AREA 13 (WATERSIDE), THE CHANNELSIDE AREA, BARROW-IN-FURNESS

Archaeological Watching Brief Report

Oxford Archaeology North

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SUMMARY

Oxford Archaeology North was commissioned by Capita Symonds to carry out an archaeological watching brief on an area of land being cleared for future development. Barrow Borough Council and Cumbria County Council are acting in partnership to redevelop the Channelside area of Barrow-in-Furness; the site, Area 13 (Waterside), The Channelside Area, is one of 13 discrete areas within this development. Area 13 is on the east bank of the Walney Channel, south of the Jubilee Bridge (centred on SD 1903 6865). The watching brief monitored the removal of the surface and sub-surface concrete from the area, which is to be subsequently replaced by hardstanding. The watching brief was undertaken intermittently between 17th March and 1st April 2005, as and when the concrete was being removed.

A large number of very substantial concrete blocks were removed. These represent the foundations of a large industrial building, connected to the docks, that documentary evidence shows was built between 1911 and 1933 and demolished in 2000. Four concrete-lined pits associated with this building were found, one of which contained plinths. The exact purpose of the pits is unknown, but will have been related to large-scale industrial manufacture. On the east side of the site there were two brick-built structures that were very probably also part of this building.

Observations of the made ground around the concrete, which consisted of layers of rubble, indicated that the activity associated with the recently demolished industrial building disturbed the ground within its footprint to a depth of 2.5m beneath the current yard surface.

Only one structure found during the watching brief is interpreted as pre-dating this building, and represents the industrial use of the site in the late nineteenth or early twentieth century. This was a small, heavily truncated brick structure on a concrete base, which underlay one of the concrete blocks of the recently demolished industrial building. The extent of these remains was very limited; insufficient evidence was preserved to characterise this structure and there was no indication of its function. It is possible that it is part of the Old Barrow Brick Huts, built in 1871 and which are shown within the current development area on late nineteenth century maps.

Although documentary evidence indicates the presence of earlier buildings on the site, the absence of archaeological evidence is likely to relate to the deep and extensive truncation associated with the construction of the early twentieth century building.

ACKNOWLEDGEMENTS

Oxford Archaeology North would like to thank Steve Capstick of Capita Symonds for commissioning the project and for his assistance throughout the fieldwork.

The watching brief was undertaken by Steve Clarke who also wrote the report. The figures were created by Emma Carter and Kathryn Blythe, the project management by Tim Carew and report editing was by Stephen Rowland and Alan Lupton.

1. INTRODUCTION

1.1 CIRCUMSTANCES OF PROJECT

1.1.1 Barrow Borough Council and Cumbria County Council are acting in partnership to redevelop the Channelside area of Barrow-in-Furness for as yet undetermined uses. The site that is the subject of this report, Area 13 (Waterside), The Channelside Area, Barrow-in-Furness, Cumbria, is one of 13 discrete areas within the Channelside area. A desk-based assessment of the historical and archaeological background to the site was prepared in 2002 (EDAS 2002). The buildings on the site were demolished in 2000, and a scheme was designed by Capita Symonds to prepare the site further, by the removal of surface concrete. Initially, the groundworks were intended to consist of the removal of concrete slabs and their replacement with hardstanding, which did not require a watching brief. However, this method was changed after work began, when it was found that there was a large amount of concrete present in the ground, especially the large blocks that formed the footings for an industrial building built in the early twentieth century. It was decided to clear the ground of these deeper solid obstructions as well, which meant excavating up to 2.5m in depth.

1.1.2 As a result, given the results of the desk-based assessment (*ibid*), the Assistant Archaeologist for Cumbria County Council recommended a watching brief to monitor the groundworks. The scope of the work required during the watching brief was covered by a verbal brief. This required the recording, where preserved, of any remains identified in the desk-based assessment, especially the late nineteenth century temporary housing for the shipyard workers, and the early twentieth century propeller testing areas and offices (*see section 1.3*). Oxford Archaeology North (OA North) undertook this work between late March and early April 2005.

1.2 SITE LOCATION, TOPOGRAPHY AND GEOLOGY

1.2.1 The study area lies on the east side of the Walney Channel, immediately adjacent to the south side of the Jubilee Bridge, *c* 0.9km to the south-west of Barrow town centre (centred on SD 1903 6865). The large shipbuilding sheds of BAE Systems lie to the south, while Bridge Road lies to the east. The study area covers 2.8 hectares and is sub-square in plan.

1.2.2 Barrow-in-Furness lies at the south-western tip of the Furness Peninsula in South Cumbria, although it lay historically in that part of Lancashire known as ‘across the sands’ or North Lonsdale. It is bounded by Morecambe Bay to the south and Duddon Sands to the north, with the Furness Fells to the east and Irish Sea to the west (Fig 1).

