

# LEEDS FLOOD ALLEVIATION SCHEME 2 STEP 1: SOVEREIGN STREET FOOTBRIDGE, LEEDS, WEST YORKSHIRE

Archive Report for:  
Archaeological Monitoring (Watching Brief)

*Prepared by*

**NETWORK ARCHAEOLOGY**

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# Non-Technical Summary

An archaeological watching brief was conducted at Water Lane and Sovereign Street, Leeds, during groundworks associated with the construction of the Sovereign Street Footbridge across the River Aire. The work was commissioned by BAM Mott MacDonald Joint Venture (BMMJV). This report is designed to provide the archaeological results of the fieldwork undertaken and to fulfil the obligations of Condition 6 of Planning Application 21/04124/FU: *“6) No development to take place within the area indicated until the applicant [...] has secured the implementation of a programme archaeological recording”*.

The findings of the archaeological monitoring were limited to several 19<sup>th</sup> or 20<sup>th</sup> century walls recorded during the watching brief. These are likely to belong to a series of warehouses present along the banks of the River Aire and shown on 1898 to 1949 Ordnance Survey Maps. These walls were overlain by modern levelling deposits to a depth of between 1.2m and 1.5m. This document also reports on the discovery of a post-medieval millstone recovered on the south side of the River Aire (NGR SE 30200 33031) by BAM following the curtailment of the watching brief through agreement with West Yorkshire Archaeological Advisory Service (WYAAS).

# 1 Introduction

## 1.1 Purpose of this Report

This archaeological monitoring report is designed to inform the relevant parties of the extent of archaeological remains recorded during the Archaeological Monitoring (Watching Brief) within the proposed development area.

## 1.2 Project Background

### 1.2.1 Proposed development and planning history

The proposed development consists of the construction of a new footbridge over the River Aire and associated landscape and access works as part of the Sovereign Street Footbridge Scheme (planning reference: 21/04124/FU), located just to the south of Leeds Railway Station.

The application for construction of the footbridge was granted full planning permission on the 10th of August 2021. Archaeological works are dealt with by Condition 6 of the planning permission which states:

*“6) No development to take place within the area indicated until the applicant, or their agents or successors in title, has secured the implementation of a programme archaeological recording. This recording must be carried out by an appropriately qualified and experienced archaeological consultant or organisation, in accordance with a written scheme of investigation which has been submitted by the applicant and approved in writing by the Local Planning Authority. In the interests of appropriate archaeological recording.”*

Accordingly, a scheme of works (WSI) was produced by Mott Macdonald following consultation with the West Yorkshire Archaeological Advisory Service (WYAAS) in their capacity as the archaeological advisors to LCC. This document forms a report on these works, archaeological monitoring of groundworks to the north and south of the river.

### 1.2.2 Location, description, and natural environment

The new bridge will provide a new pedestrian and cycle access route between Sovereign Street, the southern bank riverside walking routes, and future Meadow Lane urban development in central Leeds. The bridge will span between the northern and southern banks of the river, connecting Sovereign Street and Water Lane respectively. The landing points are located at

approximately National Grid Reference NGR SE 30132 33049 in the north and NGR SE 30206 33044 in the south.

The underlying geology of the Scheme area comprises Pennine Lower Coal Measures Formation, described as Sedimentary Bedrock formed approximately 312 to 313 million years ago in the Carboniferous Period. Superficial deposits of alluvium are also recorded. The waterlogged nature of alluvium is conducive to the preservation of timber wharf structures relating to water transportation in Leeds potentially known to exist within the Scheme area (BGS).

Three boreholes were excavated during ground investigations in 2021 on the respective landing points of the new footbridge. All exploratory holes encountered made ground to depths of between 2.00m and 2.70m below the present ground level.

### 1.3 Archaeological Background

The following archaeological background information is taken from the BMMJV Written Scheme of Investigation (2021):

The Scheme area was largely undeveloped before the late 18<sup>th</sup> century. During the prehistoric period, the River Aire valley basins were likely marsh or carr land, exploited during fluctuations in water levels for the wooded gravel terraces and fertile soils in the basins. However, evidence from this period has been restricted to isolated finds at Sovereign Street, recovered in later 18<sup>th</sup> or 19<sup>th</sup> century deposits and therefore stratigraphically inconclusive. The conjectured line of the Roman road from Manchester to Tadcaster is thought to pass on a south-west to north-east orientation through Leeds (18, Margary 1973, Road No. 712), and remains thought to be a Roman ford across the River Aire were recorded in the 19<sup>th</sup> century at Dock Street (east of the Scheme area).

The nature of occupation throughout West Yorkshire in the immediate post-Roman and early medieval period remains poorly understood, although there is evidence for some form of settlement in Leeds by the 7<sup>th</sup> century. Early medieval settlement activity within the Scheme area comprises Pre-Conquest crosses found during the rebuilding of St Peter's Church in the early 19<sup>th</sup> century, as well as a possible Saxon burial recorded during the construction of the former Wesleyan Chapel in 1816, its form illustrative of early medieval burial practices. The earliest area of medieval settlement is thought to have been established prior to the 11<sup>th</sup> century and was likely focused on the church in Kirkgate. Archaeological evidence beyond

the 11<sup>th</sup> century has been restricted to residual pottery, which was recovered during investigations to the south of the Chantry church and during investigations at nearby Church Row. Pits containing 14<sup>th</sup> and 15<sup>th</sup> century pottery were identified at the latter site.

A manorial corn mill, known as the King's Mill (HER No. 11238), is recorded within the city in the Domesday Survey (WYAS 2017). The mill was the principal source of flour for the city and likely followed the soke custom, in accordance with which the residents of Leeds were obligated to pay a levy to use the mill to grind their grain (WYAS 2001). The site of the mill is thought to be located to the north of Sovereign Street (NGR SE 30090 33200). Excavation on the site of the mill in 1995 and 1998 recorded stonework and deposits relating to the mill at a depth of between 2m and 3m below the current ground surface dating from the early 11<sup>th</sup> to 19<sup>th</sup> centuries. The excavations also recorded evidence of the 17<sup>th</sup> century stone-built 'New King's Mills' (ibid). This new mill was first water-powered and then steam-powered by the 19<sup>th</sup> century. The mill maintained its function until the 19<sup>th</sup> century and the latest brick-built mill buildings were demolished in the early 20<sup>th</sup> century.

Textile trade and manufacture in Leeds increased substantially during the 16<sup>th</sup> century, and the available cartographic evidence demonstrates the growth in the settlement. By the late-18<sup>th</sup> century the increasing pace of industrialisation had begun to influence the townscape of Leeds. By 1770, Water Lane had been laid out along the southern bank of the Aire with waterfront buildings, most likely warehousing, while to the north of the river, mills had infilled the land between Swinegate and the northern bank of the river. The extant warehouse buildings along Water Lane are known to have been developed during this period, with No. 2 Water Lane, immediately to the east of the Scheme area, being constructed in the early-19<sup>th</sup> century. By the mid-19<sup>th</sup> century, the street layout apparent today had largely been established.

