



# Green Street Pumping Station Kidderminster, Worcestershire

Archaeological Watching Brief



Planning Ref: 16/0187/FULL  
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## **Green Street Pumping Station Kidderminster, Worcestershire**

### **Archaeological Watching Brief**

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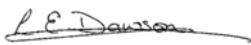
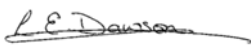
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## Quality Assurance

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# Green Street Pumping Station Kidderminster, Worcestershire

## Archaeological Watching Brief

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# Green Street Pumping Station Kidderminster, Worcestershire

## Archaeological Watching Brief

### Summary

Wessex Archaeology was commissioned by NMC Nomenca, on behalf of Severn Trent Water, to carry out an archaeological watching brief during the groundworks for the construction of a UV disinfection kiosk within the boundary of the Green Street Pumping Station, Kidderminster, Worcestershire, centred on National Grid Reference (NGR) 383038, 275926.

The results of the watching brief identified two distinct phases of activity on the site. The earliest indicated a series of deposits associated with the distribution of rubbish, most likely domestic but possibly industrial due to the presence of a number of carpet factories in the vicinity.

Finds from this early phase indicate a deposition date centred primarily on the first half of the 19th century, with a number of finds of later date.

The second phase of activity was associated with the construction and occupation of a former engineer's house and outbuildings, dating from the end of the 19th century, up to 1973 when the buildings were demolished.

The project archive resulting from the archaeological works will be deposited with Worcestershire County Museum. Deposition of any finds with the Museum will only be carried out with the full agreement of the landowner. The archive is currently held at the offices of Wessex Archaeology in Sheffield under site code 112282.

An OASIS form ID number wessexar1-280363, has been provisionally completed and will be finalised at the time of deposition.



# **Green Street Pumping Station, Kidderminster, Worcestershire**

## **Archaeological Watching Brief**

### **Acknowledgements**

This fieldwork was commissioned by NMC Nomenca, on behalf of Severn Trent Water, and Wessex Archaeology is grateful to Jamie Hurst in this regard. Nick Hammond, Site Manager for NMC Nomenca, is also thanked.

The project was managed for Wessex Archaeology by Lucy Dawson. The fieldwork was undertaken by Andy Swann between the 19th and 21st October 2016. The report was written by Andy Swann and Alvaro Mora-Ottomano. Finds were assessed by Lorraine Mepham, and illustrations were carried out by Nancy Dixon.



# Green Street Pumping Station Kidderminster, Worcestershire

## Archaeological Watching Brief

### 1 INTRODUCTION

#### 1.1 Project background

- 1.1.1 Wessex Archaeology was commissioned by NMC Nomenca, on behalf of Severn Trent Water, (hereafter 'the Client') to carry out an archaeological watching brief during the groundworks for the construction of a UV disinfection kiosk within the boundary of the Green Street Pumping Station, Kidderminster, Worcestershire, centred on National Grid Reference (NGR) 383038, 275926 (hereafter 'the Site', Figure 1).
- 1.1.2 The Site includes a locally listed pumping station, constructed in 1905, situated within the Green Street Conservation Area. The UV kiosk was to be positioned at the south-west corner of the Site over the footprint of a former engineer's house, demolished in the 1970s.
- 1.1.3 Planning permission has been granted for the installation of the UV kiosk, subject to conditions, by Wyre Forest District Council (WFDC) (Planning Application No: 16/0187/FULL).
- 1.1.4 The archaeological watching brief was undertaken in line with a Written Scheme of Investigation (WSI) prepared by Wessex Archaeology (2016b) which was approved by Wyre Forest District Council (WFDC) in advance of the commencement of the fieldwork. All work was undertaken in accordance with current industry standards and guidance issued by the Chartered Institute for Archaeologists (CIfA 2014a-d) and Historic England (2015).

#### 1.2 Site location and topography

- 1.2.1 The Site consists of an irregular parcel of land owned by Severn Trent Water, located approximately 500 m to the south of the centre of Kidderminster (Figure 1), within the Wyre Forest District of Worcestershire. The UV kiosk was to be positioned at the south-west corner of the Site over the footprint of a former engineer's house, demolished in the 1970s.
- 1.2.2 The Site is bounded to the north-east by Pump Street, to the south by Green Street and to the north-west by New Road and domestic properties. It lies approximately 100 m east of the River Stour.
- 1.2.3 The Site contains Green Street Borehole Pumping Station, which is a locally listed building, set within the Green Street Conservation Area.

The Site lies at approximately 34 m above Ordnance Datum (aOD) on the River Stour flood plain and the underlying geology is mapped as the Kidderminster Formation comprising interbedded sandstone and conglomerate (British Geological Survey).





## **2 ARCHAEOLOGICAL BACKGROUND**

### **2.1 Introduction**

2.1.1 A heritage statement produced by Wessex Archaeology (2016a) included a comprehensive archaeological and historical development of the Site and surrounding conservation area. Below is a summary of the archaeological background relating to Green Street Pumping Station.

### **2.2 Green Street Pumping Station**

2.2.1 Depicted on the 1859 Town Plan (not reproduced), a brickyard is positioned just north of the Site. To the south-west of the brickyard a rectangular building is shown, set back from New Road. This is likely to be the same domestic building which remains extant fronting New Road to the north of the Site, which at one time housed the pumping station workers.

2.2.2 Wells were sunk at Green Street (south side) in the late 19th century by Kidderminster Borough Water Works and used to supply the town from 1879, originally as a back-up when the pumps at Foley Park, to the south-west of the Site, had to be stopped for repairs. The wells at Green Street were found to be more cost effective and so the running of them continued. The south side of Green Street comprised the Pumping Station and Sewage Works, first depicted on the 1884 OS map (not reproduced), which also shows the workers housing fronting New Road, as previously described, with numerous outbuildings to the rear.

2.2.3 In 1898 a third well was sunk at Green Street and plans were made for the construction of the pumping station to the north side of Green Street. Prior to the construction of the pumping station, a large house was built to house the Works engineer. This house fronted the former junction of Green Street and New Road, to the west of the Site, and was first depicted on the 1901 OS map (Figure 2).

