

ARCHAEOLOGICAL
MONITORING AND RECORDING
OF THE GRANDSTAND SYPHON,
GRAND STAND ROAD,
WORCESTER

Tom Vaughan

Illustrated by Carolyn Hunt

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INVESTOR IN PEOPLE

Project 3009
Report 1500
WCM 101488

Archaeological monitoring and recording of the Grandstand Syphon, Grand Stand Road, Worcester

Tom Vaughan

Background information

<i>Client</i>	Severn Trent Water Ltd
<i>Site address</i>	Grand Stand Road St Clement's Worcester
<i>National Grid reference</i>	SO 8439 5512
<i>Sites and Monuments Record reference</i>	WCM 101488
<i>Planning authority</i>	Worcester City Council
<i>reference</i>	n/a
<i>Brief</i>	WCMAS 2006
<i>Project design</i>	HEAS 2006b
<i>Project parameters</i>	IFA 1999

Previous archaeological work on the site and associated sites

There has been no previous archaeological work undertaken on the site. Archaeological investigations have been undertaken in the immediate vicinity, on Pitchcroft during pipe laying, 100m to the north (WCM 100548) and during the construction of Sabrina Bridge, 100m to the north-west (WCM 100751). To the south, the medieval city walls were the subject of a number of small-scale investigations in the 1950s (WCM 100157, 100201-3) and more recently a larger scale evaluation during demolition of Croft Road cattle market (WCM 100853). Desk-based assessments have been undertaken of St Clement's Gate and the area around Croft Road and The Butts (WCM 100427, 100625 and 100759).

Archaeological background

The site lies on the east bank of the River Severn, within the floodplain. Prehistoric activity has been identified at points along the River Severn, associated with both the present course and earlier channels. Alluvial layers have been identified, such as at the adjacent Sabrina Bridge site (WCM 100751). The floodplain was utilised extensively in the Roman period, particularly for the dumping of slag and cinders from ironworking which appears to have been the major industrial activity here at the time. The material appears to have been systematically dumped, in part to consolidate the area and provide foundations for further industrial activity (WCM 96167). In the 17th century the efficiency of Roman smelting methods were recognised to be so poor that the slag being re-smelted, and traces of Roman hearths along with a coin hoard were observed set on more than 2m depth of slag, at Little Pitchcroft (thought to be in the vicinity of the cattle market off Croft Road) to the south of the present development area (WCM 100418). In the late 18th century, the southern portion of Pitchcroft, 200-300m out from the city walls, was known as 'Cinder Point' because of the great depth of burnt bricks and slag (1.50-1.80m deep) which was exposed in the riverbank, below bands of river alluvium (WCM 100419 and 100420). Conversely, pipeline works c 1980 toward the southern end of the racecourse identified alluvial layers to a depth of more than 3m, without any trace of iron slag (WCM 100421), so the Roman deposits appear to be very variable across the area.

The site lay outside the medieval city walls, c 225m north-west of the former St Clement's Gate within an area known as Pitchcroft (WCM 96043, 96120-2 and 96124). In the medieval period, Pitchcroft was a meadow held in common, and was used for tentering cloth, e.g. stretching and drying woollen cloth a large wooden frames (WCM 96637). The investigations on the west bank during construction of the Sabrina Bridge revealed a timber waterfront structure or jetty of late medieval or early post-medieval date (WCM 100751). After the Battle of Worcester in 1651, the victorious Parliamentarian forces levelled the medieval city walls and gatehouse along with St Clement's Church tower and the Royalist civil war earthworks thrown up before the second siege of Worcester in 1646 (WCM 96041 and 96142). During the 1646 siege a boat bridge was constructed

across the river at Pitchcroft with an associated emplacement on the east bank (WCM 98636 and 98637). Pitchcroft meadow became a racecourse in the 18th century (WCM 96637).

A waterworks was established on South Quay, to the south of the site, in the early 17th century. This involved the construction of a water tower, wheel and channel off from the main river course, known as 'Little Severn' in the mid 18th century. This was removed in the late 18th or early 19th century (WCM 96079).