1.2.3 The solid geology is made up almost entirely of Triassic red sandstone, with areas of red, grey and green mudstones and siltstones to the south-west (British Geological Survey 1982). As the study area is entirely urban or

industrial, the nature of the overlying drift geology is not clear. It is likely to consist of glacially derived gravel and clay, overlain by typical brown earths, as in neighbouring areas (Ordnance Survey 1983).

1.3 HISTORICAL AND ARCHAEOLOGICAL BACKGROUND

1.3.1 The following has been extracted from the desk-based assessment (EDAS 2002), which gives a more detailed account of the archaeological and historical background.

1.3.2 In 1850 the Ordnance Survey map shows that the western side of the site was within the western channel, while the eastern part formed agricultural land on Barrow Island

1.3.3 In 1863 the Furness Railway Company acquired the whole of Barrow Island. A plan of 1867, drawn up by the Railway Company, shows that the site lay within a block of land labelled as 'Site for Shipbuilding Yards'.

1.3.4 In 1870 the Barrow Iron Shipbuilding Company was established on the island, and the first warships were built by the yard in 1877. The shipyards and associated works did not extend into the study area at this time.

1.3.5 In 1871 the site was occupied by the 'Old Barrow Brick Huts'. These were an early form of prefabricated housing built for the Ship Company to provide accommodation for the shipyard workers and navvies. The huts were of two types, wooden and brick. There were 349 arranged in rows separated by a railway line. Due to poor living conditions the wooden huts were condemned in 1877, but the brick huts remained in use until the 1880s. The 1873 Ordnance Survey map shows a building named as 'Old Barrow National School' at the south end of the huts.

1.3.6 In 1891 the site was again open ground with a ferry station to the north and a road running north-west to south-east through the site, on the approximate line of the former railway. The school building still existed at this date.

1.3.7 The Ordnance Survey 1911 map shows the site to be occupied by a circular 'Propeller Testing Machine', measuring 70m in diameter, and a smaller feature to the south. There is a railway line entering from the south-east and some smaller buildings in the north-west corner. The south-west corner of the site, which was formerly an inlet, had now been reclaimed. Two toll houses are shown at the Walney Bridge approach, on the east side of the bridge, which had been built in 1908.

1.3.8 By 1933 the site was almost entirely occupied by a very large industrial building measuring 150m by 120m. It is shown as having a glass roof, and information from BAE suggests it was a plant preparation shop. Railway lines ran into and around the building. There were office buildings on the Walney Bridge Approach frontage.

1.3.9 The 1959 Ordnance Survey map shows that new offices had been built nearer Walney (now Jubilee) Bridge by this date, and the toll houses were now disused.

1.3.10 The large industrial building was demolished in 2000, it is not known when the toll houses were demolished, although the offices on the bridge approach road have been recently replaced by Waterside House.

2. METHODOLOGY

2.1 WATCHING BRIEF

2.1.1 The work undertaken followed the verbal brief issued by the Assistant Archaeologist at Cumbria County Council, and complied with current legislation and accepted best practice, including the Code of Conduct and the relevant professional standards of the Institute of Field Archaeologists (IFA). Close liaison between OA North staff and site contractors was maintained during the groundworks.

2.1.2 The programme of field observation recorded accurately the location, extent, and character of any surviving archaeological features. This work comprised observation during the groundworks, the examination of any horizons exposed, and the recording of all archaeological features and horizons found during the excavations. Deposits were scanned to recover artefacts of archaeological significance, but none were noted.

2.1.3 The recording comprised a full description and preliminary classification of features and structures revealed, on OA North *pro-forma* sheets, and their location in plan. In addition, a photographic record in colour slide and monochrome formats was compiled.

2.2 ARCHIVE

2.2.1 A full professional archive has been compiled in accordance with current IFA and English Heritage guidelines (English Heritage 1991). The paper and digital archive will be deposited in Cumbria County Record Office in Barrow on completion of the project. Copies of the report will be deposited with the Sites and Monuments Record (SMR) in Kendal.

3. WATCHING BRIEF RESULTS

3.1 WATCHING BRIEF RESULTS

3.1.1 A large number of concrete blocks were present on the site, 120 being counted, which were almost certainly the foundations of the industrial building built between 1911 and 1933, and demolished in 2000. These were usually about 2m x 2m x 1.5m deep, arranged in lines running north/south, and covered the whole area of the watching brief except for a 20m strip along the western boundary. Between them there was a thick layer of made ground that is interpreted as also dating to this episode of construction; mostly brick rubble, but with redeposited clay with a layer of clinker and ash at the north end of the site. Therefore, a high proportion of the site was disturbed in the early twentieth century to a depth of about 2.5m.

