HAVEN BANKS OUTDOOR EDUCATION CENTRE, EXETER

(SX 92652 93185)

Results of an archaeological watching brief

Exeter City Council planning references 09/1023/03 and 11/2029/27

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On behalf of:
Midas Construction Ltd

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AC archaeology

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Summary

An archaeological watching brief was carried out by AC archaeology between February and May 2012 during groundworks for the construction of a new outdoor education centre at Haven Banks, Exeter (SX 92652 93185)*. The site had the potential for buried palaeo-environmental deposits as well as features associated with the original construction of the canal basin in 1828-30. The development site lies within a wharf alongside the basin.*

No early archaeological deposits or features were exposed. Records of the basin boundary wall were prepared. All exposed deposits were associated with the construction of the 1820s wharf and basin as well as the extension of the railway siding into the wharf in the early 20th century.

1. INTRODUCTION (Figs 1-2)

1.1 This report presents the results of an archaeological watching brief carried out between February and May 2012 by AC archaeology during groundworks associated with the construction of a new outdoor education centre at Haven Banks, Exeter (SX 92652 93185; Fig. 1). The work was commissioned by NPS South West Ltd and Midas Construction Ltd, and was required by Exeter City Council as conditions of the grant of planning permission (references 09/1023/03 and 11/2029/27).

1.2 The site is located on the north side of the Exeter Canal Basin, an extension to the mid 16th-century Ship Canal, which was constructed between 1828 and 1830. The site falls within a larger area for which a desk-based assessment has previously been prepared (Exeter Archaeology and Keystone Historic Building Consultants 2000). The site is defined on its northeast and southwest sides by a boundary wall probably dating from 1831. It is constructed from Torquay limestone and incorporates two gateways, which lead into an enclosed yard. In 2000 this wall was considered to be virtually unaltered since the 1870s and presumably since the 1830s; however one of the openings has since been modified (Fig. 2). The walls are not listed but have been classed by Exeter City Council in their adopted Local Plan as a '*building of local importance'*. The site lies in the Riverside Conservation Area at 9m aOD, with the underlying solid geology comprising Breccia from the Alphington Breccia Formation (British Geological Survey online 2012).

1.3 The investigations entailed building recording and archaeological monitoring prior to and during the construction of a detached three-storey education centre, a two-storey storage building with associated pontoons, ramps, a climbing tower enclosure, parking and access to the highway.

2. ARCHAEOLOGICAL AND HISTORICAL BACKGROUND

2.1 A detailed archaeological assessment has previously been undertaken of the site and wider area within which the proposed development is located (Exeter Archaeology and Keystone Historic Building Consultants 2000). The assessment established that there was potential for survival of deposits relating to the late 17th century 'New Cut' and to prehistoric and later river channels, which may contain important palaeoenvironmental remains such as preserved organic cultural remains (wood, leather *etc*) and/or preserve 'ecofacts' (pollen, beetles *etc*).

2.2 A Ground Probing Radar (hereafter GPR) assessment of the development site has also been undertaken. This identified five categories of significant radar reflections which include the following:-

- *Possible structures.* A number of linear features, many of which appear to correlate with remnant masonry walls visible on the surface of the site, were recorded at the southeast

end of the site. These reflections are considered to be probable wall footings and/or the remains of former structures;

- *Reinforced concrete* was found over a significant part of the southeast area of the site. The concrete was so dense that it was not possible to determine the presence of any features underneath;
- A section of *buried railway track* was located running from the southeast corner of the site for some 70m, to the northwest end. Its presence will have masked other any other features where present;
- Several *anomalous layers* were identified at the northwest end, in the middle of the site and at the southeast end. Five other isolated patches were also present. Reflections such as this are typical of ash, hard core, buried floors or foundations; and,
- A number of *possible high void ratios* were also recorded in the vicinity of the main entrance gate, at the southeast end of the site under the concrete and near the northwest entrance.