The riverbank is thought to have been artificially raised in the post-medieval and modern periods. An engine house is recorded on the first edition OS map of 1883, to the immediate south-east of the development area (WCM 98075). It lay within the apex of The Butts railway branch (WCM 98523). This left the Hereford to Worcester line to the west of Foregate Street, curving off to the north as it descended to the riverside where a headshunt connected with the railway line along the river bank to the south. The southern section was truncated when the main road bridge across the river was rebuilt in 1930. The entire branch ultimately closed in 1955 and was subsequently removed and the viaduct demolished. A cattle market is recorded off Croft Road to the south-east on the 1883 OS map, with additional cattle pens on the riverbank on the site of the aforementioned former waterworks (WCM 98076).

A number of defensive structures were erected during WWII on Pitchcroft, including a Home Guard post on top of the grandstand (demolished in 1973) and aircraft landing obstacles (WCM 92218 and 92381). Contingency plans were also drawn up for the demolition of the railway bridge over the Severn should invading forces threaten the city (WCM 92218).

Aims

The aim of the watching brief was to observe and record archaeological deposits, and to determine their extent, state of preservation, date and type, as far as reasonably possible within the constraints of the development.

Methods

General specification for fieldwork	CAS 1995
Sources consulted	Worcester City HER Sources cited by the HER 1 st edition OS map 1883, scale 1:500
Date(s) of fieldwork	20 th November to 1 st December 2006
Total site area	c 195m ² . Indicated on Fig 2
Area observed	c 50m ²
Dimensions of excavated areas observed	length 13.15m width 2.20-5.40m depth c 4.00m

Access to or visibility of deposits

Observation of the excavation area west of Grand Stand Road was undertaken during and after machine excavation. The exposed surfaces were sufficiently clean to observe well-differentiated archaeological deposits, though any less clear may have not been identified. Access to deep trenches was not made for safety reasons. The groundworks within the racecourse and across the eastern half of Grand Stand Road were not made available for monitoring.

Statement of confidence

Having undertaken the project the following comments may be made with regard to the methods adopted. Only the western portion of the site, representing approximately one quarter of the total site area, was available for archaeological monitoring. This was rapidly shuttered due to the depth of the trenching, allowing only a brief inspection of the stratigraphy. It could therefore be argued that the aims of the project were only partially achieved.

Deposit description

Context	Classification	Description	Depth below ground surface
100	Tarmac	Dark grey black tarmac. Grand Stand Road existing surface.	0.00-0.10m
101	Hardcore	Light brown sub-angular small-medium gravel. Road foundation, below 100.	0.09-0.32m
102	Dump deposit	Dark brown sand with extensive brick rubble frags. Bricks red, 7.75cm thick. Road foundation. Sealed by 101.	0.31-1.19m
103	Brick wall	Aligned WNW-ESE. Bricks 10x23x8cm, laid in English Bond. Wall 98cm wide. Sealed by 102 and 104. Engine house wall as noted on 1 st edition OS map 1883.	0.58-1.23m
104	Dump deposit	Mixed and variable layers of reddish brown sandy silts and clays sealed by turf. Not compacted. Overlies 103 to south-west; sealed by 108 to north-east.	0.00-3.52m
105	Alluvium	Mid-dark brown clayey silt. Compact and cohesive. No inclusions. Sealed by 104. Continues beyond depth of trench.	c 3.50m +
106	Dump deposit	Dark grey silty loam. Frequent small sub/well rounded pebbles. Loose and uncompact. Sealed by 102; overlying 107.	c 1.18-1.50
107	Tarmac	Dark grey black tarmac. Former road surface. Sealed by 106; overlying 108.	c 1.49-1-71m
108	Hardcore	Light brown sub-angular small-medium gravel? Road foundation, below 107.	c 1.70-1.89m

Discussion and conclusions

No significant archaeological deposits or layers were identified, nor were finds recovered during the project.

Alluvial clay was recorded at a depth of approximately 3.50m. It continued to the full depth of the trench and was sterile, containing no inclusions of charcoal or slag.. However the possibility of there being Roman industrial deposits at a lower depth and sealed by the alluvium, as been recorded by antiquarians along the riverbank in the vicinity, cannot be entirely discounted (WCM 100419 and 100420).

