

SEVERN TRENT WATER

STORM WATER SEWER HEADWALL REPLACEMENT VINES PARK, DROITWICH WORCESTERSHIRE

ARCHAEOLOGICAL WATCHING BRIEF REPORT

June 2017



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SEVERN TRENT WATER

Vines Park, Storm Water Sewer Headwall Replacement, Droitwich, Worcestershire

## Watching Brief

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DESK BASED ASSESSMENTS
ARCHAEOLOGICAL EVALUATION
ARCHAEOLOGICAL EXCAVATION
GEOPHYSICAL SURVEY
TOPOGRAPHIC AND LANDSCAPE SURVEY
HISTORIC BUILDING RECORDING
ENVIRONMENTAL SERVICES



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#### SUMMARY

Between March and April 2017, Wardell Armstrong LLP (WA) undertook an archaeological watching brief at Vines Park, Droitwich, Worcestershire. It was commissioned by Severn Trent Water who were undertaking the replacement of an existing storm water sewer headwall within the Scheduled Monument multi-period salt production area. These works were undertaken under permitted development for which Wychavon District Council and Historic England were aware.

The archaeological watching brief was undertaken to ensure that no deposits or in-situ features associated with the Scheduled Monument were exposed, and, if they were, to inform Heritage England and undertake appropriate methodologies to deal with them accordingly. The works demonstrated that all modern interventions were undertaken within the previous disturbance caused by the initial placement of the sewer outflow and headwall.

The frequent laminations and nature of the backfill were of some note however as they were able to show the primarily industrial nature of the deposits which is consistent with that seen elsewhere in the immediate vicinity. Albeit, the deposits seen representing the mixed, redeposited variations of these rather than in-situ.

As such the current intrusive works have been demonstrated to have had no further impact on the Scheduled Monument than that previously undertaken, and the placing of a geotextile membrane ahead of the new drain and headwall may actually help improve the underlying stability of the water table which had previously drained into this area.



#### 1 INTRODUCTION

## 1.1 Project Circumstances and Planning Background

- 1.1.1 Between March and April 2017, Wardell Armstrong LLP (WA) undertook an archaeological watching brief at Vines Park, Droitwich, Worcestershire (NGR: SO 9012 6348: Figure 1). It was commissioned by Severn Trent Water who were undertaking the replacement of an existing storm water sewer headwall within the Scheduled Monument (SM). These works were undertaken under permitted development for which Wychavon District Council and Historic England were aware.
- 1.1.2 The investigations were to be undertaken within the Scheduled Monument multiperiod salt production area (SM Reference: 1020256) and before works were undertaken Scheduled Monument Consent (SMC) was applied for and granted by Historic England (SMC Reference: S00157191). This consent required that an archaeological watching brief be undertaken during the course of the required intrusive works so that Historic England could be informed and appropriate mitigation strategies employed.
- 1.1.3 A watching brief is defined as a programme of 'monitoring and investigation carried out during a non-archaeological activity within a specified area of land or development where construction operations may disturb or destroy archaeological remains' (CIFA 2014a).

### 1.2 Project Documentation

- 1.2.1 The project conforms to the Scheduled Monument Consent requirements requested by Dr. Neil Rimmington, Assistant Inspector of Ancient Monuments Planning Group, Historic England. A WSI (WA 2017a) was produced to provide a specific methodology based on the requirement for a programme of archaeological mitigation implemented via a watching brief. This was approved by the archaeological planning advisor prior to the fieldwork taking place. This is in line with government advice as set out in Section 12 of the National Planning Policy Framework (NPPF 2012).
- 1.2.2 This report outlines the work undertaken on site, the subsequent programme of post-fieldwork assessment, and the results of this watching brief.

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### 2 METHODOLOGY

### 2.1 Standards and guidance

- 2.1.1 The archaeological watching brief was undertaken following the Chartered Institute for Archaeologists Standard and Guidance for an archaeological watching brief (CIFA 2014a), the Standards and guidelines for archaeological projects in Worcestershire (WCC 2010) and in accordance with the WA fieldwork manual (2017b).
- 2.1.2 The fieldwork programme was followed by an assessment of the data as set out in the Standard and Guidance for an archaeological watching brief (CIfA 2014a) and the Standard and Guidance for the collection, documentation, conservation and research of archaeological materials (CIfA 2014b), and the Standards and guidelines for archaeological projects in Worcestershire (WCC 2010).

