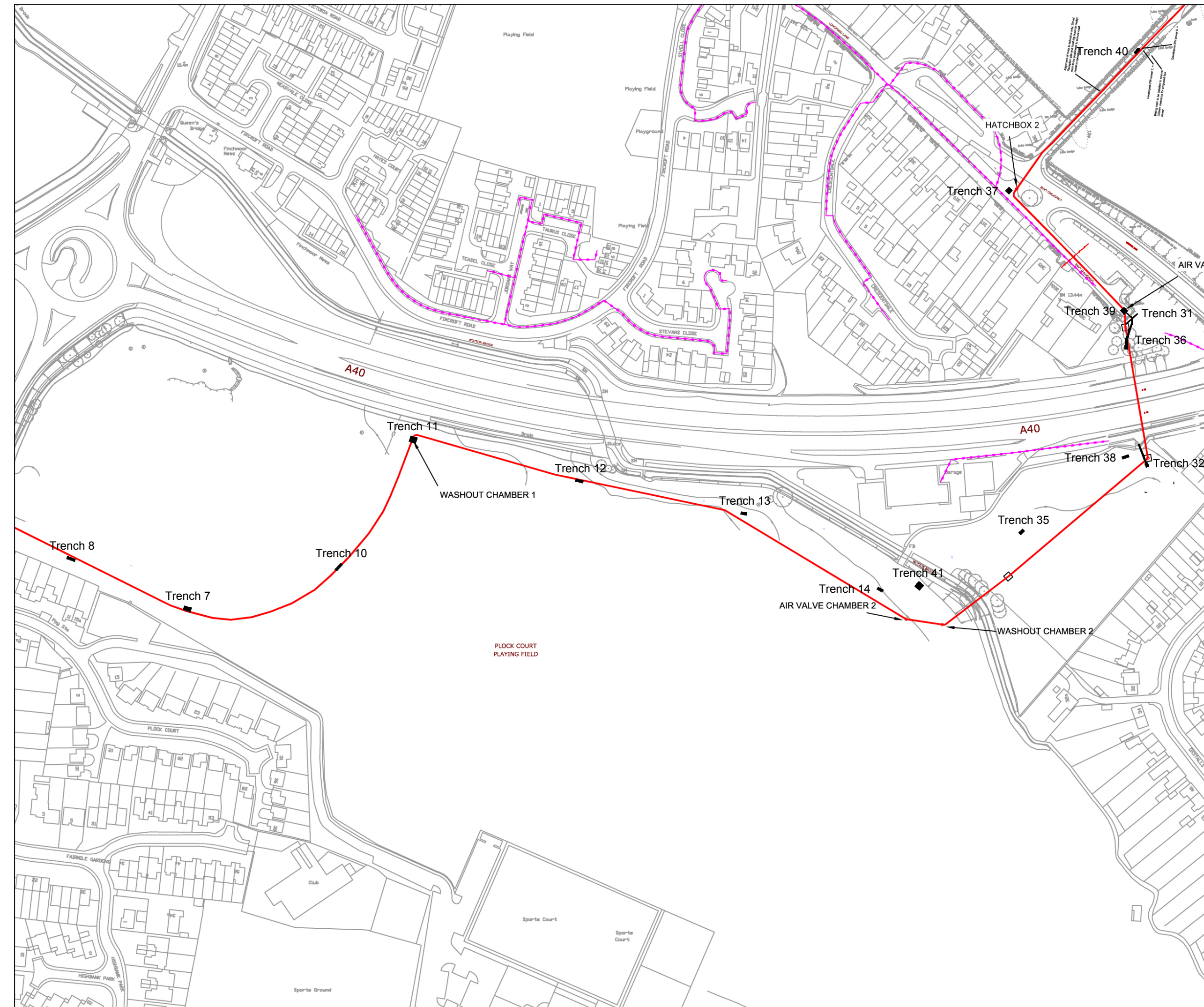
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Figure 4. Trench locations, Plock Court
Playing Field

Scale: 1:2250 at A3



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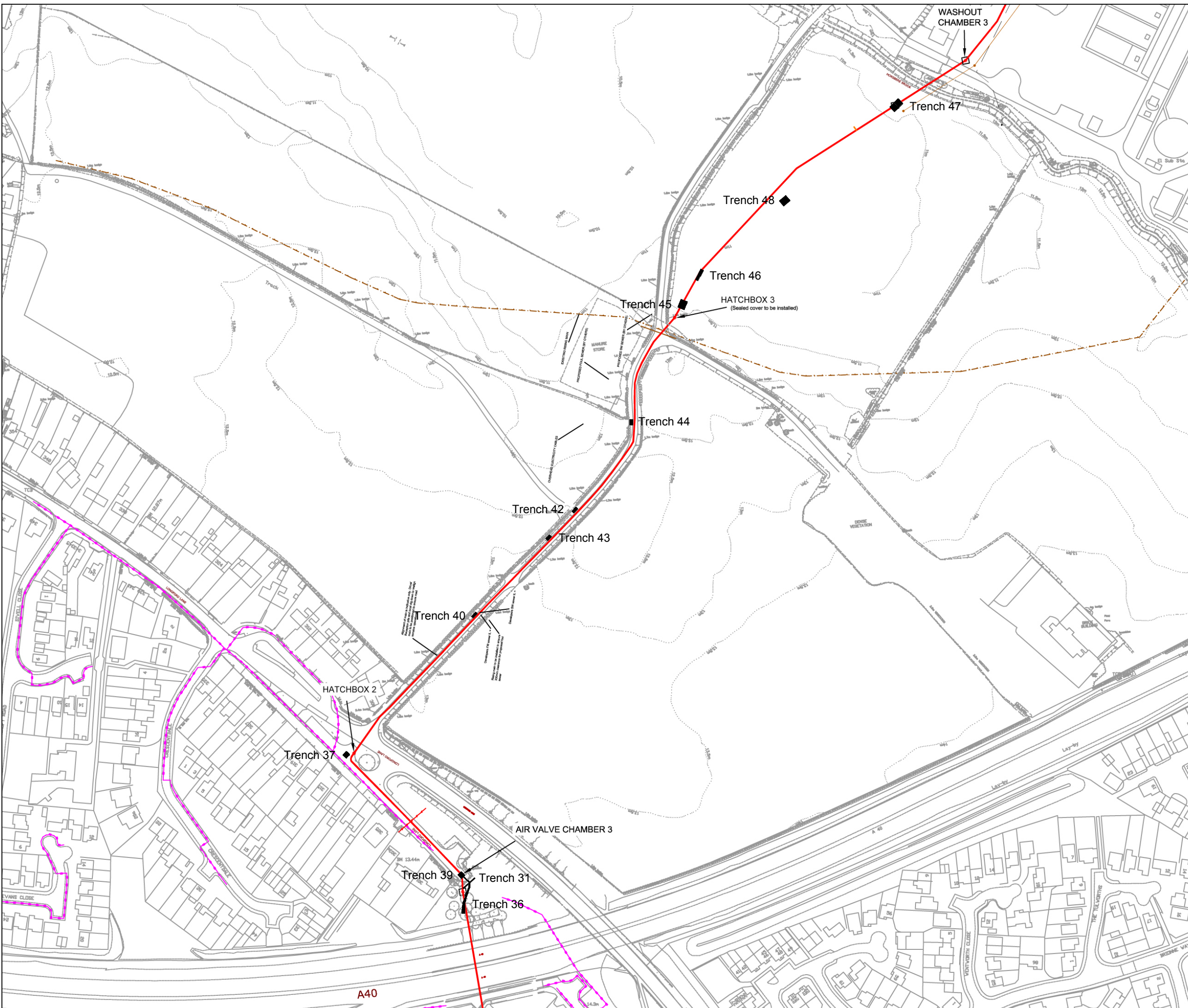
Figure 5. Trench locations along Longford Lane