2.3 A review of historic mapping suggests that the proposed development site remained largely undeveloped until the 1830s. The early maps of the area including Hooker's map of 1587, Brown's map of 1618, Sherwood's maps of *c*. 1630 and 1633, Rocque's map of 1744 and Map 1 of the 1756 Exeter Chamber Map Book all show the development site as lying within an area of partially enclosed and later unenclosed rough pasture. Donn's map of 1765 depicts the Haven Walk, a footpath that runs along the river bank, passing through the proposed development site. The whole area still remained undeveloped at this point. Tozer's map of 1792 also shows the same footpath, with the area now depicted as enclosed agricultural land, bounded on its southwest side by the '*New Cut'*. The development plot is labelled *New Cut Close*. Hayman's map of 1805/1806 does not show the *New Cut* although the Haven Walk is depicted. The layout of the area including the development site seems to have been established by the time Brown's map of 1835 was produced. Coal wharfs are shown to the southwest of the *Exeter Canal Basin* and a building to the northeast of the development site. The site itself remained undeveloped, although the wall that currently forms the northeast and southwest boundaries is present. A similar picture is shown on the Rapkin map of 1852.

2.4 The Ordnance Survey 1:2500 maps of 1876, 1880, 1905 and 1930 also show the site boundary wall. The 1876 1:500 map depicts two breaks in the wall, at the north end of the site, and towards the centre of the site. The northern entrance is also shown on an 1852 lease of the adjacent site. Both show piers either side of the opening. A number of mooring posts are depicted within the interior of the site on the 1905 map, as is a small structure against the southwest boundary wall. This map also shows a third entrance in the wall. By 1930 the development site had been divided in half by an internal wall, with the three breaks in the main boundary wall shown on the 1905 map still in place. A tank (probably a water tank) within an enclosure is shown at the very southeast end of the site, together with a structure adjacent to the southeast break in the wall and another structure against the northwest boundary wall. The railway is shown on the 1932 revision, suggesting that it was extended across the site between 1930 and 1932.

3. AIMS

3.1 The principal aim of the building recording was to provide a record of the boundary wall and the rest of the proposed development site, prior to any alterations and development.

3.2 The aim of the watching brief was to preserve by record any archaeological features or deposits exposed during ground works associated with development.

3.3 More specific aims were to:

- Establish the presence/absence of archaeological deposits/remains;
- Determine the extent, condition, nature, character, date and significance of any archaeological deposits/remains encountered, in particular features associated with the historic development of the site;
- Establish the nature of the activity on the site;
- Recover any environmental evidence from archaeological deposits/features;
- Identify any artefacts relating to the occupation or use of the site;
- Provide further information on the archaeology of Exeter from any archaeological remains encountered; and,
- Report, in appropriate format(s), the results of the above.

4. METHODOLOGY: BUILDING RECORDING

4.1 All monitoring and recording were carried out in line with a project design prepared by AC archaeology (James 2012).

4.2 Building recording

The work was undertaken with reference to specifications applicable to Level 1/2 in English Heritage (2006) *Understanding Historic Buildings: a guide to good recording practices*. It consisted of a detailed and general photographic record, supplemented by a written description.

4.3 Watching brief

Groundworks monitored were the shallower excavations comprising excavations for service trenches, removal of the former railway siding, and the excavation of pile caps. All monitoring was carried out in line with the project design, and the recording in accordance with AC archaeology's *General Site Recording Manual, Version 1*.

5. RESULTS (Figs 2-4; Plates 1-8)

5.1 The site prior to development

The site is defined on its northeast and southeast sides by the limestone boundary wall that was built in 1831 to enclose the (then new) canal wharf (Fig. 2). The southeast length of wall forms one side of a passage between two wharves. Here the southwest end of the wall has been removed to create a walkway along the wharf frontage (Plate 1). The wall is 0.60m wide and is constructed from a mixture of rubble and faced limestone bonded in lime mortar. It stands to a height of 3m on its exterior face and 2m on its interior elevation. Where 20th-century buildings abutted the wall on its inner elevation, for example beside a former entrance (see below) it had been rendered, and scars of the walls and roofs are visible. The present entrance is an early 20th-century insertion that was been widened during the later 20th century. The jambs of the opening have been rebuilt (Plate 2). There are further openings at the northwest end of the wall and towards the northeast end. The latter is 3.8m wide and has been crudely blocked with limestone rubble bonded in concrete. This opening has dressed stone piers projecting from its south elevation (Plate 3). To the east of the present entrance the wall is supported on its inner face by two brick piers. The northernmost section of wall between the gateway opening and the warehouse has been rebuilt during the 20th century.