### 2.2 The Watching Brief

2.2.1 The watching brief comprised the monitoring of all intrusive works associated with the removal of the existing storm water sewer headwall and its replacement. The intrusive works were designed to be limited within the area previously disturbed during the construction of the original storm water headwall. This comprised the excavation of a 5m by 3m area down to a maximum depth of 1.70m below the present ground level.

## 2.2.2 The general aims of these investigations were:

- allow the monitoring archaeologist to signal that an archaeological find has been identified before it is destroyed;
- to provide the opportunity for appropriate resource allocation if the archaeological find cannot be dealt with under the watching brief remit;
- to determine the presence or absence of buried archaeological remains within the working area;
- to determine the character, date, extent and distribution of any archaeological deposits and their potential significance;
- determine levels of disturbance to any archaeological deposits;
- investigate and record all deposits and features of archaeological interest within the areas to be disturbed by the works;

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- to determine the likely impact on archaeological deposits from the works;
- to disseminate the results of the fieldwork through an appropriate level of reporting.

## 2.2.3 And specifically to:

- Investigate and record the exposed canal wall to gain a better understanding of construction techniques and materials used;
- Flag any exposure of the former saltworks or associated activities to allow for an appropriate recording strategy to be formulated.
- 2.2.4 Deposits considered not to be significant were removed by a mechanical excavator fitted with a toothless ditching bucket to maximise the chance for identification of archaeological remains should they be present. All intrusive groundworks were monitored under close supervision by a suitably trained archaeologist. All surfaces were cleaned and investigated to characterise their form, function and date as well as inspected for their artefactual and ecofactual potential. Due to the clearly modern nature of the deposits investigated the artefactual material was noted but not retained and no deposits were suitable for the taking of palaeoenvironmental samples.
- 2.2.5 A full professional archive has been compiled in accordance with the project specification (WA 2017a), the Archaeological Archives Forum recommendations (Brown 2011) and the Standards and guidelines for archaeological projects in Worcestershire (WCC 2010). The archive will be deposited with Worcestershire County Museum, with copies of the report sent to the Worcestershire County HER, available upon request. The project archive can be accessed under the unique accession identifier WSM 69201.
- 2.2.6 Wardell Armstrong Archaeology supports the Online AccesS to the Index of Archaeological InvestigationS (OASIS) project. This project aims to provide an online index and access to the extensive and expanding body of grey literature, created as a result of developer-funded archaeological work. As a result, details of the results of this project will be made available by WAA as a part of this national project. The OASIS reference for the project is: Wardela2-277776.



#### 3 BACKGROUND

### 3.1 Location and Geological Context

- 3.1.1 The site is located in Vines Park at the northern end of Droitwich Town centre, it is bound to the south by the B4090 Saltway and to the north by the Droitwich canal. The east of the site lies aside a public footpath and playground whilst to the west lies gardens associated with Vines Park itself. The area of interest is situated within Vines Park that constitutes manicured grass areas with formal paths running sinuously across them. The ground level is broadly flat and lies at an average height of c.30m AOD (Above Ordnance Datum).
- 3.1.2 The underlying solid geology within the area of investigation is mapped as Mercian Mudstone (formerly Keuper marl) deposited approximately 200 to 251 million years ago in a local environment dominated by local deserts (BGS 2017). This was mapped as being overlain by soils of the Compton soil series (813), a reddish peloalluvial gleyed mottled clays developed from river alluvium above permanently waterlogged gley clay. Adjacent to this is mapped soils of the Whimple series (572) that comprise stagnogleyic argillic brown earths developed in thin loamy or silty drift over a reddish clayey parent material (Soil Survey of England and Wales 1986).
- 3.1.3 Where recorded in detail during a number of previous archaeological investigations along the valley base, the natural alluvial deposits have been dated as being deposited in the 7th-8th century AD (Hurst 1997; Hurst et al. 2014). The line of the river is known to have fluctuated over time and a combination of archaeological investigations and geological boreholes have suggested that the former floodplain of the river stretched as far south as the High Street in the pre-medieval period (Hurst et al. 2014). The canal occupies the former position of the river Salwarpe and was constructed in the 18th century (Webster 2010). The current investigation can add little on the validity of the above mapped deposits as only modern backfill was observed.