Scale: 1:2250 at A3

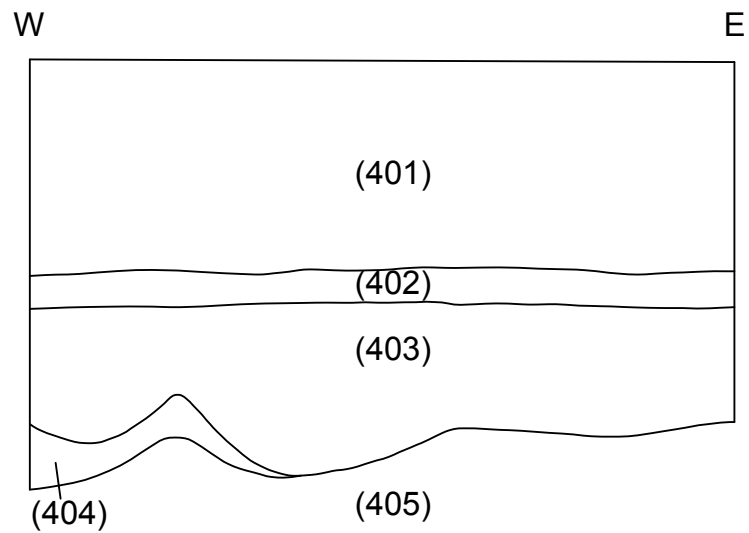


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South facing section



North facing section

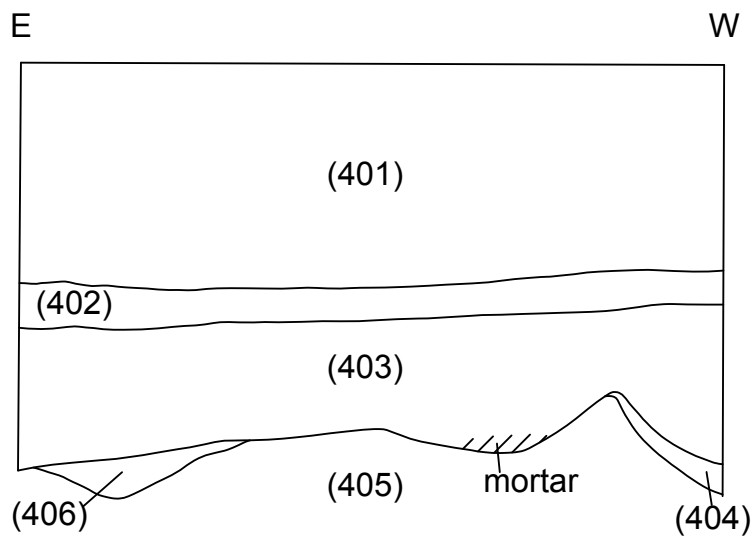


Figure 6. Trench 4 sections
Scale: 1:20 at A4

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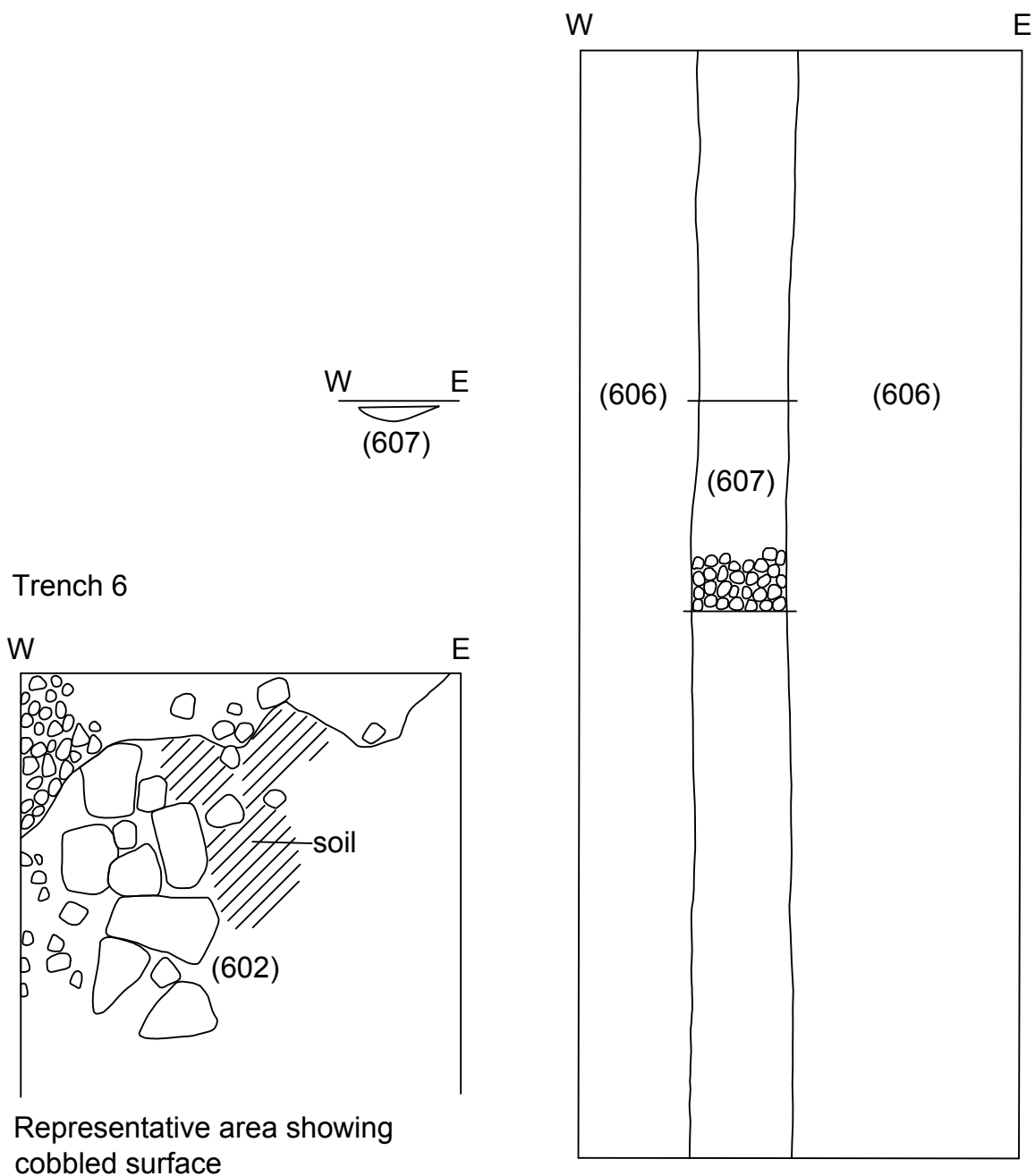