Between the early-19<sup>th</sup> century and the middle of the 20<sup>th</sup> century, the land between Meadow Lane and Hunslet Road, was occupied by Leeds South Market. The market was used by butchers, with the presence of slaughterhouses, other retailers and housing illustrating the commercial importance of Meadow Lane during this period.

Between 1870 and 1873, a new steel and iron bridge was constructed by T. D. Dyne Steel to replace the medieval Leeds Bridge, and much of the 18<sup>th</sup> and early-19<sup>th</sup> century buildings on Meadow Lane on the approach to the bridge from the south were replaced at this time, modernising this important approach into the town. The medieval bridge had been the only



crossing on the River Aire at Leeds until 1818, however between 1818 and 1870 crossings were made at five other points on the river.

In the first years of the 20<sup>th</sup> century the Scheme area on the northern banks of the River Aire had been redeveloped, and the eastern channel of the River Aire blocked. Throughout the post-war period Leeds's industries, focused around steel and textiles, began to decline and so the industrial character of the study area and south Leeds in general began to decline also. On the southern bank of the River Aire, Water Lane, east of the Scheme area, and the industrial buildings which flanked it, had been cleared and the area redeveloped as the offices of ASDA by at least 1991.

## 2 Results

### 2.1 Overview

Two areas were subject to archaeological monitoring (Figures 2-5). These were situated at Sovereign Street, on the northern bank of the River Aire, and Water Lane, situated on the southern bank. Three trenches were excavated (Trenches 1, 2 and 3) on the southern side of the river to facilitate the erection of the piles to support the bridge and on the northern side of the river a single trench (Trench 4) was excavated. All the trenches were excavated in order to remove obstructions in advance of piling. The work was carried out following the stipulations set out within the Written Scheme of Investigation (BMMJV 2022).

The areas of the bridge footings were stripped using a 360<sup>0</sup> mechanical excavator, operating under full archaeological supervision, to clear overburden and allow piles to be erected. Modern levelling material and overburden was removed to reveal several brick walls. These walls were recorded using survey grade GPS, photography and pro-forma recording sheets.

For clarity, the context numbers have been re-assigned during post-excavation. Trench 1 context numbers have been allocated 100s, trench 2: 200s, trench 3: 300s, etc. For the purposes of this report photographic identification boards showing old numbers have been clarified within the caption text.

### 2.2 Results

#### 2.2.1 South Bank

##### Trench 1

Trench 1 measured 4.5m x 7.1m and was located at the landing point of the bridge on the south side of the River Aire (Figure 2, Photograph 1). It was excavated to facilitate the erection of the piles to support the bridge.

Wall **101** was located in the southwest corner of the trench. It originated from the northwest-facing section of the trench and continued northwest for 1.5m, before turning southwest for 1.65m and continuing outside of the limit of excavation. Wall **101** was of brick construction, two courses in thickness and bonded with mortar. The wall enclosed a circular utility hole (**100**) of concrete and iron construction (Photograph 2).

Utility hole **100** and wall **101** were abutted by layer **103**, a dark greyish-brown silty sand containing approximately 50% bricks and limestone fragments. This layer covered the entirety of the trench and was excavated to a depth of 0.5m. Layer **103** was overlain by layer **102**, a 0.7m thick deposit of dark greyish brown silty sand containing bricks, limestone fragments and modern artefacts, including plastic.

## **Trench 2**

Trench 2 measured 2.7m x 5.1m and was located 8m to the east of trench 1 (Figure 3, Photograph 3). It was excavated to facilitate the erection of the piles to support the bridge.

Wall **200** was located in the southern half of the trench (Photograph 4). It originated from the southwest-facing limit of excavation and continued approximately 2.6m southwest, continuing under the northeast-facing limit of excavation. The wall was 0.75m wide and was excavated to a depth of 1.5m (Photograph 5). The upper 1.1m of the wall was of brick construction, two-bricks thick, bonded with mortar. The lower 0.4 of the wall was constructed from limestone blocks, 1m wide x 0.3m deep.

Brick wall **201** was perpendicular to wall **200** and continued for approximately 2.5m to the northwest, before turning ninety degrees and continuing under the southwestern limit of excavation. The wall was two courses thick, approximately 0.25m wide, and bonded with mortar. A second brick wall (**205**) was recorded perpendicular to wall **200** and parallel to wall **201**. This wall was similar to wall **201**, being two courses thick, approximately 0.25m wide, and bonded with mortar.

A short section of truncated brick wall (**204**) was recorded in the centre of the southwest facing section of the trench (Photograph 6). A length of approximately 1.45m of the walls was visible and it continued beyond the limit of excavation to the northwest. Wall **204** was situated approximately 1.4m to the northeast of wall **201** and ran parallel to it.

A brick-built pillar (**202**) was recorded in the south-facing section of the trench. The pillar was partially visible within the section and was approximately 0.65m wide. Further excavation along the northwestern limit of excavation revealed an apparent continuation (**206**) of pillar **202**. Wall **206** was set back a single brick depth from pillar **202** and continued beyond the southwestern limit of excavation.

A layer of made ground (203) covered the entirety of the trench and was excavated to a depth of 0.4m. Layer 203 was overlain by layer 207, a 0.8m thick deposit of dark greyish brown silty sand containing bricks and modern artefacts.

### **Trench 3**

Trench 3 was 3.2m x 4.8m and was located 9.4m to the northeast of trench 2 (Figure 4), excavated to remove obstructions in advance of piling to support the bridge ramp.

Wall **300** was recorded in the centre of the trench (Photograph 7). It originated from the northwest-facing limit of excavation and continued for approximately 4.8m to the northwest, continuing under the southeast-facing limit of excavation. The wall was approximately 0.7m wide and was excavated to a depth of 1.4m. The upper 1.1m of the wall was of brick construction, two courses thick, bonded with mortar. The lower 0.3m of the wall was constructed from limestone blocks, 1m wide x 0.2m deep. The wall was initially recorded in the northern half of the trench and was later found to continue to the south as wall **302**. Wall **300** abutted feature **305**, a perpendicular wall of limestone blocks 0.35m thick, which was partially visible in the north-western limit of excavation and which possibly forming the previous southern bank of the river (Photograph 8).

Brick wall **301** was perpendicular to wall **300=302** and continued approximately 1m southwest, continuing under the southwest limit of excavation. The wall was two bricks thick, approximately 0.35m wide, and bonded with mortar.

Walls **300**, **301** and **302** were abutted by layer 304, a dark greyish-brown silty sand containing approximately 50% bricks and limestone fragments. Layer covered the entirety of the trench and was excavated to a depth of 1.2m.