The brick structure is determined to be the Engine House depicted on the 1st edition OS map of 1883, associated with The Butts and riverside railway branch line, which was closed in 1955 and soon after demolished.

All other observed layers appeared to abut the brick structure and thus post-date it. The present road surface has clearly been substantially raised above the level of the previous road, which is also of

20th century date. It was not possible to differentiate the mixed deposits observed directly below the turf to the west of the structure and below the earlier road surface to the east. They were noted directly over the alluvium to the west and are considered to represent deliberate dumps, designed to raise the riverbank, either for the 19th century railway line or for later flood prevention.

Publication summary

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

Archaeological monitoring and recording was undertaken on behalf of Severn Trent Water Ltd of the Grandstand Syphon, Grand Stand Road, Worcester (NGR SO 8439 5512; HER ref. WCM 101488). Approximately one quarter of the total site area was available to monitor. No significant archaeological deposits or layers were identified, nor finds recovered during the project. Alluvial clays were identified at approximately 3.50m depth. Their sterile nature indicates that they probably seal natural river terrace deposits, rather than Roman industrial dumps, as have been recorded elsewhere within the vicinity. A brick structure was revealed, which is considered to be the Engine House recorded on later 19th century maps, associated with The Butts and riverside railway branch line. To the east an earlier tarmac road surface was recorded at approximately 1.50m depth below the present road. Otherwise mixed layers of sandy silts and clays were recorded either side of the brick structure. These are considered to represent deliberate dumps, designed to raise the riverbank, either for the 19th century railway line or for later flood prevention.

Archive

Fieldwork progress records AS2	1
Photographic records AS3	1
Digital photographs	35
Drawing number catalogues AS4	1
Drawings	3
Context number catalogue AS5	1
Abbreviated context records AS40	9
Computer disks	1

The project archive is intended to be placed at: Worcester City Museum and Art Gallery
Foregate Street
Worcester
WR1 2PW

telephone 01905 25371

Acknowledgements

The Service would like to thank the following for their kind assistance in the successful conclusion of this project, Paul Cambridge (Engineer, Severn Trent Water Ltd), James Dinn (Archaeological Officer, Worcester City Council) and Sheena Payne (Historic Environment Record Officer, Worcester City Council).

Personnel

Angus Crawford undertook the fieldwork. The report preparation was led by Tom Vaughan.