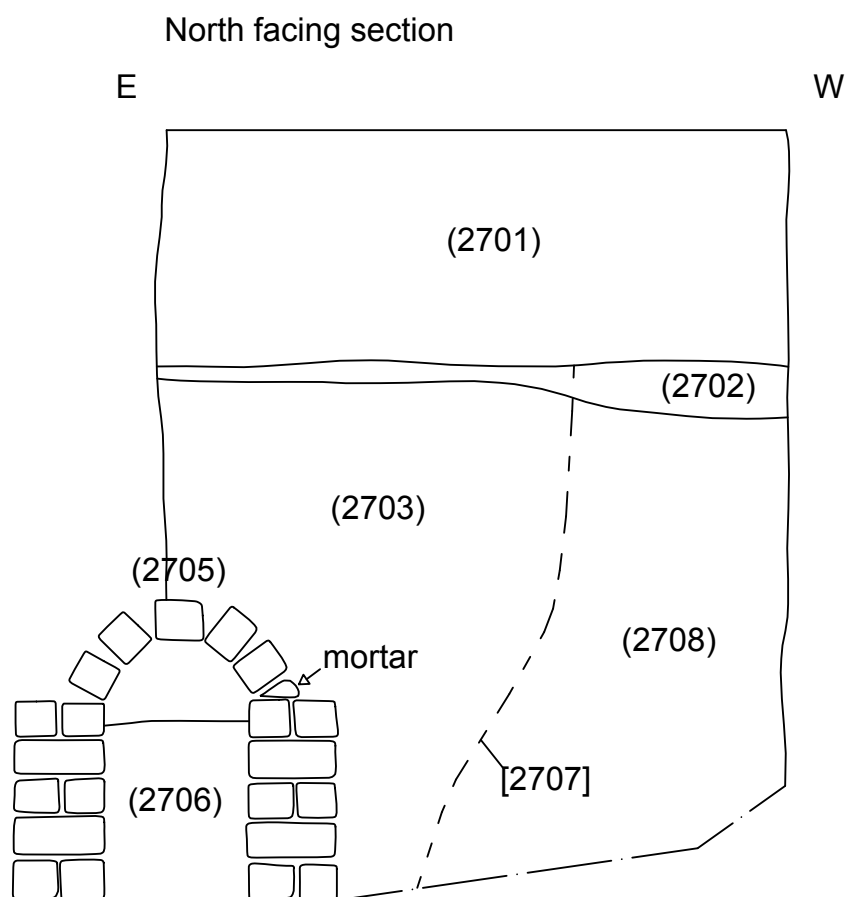
Figure 7. Trench 6 plans and feature (607) section.
Scale: 1:20 at A4

Key:

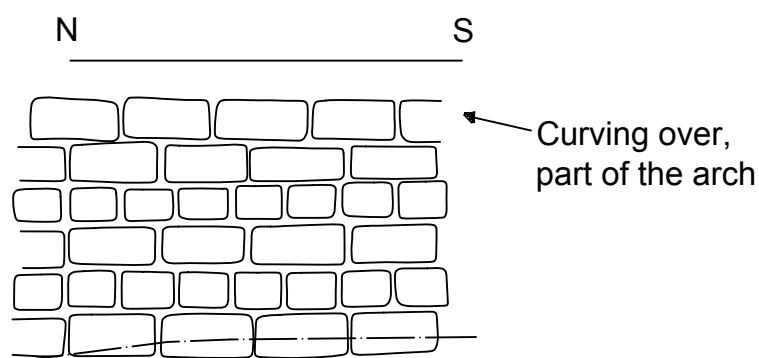


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(2705) Elevation



metres 0 0.5 1

A scale bar with markings for 0, 0.5, and 1 metre.

Figure 8. Trench 27 section and feature (2705) elevation.
Scale: 1:20 at A4

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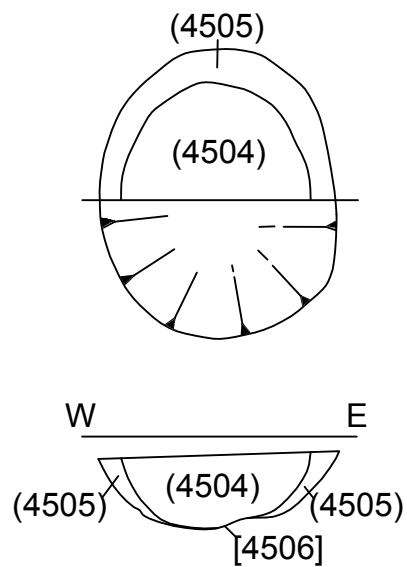


Figure 9. Feature (4504) plan and section

Scale: 1:20 at A4

Key:



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Figure 10. Trench 1 plan, already sheeted, facing south. Scale = 1m.



Figure 11. Trench 1a plan, facing north. Scale = 2m.



Figure 12. Trench 1a section, facing east. Scale = 2m.