3.1.2 Towards the south-east corner of the site there was a concrete block, ***103***, that was larger than normal at 3m x 3m x 1.7m deep (Figs 2 and 3), possibly to support a greater load from the building. A small trench excavated on the east side of this revealed the remains of a heavily truncated earlier structure at a depth of 2m. This was supported by another concrete base, ***104***, which at the south end was overlain by a single layer of red bricks, ***105***, 0.08m thick. On this surface was three sides of a brick structure, ***107***, with walls about 0.23m thick (Plate 1). It was 1.3m wide on its south side, with its east and west walls truncated at 0.80m and 0.92m respectively. Within the walls were the remains of a yellow brick surface, ***106***, 0.08m thick, extending 0.62m from the south wall. This structure is interpreted as relating to an earlier phase of industrial activity, in the late nineteenth or early twentieth century. However, the extent of the surviving remains was so limited that the type of structure it represents and its function is unknown.

3.1.3 Part of a brick-built structure, ***116***, was also revealed close to the south-east corner of the site (Fig 2, Fig 4, Plate 2). The surviving elements of this consisted of a south wall, 2.2m long, and a west wall, 2.8m long, which turned north-west for a further 2.8m. The walls were 0.23m thick, and the bricks were of local manufacture. The depth of the walls is not known, as only the top layer of bricks was visible at the time of recording. The walls were set in a cut, ***114***, with the external side packed with a yellow clay backfill, ***115***.

3.1.4 Two reinforced concrete pits were revealed in the south-east part of the site (Fig 2). Rectangular pit ***112*** was 9m north/south, 3m east/west, and 3m deep. Constructed of concrete, the east and west sides were 0.4m thick, reinforced with steel girders. The other pit, ***101*** (Plate 3), was situated 30m to the north. This measured 12m x 6m, running east/west. The base was stepped in the middle, being 1.6m deep on the west side and 2m deep on the east side. Again, these pits have an unknown function, but were part of the large industrial building.

3.1.5 Two more pits were found towards the north-west corner of the site, parallel to each other and 4m apart (Fig 2). Pit ***102*** measured 7.3m north/south and 8.9m east/west, narrowing to 7m at the south end (Plate 4). There were four plinths

built into the pit, also constructed of concrete. Two plinths in the south-east and south-west corners measured 2.55m x 2.1m. The other two both measured 3.3m x 1.3m, one of these being against the north wall, and the other being parallel to it, a further 1.3m to the south. These plinths were 0.6m lower than the top of the pit. This pit is interpreted as a base for large machinery in the recently demolished industrial building. Pit ***109*** was rectangular and ran 8.2m east/west by 4.2m north/south. The base was 0.5m deep in the centre, stepping up 0.15m, 1.95m from each end. This pit is interpreted as part of the same building, but its specific purpose is not known.

3.1.6 On the east side of the site, 1.4m from the boundary, a row of four of the concrete blocks running north/south at 12m intervals were smaller than usual, at 1m x 1m x 1m. Adjacent to the most southerly of these was a red brick structure, ***117***, 6.0m x 6.9m, the walls being 0.3m thick and at least 0.7m deep (Fig 2, Plate 5). This was constructed of bricks of local manufacture, its west side and part of its north wall were missing, and the interior had been backfilled with building rubble, ***120***. On the east wall in the south corner there was a recess measuring 1.15m x 1.35m. The concrete block, ***118***, was set against the outside of the east wall, and against the north side of this recess, and the impression of the walls had been retained in the concrete. The concrete and the brick structure were therefore associated, so the brick structure can be interpreted as another part of the same building.

3.1.7 Trench 1 (Fig 2) was excavated towards the north-east of the site for the construction of a drainage system, 21m long and 1.6m wide, running north/south, and to a depth of 1.8m. The section showed a layer of reddish-brown silty-clay, ***111***, over which the concrete slab had been laid. In this layer of clay there was a large deposit of clinker ash mixed with building rubble, ***110***, extending over 10m and 1.7m in depth. It is not clear whether deposit ***110*** was contemporary with the recently demolished industrial building or earlier.

4. DISCUSSION

4.1 DISCUSSION

4.1.1 Most of the evidence observed during the watching brief related to a large industrial building that documentary evidence shows was built between 1911 and 1933 and demolished in 2000. Concrete blocks encasing iron girders represent the foundations of the iron-framed structure. Large concrete pits, one with plinths within it for heavy machinery, are consistent with the industrial activities known to have been the purpose of the building. Brick structures on the east side of the site were also part of the building.

4.1.2 Layers of made ground associated with the construction of this building demonstrate that earlier remains have generally been truncated to a depth of 2.5m across its footprint. The very limited evidence of previous activity on the site, possibly relating to the propeller workshop or the Old Barrow Brick Huts, is almost certainly due to this truncation.

4.1.3 A single structure that pre-dates this building was observed, and represents the probable industrial use of the site in the late nineteenth or early twentieth century. This was a small brick structure on a concrete base that had been heavily truncated. Not only was this an isolated example on the site, but insufficient evidence was preserved to characterise this structure and there was no indication of its function. It is possible that brick floor ***105*** extended across the whole of the concrete surface, and that the area defined by wall ***107*** and yellow brick floor surface ***106*** was an alcove within a larger structure. The use of two different types of brick appears quite decorative, and provision of a brick floor above a concrete surface seems somewhat unnecessary in an industrial situation. The structure is unlikely to relate to the Old Barrow National School, as older maps, such as the 1883 plan of the dockyards (Kellet 1990), show the school to be further to the south-east.