## 3.2 Historical and Archaeological Background

3.1.4 A general overview on the known history of the site and general surrounding landscape has been produced to provide context to the intrusive works undertaken.



#### 3.2 Prehistoric

3.2.1 The earliest known activity in Droitwich was identified at Bays Meadow (HER Reference: WSM 03956) and comprised a Mesolithic site (Hurst 1987), with later activities from the Neolithic and Bronze Age periods being noted elsewhere within the town (Woodiwiss 1992, 8; Mann et al. 2015). No direct association with the use of the natural brine springs or salt production have been made for these early sites however and the earliest known excavated exploitation comes from the Middle Iron Age (HER Reference: WSM 21413; Buteux and Hurst 1996, 9) and late Iron Age (HER Reference: WSM 00600; Woodiwiss 1992, 8-13). The late Iron Age evidence comprises large clay lined timber tanks and hearths which have been postulated as covering a considerable area to the south of the river.

#### 3.3 Romano-British

- 3.3.1 The Romano-British settlement at Droitwich has long been identified as Salinae (VCH I, 208-9) and its close connection with salt production is clear in the town name (River and Smith 1979, 120-1 and 451; Burnham and Wacher 1990, 211). As discussed above large scale salt production was already being undertaken in the late Iron Age and the Romanisation of the settlement from at least the mid-1st century appears to be a continuum of the production rather than an overhaul. The main addition brought to bear was speed of trade with Roman roads constructed to link Droitwich to the wider region. The main Romano-British road (HER Reference: WSM 30529) lies under the present Queen Street and was aligned northeast to southwest. The route of the road is known up to the River Salwarpe where it becomes unclear and it is not known if a bridge was present or a fording point, although it is thought to be around the current Chapel Bridge (HER Reference: WSM 00698). A second road (HER Reference: WSM 00694) is known to be in the vicinity although its exact location is uncertain. It is thought to cross the main road at some point near the river, and may have linked with the main road on an east to west alignment south of the town centre, or may have run along the backs of the plots off present Charles Henry Road on a southeast alignment, thereby joining the main road adjacent to the present bridge and largely avoiding the river flood plain (Webster 2010).
- 3.3.2 A Romano-British fort is situated to the northeast along the Roman road to Dodderhill under the present school (HER Reference: **WSM 29108**). A 1<sup>st</sup> century marching camp or auxiliary fort has also been identified at Crutch Lane further to



the north (HER Reference: **WSM 10571**). The main fort at Dodderhill was later replaced by a sumptuous villa at Bays Meadow and has been postulated as being the base for the Emperor's representative due to the importance of the salt production and the desire to keep a monopoly over its production and trade (Hurst 2006, 244).

3.3.3 Excavations at Upwich (HER Reference: WSM 4575) revealed very well-preserved remnants of the Romano-British salt production including a timber brine reservoir and associated crane bases (Hurst 1997, 16). Salt production was undertaken on an industrial scale throughout the Romano-British period although there is evidence that the foci of the works shifted several times during this period. Secondary industries such as salting meats and tanning have also been demonstrated to have been present throughout this period.

## 3.4 Early medieval

- 3.4.1 A royal estate was located to the east as part of the Dodderhill/Wychbold manor and was visited regularly throughout the 7<sup>th</sup> to 9<sup>th</sup> centuries by the ruling elite indicating the importance of the salt production at Droitwich. Its first documented mention in this period appears in the Saxon Hundred of Clent in 716AD when the settlement is referred to as Wiccium emptorium (Mawer and Stenton 1927, 285-6).
- 3.4.2 It is at this time that the first documented evidence appears for the management of woodland in the landscape; the production of salt requiring a constant supply of fuel to keep the furnaces going. Salt production continued throughout this period although there is evidence of a hiatus in the mid-7<sup>th</sup> century when substantial flooding buried sites with up to 3m of silt. The brine was contaminated with fresh water, silt and clay (Hurst et al. 2014; Vaughan and Darch 2003; Buteux and Hurst 1996).