Figure 13. Feature (105), probable Roman road. Scale = 1m.

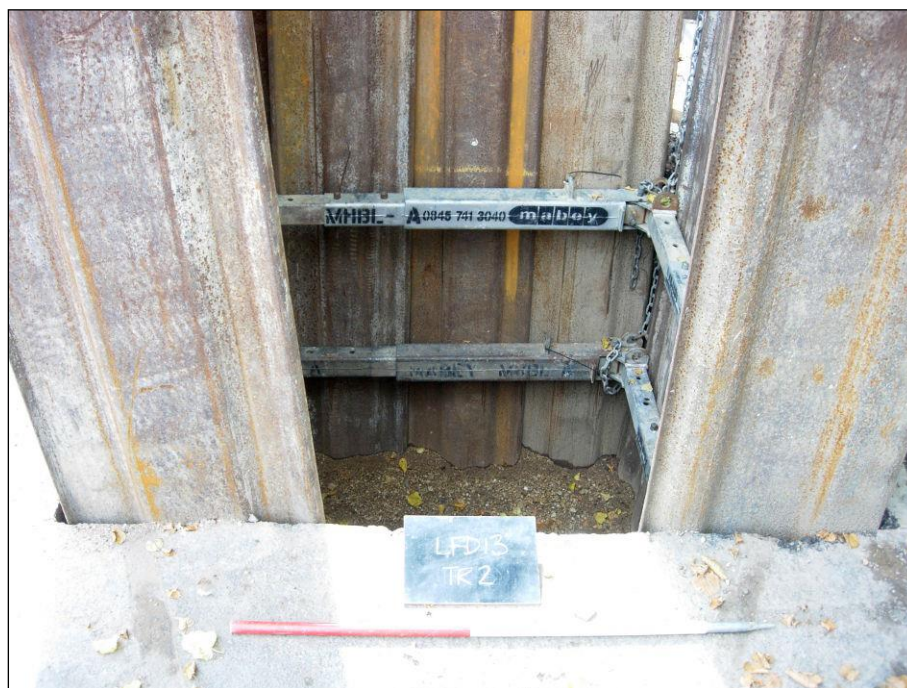


Figure 14. Trench 2 plan, already sheeted, facing south. Scale = 1m.



Figure 15. Trench 3 plan, already backfilled, facing north. Scale = 1m.



Figure 16. Trench 4 plan, facing north. Scale = 1m.



Figure 17. Trench 4 section, facing west. Scale = 1m.



Figure 18. Feature (404), probable Roman road surface, facing west. Scale = 0.25m.



Figure 19. Trench 4a plan, facing north. Scale = 1m.



Figure 20. Trench 4a section, facing west. Scale = 1m.



Figure 21. Trench 5 plan, facing north. Scale = 2m and 1m.



Figure 22. Trench 5 section, facing east. Scale = 1m.



Figure 23. Trench 6 plan, facing south. Scale = 2m.

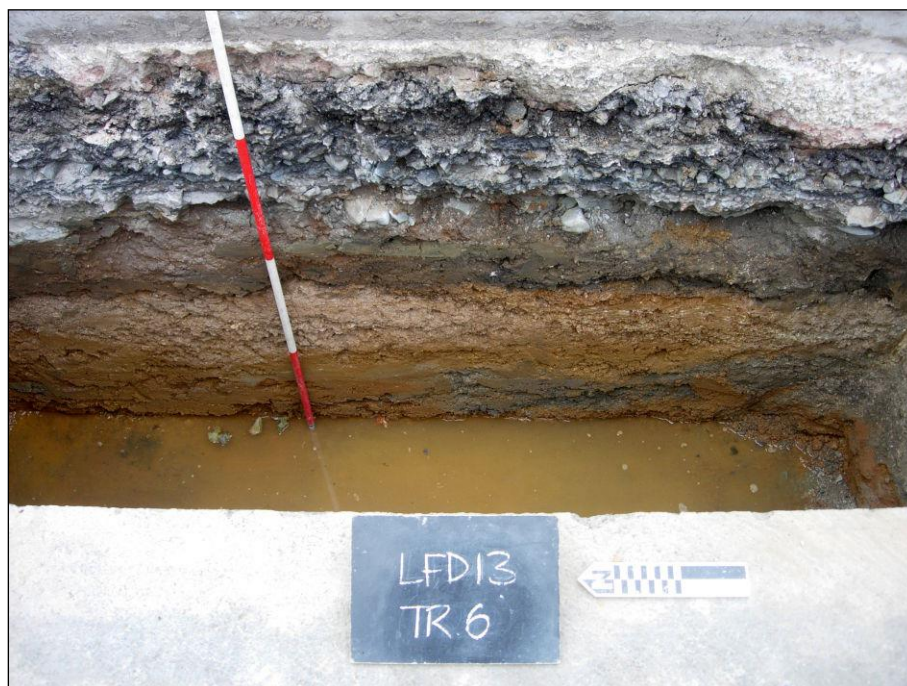


Figure 24. Trench 6 section, facing east. Scale = 2m.



Figure 25. Feature (602), probable post-medieval turnpike surface. Scale = 2m.



Figure 26. Feature (606), probable Roman road surface. Scale = 2m.



Figure 27. Feature (607), wheel rut in Roman road. Scale = 0.25m.



Figure 28. Trench 7 plan, facing east. Scale = 2m.



Figure 29. Trench 7 section, facing south. Scale = 2m and 1m.



Figure 30. Trench 8 plan, facing east. Scale = 2m.



Figure 31. Trench 8 section, facing south. Scale = 2m.



Figure 32. Trench 9 plan, facing north. Scale = 2m.