Prior to development the site was covered by tarmac and gravel as well as concrete forming the floors of former buildings. The only surviving structure is an early 20th-century brick lean-to attached to the gable elevation of the adjacent warehouse. It is constructed of red brick laid in stretcher bond, with discontinuous courses of yellow brick. There is a door with a blocked (?vent) opening in the southwest elevation and three narrow, high-level sash windows in the southeast elevation. It has a pitched corrugated iron sheet roof. The line of the buried railway siding could be discerned as raised lines in the tarmac surface (Plate 4).

The canal basin wall is constructed of coursed limestone blocks, with five courses being fully visible above water level. It is topped along the wharfside by granite capstones, some of which contain rebates for former iron ties as well as sawn off posts, presumably for former railings. The latter are unlikely to be original features. The extreme eastern end of the wall has been rebuilt in concrete and the capstones relaid. Behind the wall several large iron anchor points project emerge from the tarmac surface (Plate 4).

5.2 Observations during groundworks

At the southeast corner of the site, close the wharf frontage observations in a trial trench excavated to locate the existing electricity cable were made (Fig. 3a; Plate 5). At a depth of 0.86m from the surface waterworn gravels in light brown-yellow clayey sand (107) were exposed, which probably represent a natural alluvial deposit. This was overlain by a series of dumped deposits of gravelly clay-sand as well as gravels (102-106) that had been tipped behind the wharf wall. These were sealed by the present surface and its associated make-up (100 and 101). This same deposit sequence was observed throughout the new service behind the wharf, except that the upper dumped deposits 102 and 103 (and part of 104) had been removed and replaced with chippings (110) set within a wide trench (F117) when the railway siding was laid (see Plate 8).

In the northeastern half of the site a slightly different sequence of deposits was present (Fig. 3b). Natural gravels (113 and 137) were exposed at a depth of up to 1.60m from the surface and were overlain by a band (112) or bands (135 and 136) of alluvial flood-derived material comprising sandy clays and clayey sands containing rare gravel. Nineteenth-century levelling deposits of crushed gravel and breccia and clayey sand with pebbles (133 and 134) only survived in the northern third of the site.

In the northwest corner of the site a series of structures were recorded, both above ground and below ground (Fig. 4; Plate 6). The primary wharf boundary wall and associated footings (F147) survived to the south of the gateway, although the eastern jamb had been rebuilt (F139), as had the wall to the north of the present opening (F138). The lowest exposed course of the foundation appeared to be contemporary with a projecting footing of limestone masonry (F150) whereas the courses above appeared to abut F150. Masonry F150 measured up to 1.20m and its position coincides with a gate pier depicted on historic maps. The relationships between F147 and F150 appear to indicate that the foundations of the wall were constructed first and that the final positions of the openings (and associated gate piers) were made during the actual construction of the wall itself. A further length of masonry (F152) was present to the northwest of the wall. Unfortunately its relationship with the pier had been removed by the excavation of a trench for a wall tie. However, it is likely to represent the foundations of the 1831 boundary wall. Above wall F152 a layer of 19th-century levelling (151) survived. Deposits 148 and 149 also probably represent 19th-century levelling after the construction of wall F150. These were all sealed by 20th-century surfaces (142 and 143) and the foundations (140, 144-146) associated with the wall (F138) blocking and narrowing the former gateway.

The wharfside railway siding was exposed across its full surviving length. A 10.6m length of it had previously been removed at the southeast end of the site, presumably when the adjacent wharf wall was replaced. Two rails were present, spaced 1.44m apart, and were laid into wooden sleepers placed 0.52m apart (Plates 7-8). They had been laid to standard gauge dimensions, consistent with their late date – the siding was extended along the wharf probably in the 1920s.