#### 3.5 Medieval

3.5.1 The importance of the salt industry continued throughout the medieval period with well-preserved buried remains (HER References: WSM 00605, 00670, 00680, 04575 & 38439) supported by a wealth of documentary material. The residential and commercial focus of the town was centred on the current High Street and Friar Street to the south with the industrial focus remaining in the valley basin and to the north. The largest brine extraction currently known lay at the Upwich Pit (HER Reference: WSM 04575) within Vines Park itself and was subject to excavation



(Hurst 1997, 32-57). Brine extraction also occurred in Middlewich (HER Reference: WSM 00670; also within Vines Park) and Netherwich (HER Reference: WSM 00680; to the immediate west of Vines Park). The Middlewich pits are understood from documentary evidence to have gone out of use in 1477 (Berry 1957, 41) while the Netherwich pits and seals (Salt production buildings) are still present on a map of the area dating to the 17th century.

#### 3.6 Post medieval

- 3.6.1 With the ending of the Borough monopoly in 1695 (Berry 1957, 53) salt production rapidly increased and this expansion continued into the 20<sup>th</sup> century. The Vines park area became a bustling industrial landscape with numerous saltworks producing salt primarily using the 'open pan' method (large shallow iron pans in which the brine is heated and water evaporated off to leave the salt crystals to be skimmed off).
- 3.6.2 The earliest small-scale map of Droitwich dates from the 17<sup>th</sup> century and focuses on the centre of the town. The map indicates the current Vines Park lying from the corner of Frogg Lane and Gosford Street to the immediate east of the Upwich 'Brine-well'. A chapel lies at the northeast corner of the plot to the southwest of the bridge over the River Salwarpe. The 'town mill', also known as Frog Mill (HER Reference: WSM 00690), is depicted to the northeast of the bridge. The east of Vines Park at this point is marked as containing structures of some sort whilst the west of the current park is depicted as a series of commercial buildings set out in a square and associated with the Upwich pit extraction works (Hurst 1992, 26-27).
- 3.6.3 Karver's map of 1786 is the first comprehensive small-scale map of the town and records the roads to the south and east as Frog Lane and Queen Street, meeting at the Cross, with Chapel Bridge over the Salwarpe to the northeast. The river by this time is recorded as being canalised and its course modified by James Brindley in 1771. The area of Vines Park appears to be divided into a combination of possible domestic and larger industrial plots with substantial irregular buildings along the frontages. Access to the rear of the plots is marked via gaps between the buildings and a number of free standing structures are noted in various yards.
- 3.6.4 In the late 19<sup>th</sup> century a number of saltworks with associated salt heaps were in operation. Two such production sites lay to the immediate north and east of Vines Park (HER References: WSM 10590 and 105910, whilst others lay along the banks



- of the canal (HER References: **WSM 10585**, **10586**, **10587**, **10589** and **10590**). The Great Western railway was opened to the north of the park in the mid-19<sup>th</sup> century (HER Reference: **WSM 10582**).
- 3.6.5 The 1903 map indicates that the salt works in the west of Vines Park no longer exists and a number of buildings along Queen Street had been pulled down. The 1927 map revealed that the entire site had undergone radical alterations. All structures along Queen Street were removed and a new block built in their place. A series of lock-ups or garages here bound to the west and north by a blank area that appears to be the embryotic start of the current Vines Park. The park had greatly improved by the 1938 map with landscaping and tree avenues placed along specific paths through the park, in addition a statue was erected to St Richard, the patron Saint of Droitwich.
- 3.6.6 The excavations of the Saab garage at the east end of Vines Park (Vaughan and Darch 2003) revealed large quantities of post-medieval and modern dumped material from industrial deposits, and this has been demonstrated to be consistent over much of the valley basin (Hurst et al. 2014) with modern dumps averaging between 1.30m and 1.70m in thickness. These dumps appear to have formed two purposes; firstly backfilling former pits and hollows, they were able to remove some of the extensive waste material produced during the salt production process; and secondly they were able to infill much of the subsidence caused by the extraction process.
- 3.6.7 Vines Park is known to have been affected by subsidence in the past (Vaughan and Darch 2003; Vaughan 2008), associated with the brine run flowing beneath Droitwich (Poole and Williams 1980). This was exacerbated by the excessive extraction of brine in the 19<sup>th</sup>-20<sup>th</sup> century (including at nearby Stoke Prior after the industry relocated from Droitwich in the 1920s). The general line of subsidence is from north to south between just east of the centre of the high street and the church of St Augustine on Dodderhill (Woodiwiss 1983), which corresponds to the position of the main subterranean brine channel (Poole and Williams 1980).
- 3.6.8 The Barge Canal was completed in 1771, as mentioned above by James Brindley, who's previous project was the Staffordshire and Worcestershire Canal (Sinclair 2000). He was assisted by Robert Whitworth with John Priddley acting as the resident engineer and John Bushel the main contractor (*Ibid.*) who used a local labour force to complete the works (DCT 2000). The main cargoes on the canal