2.2.4 In March 1905 the construction of the pumping station located within the Site commenced with the contractors Thomas Vale & Co. (Barber 2002 and 2009). The work had been delayed due to the death of Mr Arthur Comber C. E. the borough surveyor, and instigator of the works, in 1900. However, some work had already been undertaken, including the sinking of the well with a borehole of 30 cm diameter, to a depth of approximately 125 m, and the company of Mr George Law had laid a rising main from Green Street Works to the reservoir at Foley Park. This main enabled all the water from the wells to be pumped into the reservoir instead of directly into the towns mains as had been the case previously (Barber 2002).

2.2.5 The new pumping station was installed with a steam driven pump comprising a large flywheel supplied by Barclay Son & Company of Kilmarnock. The boiler house was constructed on the south side of Green Street at the north of the earlier pumping station and sewage works, the pump of which it also drove. Steam pipes were laid beneath the road and new mains laid in parts of the town. The boiler house was demolished in the early 1970s, but the former sewage pump house and sewage treatment building are still extant. The new pump house was intended to be used as a reserve in emergencies only, but most of the borough was supplied from this well after 1908.

2.2.6 In the 1930s an electric pump was installed, with the steam pump retained as an emergency back-up. Due to an increased demand for water following World War II from the nearby carpet factories and the associated increase in workforce residing within the area, a second electric pump was installed in the late 1950s. During peak times the water level of the well dropped, rendering the electric pump inefficient.



- 2.2.7 J.G. Stewart, Borough Engineer and Surveyor, in 1959, directed contractors works for breaking through the bottom of the existing well and sinking a 52.5 cm diameter borehole 21 m deep. This was steel lined for the first 15 m and interconnected with the existing borehole. The works were not certified as complete until a 48 hour pumping test of 65,000 gallons per hour had been achieved, with the water level not dropping lower than 18 m below floor level (Barber 2002 and 2009). The steam pump was dismantled and removed from the pumping station to make way for the new electric pump.
- 2.2.8 The former water engineer's house (Plate 1, Figure 2) to the west of the Site was demolished shortly after August 1973, following the construction of stage three of the ring road, linking Comberton Hill to Worcester Road. This was due to the south-west end of Green Street, at the junction with Worcester Road, being raised by approximately 5 m, leaving the house in a hollow. The former boiler house located on the south side of Green Street was also demolished during the ring road construction, making way for Island Drive.
- 2.2.9 The Site and local water supplies were under the control of the Kidderminster Borough Council until 31st October 1962 when it was taken over by the North West Worcestershire Water Board. From April 1974 it has been administered by Severn Trent Water (Barber 2009).

### **3 METHODOLOGY**

#### **3.1 Aims**

3.1.1 The aims of the project were:

- *to identify and record any archaeological features exposed during the groundworks for the UV kiosk;*
- *to recover any artefact evidence during groundworks;*
- *to identify any previously unknown archaeological remains and define their location, extent, date, function and form;*
- *to provide sufficient information to devise a suitable mitigation strategy if required;*
- *to make available the results of the investigation; and*
- *to deposit the Site archive and make available the results of the investigation.*

#### **3.2 General**

3.2.1 Wessex Archaeology monitored the groundworks associated with the construction of the UV kiosk, the footprint of which measures approximately 30 m<sup>2</sup>. All monitoring was carried out by a suitably qualified archaeologist. All work was carried out in accordance with industry best practice (CIfA 2014a-d).

#### **3.3 Machine excavation**

- 3.3.1 Overburden was removed using a mechanical excavator fitted with a toothless ditching bucket where possible, working under the continuous direct supervision of a suitably experienced archaeologist. Overburden was (where possible) removed in a series of level spits down to the level of the trench extent, the upper archaeological horizon, or the level of the natural geology, whichever was reached first.
- 3.3.2 All spoil was scanned for artefacts, which were recorded and retained unless of clearly modern (i.e. late 20th- or early 21st-century) origin.



3.3.3 In the area at the western end of the pump house, with the chlorine gas house to the north and the sample kiosk to the south, machine access was proved difficult. A mini excavator was used to remove the tarmac surface and the substrate and then the area was hand excavated due to the concentration of live services.

### **3.4 Sample excavation and recording**

3.4.1 Surfaces and walls were cleaned as necessary to allow inspection and to define the extent of any archaeological features and deposits. Archaeological features were hand excavated in order to understand and record the full stratigraphic sequence, down to naturally occurring deposits.

3.4.2 Written and drawn records were made of the Site's stratigraphy, even where no archaeological deposits were identified. Full written and drawn records of all excavated contexts were made in accordance with best archaeological practice. Archaeological deposits which were not excavated were recorded to the maximum extent possible.

3.4.3 Records included overall Site plans. All archaeological features were related to the Ordnance Survey datum and to the National Grid. Survey was undertaken using a GPS system.

3.4.4 All archaeological deposits were recorded using Wessex Archaeology's *pro forma* recording system. This written record is hierarchically based and centred on the context record. Each context record fully described the location, extent, composition and relationship of the subject and was cross-referenced to all other assigned records. Context numbers used in the watching brief were not repeated.

3.4.5 Each excavated context appears on at least one detailed plan at 1:50 or 1:20 scale and one section at 1:10 and co-ordinated on to the overall Site plan. A full photographic record was maintained consisting of digital images. The photographic record illustrated both the detail and the general context of the principal features.

### **3.5 Finds**

3.5.1 All finds were treated in accordance with relevant industry guidance (UKIC 2001; MGC 1991; English Heritage 2005, 2006; ClfA 2014b), and the requirements of Worcestershire County Museum.

3.5.2 All artefacts from excavated contexts were retained (except unstratified modern material) and taken to Wessex Archaeology offices in Sheffield for further work.

3.5.3 All artefacts were (as a minimum) washed, weighed, counted and identified. Any artefacts requiring conservation or specific storage conditions were dealt with immediately, in line with *First Aid for Finds* (Watkinson and Neal 1998). Other conservation needs were assessed by Wessex Archaeology's Conservator.

3.5.4 All artefacts were recorded by context, with summary listing of artefacts by category to provide simple quantification. Artefacts were analysed and reported by specialists.