6. COMMENTS

6.1 Natural gravels were encountered across much of the site, in places overlain by natural flood-derived deposits. No palaeochannels or deposits of palaeo-environmental nature were present.

6.2 Levelling layers associated with the formation of the wharf in the late 1820s were exposed across the site. They were formed from silty clays and dumps of gravel and crushed breccia. The latter were frequently found at the top of the deposit sequence indicting they had been laid to form a sub-base for the yard surface. A photographic and written record of the associated wharf boundary wall and wharf frontage has been prepared.

6.3 Alterations to the wharf took place during the 20th century, and scars of mid and late 20th-century buildings were recorded within the site. At a date probably between 1876 and 1905, the northernmost opening in the boundary wall was partially blocked by a new wall and reduced to a pedestrian gateway. The foundations of a pier associated with the original gateway were exposed during the excavations. The eastern opening had been inserted by 1905, and was also blocked, sometime after 1930. The central, present entrance represents a widening of an earlier gateway present in 1876. In the early 20th-century the railway sidings around the canal basin were extended to serve the wharf. The rails survived almost in their entirety and were recorded prior to removal.

7. ACKNOWLEDGEMENTS

7.1 The fieldwork was commissioned by the NPS South West on behalf of Devon County Council and managed for them by Peter King, and for AC archaeology by Tanya James. The watching brief was undertaken Simon Hughes. The documentary research was carried out by Kerry Kerr-Peterson, the report was prepared by Andrew Passmore, with the illustrations drawn by Sarnia Blackmore. Thanks are due to the city Archaeological Officer Andrew Pye for discussions on the development of the site.

8. ARCHIVE AND OASIS ENTRY

8.1 The paper and digital archive is currently held at the offices of AC archaeology Ltd, at 4 Halthaies Workshops, Bradninch, near Exeter, Devon, EX5 4LQ, but will be deposited at the RAMM, Exeter once their non-acceptance policy has been reviewed. A temporary reference number from the museum is 12/04.

8.2 The OASIS (Online AccesS to the Index of Archaeological InvestigationS) number for this project is 154203.

9. REFERENCES

Exeter Archaeology and Keystone Historic Building Consultants, 2000, Archaeological, Historical and Conservation Study of the Exeter Canal Basin, Exeter Archaeology Report Number **00.18**.

James, T., 2012, *New Outdoor Education Centre at Haven Banks Boatyard, Exeter, (NGR SX 92652 93185), Project design for a scheme of archaeological investigations, Exeter City Council Planning Application Ref. Nos. 09/1023/03 (Condition No. 8) & 11/2029/27*, AC archaeology document no. **ACD434/1/0**.