### **Millstone**

Following the curtailment of the watching brief through agreement with WYAAS, a post-medieval millstone was recovered by BAM during the excavation of foundation piles 2.9m south of trench 2 (Photographs 9 and 10, and Figure 3). The millstone was a single piece of flat disc shaped coarse sandstone 1250mm in diameter and 160mm thick. There is a circular hole or 'eye' through the centre measuring 250mm in diameter. The eye of the millstone was filled with a mixture of brick, stone and mortar that could not be removed without damaging the stone. The location of the stone, 2.9m south of trench 2, suggests that it comes from a similar context to

layer 203, the made-ground used to level the area following the demolition of the buildings recorded within trenches 1, 2 and 3. Similarly, the infilling of the central hole indicates that the millstone had already gone out of use, and was not installed in any milling apparatus, at the time of its deposition.

## 2.2.2 North Bank

### Trench 4

Trench 4 measured 4.3m x 6.4m and was located at the landing point of the bridge on the north side of the River Aire, excavated to facilitate the erection of the piles to support the bridge (Figure 5).

Wall **403** was located in the southeast corner of the trench and oriented northwest to southeast (Photograph 11). Approximately 1.5m x 0.5m of the wall was exposed within the trench and it continued under the northeast and southwest limits of excavation. Wall **404** ran along the southeast limit of excavation and was oriented northeast to southwest. Approximately 6.4m of the wall was visible in the northwest facing section of the trench and continued to the northeast to southwest and to the southeast. Walls **403** and **404** were both constructed from limestone blocks approximately 1m x 0.5m x 0.5m. Northwest-southeast wall **403** was jointed into wall **404**, suggesting that they are contemporaneous to one another.

Walls **403** and **404** were abutted by a modern levelling deposit **402** (Photograph 12), a layer comprising bricks, mortar and concrete fragments, excavated to a depth of 0.2m-0.5m. Layer **402** was overlain by layer **401**, a 0.4m thick deposit of mixed black sand, limestone fragments and modern artefacts, including off-cuts of plastic pipe. The whole trench was covered with a brick pavement (**400**) and associated preparation layers of sand and crushed limestone. Layer **405** was recorded in the southwest facing section the trench following the partial removal of wall **403**. The layer was not excavated but comprised a dark grey and black coarse sand, visible in the section to a depth of 0.8m.

### 3 Conclusions

The excavation of trenches on both sides of the River Aire encountered a series of brick-built and limestone walls probably dating to the 19<sup>th</sup> century. Wall **404** was recorded on the north side of the River Aire, approximately 1.2m from the current edge of the river. This wall likely formed the northern bank of the river and possibly the foundations of a building. The deposits abutting and overlying the wall were both relatively modern and dated to after the partial demolition of the wall. Similarly, wall **200**, recorded on the south side of the river, also ran parallel to the modern riverbank, approximately 8.5m to the south. This wall likely represents the southern outer wall of a brick building. Walls **201**, **300** and **302** were recorded at right-angles to wall **200** and probably represent internal walls of the building.

The walls recorded during the archaeological monitoring likely belong to a series of warehouses present along the banks of the River Aire and depicted on the 1898 to 1949 Ordnance Survey Maps. These walls were abutted and overlain by deposits of 20<sup>th</sup> century made-ground, excavated to a depth of 1.2m – 1.5m.

Specialist assessment of the millstone discovered close to trench 2 has suggested that it is of local manufacture and dates to the 18<sup>th</sup> or 19<sup>th</sup> century (Shaffrey 2022). The survival and preservation of the millstone indicates that it originated close to the findspot. Shaffrey (2022) has suggested that the millstone is likely to have been used at the Kings Mill, the first flour mill in Leeds and located on Sovereign Street. The mill is thought to have been in use from the 12<sup>th</sup> until the 19<sup>th</sup> century, undergoing various iterations of construction, evolving from a timber to a stone and then a brick-built structure (WYAS 2001, 2017). The millstone is likely from the 'New King's Mill' constructed in the 17<sup>th</sup> century and active until the c19<sup>th</sup>, although due to the lack of diagnostic features of the millstone it is not possible to provide an exact date for the artefact.

It is most likely that the millstone was incorporated into backfilled material used to level the ground surface following the closure of the mill in the 19<sup>th</sup> century and the demolition of the buildings recorded in trenches 1, 2 and 3. Following discussion with WYAAS, BMMJV and Leeds Museum, it was decided that due to the frequency of similar stones within the area, the example from Sovereign Bridge would not be retained. Instead, it was agreed that the millstone

should be incorporated into the landscape designs as part of the development and therefore retained at the location from which it was recovered.

The results of the watching brief support the findings of boreholes excavated during ground investigations in 2021 on the respective landing points of the new footbridge, which encountered made ground to depths of between 2.00m and 2.70m. It is likely that all deposits and features above this depth will be of 19<sup>th</sup> or 20<sup>th</sup> century date.

The archaeological monitoring fulfilled the aims of the WSI to identify and record the presence/absence, extent, condition, character and date of any archaeological features and deposits disturbed or exposed because of groundworks. Due to the depth of the 20<sup>th</sup> century deposits, it was determined that there was negligible potential for pre-industrial archaeology within the area of the watching brief.

An interim report was submitted by NAL to BMMJV following the completion of the watching brief. Any further archaeological monitoring within the watching brief area was curtailed following consultation with West Yorkshire Archaeological Advisory Service and no further work was recommended.

This Archaeological Monitoring report confirms that the full programme of archaeological monitoring (watching brief) works at Sovereign Bridge, Leeds, South Yorkshire were completed as stipulated in the WSI (BMMJV 2022) to satisfy Condition 6 of Planning Reference 21/04124/FU.

## 4 Photographs



Photograph 1: Overview of the excavation area to the south of the river, facing east.



Photograph 2: Utility hole **100** (113 on board) and wall **101**, facing southeast.





Photograph 3: Overview of trench 2, facing northwest.



Photograph 4: Wall **200** (100 on board), facing southwest.



Photograph 5: Wall **200** (100 on board) partially removed, facing southwest.



Photograph 6: Wall **204** (110 on board), facing northeast.



Photograph 7: Wall 300 (101 on board), facing northeast.



Photograph 8: Wall 305 (109 on board), facing northwest.



Photograph 9: Post-medieval millstone recovered by BAM during the removal of made-ground deposits during ground leveling



Photograph 10: Side view of the post-medieval millstone



Photograph 11: Wall 403 (203 on board), facing southeast.



Photograph 12: Overview of made ground 402 (202 on board) in trench 4, facing east.

## 5 Archive

The archaeological works produced the following document archive, under the site code of CMH24. The recipient museum will be Leeds Museums & Galleries, Leeds Discovery Centre Carlisle Road, Leeds LS10 1LB. The accession number is to be confirmed. The decision was made by WYAAS and Leeds Museum Services not to retain the post-medieval millstone recovered by BAM.