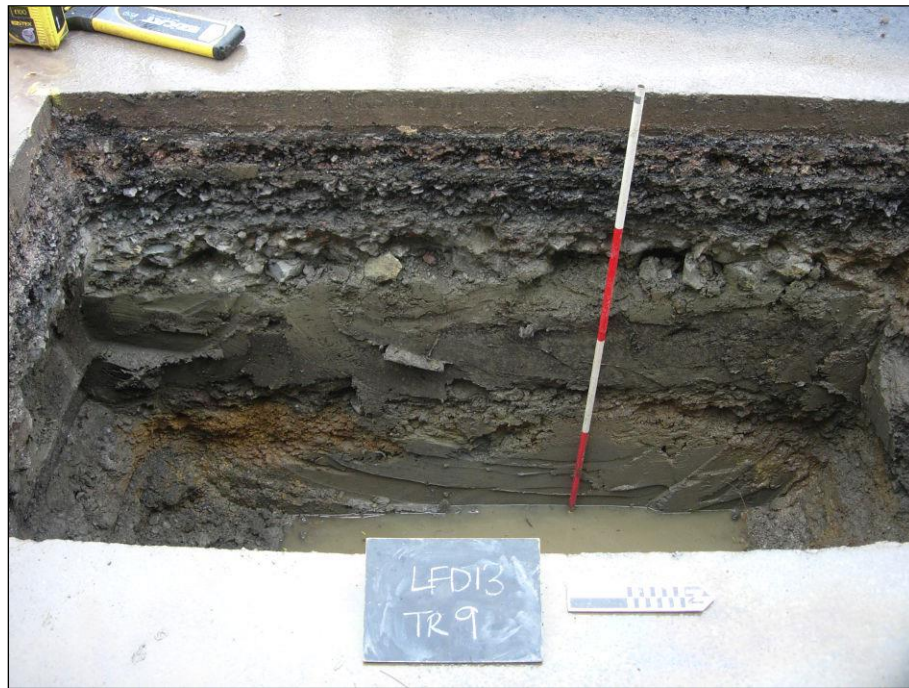


Figure 33. Trench 9 section, facing west. Scale = 2m.



Figure 34. Trench 10 plan, facing north. Scale = 2m.



Figure 35. Trench 10 section, facing east. Scale = 2m.



Figure 36. Trench 11 plan, facing east. Scale = 2m.



Figure 37. Trench 11 section, facing east. Scale = 2m.



Figure 38. Trench 12 plan, facing north-west. Scale = 2m.



Figure 39. Trench 12 section, facing north. Scale = 1m.



Figure 40. Trench 13 plan, facing south-east. Scale = 2m.



Figure 41. Trench 13 section, facing south-west. Scale = 2m.



Figure 42. Trench 14 plan, facing east. Scale = 2m.



Figure 43. Trench 14 section, facing north. Scale = 2m.



Figure 44. Trench 15 plan, already backfilled, facing north. Scale = 2m.



Figure 45. Trench 16, already boxed and sheeted, facing south. Scale = 1m.



Figure 46. Trench 17 plan, facing south. Scale = 2m.



Figure 47. Trench 17 section, facing north. Scale = 1m.



Figure 48. Trench 18 plan, facing south. Scale = 2m.



Figure 49. Trench 18 section, facing west. Scale = 1m.



Figure 50. Trench 19 plan, facing south. Scale = 2m.



Figure 51. Trench 19 section, facing west. Scale = 1m.



Figure 52. Trench 20 plan, facing south. Scale = 2m.



Figure 53. Trench 20 section, facing east. Scale = 1m.



Figure 54. Feature (2002), probable post-medieval turnpike. Scale = 1m.



Figure 55. Trench 21 plan, facing south. Scale = 2m.



Figure 56. Trench 21 section, facing east. Scale = 1m.



Figure 57. Trench 22 plan, facing south. Scale = 2m.



Figure 58. Trench 22 section, facing east. Scale = 1m.



Figure 59. Trench 23 plan, facing north. Scale = 1m.



Figure 60. Trench 23 section, facing west. Scale = 1m.



Figure 61. Trench 24 plan, facing south. Scale = 2m.



Figure 62. Trench 24 section, facing west. Scale = 2m.



Figure 63. Trench 25 plan, facing west. Scale = 2m.



Figure 64. Trench 25 section, facing south. Scale = 1m.



Figure 65. Trench 26 plan, facing west. Scale = 2m.



Figure 66. Trench 26 section, facing north. Scale = 1m.



Figure 67. Trench 27 plan, facing south. Scale = 2m.



Figure 68. Trench 27 section, facing east. Scale = 2m.



Figure 69. Trench 27 extension, facing west. Scale = 2m.



Figure 70. Feature (2705), arched brick culvert, facing east. Scale = 1m.



Figure 71. Feature (2705), arched brick culvert, facing south. Scale = 1m.



Figure 72. Trench 28 plan, already boxed, facing north.



Figure 73. Trench 29 plan, facing south. Scale = 2m.



Figure 74. Trench 29 section, facing west. Scale = 2m.



Figure 75. Trench 30 plan, facing south. Scale = 2m.

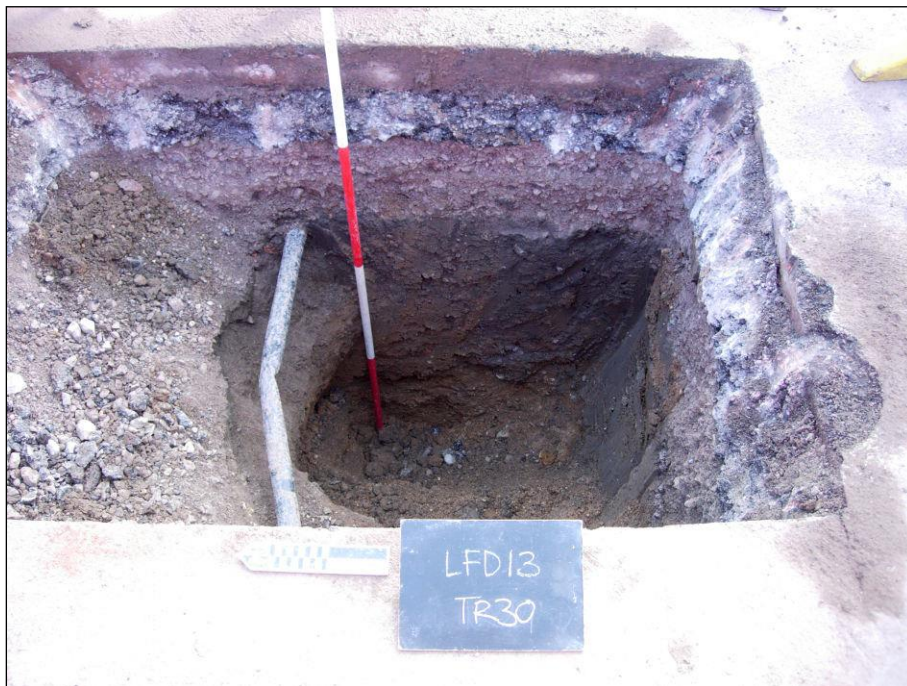


Figure 76. Trench 30 section, facing east. Scale = 2m.



Figure 77. Trench 31 plan, facing west. Scale = 2m.



Figure 78. Trench 31 section, facing north. Scale = 1m.



Figure 79. Trench 32 plan with extension, facing north-west. Scale = 2m.