4.1.4 A possible candidate seems to be the Old Barrow Brick Huts built as temporary accommodation for the shipyard workers, which are shown on the 1883 dockyard plan (Fig 6) as lying on a north-east/south-west alignment, perpendicular to the Walney channel (*ibid*). The structure defined by wall ***107*** recorded during the watching brief is also at an angle, and thus could be part of one of these Brick Huts. Given that the Old Barrow Brick Huts were built as temporary accommodation, the use of two different colours of brick for various areas of flooring seems a little decorative, and it is possible that an office area, or perhaps a foreman's accommodation, might be represented. However, plotting the current development area and identified archaeological features onto the 1883 dockyard plan (Fig 6) would suggest that the feature defined by wall ***107*** lies some 30m to the south of the position of the Old Barrow Brick huts. There is the possibility that the 1883 plan could be inaccurate, although 30m seems to be an unacceptably high margin of error and, it is perhaps more likely that the identified structure represents a building built and demolished between 1883 and some time before 1933.

4.2 CONCLUSION

4.2.1 It is likely that almost all the potential remains identified in the desk-based assessment as being of archaeological significance were damaged by the industrial features and concrete foundations inserted in the early twentieth century. Since the present redevelopment scheme does not involve sub-surface intrusion, no further work is recommended.

5. BIBLIOGRAPHY

5.1 CARTOGRAPHIC AND PRIMARY SOURCES

1850 Ordnance Survey 6" map

1873 Ordnance Survey 25" map

1873 Ordnance Survey 6" map

1911 Ordnance Survey 25" map

1959 Ordnance Survey

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5.2 SECONDARY SOURCES

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ILLUSTRATIONS

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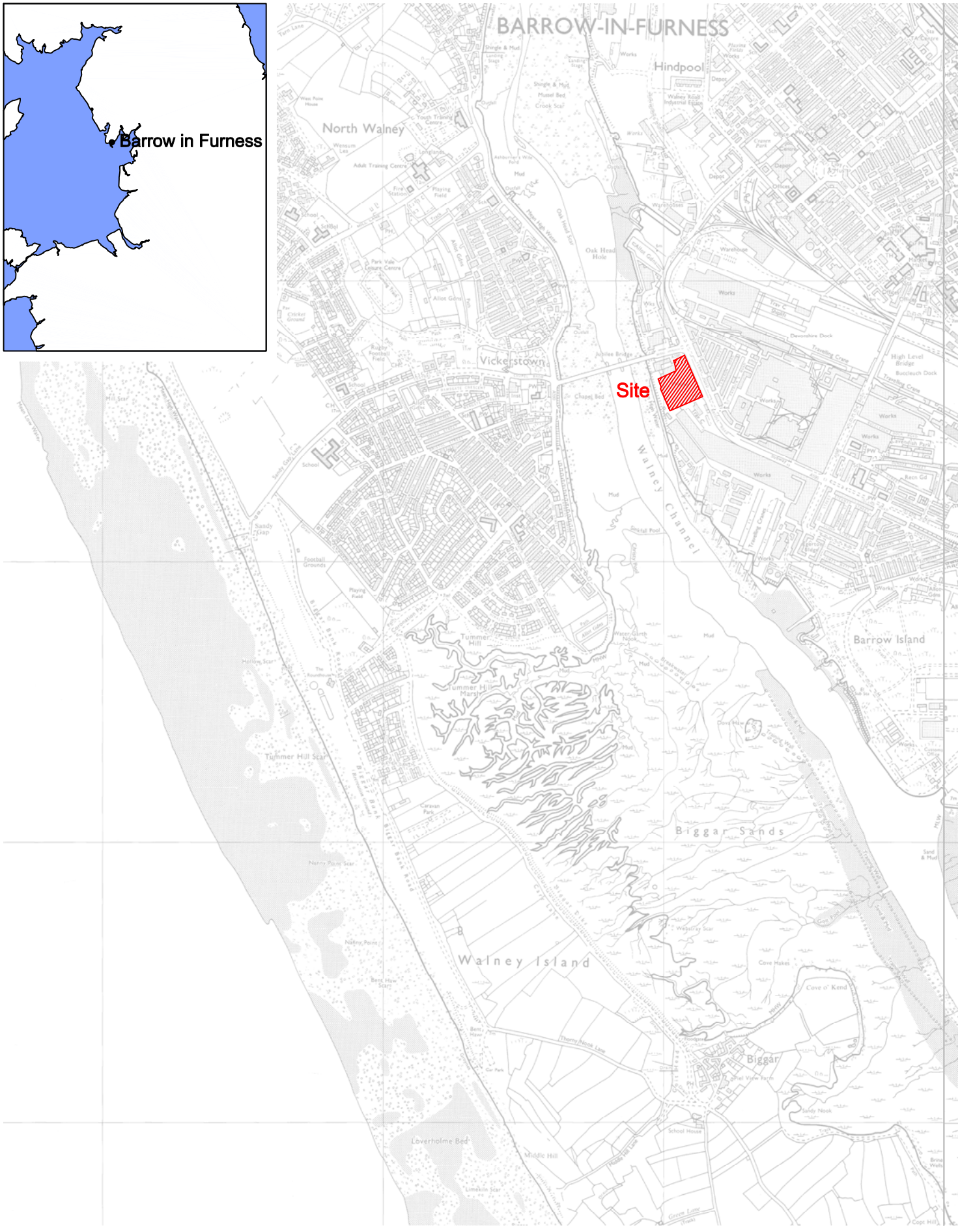