Table 1: Archive Quantification

Archive component	Count
Context registers	2
Context sheets	21
Photographic registers	3
Digital colour photographs	89
Black and white photographs	32
Drawing permatrace sheets (A3)	1

# 6 Bibliography

## 6.1 Secondary sources

Reference	Year	Title	Published
AAF	2007	Archaeological Archives: A Guide to best practice in creation, compilation, transfer and curation	
BMMJV	2022	Sovereign Street Footbridge: Written Scheme of Investigation: Archaeological Watching Brief	
CifA	2007	Archaeological Archives: A Guide to best practice in creation, compilation, transfer and curation	
CifA	2014a	Code of Approved Practice for the Regulation of Contractual Arrangements in Field Archaeology	
CifA	2014b	Standards and Guidance for the Collection, Documentation, Conservation and Research of Archaeological Materials	
CifA	2014c	Standard and Guidance for an archaeological evaluation	
CifA	2014d	Standard and guidance for the creation, compilation, transfer and deposition of archaeological archives	
Ferguson L.M. & Murray D.M.	1997	Archaeological Documentary Archives: Preparation, Curation and Storage, Paper 1,	Institute of Field Archaeologists' Manchester
Historic England	1991	Exploring Our Past	London
Historic England	1997	English Heritage Archaeology Division Research Agenda (Unpublished draft)	London
Historic England	2009	Management of Research Projects in the Historic Environment and MoRPHE Project Planning Note 3: Excavation	London
Historic England	2011	Environmental Archaeology: A Guide to the Theory and Practice of Methods, from sampling and recovery to post excavation (second edition) (Centre for Archaeology Guidelines)	London
Museums & Galleries Commission	1992	Standards in the Museum Care of Archaeological Collections	London
Network Archaeology	2006	Health, Safety and Welfare Policy	
Shaffrey, R.	2022	Archaeological Assessment of a Millstone from Sovereign Bridge, Leeds	Unpublished report
Society of Museum Archaeologists	1995	Towards an accessible archaeological archive - the transfer of archaeological archives to museums: guidelines for use in England, Northern Ireland, Scotland and Wales	Society for Museum Archaeologists, London
UKIC	2001	Excavated Artefacts and Conservation	United Kingdom Institute for Conservation, Conservation Guidelines No. 1, revised
Walker, K.	1990	Guidelines for the preparation of excavation archives for long-term storage.	United Kingdom Institute for Conservation, Archaeology Section (London)
Watkinson, D & Neal A. V	1998	First Aid for Finds	Rescue Publications, Hertford

Reference	Year	Title	Published
West Yorkshire Archaeological Services (WYAS)	2021	Excavations at the King's Mills, Swinegate, Leeds, West Yorkshire	Unpublished report
West Yorkshire Archaeological Services (WYAS)	2017	Archaeological Desk-based Assessment: Sovereign Street Footbridge, Leeds, West Yorkshire	Unpublished report

## 6.2 Website sources

Reference	Title	Link
ADS	Digital Archives from Excavation and Fieldwork: Guide to Good Practice Second Edition	<a href="http://ads.ahds.ac.uk/project/goodguides/excavation/">http://ads.ahds.ac.uk/project/goodguides/excavation/</a> [Accessed 29/09/2017]
British Geological Survey, undated	Geology of Britain viewer	<a href="http://mapapps.bgs.ac.uk/geologyofbritain/home.html">http://mapapps.bgs.ac.uk/geologyofbritain/home.html</a> [Accessed 29/09/2017]
Cranfield University	Soilscapes Viewer	<a href="https://www.landis.org.uk/soilscapes/">https://www.landis.org.uk/soilscapes/</a> [Accessed 29/09/2017]
Heritage Gateway	Heritage Gateway Online Viewer	<a href="http://www.heritagegateway.org.uk/Gateway/Results.aspx">http://www.heritagegateway.org.uk/Gateway/Results.aspx</a> [Accessed 09/07/2021]





# Appendix 1

## Context listing

Trench	Context No.	Type	Fill of / filled by	Description
1	100	Masonry	-	Brick utility hole in Trench 1
1	101	Masonry	-	Brick wall surrounding 100
1	102	Layer	-	Demolition layer
1	103	Layer	-	Demolition layer
2	200	Masonry	-	NE-SW brick wall with Trench 2
2	201	Masonry	-	NW-SE brick wall within Trench 2
2	202	Masonry	-	Possible brick pillar in Trench 2
2	203	Layer	-	Demolition layer
2	204	Masonry	-	NW-SE brick wall within Trench 2
2	205	Masonry	-	NE-SW brick partition wall with Trench 2
2	206	Masonry	-	Continuation of Wall 202
2	207	Layer	-	Demolition layer
3	300	Masonry	-	NW-SE brick wall with Trench 3
3	301	Masonry	-	NE-SW brick wall within Trench 3
3	302	Masonry	-	Continuation of Wall 300
3	304	Layer	-	Demolition layer
3	305	Masonry	-	NW-SE stone wall within Trench 3
4	400	Layer	-	Modern pavement
4	401	Layer	-	Modern levelling/overburden
4	402	Layer	-	Modern compacted debris
4	403	Masonry	-	NW-SE brick wall within Trench 4
4	404	Masonry	-	NW-SE stone wall within Trench 4
4	405	Layer	-	Layer of sand to the NE of Wall 404

# Appendix 2

## Millstone Assessment – Ruth Shaffrey

## Assessment of a millstone from Sovereign Bridge, Leeds

Ruth Shaffrey (Ba Hons, PhD, MCifA, FSA)

### Introduction

A complete upper millstone (Photographs 11 & 12) was uncovered during archaeological works at Sovereign Street, Leeds. The millstone was found at NGR SE 30200 33031. Due to the size of the millstone and the difficulty in moving it, it is recorded here through examination of photographic records and measurements taken by staff on site.

### Results

The millstone is of flat disc-shape and has a rectangular rynd chase and neat pronounced harped grooving. These features indicate a post-medieval date because medieval millstones tended to have curved rynd chases and cruder grooving (Watts 2002, 102).

The millstone is a monolithic stone, and although not examined, therefore likely to be a Peak District millstone; such an identification seems more likely given that the Peak millstone makers, Childs, were based in Leeds, at least in the 19th century (Tucker 1977, 2). Post-medieval millstones from the Peak District ranged in diameter from about 1.1m to 2m (Tucker 1985, 43) making this one of the smaller examples, although large compared to Roman millstones. This relatively small size and the flat disc-shape indicate a production date in the later post-medieval period (c 18th/19th century) because earlier post-medieval millstones (c 16th/17th century) tended to be larger and have rounded backs (Watts 2002, 143).

The millstone was presumably used in the adjacent Kings Mill and as it appears to be fully functional, was probably discarded when the mill was closed.

### Catalogue description

Upper millstone. A large and complete monolithic stone of flat disc type with deep and wide harped grooving and two-armed rectangular rynd chase set into the grinding surface. The rynd chase measures 100mm in width and 400mm in length plus 60mm in depth. The eye is circular and measures 250mm in diameter and is filled with a brick/concrete mixture. The circumference is roughly tooled. The opposing face was not recorded due to being underneath. The millstone measures 1250mm in diameter x 160mm in thickness.