Bibliography

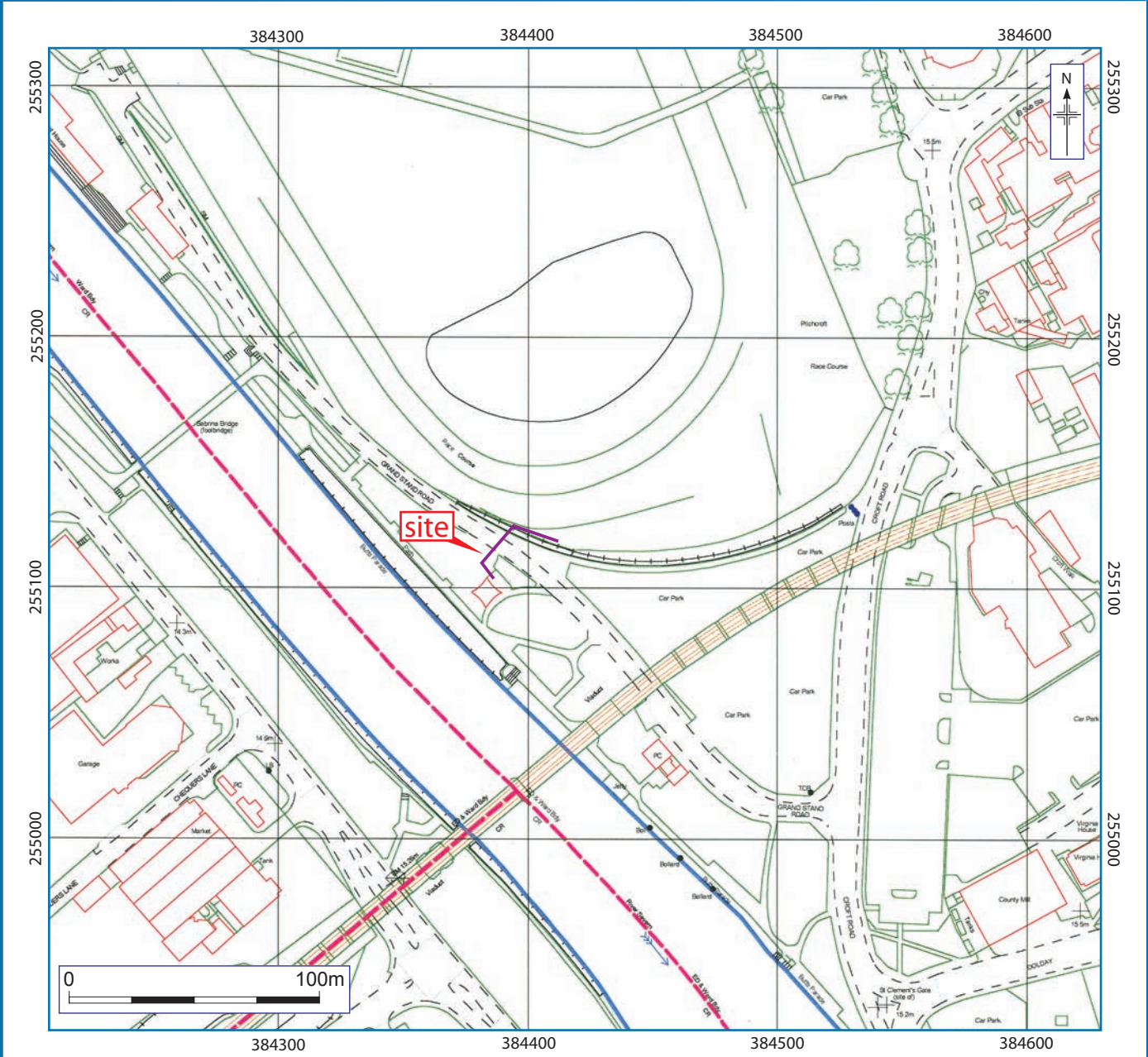
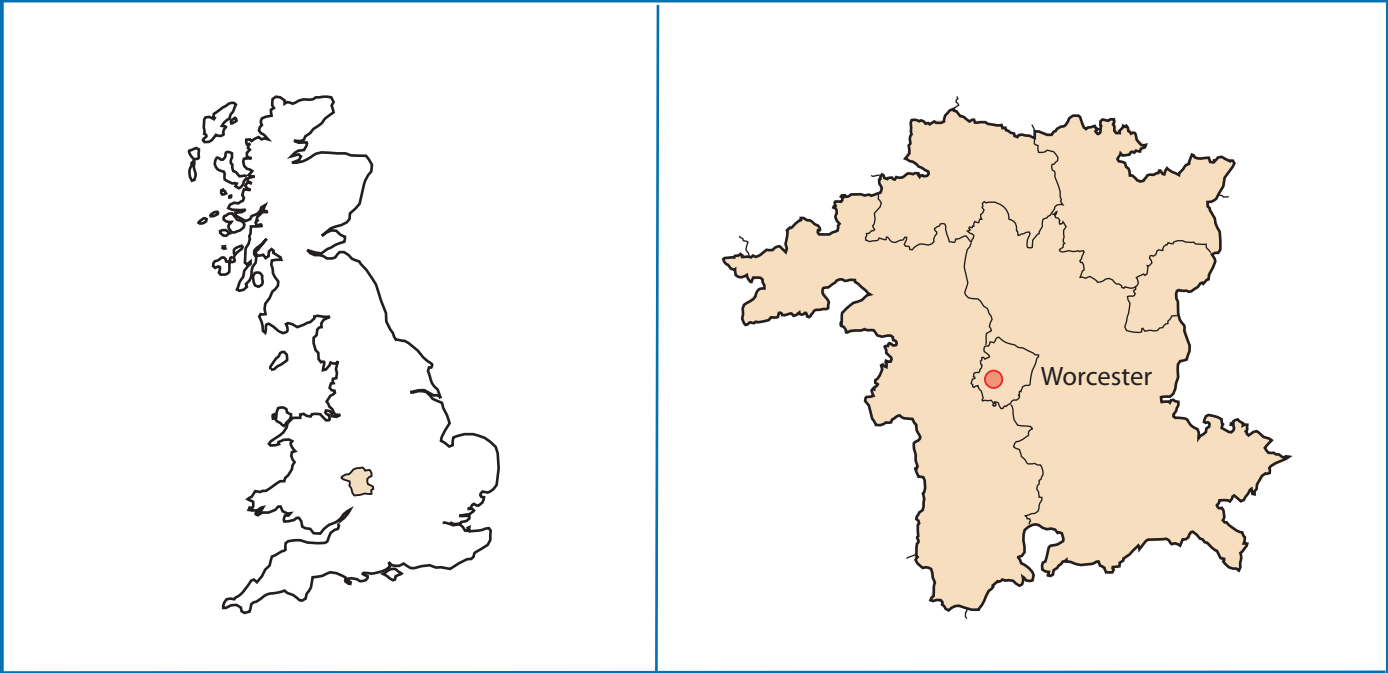
CAS 1995 (as amended) *Manual of Service practice: fieldwork recording manual*, County Archaeological Service, Hereford and Worcester County Council, report, **399**