- brought in coal for the furnaces and transported out not only salt but also agricultural produce and bricks. The canal locks were lengthened in 1853 to take into account the growth in barge size (Woodiwiss 2003).
- 3.6.9 Since the 1930s the canals have fallen into disrepair although the formation of the Droitwich Canals Trust in 1973 has done much to remedy this and progress is such that the canal is once more navigable between Ladywood and Droitwich. Restoration works conducted in the 1980s along the canal excavated post-medieval deposits to a depth of 1.16m and the spoil from this can still be seen as earthworks within the park today (Webster 2010).

#### 4 WATCHING BRIEF RESULTS

## 4.1 Stratigraphic Narrative

- 4.1.1 The watching brief was undertaken between the 27<sup>th</sup> of March and the 4<sup>th</sup> of April 2017. The archaeological watching brief monitored all excavations associated with the removal of the existing storm water sewer headwall and its replacement. Context numbers are provided, where relevant, in brackets, relating also to a summary table provided in Appendix 1.
- 4.1.2 The excavation area comprised a 5m length by 3m wide area placed atop the previous storm water headwall and drainage pipe. A cofferdam was first erected to stop ingress of water from the canal into the working area and then excavations were undertaken to a maximum depth of 1.70m below the present ground surface level to remove the former drainage pipe.
- 4.1.3 The intrusive works revealed the deposits below that were demonstrated to be associated with the construction of the original storm water sewer headwall and pipe, the construction cut [106] for which was not seen as it survived beyond the current limit of excavations, although its presence could be inferred from the known history of the site. The earliest deposit seen was a clearly backfilled deposit (105) at least 0.05m in thickness of redeposited material that comprised an industrial rich deposit consistent with it being the same material originally excavated from the area prior to the storm water pipe construction. Clay pipe, CBM and modern plastics were all noted within the fill but were not retained. This was overlain by a 0.25m thick bedding 'sand' (107) that had been clearly placed to create a platform onto which concrete drainage pipe 103 could be placed. This pipe

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measured 1.00m in diameter with the walls of the structure measuring 0.08m in thickness. This pipe was in at least two sections that overlapped each other to a length of at least 3.00m in length. This in turn was sealed by up to 1.21m of modern highly disturbed redeposited backfill material (102) with laminations that belied their original composition as post-medieval make-up deposits. Modern plastics, pottery, CBM and glass was noted throughout and these laminations were demonstrated to be associated with individual dumps undertaken during the backfill which helped to demonstrate the use of a machine in the original installation of the storm water sewer drainage. This was in turn covered by between 0.04m and 0.19m of topsoil/turf (101) associated with the current park. To the immediate north the pipe was terminated by the placement of a three course wide brick wall 108 constructed primarily in a stretcher course style with a metal capping plate 104 measuring 1.40m in diameter that connected snugly with the outflow of the concrete pipe to stop water from the canal or debris backing up the pipes length.

### 4.2 Archaeological Finds and Environmental Sampling

4.2.1 Modern material including plastics, pottery, glass, CBM and clay pipes were revealed in both contexts (102) and (105) however due to the nature of the investigations and the instability of the deposits these were not retained. All deposits were inspected for their palaeoenvironmental potential, however in this instance no contexts were noted as being suitable for sampling.