Figure 80. Trench 32 section, facing east. Scale = 1m.



Figure 81. Trench 32 section, extension, facing north-east. Scale = 2m.



Figure 82. Trench 33 plan, facing north. Scale = 2m.



Figure 83. Trench 33 section, facing east. Scale = 2m.



Figure 84. Trench 33 plan, extension across pavement, facing east. Scale = 2m.



Figure 85. Trench 33 section, extension across pavement, facing south. Scale = 2m.



Figure 86. Trench 33 extension into verge, facing west. Scale = 2m.



Figure 87. Trench 33 section, extension into verge, facing north. Scale = 2m.



Figure 88. Trench 34 plan, facing south. Scale = 1m.



Figure 89. Trench 34 section, facing east. Scale = 1m.



Figure 90. Feature (3402), brick and rubble surface. Scale = 1m.



Figure 91. Trench 35, already boxed and sheeted. Scale = 2m.



Figure 92. Trench 36 plan south, facing north. Scale = 2m.



Figure 93. Trench 36 section south, facing west. Scale = 2m.



Figure 94. Trench 36 plan north, facing north-east. Scale = 2m.



Figure 95. Trench 36 section north, facing north-west. Scale = 2m.



Figure 96. Trench 36 plan, extension north, facing north-west. Scale = 2m.



Figure 97. Trench 36 section, extension north, facing south-west. Scale = 2m.



Figure 98. Trench 37 plan, facing north-west. Scale = 2m.



Figure 99. Trench 37 section, facing north-west. Scale = 2m.



Figure 100. Trench 38 plan, facing west. Scale = 2m.



Figure 101. Trench 38 section, facing north-west. Scale = 2m.



Figure 102. Trench 39 plan, facing south-east. Scale = 2m.



Figure 103. Trench 39 section, facing north-east. Scale = 2m.



Figure 104. Trench 40, already boxed, facing north-east.



Figure 105. Trench 41 plan, facing north-west. Scale = 2m by 2m.



Figure 106. Trench 41 section, facing north-west. Scale = 2m.



Figure 107. Trench 42, already boxed and sheeted. Scale = 1m.



Figure 108. Trench 43 plan, facing south-west. Scale = 2m.



Figure 109. Trench 43 section, facing north-west. Scale = 2m.



Figure 110. Trench 44 plan, facing north. Scale = 2m.



Figure 111. Trench 44 section, facing west. Scale = 2m.



Figure 112. Trench 45 plan, facing south-west. Scale = 2m by 2m.



Figure 113. Trench 45 section, facing east. Scale = 1m.



Figure 114. Feature (4504), small pit within Trench 45. Scale = 1m.



Figure 115. Trench 46 plan, already boxed. Scale = 2m.



Figure 116. Trench 47 plan, already boxed. Scale = 2m.



Figure 117. Trench 47 section. Scale = 2m.



Figure 118. Trench 48 plan, already boxed.

Appendix 2. Specification



Longford Rising Main, Gloucester

Written Scheme of Investigation for an Archaeological Watching Brief

August 2013

Compiled By:

Robin Holgate MIfA
Archaeological Research Services Ltd
Angel House,
Portland Square,
Bakewell
DE45 1HB
Tel: 01629 814540

Scott Williams MIfA
Archaeological Research Services Ltd
23 Hawthorn Way, Stoke Gifford,
Bristol, South Gloucestershire
BS34 8UP
Tel: 0117 9792018

admin@archaeologicalresearchservices.com

www.archaeologicalresearchservices.com

1. INTRODUCTION

1.1 This Written Scheme of Investigation (WSI) has been prepared by Archaeological Research Services Ltd (ARS Ltd) for NMC Nomenca, on behalf of Severn Trent Water. It provides a WSI for an archaeological watching brief (hereafter 'WB') for the installation of a new rising main sewer pipe as part of the Longford and Innsworth Sewer Requisition Scheme.

1.2 The proposed new sewer (see *Figure 1*) follows a linear route northwards along Tewkesbury Road on the north side of Gloucester city centre, eastwards across Plock Court playing field, heading east alongside the A40 up to Longford Lane, departing from Longford Lane across the fields to just beyond the Horsbere Brook and terminating at the Innsworth Water Reclamation Works. The southern section of the sewer route is within the City of Gloucester, whilst that to the north of the A40 is situated within the Parishes of Longford and Innsworth which are outside the City boundary and under the jurisdiction of Tewkesbury Borough Council.

1.3 The proposed new sewer is to be inserted using direct drilling techniques, and this will help to minimize impacts to archaeological deposits. However, 19 reception/drive pits will also be required to be excavated to enable the directional drilling to take place, and these have the potential to impact upon archaeological deposits to a depth of c.2.5m. Consequently, GCC's Senior Archaeological Officer and the Gloucester City Archaeologist have requested that a desk-based assessment be undertaken in advance of any groundworks to assess the potential archaeological impact and an archaeological watching brief be undertaken when the reception/drive pits are excavated. This WSI is for the archaeological watching brief; a separate WSI has been produced to cover the desk-based assessment.

2. ARCHAEOLOGICAL BACKGROUND

2.1 The project traverses an area rich in archaeological remains. The southern stretch of the pipeline follows the line of Tewkesbury Road which fossilizes the course of the Roman road from Gloucester to Worcester and on to Methley (Margary 180). Excavations a short distance to the west of this road on Sandhurst Lane (Site Code 4/89) recorded a stone-lined feature of Late Iron Age date and early Roman boundary ditches, c.20m from the line of the proposed new sewer. To the east of the Roman road, excavations during redevelopment at the former Gambier Parry Lodge site in the 1980s recorded an extensive Roman cemetery containing an estimated 2000 interments (Site Code 9/83).

2.2 Excavations further to the north along the Roman road (Site Code 8/87) have recorded two successive road metallings at a depth of c.1m below ground level overlying 1st century pottery, attesting to the likely survival of buried structural elements relating to the Roman road along the course of the proposed sewer. A pipe trench excavated further to the north along the edge of Plock Court playing field (Site Code 8/83) also produced a Roman tankard sherd, and a Roman burial was discovered in 1967 in the garden of a house at Longford towards the northern end of the sewer route (NMR SO 82 SW 8). A cropmark of a rectilinear enclosure of possible Iron Age or Roman-British date has also been recorded through aerial photography in the vicinity of the route of the

sewer to the east of Longford (NMR SO 82 SW 20), indicating that Roman or earlier remains could be expected anywhere along the route of the proposed sewer.