HEAS 2006 *Proposal for an archaeological watching brief of the Grandstand Syphon, Grand Stand Road, Worcester*, Historic Environment and Archaeology Service, Worcestershire County Council, unpublished document dated 20th November 2006, **P3009**

IFA, 1999 *Standard and guidance for an archaeological watching brief*, Institute of Field Archaeologists

WCMAS 2006 *Brief for an archaeological watching brief, Grandstand Syphon, Grandstand Road, Worcester*, Worcester City Museum Archaeology Section, unpublished document dated 20th November 2006

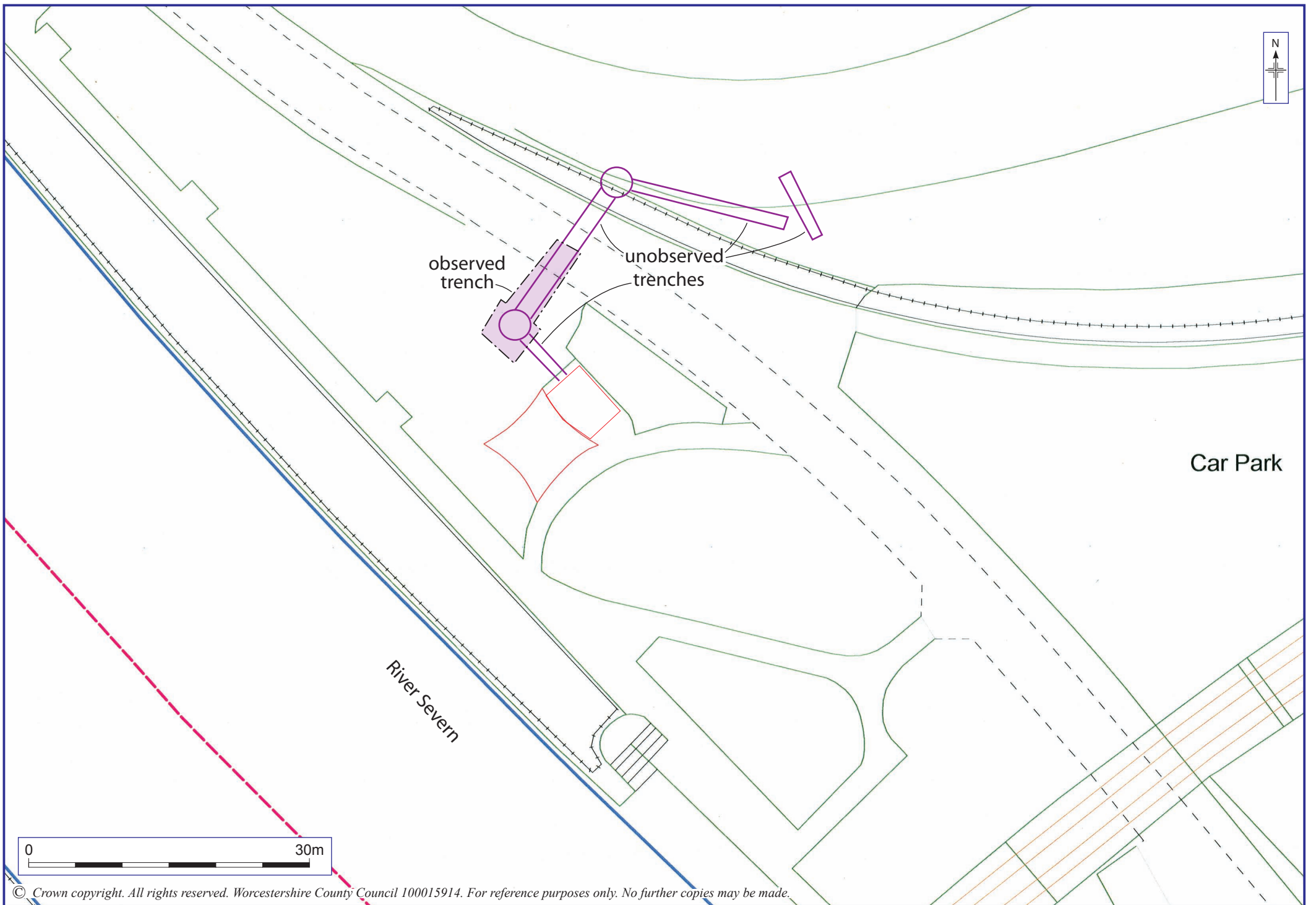
Figures



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Location of the site.