## References

Tucker, D.G. 1977 Millstones, quarries and millstone makers, *Post-medieval Archaeology* 11, 1-21

Tucker, D.G. 1985 Millstone making in the Peak District of Derbyshire: the quarries and the technology, *Industrial Archaeology Review* VIII, 1, 42-58

Watts, M. 2002 *The Archaeology of Mills and Milling*, Tempus.

# Appendix 3

## OASIS submission form

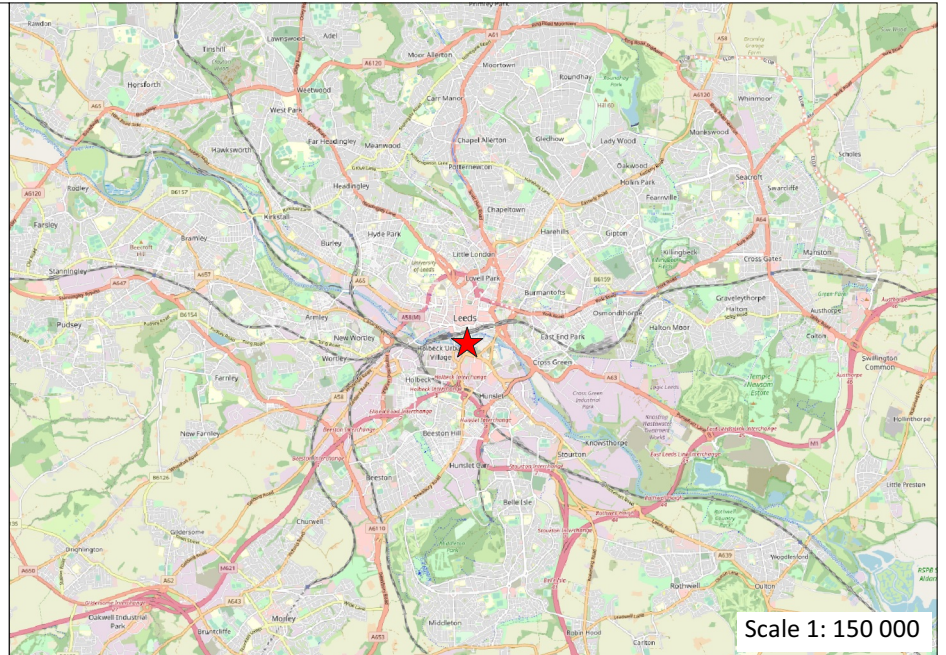
## Summary for networka2-506498

OASIS ID (UID)	networka2-506498
Project Name	Watching Brief at Sovereign Bridge
Sitename	Sovereign Bridge
Activity type	Watching Brief
Project Identifier(s)	
Planning Id	21/04124/FU
Reason For Investigation	Planning requirement
Organisation Responsible for work	Network Archaeology Ltd
Project Dates	14-Feb-2022 - 07-Mar-2022
Location	Sovereign Bridge NGR : SE 30132 33049 LL : 53.7928866655394, -1.544077774453 12 Fig : 430132,433049
Administrative Areas	Country : England County : West Yorkshire District : Leeds Parish : Leeds, unparished area
Project Methodology	Archaeological Monitoring during groundworks associated with piling for a new footbridge.
Project Results	An archaeological watching brief was conducted at Water Lane and Sovereign Street, Leeds, during groundworks associated with the construction of the Sovereign Street Footbridge across the River Aire.  Several 19th or 20th century walls were recorded during the watching brief. These are likely to belong to a series of warehouses present along the banks of the River Aire. These walls were overlain by modern levelling deposits to a depth of between 1.2m and 1.5m.  A post-medieval millstone was also recovered from the south side of the River Aire during the removal of made-ground deposits.
Keywords	Industrial Building - 20TH CENTURY - FISH Thesaurus of Monument Types
Funder	
HER	West Yorkshire HER - unRev - STANDARD
Person Responsible for work	Peter, Townend
HER Identifiers	
Archives	Documentary Archive, Digital Archive - to be deposited with Leeds Museum Discovery Centre;

# Appendix 4

## Figures





- ★ Proposed Development
- Proposed Development

(Contains Ordnance Survey data  
@ crown copyright 2010)

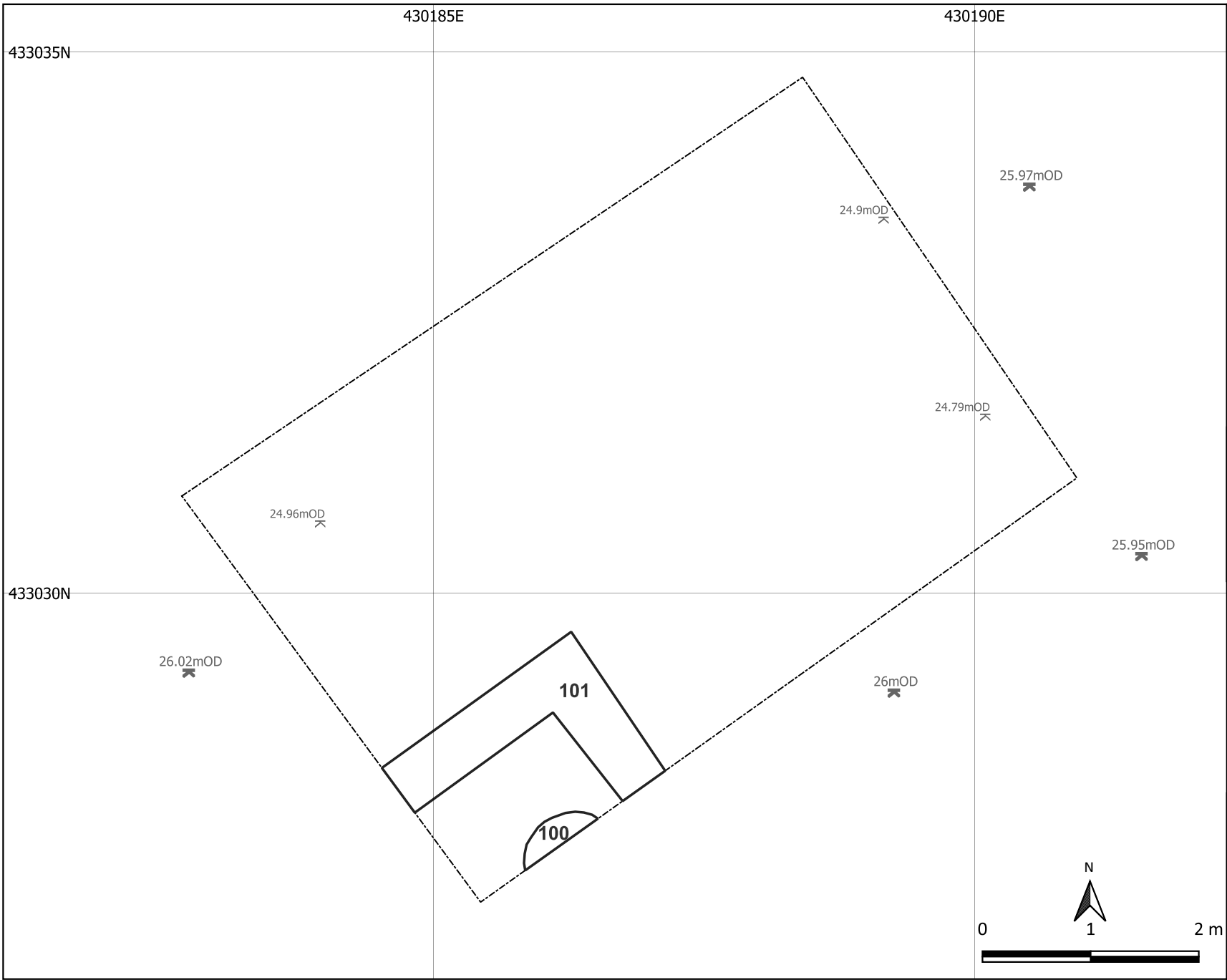
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1.0	17/11/21	First Issue	HT	AG	RC