Internet sources
British Geological Survey *www.bgs.ac.uk/opengeoscience*

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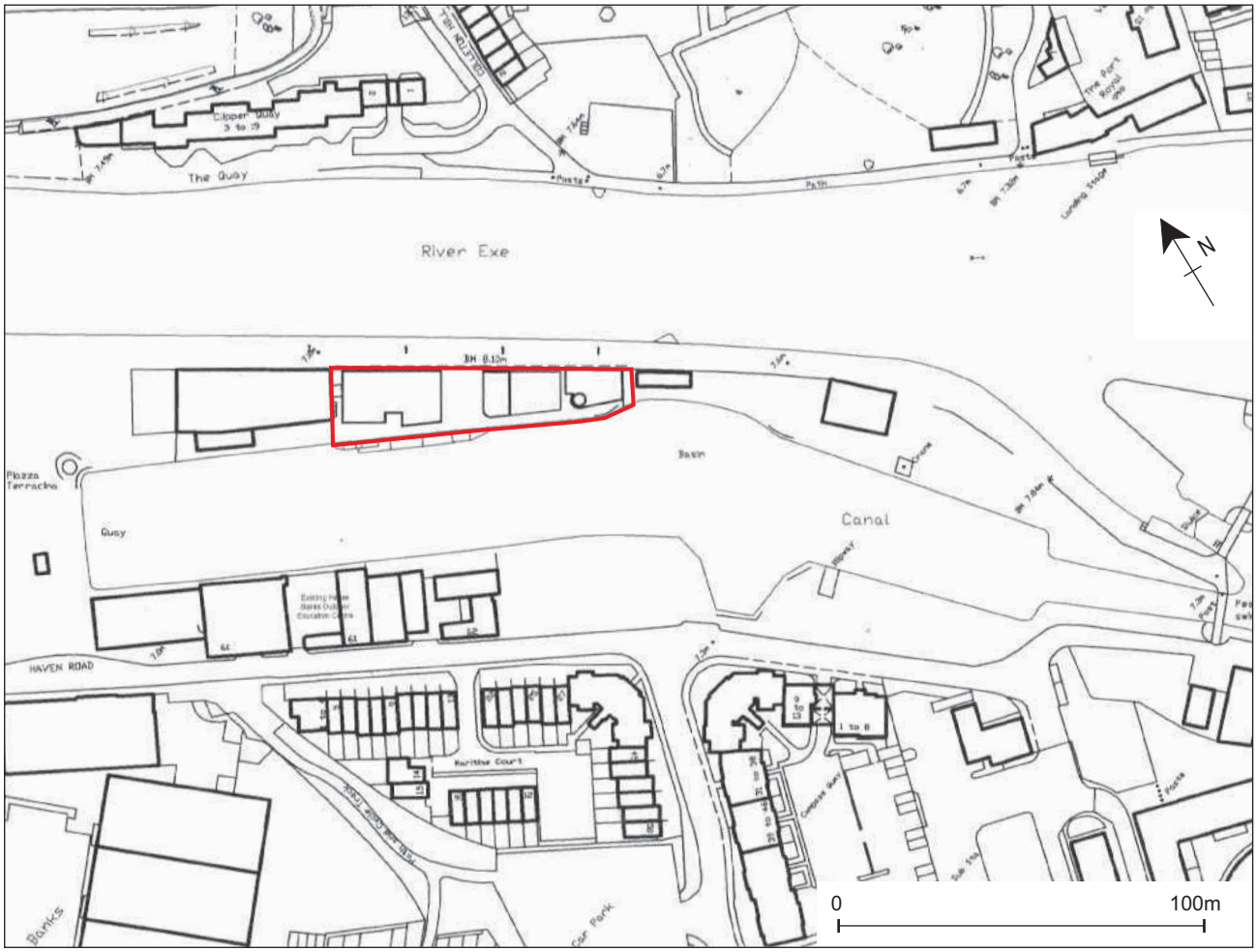