### **3.6 Environmental samples**

3.6.1 No environmental samples were taken as the layers and deposits uncovered were unsuitable for such analysis.

## 4 ARCHAEOLOGICAL RESULTS

### 4.1 Introduction

4.1.1 The following section provides a summary of the information held in the Site archive, with a full list of context numbers and context descriptions contained in Appendix 1.

4.1.2 Groundworks related to the proposed development entailed the excavation of a single trench to the west of the pumping station (Figure 1). The trench measured approximately 20 m long (east to west), 2.1 m wide (north to south) and 1.4 m deep. The western end also included a larger rectangular area located within the footprints of the proposed new UV disinfection kiosk, which measured c.5 m long (north-east to south-west) and 3 m wide (north-west to south-east). The initial groundworks required stripping the tarmacadam surface and associated hardcore sub-base layers 101 and 102 (Plate 2). The subsequent stratigraphic contexts consisted of a demolition layer 125 and a series of structural remains related to the former engineer's house. A detailed plan of the Site showing the exposed archaeological features has been compiled (Figure 3).

### 4.2 Remains of the former engineer's house

4.2.1 Across the western area of the excavated trench, three parallel brick walls (128, 126 and 106), aligned north-east to south-west, were uncovered beneath the demolition layer 125 at c. 0.3 m below the present ground level. The demolition debris appeared to be associated with the exposed *in situ* structures as indicated by the equivalent brickwork. Walls 128 and 126 were situated c.5 m apart and their construction consisted of two skins of machine-made orangey bricks (9" x 4½" x 3" i.e. standard imperial size following the 1803 brick tax) bonded with whiteish lime mortar and laid in stretcher bond. Wall 126 also included limited remnants of a perpendicular return towards the north-west which would have created a sub-division. The southwestern end of this wall formed part of an integral corner wall 127 which extended beyond the trench limits towards the south-west and south-east. At c.3.5 m west of wall 126 there was a single-skin brick wall 106 which was built with comparable brickwork. The southwestern end of this wall adjoined the corner of a zigzag brick wall, composed of 104, 105 and 107, which were built with three skins of equivalent bricks to the remaining walls referred to above. It is suggested that these walls were external side of the former engineer's house. Wall 104 extended beyond the trench towards the north-west, and wall 107 also projected towards the south-east (Plates 3 and 4). These walls correspond well with the position of the former engineer's house depicted on both the 1901 (Figure 2) and 1938 OS map (not reproduced).

4.2.2 The trench reached an overall depth of 1.4 m exposing up to fourteen brick courses of the aforementioned structures which were virtually foundations within a construction cut 120 with vertical sides. The foundation trench 120 contained a packing deposit 121 composed of sand and gravel. The foundation trench 120 cut through a series of layers which appears to have been part of a consistent deposition creating a made ground (group context 108) which extended further down (Plates 5 and 6). Deep foundations were required for the construction of the former engineer's house as the existing made ground 108, composed mainly of soft sandy soil, did not provide sufficient firmness for such construction. The made ground, 108, produced artefactual material of mainly 19th century date. The finds are described in the following section of this report. The formation of this made ground, consisting of several layers, may have represented a deliberately discarding of waste during the 19th century. The natural sub-stratum was not established as the made ground extended beyond the base of the trench.

- 4.2.3 These structural remains were part of the former engineer's house which appears depicted on Ordnance Survey maps dating from the 1901 edition through to the 1970 publication. The house was subsequently demolished in 1973.

### **4.3 Pumping station**

- 4.3.1 A small sondage was excavated against the external west wall of the pumping station as part of the watching brief. This reached a depth of 0.6 m exposing several services pipes and the step-out brick foundation of the standing structure which overlaid a concrete base projecting further out (Plate 7).

## **5 FINDS**

### **5.1 Introduction**

- 5.1.1 A small assemblage of finds was recovered from the sequence of rubbish deposits grouped as context 108, consisting largely of pottery and glass, and entirely of post-medieval/modern date.

### **5.2 Pottery**

- 5.2.1 The assemblage of pottery amounts to 128 sherds, weighing 5148 g. The full breakdown of the assemblage is given in Table 1 below. It consists largely of refined wares, supplying tea- and tablewares (plates, saucers, cups, serving dishes, tea pots), with some kitchen and other household wares (preserve jars, possible washstand vessels, three small squat cylindrical jars, one with a lid marked 'COLD CREAM'). There are examples of transfer-printed and sponge-decorated wares, and one vessel with 'mocha' decoration. One vessel with an inturned rim could be a bedpan. There are three toys (one doll's leg, and a teapot lid and saucer from a dolls' tea set) and one object (doorknob).
- 5.2.2 As well as the refined wares, there are a small number of stonewares, including a complete wide-mouth 'bung jar', a form that appears in Doulton and Watts 1873 catalogue as a container for furniture polish and disinfecting powder (Green 1999, appendix 18), a lid-seated jar, and the base from a possible imported seltzer (mineral water) bottle.
- 5.2.3 There are also three sherds in black-glazed redware, including two conjoining rim sherds from a heavy-rimmed flared bowl.
- 5.2.4 Given the stratigraphic sequence (the rubbish deposits clearly pre-dated the late 19th century brick buildings on the Site), the assemblage is thought to represent organised dumping of domestic refuse prior to that date. While there are some wares here which could pre-date the 19th century (black-glazed redwares, Nottingham-type stoneware), there is nothing which is definitively of earlier date. Feldspathic-glazed stonewares date from the 1830s onwards, but there is little else here that can be dated more closely within the century.

### **5.3 Glass**

- 5.3.1 Thirteen pieces of glass were recovered, a breakdown of which is included in Table 2 below. This includes six complete or near complete bottles. Three of these, all in pale blue/green glass, are condiment bottles, embossed with the names of the manufacturers of the contents: Mellor & Co of Worcester (listed in Kelly's Directory of 1896 as sauce manufacturers), Richard Brown of Birmingham (bottle labelled as 'Birmingham Sauce'), and Holbrook & Co (manufacturers of Worcestershire sauce in the last 19th century). There is one squat octagonal inkwell and one small cylindrical bottle, possibly for perfume.