Sovereign Street Footbridge,  
Leeds

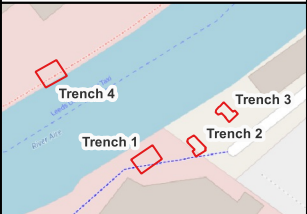
Figure 1 Location of proposed development site

Scale 1: 10,000





- Top height
- Bottom height
- Demolished wall
- LOE



(Contains Ordnance Survey data @ crown copyright 2010)

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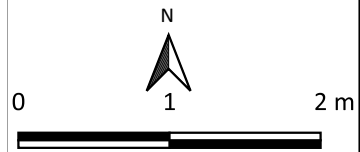
Ver	Date	Description	Drn	HT	PT	TQ
1.00	25/03/22	First Draft				

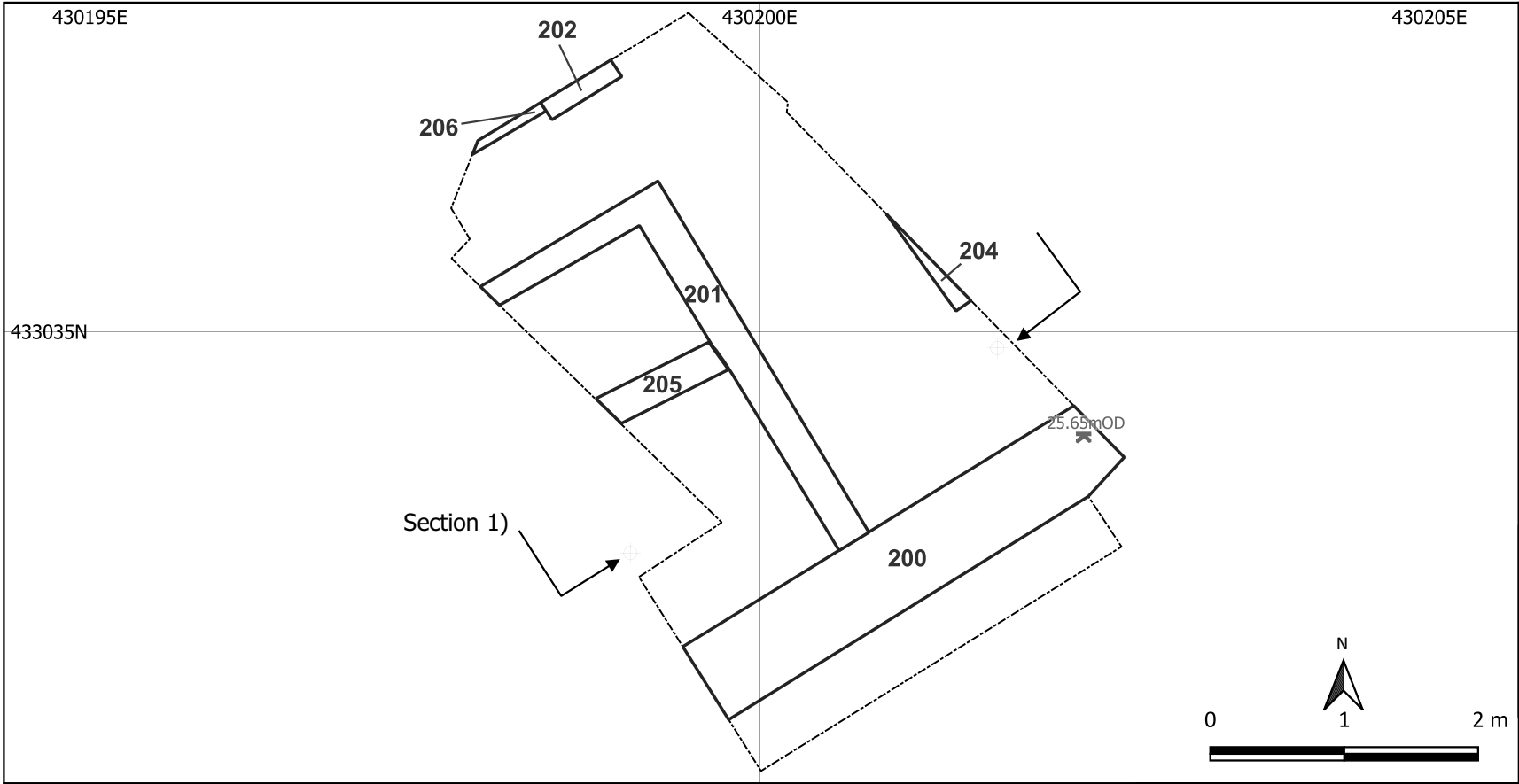


Sovereign Street Footbridge,  
Leeds

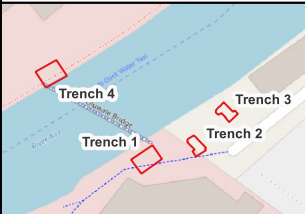
Figure 2 Results from  
Trench 1

Scale 1:50 at A4