based upon the Ordnance Survey 1:10000
with the permission of the controller of HMSO

Figure 1: Location Map

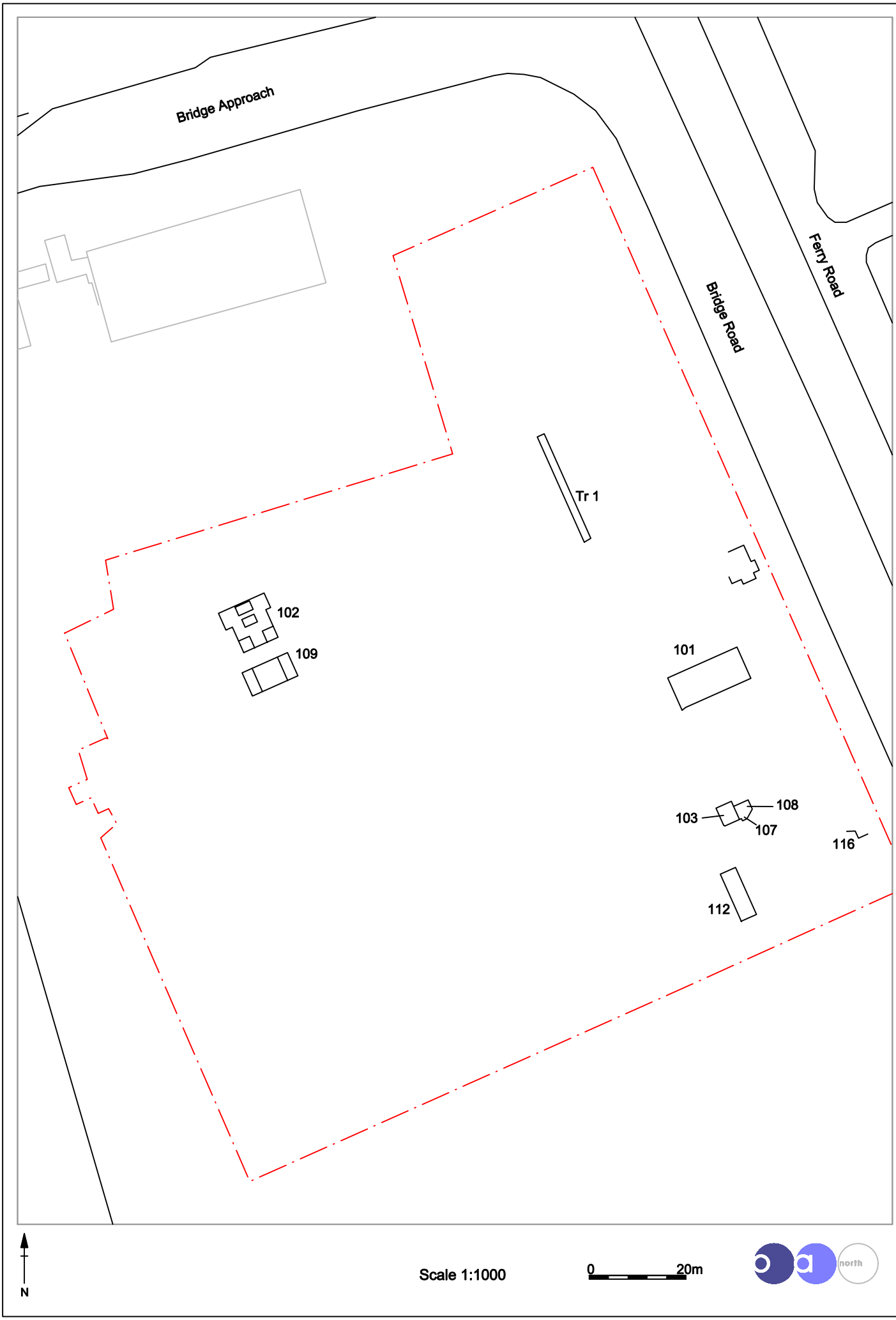