The sixth bottle is plain. Other fragments are of bottles or jars of miscellaneous form. There is also one drinking vessel, a cylindrical tumbler.

- 5.3.2 There is nothing here that necessarily dates earlier than the 19th century; as for the pottery, the glass was assumed to form part of the controlled dumping of the Site during the 19th century. Interestingly, one internet source gives 1900 as the date at which the Birmingham Vinegar Company, which was manufacturing 'Holbrooks Worcestershire Sauce' from 1875 (Shurtleff and Aoyagi 2012, 57), actually changed its name to Holbrook & Company (<http://letslookagain.com/2015/07/holbrooks-sauce/>), but this has not been confirmed.

#### 5.4 Other finds

- 5.4.1 A small conical unglazed ceramic object was recovered, of uncertain function. Similar objects have been found at a 17th century glasshouse at Stourbridge (K. Churchill pers. comm.), although their precise function is uncertain. Such objects may have had a wider industrial application.
- 5.4.2 Nine oyster shells were also recovered, comprising two right valves (preparation waste) and seven left valves (consumption waste).

**Table 1: Pottery by context**

Context	Ware	Quantity	WT	Additional Comments
108	Bone china	7	129	cups with various dec
108	Bone china	1	23	saucer with mauve sprigged dec
108	Bone china	5	77	misc body/base sherds
108	Creamware	4	344	developed creamware; conjoining sherds from wide vessel with massively inturned rim (bed pan?)
108	Creamware	1	35	developed creamware; plain preserve jar
108	English stoneware	1	148	large, side handled bowl
108	English stoneware	1	72	shouldered, wide-mouth 'bung jar'
108	Feldspathic glazed stoneware	1	562	complete wide-mouth bottle (in Doulton & Watts 1873 catalogue, for furniture cream and disinfecting powder)
108	Feldspathic glazed stoneware	1	107	lid-seated jar
108	Feldspathic glazed stoneware	1	23	misc body sherd, prob from cylindrical bottle/jar
108	Majolica	1	29	jug rim and spout
108	Notts-type stoneware	1	20	rouletted body sherd
108	Pearlware	2	32	blue jug with reeded decoration
108	Pearlware	4	272	including 3 bases
108	Porcelain	1	13	doll's leg
108	Porcelain	2	16	tea pot lid and saucer from dolls' tea set
108	Post-medieval black-glazed redware	3	294	2 conjoining rim sherds (heavy-rimmed flared bowl)
108	Refined whiteware	3	243	3 complete squat cylindrical jars, lid-seated





Context	Ware	Quantity	WT	Additional Comments
108	Refined whiteware	1	17	lid for one of the above, black transfer print 'COLD CREAM'
108	Refined whiteware	1	83	base of cylindrical vessel - jar or tankard?
108	Refined whiteware	1	29	pale blue transfer printed cup
108	Refined whiteware	2	30	rim & body from jar(s) with moulded dec (1 basket-weave)
108	Refined whiteware	12	300	blue transfer printed plates (prob all Willow pattern)
108	Refined whiteware	1	83	blue transfer printed; large base - washstand jug?
108	Refined whiteware	1	44	blue transfer printed; serving dish lid (subrectangular)
108	Refined whiteware	16	506	pale blue transfer printed plates (varying sizes, some heavy-duty)
108	Refined whiteware	8	149	brown transfer-printed; plates in 2 designs
108	Refined whiteware	6	219	plain 'utility' style plate and flanged (rectangular) bowl
108	Refined whiteware	8	313	pale blue transfer printed soup plates
108	Refined whiteware	2	62	black transfer printed - large (?soup) plate
108	Refined whiteware	3	98	red-banded flatware; plate and saucer
108	Refined whiteware	1	27	ribbed preserve jar
108	Refined whiteware	2	18	pale blue transfer printed, closed forms (1 mug)
108	Refined whiteware	13	187	miscellaneous sherds, including 1 small pedestal base (egg cup?), 1 jug handle, 1 plate rim; 1 sponged dec
108	Refined whiteware	1	45	mocha dec
108	Refined whiteware	1	52	door knob
108	Refined whiteware	1	30	hemispherical bowl, sponged dec
108	Rockingham ware	6	250	2 tea pots, 1 with moulded dec
108	Stoneware unspec	1	167	bottle base, possibly an imported seltzer (mineral water) bottle

**Table 2: Glass by context**

Context	No	Description
108	1	bottle, pale blue/green, plain, rim missing
108	1	beverage bottle, pale blue/green, plain, rim missing embossed HOLBROOK & Co
108	1	small pale green/blue sauce bottle, embossed RICHARD BROWN / BIRMINGHAM / BIRMINGHAM SAUCE
108	1	squat octagonal ink bottle



Context	No	Description
108	1	complete small clear bottle, for perfume?
108	3	miscellaneous bottle/jar body fragments
108	1	cylindrical tumbler, clear glass
108	1	olive green wine bottle (body fragment)
108	1	clear bottle/jar (body fragment)
108	1	pale blue bottle neck, with flat rim for cork closure (pharmaceutical?)
108	1	complete pale blue/green beverage bottle, embossed MELLOR & Co WORCESTER

## 6 CONCLUSION

### 6.1 Summary

- 6.1.1 The results of the watching brief identified two distinct phases of activity on the site. The earliest indicated a series of deposits associated with the distribution of rubbish, most likely domestic but possibly industrial due to the presence of a number of former carpet factories in the vicinity.
- 6.1.2 Finds from this early phase indicate a deposition date centred primarily on the first half of the 19th century, with a number of finds of later date.
- 6.1.3 The second phase of activity was associated with the construction and occupation of the engineer's house and outbuildings, dating from the end of the 19th century, up to 1973 when the buildings were demolished.

## 7 STORAGE AND CURATION

### 7.1 Museum

- 7.1.1 The project archive resulting from the watching brief will be deposited with Worcestershire County Museum. Deposition of any finds with the Museum will only be carried out with the full agreement of the landowner.