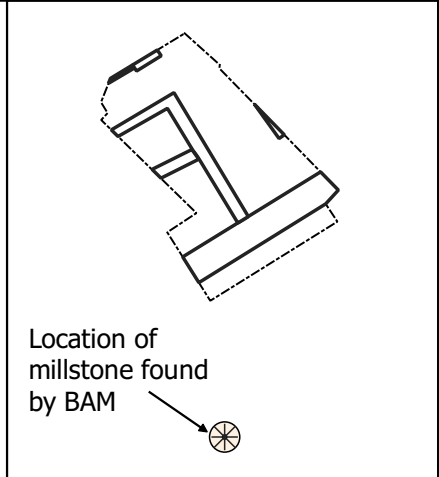
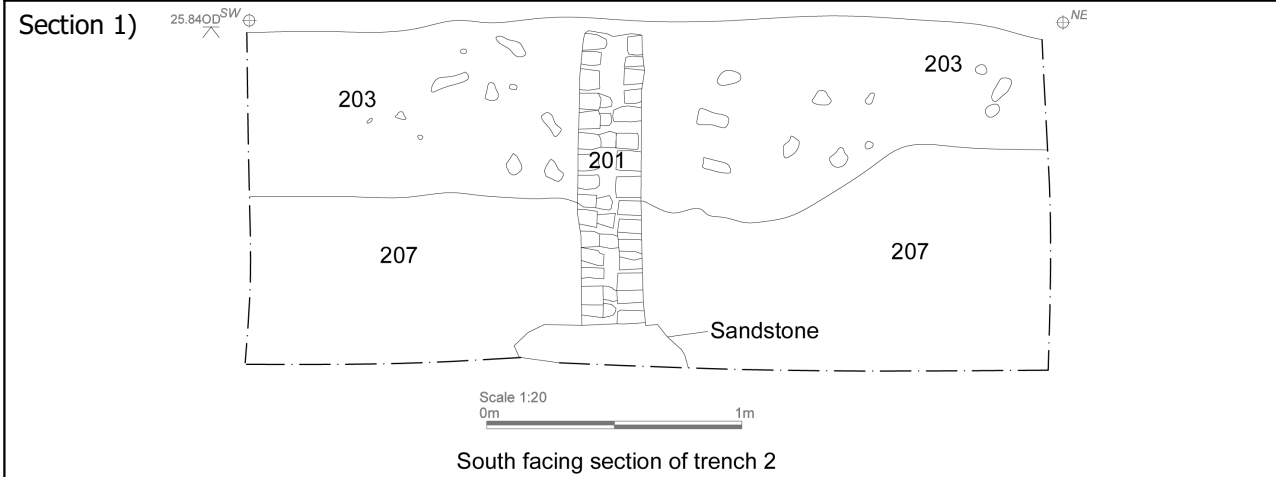




- Top height
- Demolished wall
- Drawing point
- LOE
- Masonry



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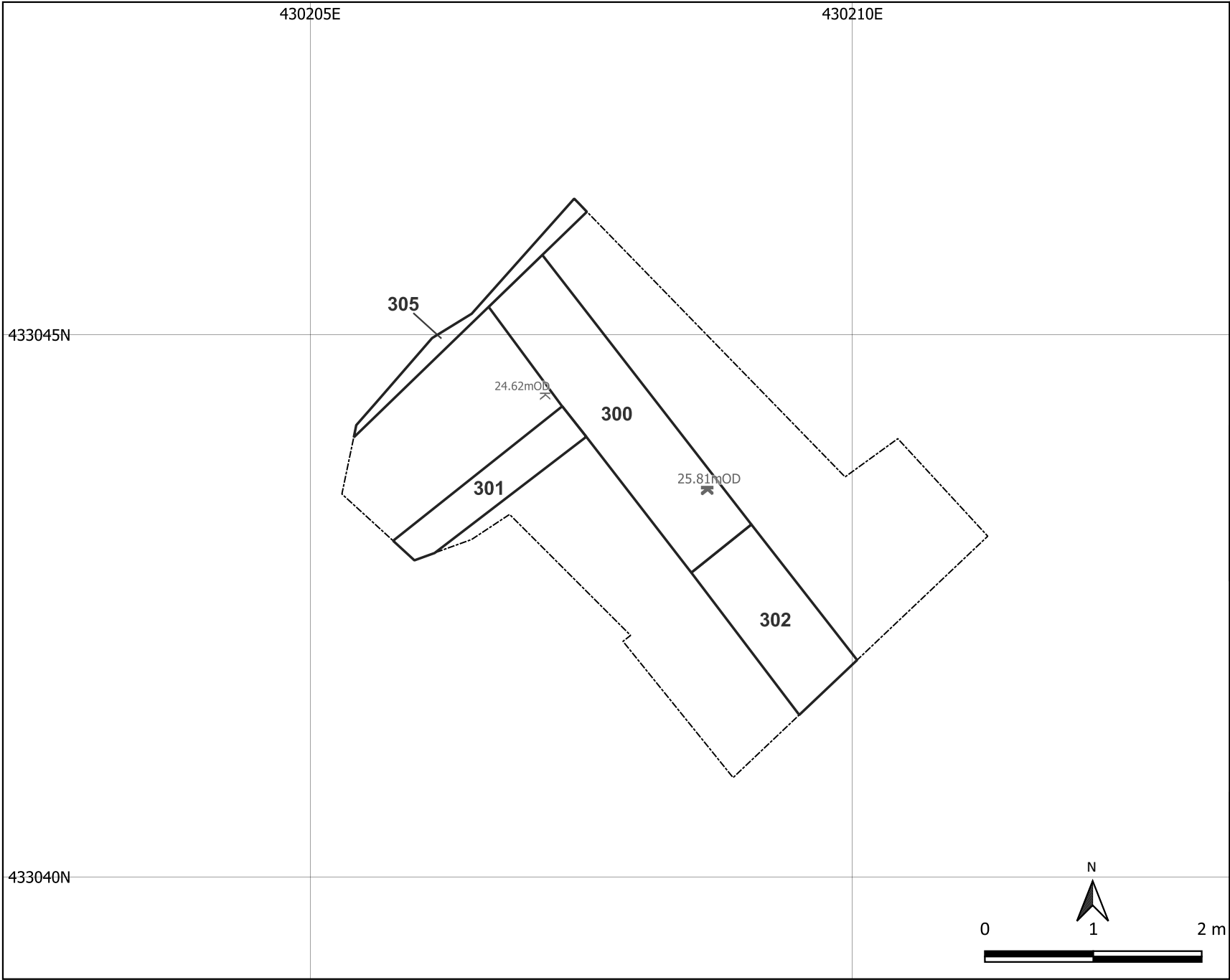
1.00	25/03/22	First Draft	HT	PT	TQ
Ver	Date	Description	Drn	Chk	App

network  
archaeology

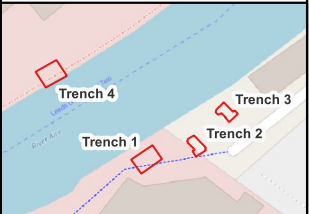
Sovereign Street Footbridge,  
Leedss

Figure 3 Results from  
Trench 2

Scale 1:50 and 1:20 at A4



- Top height
- Bottom height
- Demolished wall
- LOE
- Masonry



(Contains Ordnance Survey data @ crown copyright 2010)