3. SCOPE OF THE PROJECT

3.1 Objectives

The objective of the WB is to ensure that any archaeological features encountered during the ground works in the specified area as outlined in the desk-based assessment are recorded and interpreted.

3.2 Methodology

3.2.1 All relevant ground works will be undertaken by a suitable mechanical excavator fitted with a toothless ditching bucket or by hand once any overburden has been removed. Archaeological monitoring will not entail excavation beyond the total areas exposed by the development works. Arrangement will be made to avoid any tracking of machinery across recently stripped areas until the areas have been checked and cleared by a representative of Archaeological Research Services Ltd (ARS Ltd). If significant archaeological features are identified, both the City Archaeologist at Gloucester City Council and the Gloucestershire County Council Archaeologist will be notified and a decision taken as to the best method of proceeding.

3.2.2 ARS Ltd will provide a suitably qualified archaeologist during any ground works on the site to undertake a watching brief. The on-site archaeologist will be given the opportunity to stop site work in order to investigate potential archaeological features and adequate time will be allowed for recording any such features.

3.2.3 A written, drawn and photographic record will be maintained during the watching brief plus all significant archaeological remains will be recorded and/or retrieved. All excavations will be recorded in accordance with normal principles of archaeological evaluation upon pro forma context sheets. All significant architectural features will be photographed (with scale) *in situ* and their location recorded on a plan of the site.

3.2.4 Where archaeological features and/or deposits are identified during the watching brief, then a sufficient quantity of the said features will be investigated by hand to allow their date, nature and degree of survival to be ascribed. All features thus investigated will be recorded in plan and section and significant archaeological finds recovered will be retained for analysis. Any archaeological features identified will be photographed and drawn in plan at a scale of 1:20 and in section at a scale of 1:10. The stratigraphy, where relevant and apparent, will be recorded.

3.2.5 For brick structures, the record will include details of brick dimensions and type (handmade/machine-made, plain/frogged), mortar (colour, composition, hardness) and the extent of structures (number of courses, thickness in skins).

3.2.6 A plan of the excavated areas will be maintained, features noted and section lines recorded. All drawings will be carried out at an appropriate scale and all contexts will be recorded using a single context recording system. The site archive will include plans and sections at an appropriate scale, a scale photographic record, and full stratigraphic records on recording forms/context sheets or their electronic equivalent. Should archaeological features be present then the locations and height AOD of the features will be accurately fixed, surveying in either the planning baselines or the features themselves.

3.2.7 The watching brief will be undertaken in accordance with the Institute for Archaeologists' *Standards and Guidelines for Archaeological Watching Briefs* (2008) and *Code of Conduct* (2012). The records will follow standard conventions set by the Museum of London Archaeological Services (MoLAS) (2002).

3.2.8 In the unlikely event that human remains are discovered, they will initially be left *in-situ* and, if removal is deemed necessary, this will be undertaken in accordance with the relevant Ministry of Justice regulations.

3.2.9 ARS Ltd will ensure that heavy plant or machinery will not be operated in the immediate vicinity of archaeological remains until the remains have been recorded. Contractors and plant operators will be notified that any observations of archaeological remains must be reported immediately to the archaeologist on site.

3.2.10 A risk assessment will be undertaken before commencement of the work and health and safety regulations will be adhered to at all times.

3.2.11 Should archaeological remains be encountered for which the resources allocated to the watching brief itself are not sufficient to support treatment to a satisfactory and proper standard, then work on site shall cease and both the City Archaeologist at Gloucester City Council and the Gloucestershire County Council Archaeologist shall be notified immediately. Site works will not re-commence until resources are in place to secure preservation *in situ* or adequate archaeological treatment of the relevant remains.

3.3 *Artefact and ecofact collection and recording*

3.3.1 Artefact collection policy will be concerned with the provision of adequate samples for meeting the objectives of the work. All finds of medieval and earlier date will be collected as a matter of course. Discarded artefactual materials will be described and quantified through assignment to broad categories in the field. Analysis of finds will be undertaken, as necessary, by suitably qualified specialists. Retained finds will be cleaned, marked, catalogued and packed in materials, as appropriate, for long term storage (see Archive Deposition below).

3.3.2 Unstratified finds will only be collected where they contribute significantly to the project objectives or are of particular intrinsic interest. Finds of 'treasure' will be reported to the Coroner in accordance with the Treasure Act (1996).

3.3.3 Collection and policies for structural remains and industrial residues have been set out by the Society of Museum Archaeologists (SMA, 1993). The presence of such materials within a context will be recorded even where comprehensive retention is not considered appropriate.

3.3.4 The representative from ARS Ltd will inspect and monitor the upcast spoil from the site investigations.

3.3.5 If significant waterlogged deposits are found, which are judged to be of palaeoenvironmental significance in relation to archaeological deposits, contingency will be set aside to allow for retrieval and assessment of such samples.

4. MONITORING ARRANGEMENTS

4.1 Ideally, at least one week prior notice of the commencement of the ground works will be given both the City Archaeologist at Gloucester City Council and the Gloucestershire County Council Archaeologist.

4.2 ARS Ltd will liaise with both the City Archaeologist at Gloucester City Council and the Gloucestershire County Council Archaeologist at regular intervals throughout the course of the work.

5. REPORT

5.1 Within two months of the completion of the watching brief, ARS Ltd will produce a report which will include the following.

- Non-technical summary
- Introductory statement
- Aims and purpose of the project
- Methodology
- A location plan showing all excavated areas and any archaeological features with respect to nearby fixed structures and roads
- Illustrations of all archaeological features with appropriately scaled hachured plans and sections.
- An objective summary statement of results
- Conclusions
- Recommendations for the retention or discard of archive material
- Supporting data – tabulated or in appendices
- Index to archive and details of archive location
- References
- Statement of intent regarding publication
- Confirmation of archive transfer arrangements
- A copy of the approved scheme of works (WSI)
- A copy of the OASIS form.

5.2 On completion of the work a digital copy of the report in PDF/A format should be provided to the Gloucestershire County Archaeology Service (archaeology.planning@gloucestershire.gov.uk). This report will be passed to the Gloucester City Council HER and the Gloucestershire Historic Environment Record (HER). In addition, where it is available, the Gloucestershire HER would like to receive geo-referenced digital data for survey, evaluation and excavation locations (including excavation phase plans) in the form of a shape file or dxf file. This information, along with the report, should be forwarded to archaeology.planning@gloucestershire.gov.uk.