Figure 2: Watching Brief Location Plan

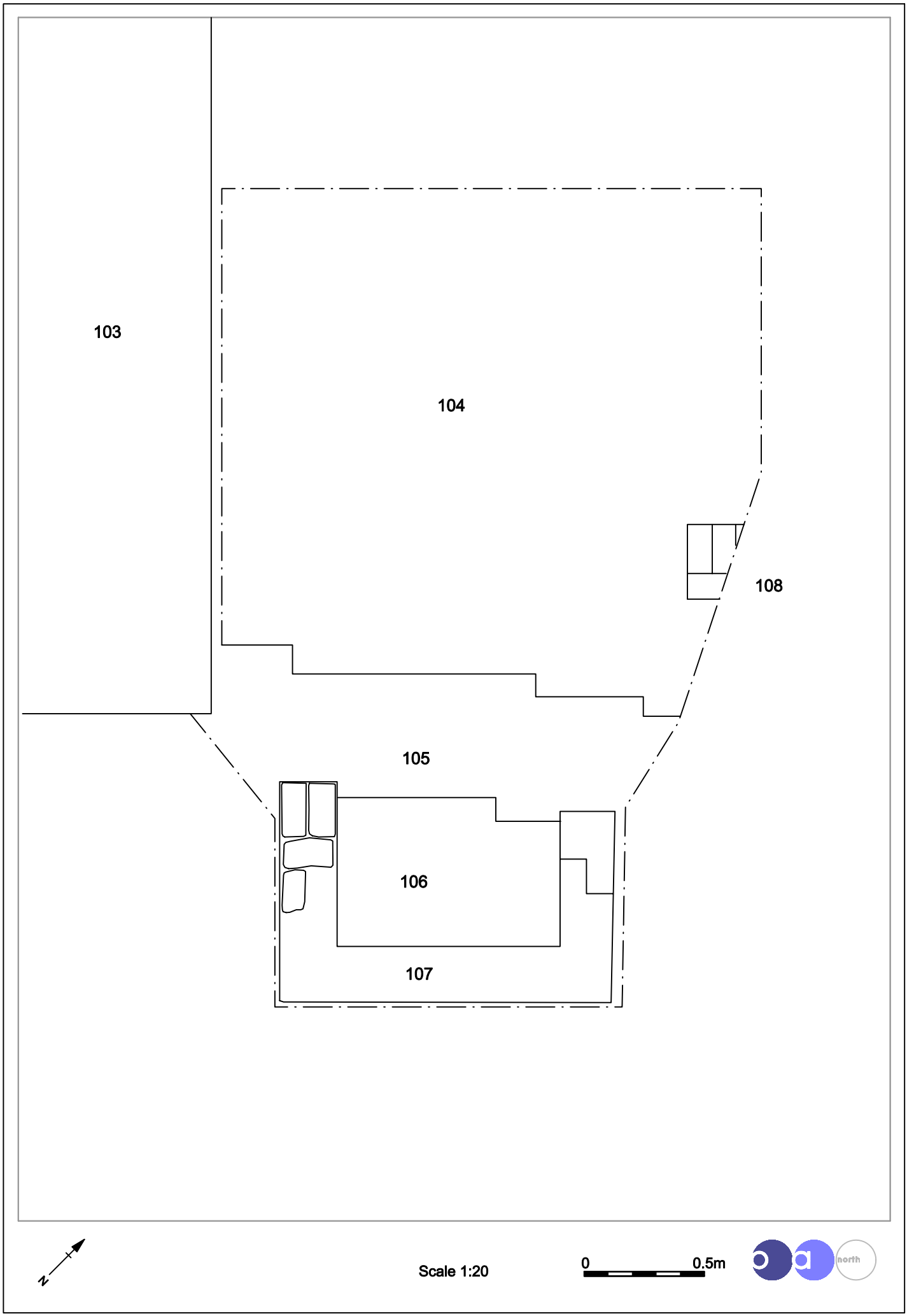
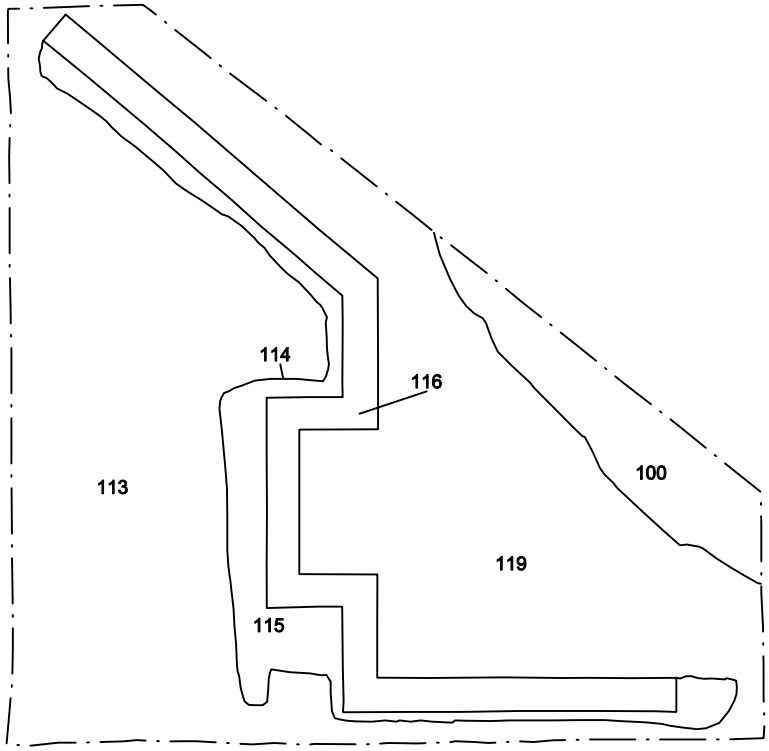