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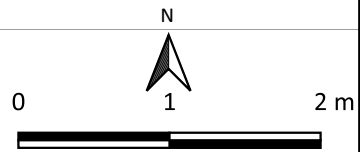
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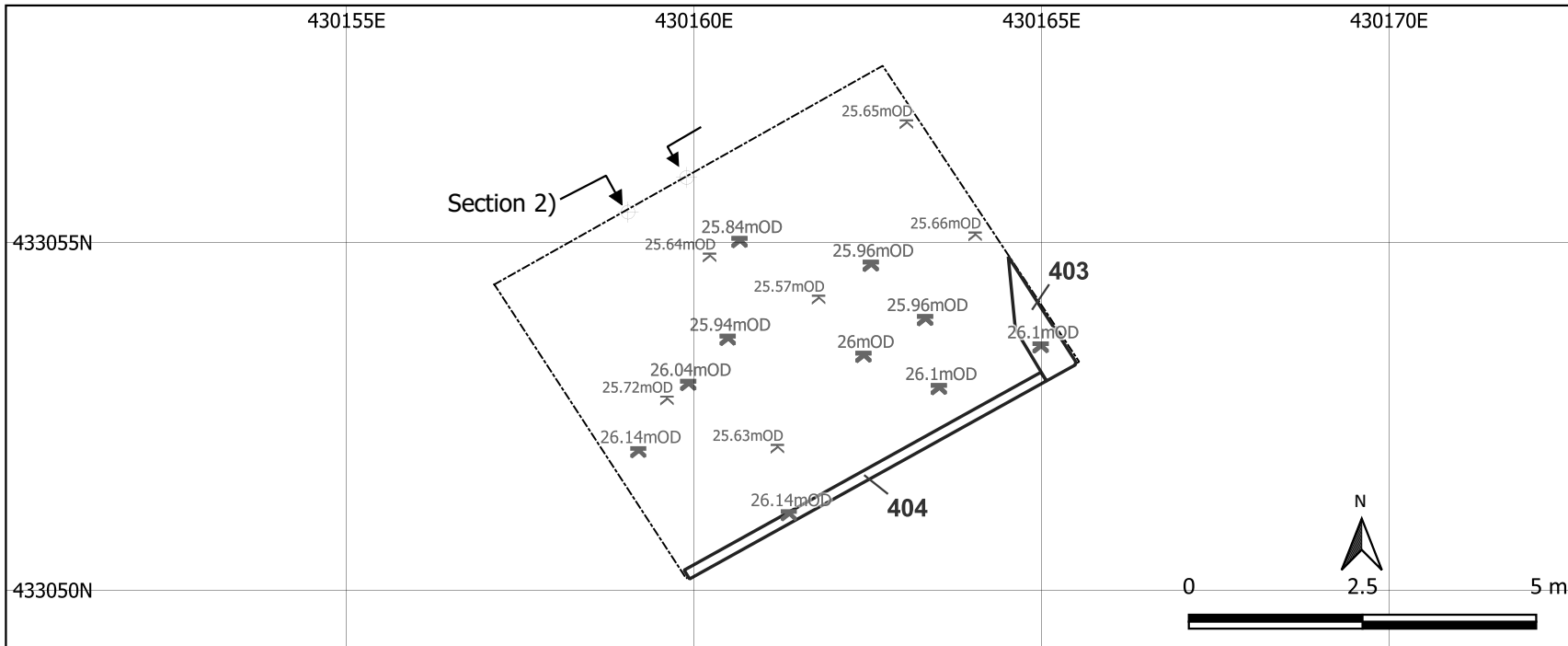


Sovereign Street Footbridge, Leeds

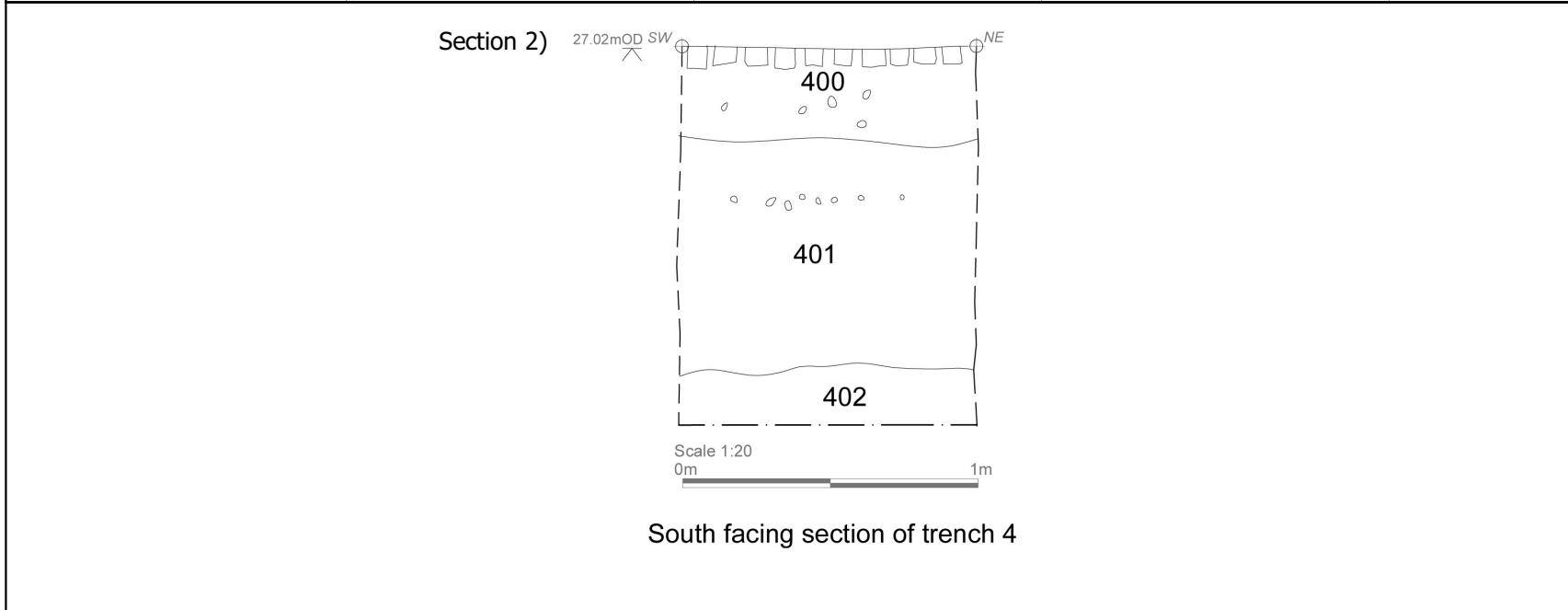
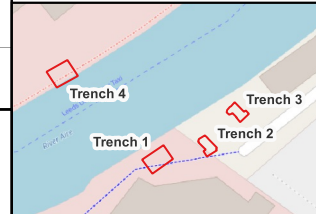
Figure 4 Results from Trench 3

Scale 1:50 at A4





- Top height
- Bottom height
- Drawing point
- LOE
- Masonry
- Test pit



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Ver	Date	Description	Drn	HT	PT	TQ
1.00	25/03/22	First Draft				

network archaeology

Soverign Street Footbridge, Leeds

Figure 5 Results from Trench 4

Scale 1:100 & 1:20 at A4