### 7.2 Preparation of archive

- 7.2.1 The complete site archive, which includes paper records, photographic records, graphics, artefacts and digital data, has been prepared following the standard conditions for the acceptance of excavated archaeological material by Worcestershire County Museum, and in general following nationally recommended guidelines (SMA 1995; ClfA 2014c; Brown 2011; ADS 2013).
- 7.2.2 All archive elements will be marked with the museum accession code, and a full index will be prepared. An OASIS form (Appendix 2), ID number wessexar1-280363, has been provisionally completed and will be finalised at the time of deposition.

### 7.3 Discard policy

- 7.3.1 Wessex Archaeology follows the guidelines set out in *Selection, Retention and Dispersal* (Society of Museum Archaeologists (SMA) 1993), which allows for the discard of selected artefact and ecofact categories which are not considered to warrant any future analysis. In this instance, although the evidence for industrial use of the Site is of interest, the evidence is only of limited local interest, and its potential for future research is extremely limited, due to the relatively small quantity of material recovered, its date range and nature (commonly occurring types of relatively recent origin), and provenance (essentially unstratified). Given these limitations, retention of the finds assemblage for long-term



curation is not recommended, and the finds will be dispersed prior to archive deposition. This process will be fully documented in the project archive.

## 7.4 Security copy

7.4.1 In line with current best practice (e.g. Brown 2011), on completion of the project a security copy of the written records will be prepared, in the form of a digital PDF/A file. PDF/A is an ISO-standardised version of the Portable Document Format (PDF) designed for the digital preservation of electronic documents through omission of features ill-suited to long-term archiving.

## 8 REFERENCES

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Wessex Archaeology, 2016b. *Green Street Pumping Station, UV Disinfection Facility, Kidderminster, Worcestershire: Written Scheme of Investigation*. Report Ref. T22024.01

## 8.2 Consulted online sources

British Geological Survey: <http://www.bgs.ac.uk/>

Let's Look Again. A history of branded Britain: <http://letslookagain.com/2015/07/holbrooks-sauce/>



## 9 APPENDICES

### 9.1 Appendix 1: Context descriptions

Context	Description	Depth (m)
101	Tarmac. Removed from area of investigation prior to attending site.	0.00-0.22
102	Hardcore layer acting as sub-base of 101.	0.22-0.31
103	Structure. Line of 9 stretcher-laid red bricks with a further 2 off-set.	0.30
104	Structure. Red brick wall, aligned northwest to southeast, associated with <b>105</b> and <b>106</b> . Three bricks wide. Lime mortar bonded.	0.30
105	Structure. Brick wall aligned southwest to northeast, associated with walls <b>104</b> and <b>106</b> . Two bricks wide. Lime mortar bonded. Probably part of the foundations of a domestic building.	0.30
106	Structure. Brick wall aligned southwest to northeast, associated with walls <b>104</b> and <b>105</b> . Single brick wide and lime mortar bonded.	0.30
107	Structure. Brick wall aligned northwest to southeast, associated with wall <b>105</b> . Two bricks wide and lime mortar bonded.	0.30
108	Group context. Pre-structure rubbish deposits, context numbers <b>109</b> to <b>119</b> inclusive	0.30-1.40
109	Layer. Mid reddish brown compact sand and occasional medium gravel, below <b>102</b> , above <b>110</b> .	0.30-0.58
110	Layer. Mid brown compact sandy loam with occasional charcoal flecks and very occasional small gravel. Below <b>109</b> , above <b>111</b> .	0.58-0.67
111	Layer. Light to mid gingery brown very sandy loam with frequent fragmented stone and gravel. Below <b>110</b> , above <b>112</b> .	0.67-0.72
112	Layer. Mid to dark brown sandy loam with abundant charcoal and occasional small stones. Below <b>111</b> , above <b>113</b> .	0.72-0.81
113	Layer. Dirty pale grey sandy mortar and ash with fragments and flecks of charcoal. Below <b>112</b> , above <b>114</b> .	0.81-0.85
114	Layer. Mid reddish brown sand with very occasional flecks of charcoal. Below <b>113</b> , above <b>115</b> .	0.85-0.90
115	Layer. Mid brown sandy loam with abundant charcoal and ash. Below <b>114</b> , above <b>116</b> .	0.90-1.05
116	Layer. Mid brown clayey sandy loam with a few flecks of charcoal and occasional small gravel. Below <b>115</b> , above <b>117</b> .	1.05-1.10
117	Layer. Dark brown sandy ashy loam with frequent stone, pottery and glass. Below <b>116</b> , above <b>118</b> .	1.10-1.20
118	Layer. Dirty mid grey ash and clinker. Probably domestic from a coal fire. Below <b>117</b> , above <b>119</b> .	1.20-1.30
119	Layer. Mid greyish brown silty sandy loam with fragmented stone and charcoal. Below <b>118</b> .	1.30-1.40
120	Cut. Vertical cut for construction trench for brick wall <b>104</b> . Filled with <b>121</b> and <b>122</b> .	0.22-1.40
121	Fill. Pale to mid reddish brown sand with some loam and gravel. Fill of <b>120</b> , above <b>122</b> .	0.22-1.05
122	Fill. Reddish brown compact sand and gravel hardcore. Fill of <b>120</b> , below <b>121</b> .	1.05-1.40
123	Structure. Brick wall Probably an extension to the northeast of wall <b>106</b> . Single brick wide and at least 10 courses deep. To the south east is <b>124</b> and to the northwest <b>125</b> .	0.22-1.20+
124	Layer. Probable demolition material. Dark brown to black ash with fragmented brick and pale gravel.	0.22-1.30



Context	Description	Depth (m)
125	Layer. Solid brick demolition rubble. Whole and fragmented unfrogged red brick with decayed lime mortar.	0.22-1.30
126	Structure. Brick wall. On a related alignment to wall 106. Two bricks wide, aligned northeast to southwest. Associated with wall 127.	0.20-1.20
127	Structure. Corner of a two-brick wide wall forming a corner and running off into the side of the trench. Associated with wall 126.	0.15-1.20
128	Red brick wall crossing the trench diagonally, on a similar parallel alignment to wall 126. Gravel construction trench fill visible in plan.	1.20-1.30