## 5 CONCLUSIONS

## 5.1 Interpretation

- 5.1.1 The archaeological watching brief at Vines Park, Droitwich was undertaken to ensure that no deposits or in-situ features associated with the Scheduled Monument were exposed during the replacement of the storm water sewer headwall replacement, and, if they were, to inform Heritage England and undertake appropriate methodologies to deal with them accordingly. The works demonstrated that all modern interventions were undertaken within the previous disturbance caused by the initial placement of the sewer outflow.
- 5.1.2 The frequent laminations and nature of the backfill were of some note however as they were able to show the primarily industrial nature of the deposits in the area

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- which is consistent with that seen elsewhere in the immediate vicinity. Albeit, the deposits seen representing the mixed, redeposited variations of these.
- 5.1.3 As such the current intrusive works have had no further impact on the Scheduled Monument than that previously undertaken, and the placing of a geotextile membrane ahead of the new sewer may actually help improve the underlying stability of the water table which had previously drained into this area ahead of these works.



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# APPENDIX 1: CONTEXT DESCRIPTIONS

Context Number	Context Type	Area	Dimensions	Description
100	Unstratified remains	Throughout site	N/A	Unique identifier for artefactual material recovered from site with uncertain contextual provenance.
101	Deposit	Throughout site	0.04m-0.19m in thickness. >3.00m in width. >5.00m in length.	Mid bluish grey silty sand of loose compaction with a highly humeric root filled nature. Included very frequent poorly sorted peagrit to gravels, rounded to sub-rounded.  Moderate charcoal flecks, all throughout. Deposit comprises the topsoil and turf associated with the current park.
102	Deposit	Throughout site	1.21m in thickness. >3.00m in width. >5.00m in length.	Light greenish grey silty sand of moderate to firm compaction with moderate lenses of ash/clinker and CBM throughout. Frequent poorly sorted peagrit to gravels throughout, rounded to sub-rounded. Upper backfill of cut [106] deposited after construction of pipe 103. Modern materials including plastics demonstrate modern date and laminations demonstrated to be the individual dumps of redeposited material.
103	Structure	Orientated roughly north/south through centre of excavation	1.00m in diameter. >3.00m in length.	Precast concrete drainage pipe associated with storm water outflow. Placed atop bedding layer (107) and underlying backfill 102.
104	Structure	On north vertical face of wall 108.	1.40m in diameter.	Precast Iron plate attached to wall 108 at the outflow of pipe 103 to stop material backing up the pipe and causing blockages.
105	Deposit	Throughout site	>0.05m in thickness. >3.00m in width. >5.00m in length.	Mid bluish brown silty sand of moderate to firm compaction with very frequent peagrit to gravels poorly sorted throughout. Rounded to sub-angular with moderate charcoal flecks, CBM fragments, plastic and clinker throughout. Modern redeposited backfill placed at the base of cut [106] as a bedding for pipe 103.
106	Cut	Running north/south across site	>1.66m in height. >3.00m in width. >5.00m in length.	Construction cut for placing of the former storm water drainage pipe 103. 20 <sup>th</sup> century in date. Edges of cut not actually seen during investigations and as such



Context Number	Context Type	Area	Dimensions	Description
				no profile descriptions can be provided.
107	Deposit	Throughout site	0.25m in thickness. 1.47m in width. >5.00m in length.	Light yellowish grey sand to gravels of moderate to firm compaction. Inclusions are poorly sorted rounded to sub rounded with few inclusions throughout.  Bedding 'sand' deliberately placed to allow for placement of pipe 103. Lies atop backfill 105.  20th century in date.
108	Structure	East/west aligned wall along canal edge	>1.38m in height. 0.235m in width. 5.12m in length.	Red brick retaining wall. Bricks machine made, well fired and unfrogged. Bonded with a light greyish yellow mortar with very occasional charcoal like flecks throughout. Constructed in a primarily stretcher bond style with occasional headers on alternate courses. At least 12 courses high by three courses in width with top course entirely comprised of headers.



## **APPENDIX 2: PLATES**



Plate 1; Pre-excavation image of headwall. Facing southwest.