6. ARCHIVE DEPOSITION

6.1 A digital, paper and artefactual archive will be prepared by ARS Ltd, consisting of all primary written documents, plans, sections, photographs and electronic data (in a format to be agreed by the repository museum). Arrangements for the deposition of the full site archive will be made with the appropriate museum archive curator. The archive

will also be prepared in line with the Institute for Archaeologists' *Standard and Guidance for the creation, compilation, transfer and deposition of archaeological archives* (IfA 2009).

6.2 All artefacts and associated material will be cleaned, recorded, properly stored and deposited in the archive (see 6.1 above).

6.3 The archive will be presented to the archive curator within six months of completion of the fieldwork, unless alternative arrangements have been agreed in writing with both the City Archaeologist at Gloucester City Council and the Gloucestershire County Council Archaeologist and the archive curator.

6.4 An Oasis form will be completed at the outset of the project, and within two months of completion, two copies of the report (including one digital copy) will be deposited with both the Gloucestershire County Council Archaeology Service and the Gloucester City Council HER.

7. STAFFING

7.1 The WB will be overseen and undertaken by Scott Williams MIfA, with the assistance as and when required of other members of ARS Ltd staff, including Victoria Park AIfA and Laura Strafford AIfA.

8. ADJUSTMENTS TO THE WRITTEN SCHEME OF INVESTIGATION

8.1 Changes to the approved methodology or programme of works will only be made after discussion and with written approval of both the City Archaeologist at Gloucester City Council and the Gloucestershire County Council Archaeologist.

9. REFERENCES

English Heritage. 1995. *A strategy for the care and investigation of finds*, English Heritage.

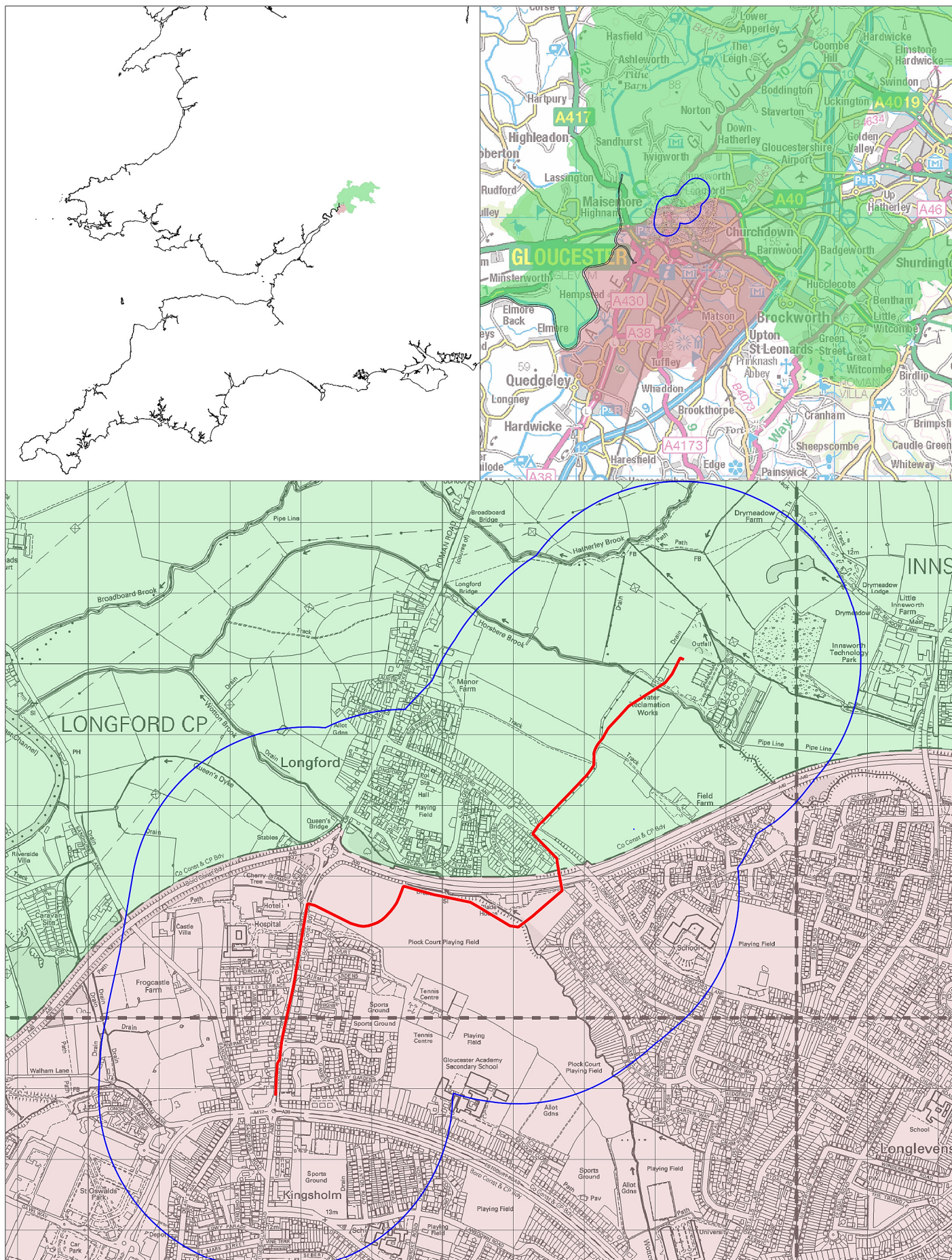
Institute for Archaeologists. 2008. *Standard and Guidance for an Archaeological Watching Briefs*. Reading, Institute for Archaeologists.

Institute for Archaeologists. 2009. *Standard and Guidance for the creation, compilation, transfer and deposition of archaeological archives*. Reading, Institute for Archaeologists.

Institute for Archaeologists. 2012. *Code of Conduct*. Reading, Institute for Archaeologists.

Museum of London Archaeological Services (MoLAS). 2002. *Site Manual*. London, Museum of London.

Society of Museum Archaeologists. 1993. *Selection, Retention and Dispersal of Archaeological Collections. Guidelines for use in England, Wales and Northern Ireland*. London: Society of Museum Archaeologists.



Site name: Longford Rising Main DBA
 Date: August 2013
 Drawn by: AB
 Scale: Varies

Tewkesbury District
 Gloucester District

500m study area



Sewer route



Archaeological Research Services Ltd

Aizlewood's Mill
 Nursery Street
 Sheffield
 South Yorkshire
 S3 8GG



Tel: 0114 275 0140

www.archaeologicalresearchservices.com

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**Figure 1:
 Site location**