## 9.2 Appendix 2: OASIS form

OASIS ID: wessexar1-280363

### Project details

Project name	Green Street Pumping Station, Kidderminster, Worcestershire
Short description of the project	Wessex Archaeology was commissioned by NMC Nomenca, on behalf of Severn Trent Water, to carry out an archaeological watching brief during the groundworks for the construction of a UV disinfection kiosk within the boundary of the Green Street Pumping Station, Kidderminster, Worcestershire, centred on National Grid Reference (NGR) 383038, 275926. The results of the watching brief identified two distinct phases of activity on the site. The earliest indicated a series of deposits associated with the distribution of rubbish, most likely domestic but possibly industrial due to the presence of a number of carpet factories in the vicinity. Finds from this early phase indicate a deposition date centred primarily on the first half of the 19th century, with a number of finds of later date. The second phase of activity was associated with the construction and occupation of a former engineer's house and outbuildings, dating from the end of the 19th century, up to 1973 when the buildings were demolished. The project archive resulting from the archaeological works will be deposited with Worcestershire County Museum. Deposition of any finds with the Museum will only be carried out with the full agreement of the landowner. The archive is currently held at the offices of Wessex Archaeology in Sheffield under site code 112282.
Project dates	Start: 19-10-2016 End: 21-10-2016
Previous/future work	Yes / Not known
Any associated project reference codes	16/0187/FULL - Planning Application No.
Any associated project reference codes	112282 - Contracting Unit No.
Type of project	Recording project
Site status	None
Current Land use	Vacant Land 1 - Vacant land previously developed
Monument type	HOUSE Post Medieval
Significant Finds	GLASS BOTTLES Post Medieval
Significant Finds	POTTERY Post Medieval
Investigation type	"Watching Brief"
Prompt	Planning condition

### Project location

Country	England
Site location	WORCESTERSHIRE WYRE FOREST KIDDERMINSTER Green Street Pumping Station, Kidderminster, Worcestershire
Study area	100 Square metres
Site coordinates	SO 8305 7592 52.380671803619 -2.249044564575 52 22 50 N 002 14 56 W Point
Height OD / Depth	Min: 34m Max: 34m



### Project creators

Name of Organisation	Wessex Archaeology
Project brief originator	Worcestershire County Council
Project design originator	Wessex archaeology
Project director/manager	Lucy Dawson
Project supervisor	Alvaro Mora-Ottomano
Type of sponsor/funding body	Water Authority/Company
Name of sponsor/funding body	NMC Nomenca

### Project archives

Physical Archive recipient	Worcestershire Museums
Physical Contents	"Ceramics","Glass"
Digital Archive recipient	Worcestershire Museums
Digital Contents	"none"
Digital Media available	"Images raster / digital photography","Text"
Paper Archive recipient	Worcestershire Museums
Paper Contents	"none"
Paper Media available	"Context sheet","Diary","Drawing","Photograph","Plan","Report","Section"

### Project bibliography 1

Publication type	Grey literature (unpublished document/manuscript)
Title	Green Street Pumping Station, Kidderminster, Worcestershire: Archaeological Watching Brief
Author(s)/Editor(s)	Mora-Ottomano, A.
Author(s)/Editor(s)	Swann, A.
Other bibliographic details	1122820.02
Date	2017
Issuer or publisher	Wessex Archaeology
Place of issue or	Sheffield