Plate 2; Demolition of headwall. Facing south.





Plate 3; Working shot during initial intrusive works. Facing south.



Plate 4; East facing section of excavations. Facing west.





Plate 5; Working shot showing west facing section of excavations. Facing east.



Plate 6; Working shot of plastic membrane insertion over geotextile. Facing west.





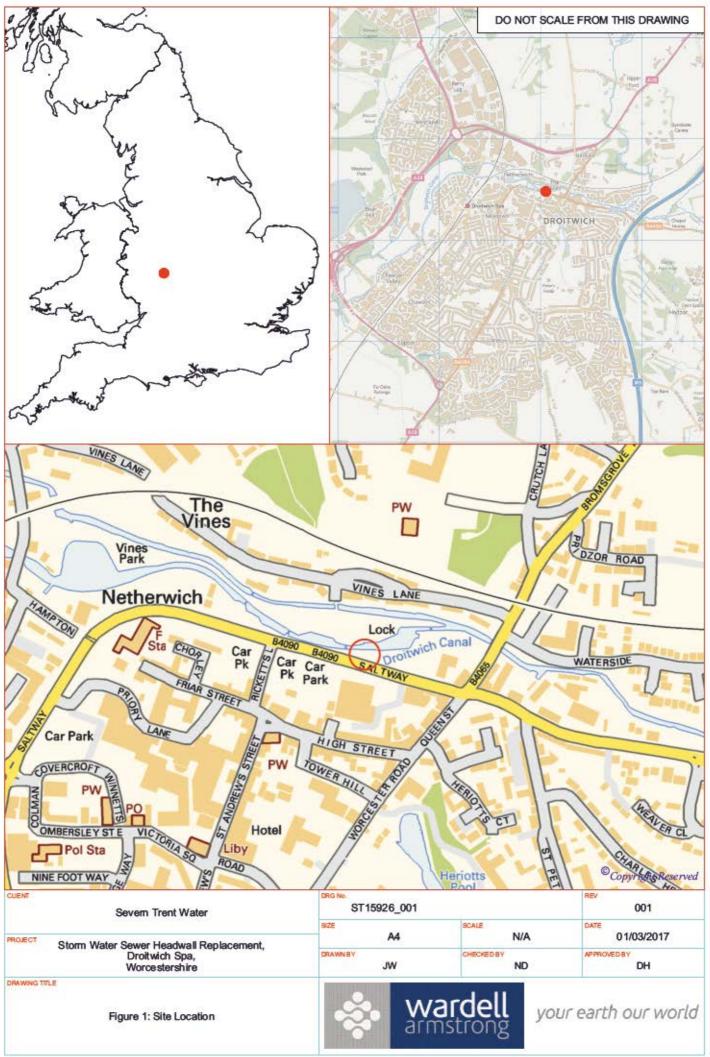
Plate 7; Completed storm water headwall. Facing south.

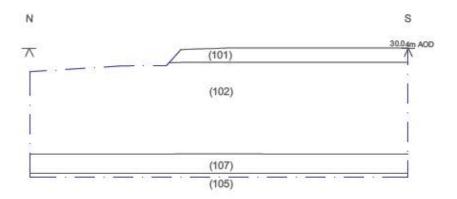


Plate 8; General view of completed storm water headwall. Facing southwest.

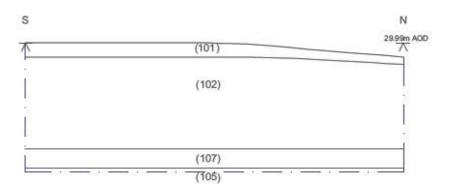


**APPENDIX 3: FIGURES** 





West facing section through archaeological deposits.



East facing section through archaeological deposits.

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CUENT	Severn Trent Water  Storm Water Sewer Headwall Replacement, Droitwich Spa, Worcestershire	ST15926-002		001	
PROJECT		SZE A4	1: 50	06/06/2017	
		DRAWNBY JW	CHECKEDBY	APPROVED BY DH	
DRAWING TIT	0.0000000000000000000000000000000000000			7.0	

Figure 2: Trench Sections.



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