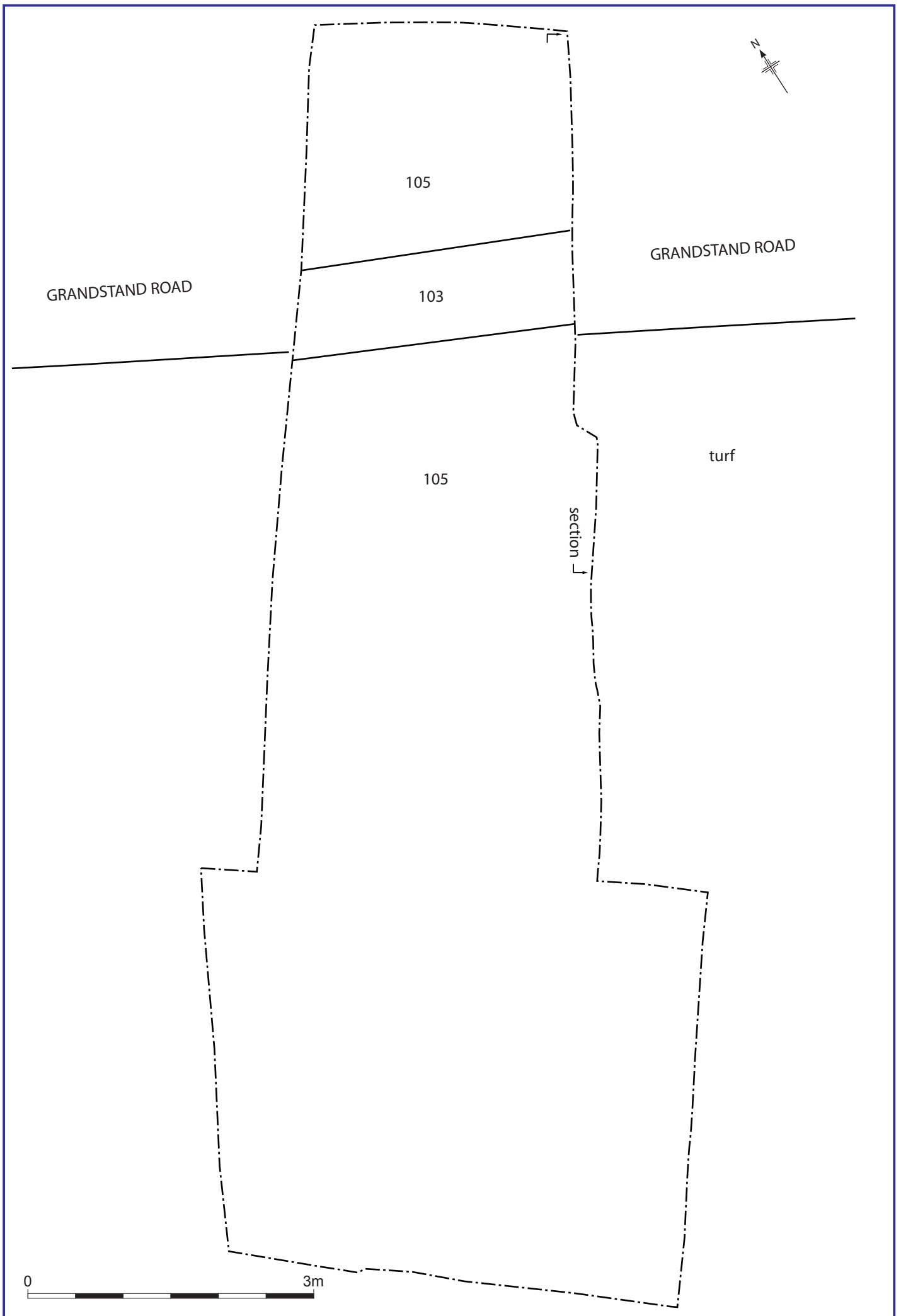
Figure 1



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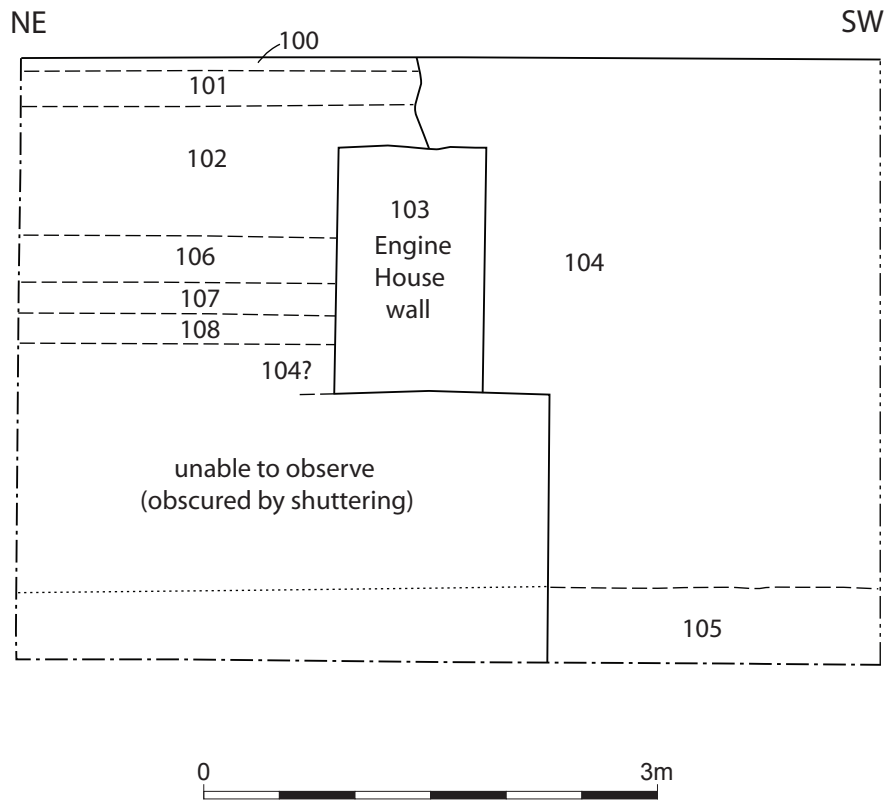
Trench location plan

Figure 2



Portion of trench monitored

Figure 3



Section.

Figure 4

Plates



Plate 1. Brick structure in plan as exposed, view north-west



Plate 2. Brick structure extant in south-east section, view south-east



Plate 3. Brick structure extant in north-west section, view north



Plate 4. General shot of trench, view north-east



Plate 5. General shot of trench in progress, view south-west



Plate 6. Alluvium at base of trench, south-west end, view east