publication

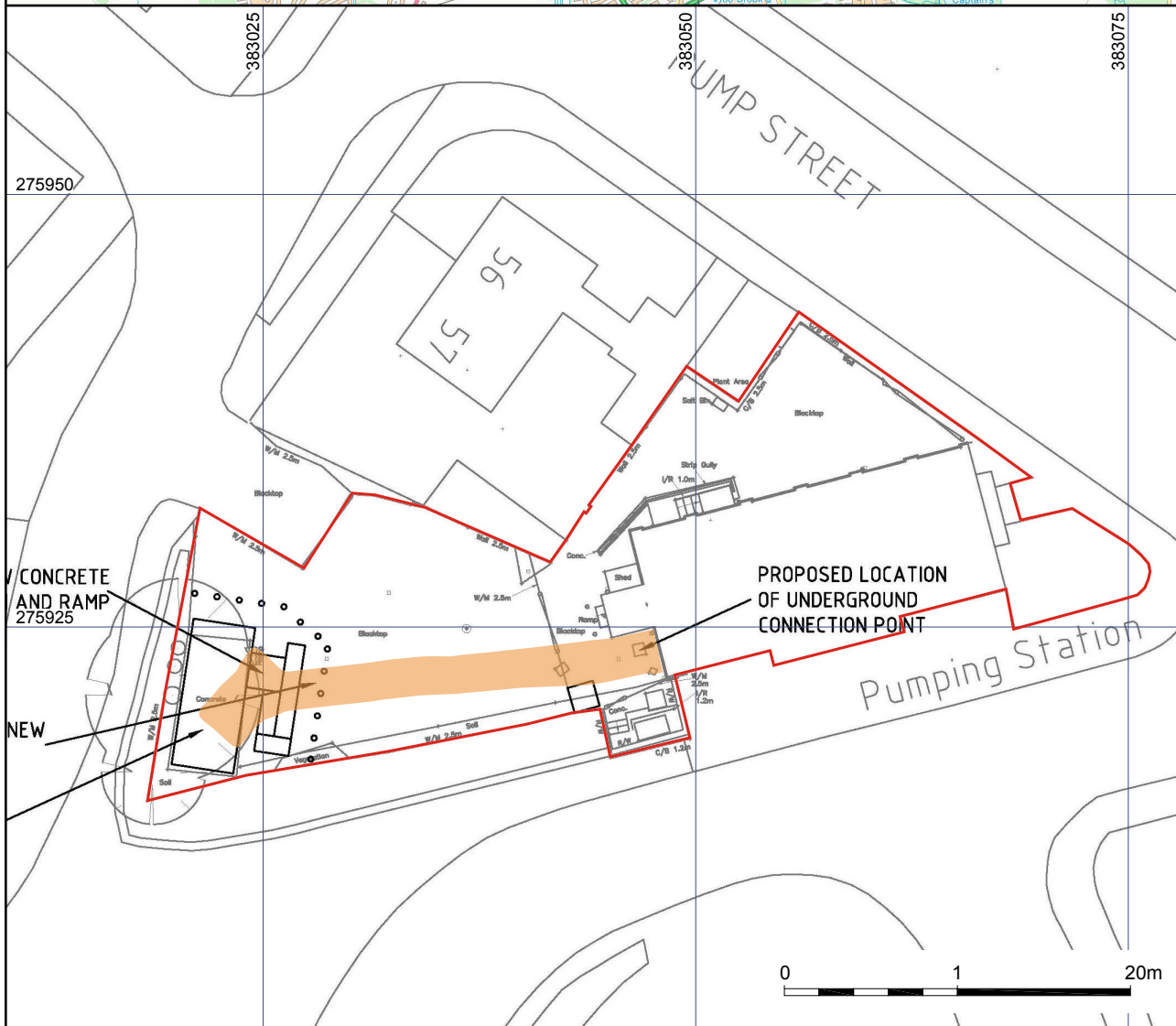
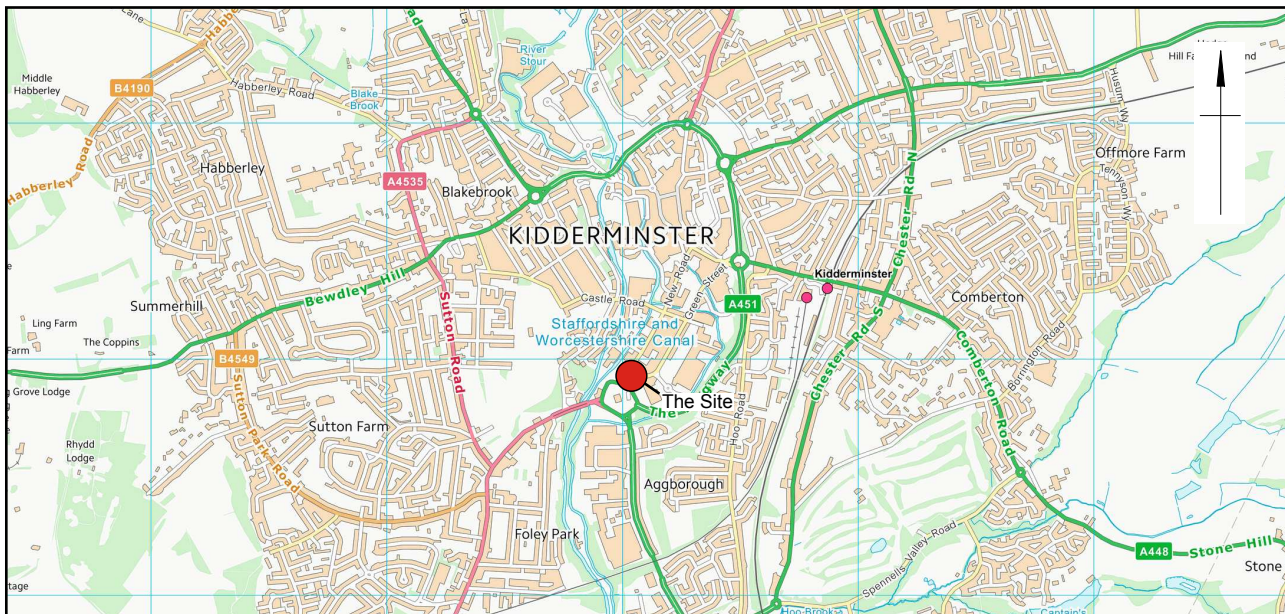
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Entered on            7 June 2017



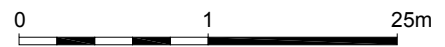
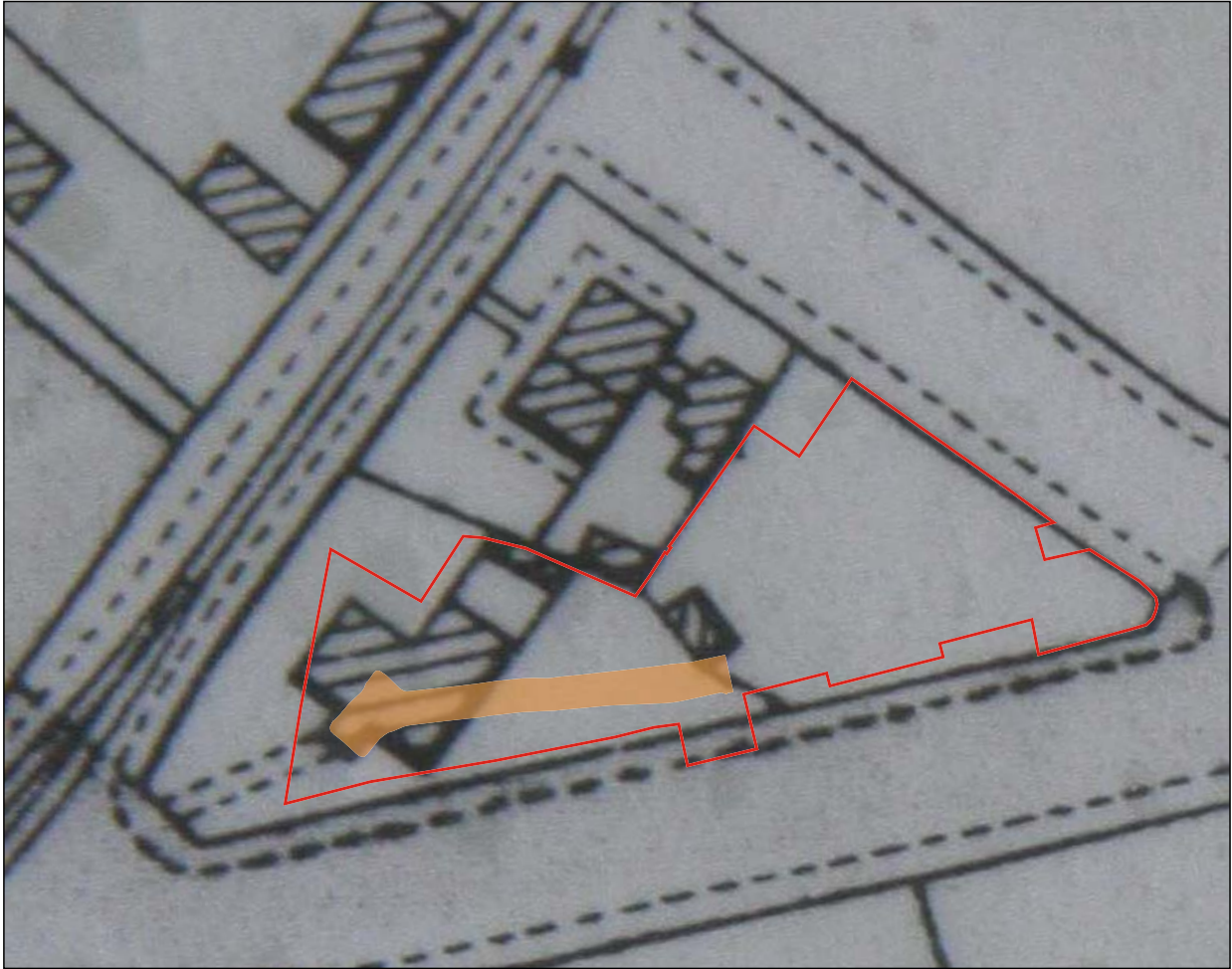