Figure 3: Plan of concrete block ***103***, structure ***107*** and related contexts



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Scale 1:50 at A4 0 1m

Figure 4: Plan of structure *116* and related contexts

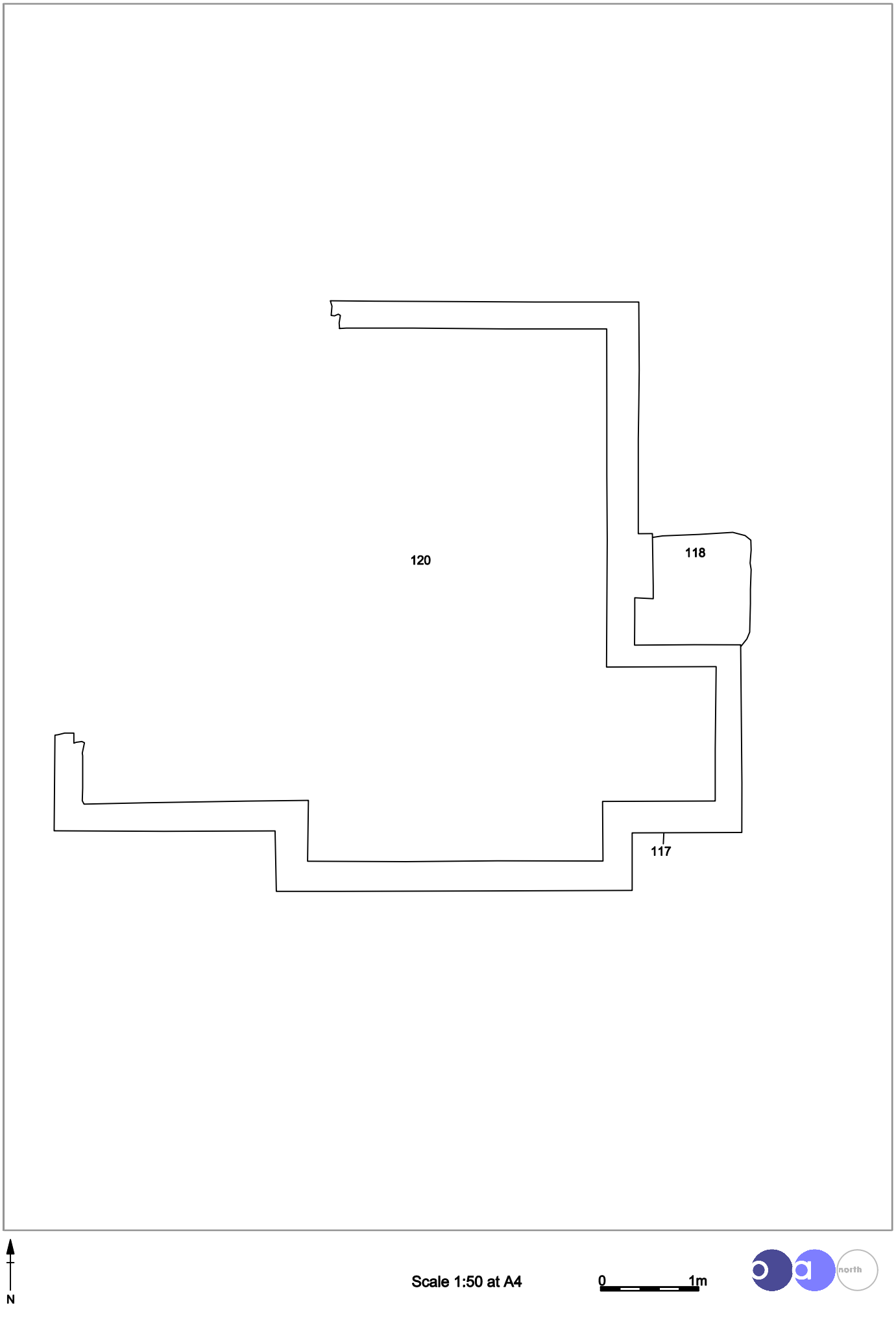

Figure 5: Plan of Structure *117* and related contexts

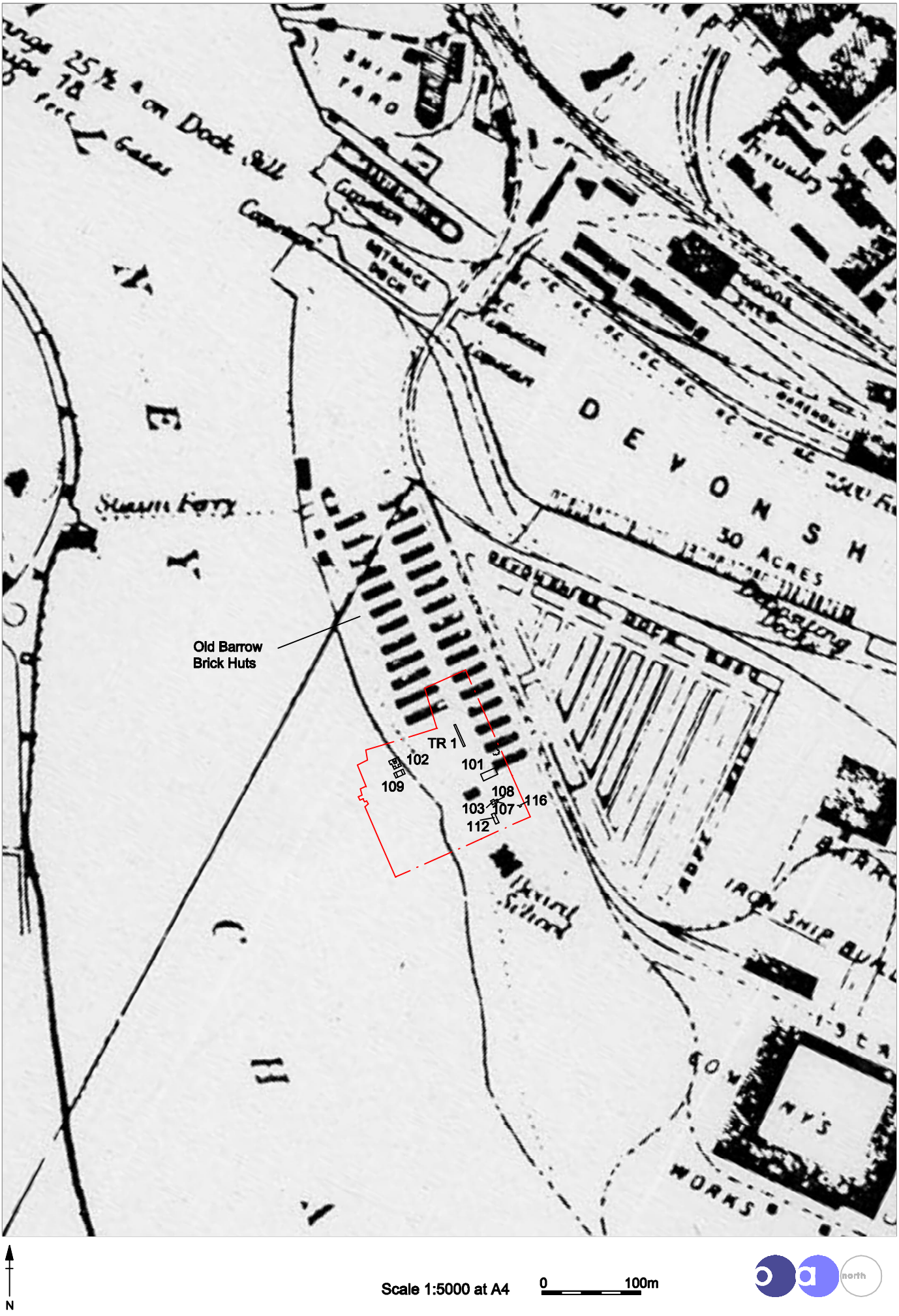

Figure 6: Extract from 1883 map of Barrow showing watching brief results

Plate 1: Structure ***107*** viewed from the north

Plate 2: Structure ***116*** viewed from the west

Plate 3: Pit ***101*** viewed from the east

Plate 4: Pit ***102*** viewed from the north-east

Plate 5. Structure ***117*** viewed from the east

APPENDIX 1: CONTEXT LIST

Context Number	Description
100	Concrete surface
101	Concrete pit
102	Concrete pit
103	Concrete block
104	Concrete surface
105	Single layer brick surface
106	Single layer brick surface
107	Brick structure
108	Brick wall
109	Concrete pit
110	Deposit of clinker and ash
111	Deposit of reddish-brown silty-clay
112	Concrete pit
113	Layer of clinker and ash
114	Cut for brick structure (116)
115	Yellow clay, fill of 114
116	Brick structure
117	Brick structure
118	Concrete block
119	Deposit of building rubble
120	Deposit of building rubble