 Watching brief area  Site boundary 	Main graphic base mapping supplied by Severn Trent Water Contains Ordnance Survey data © Crown Copyright and database right 2012. This material is for client report only © Wessex Archaeology. No unauthorised reproduction.	
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Site location plan

Figure 1





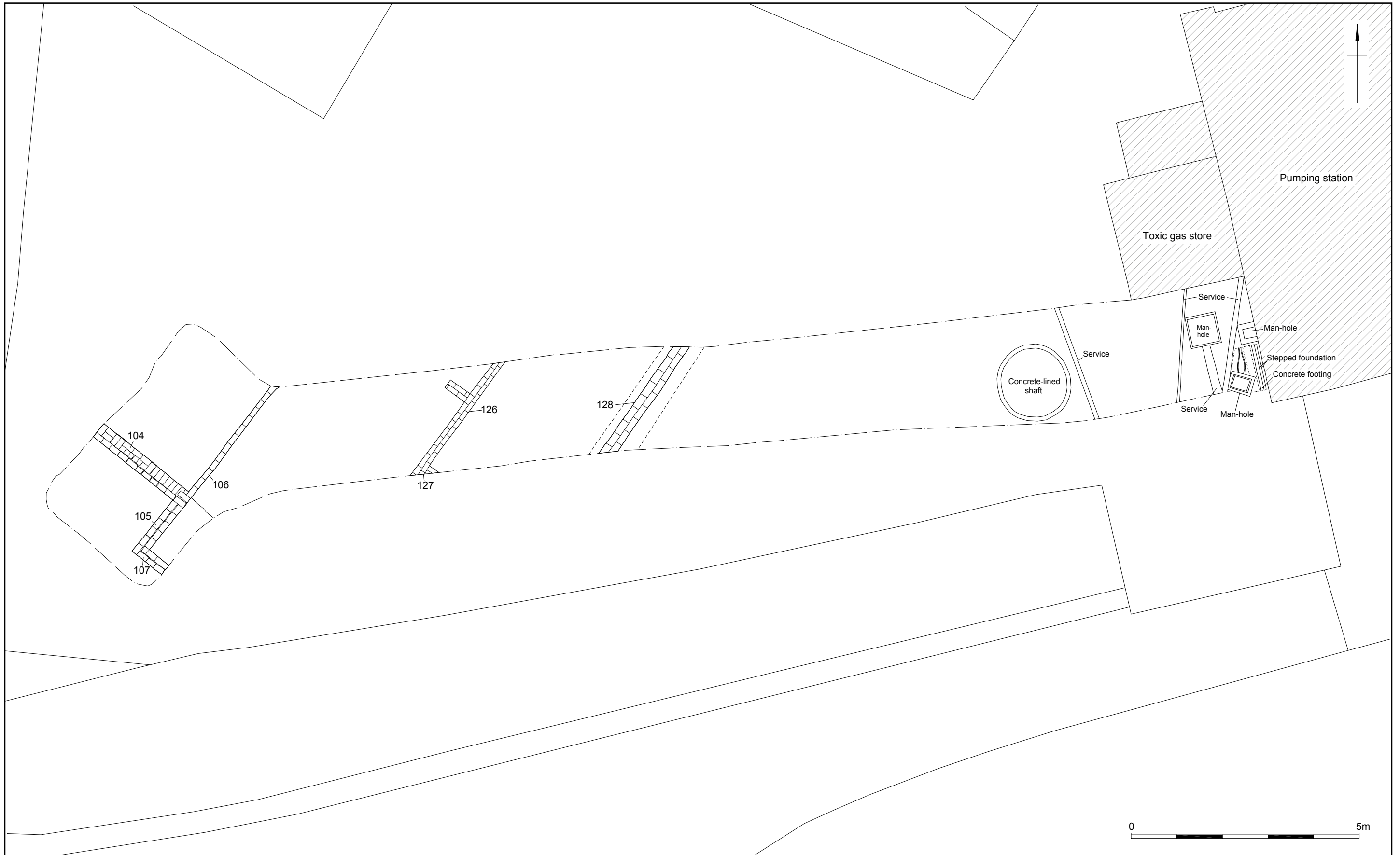
 Watching brief area

 Site boundary



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Plate 1: General view of the Site from the south-east of Green Street, c. 1960s, showing the former engineer's house and extant pumping station



Plate 2: View of the area of the watching brief following the removal of the hardstanding


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Plate 3: Brick foundation walls 104, 105, 106 and 107 at the western end of the trench, looking north-east



Plate 4: Brick foundation walls 126 and 127 at the centre of the trench, looking east


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Plate 5: Representative section at the western end of the trench



Plate 6: Representative section at the centre of the trench, looking east



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Plate 7: View of the stepped foundation of the south-west wall of the extant pumping station

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