Site location

PROJECT

Haven Banks Outdoor Education Centre, Exeter

TITLE

Fig. 1: Location of site

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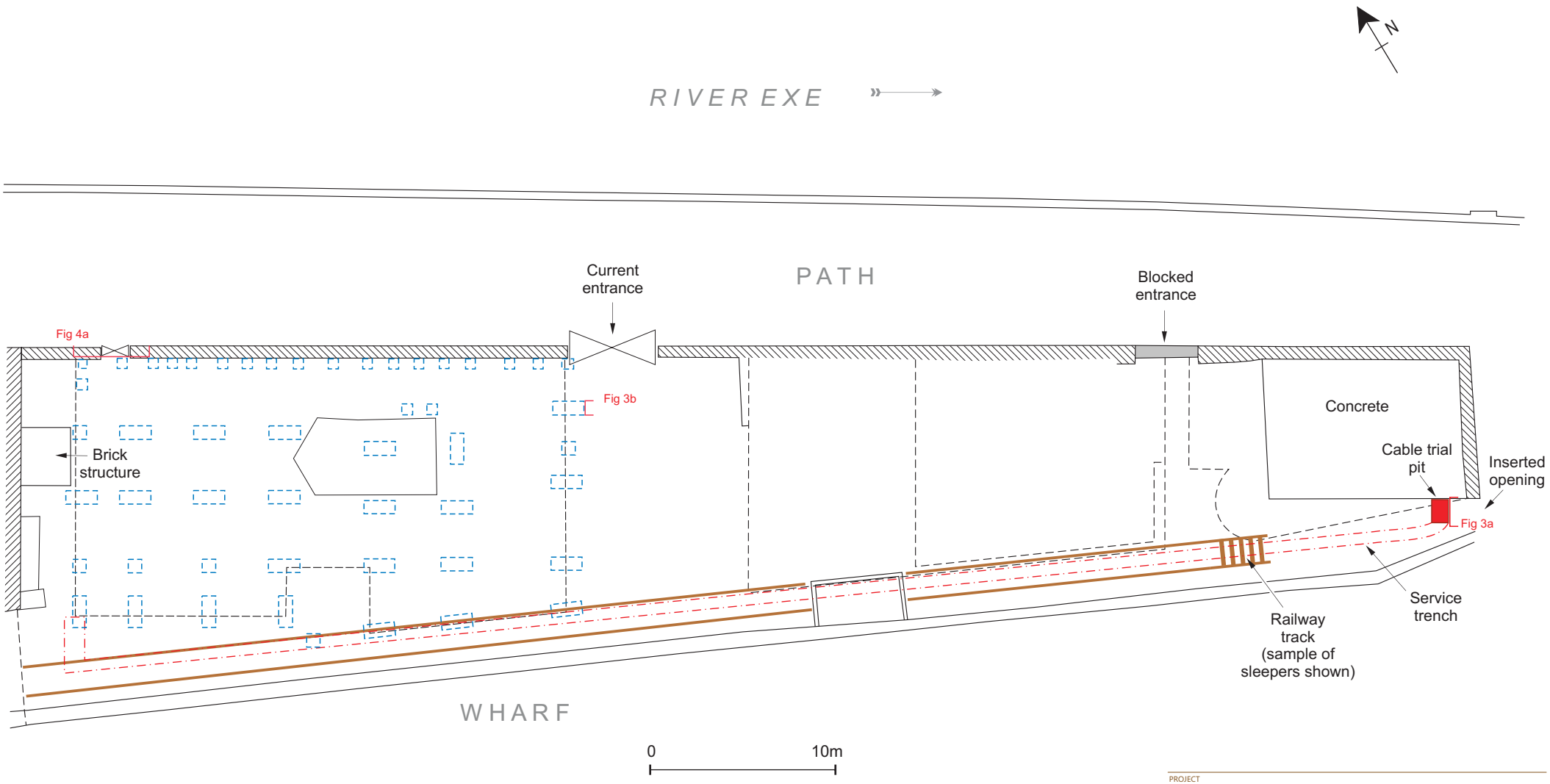

Position of base plates and piles

Outlines of new structures

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Fig. 2: Site plan showing observations

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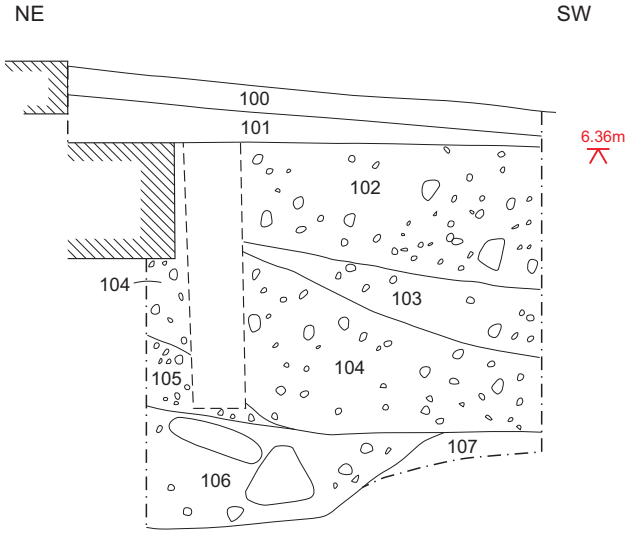
a) Section of cable location pit



b) Section near entrance

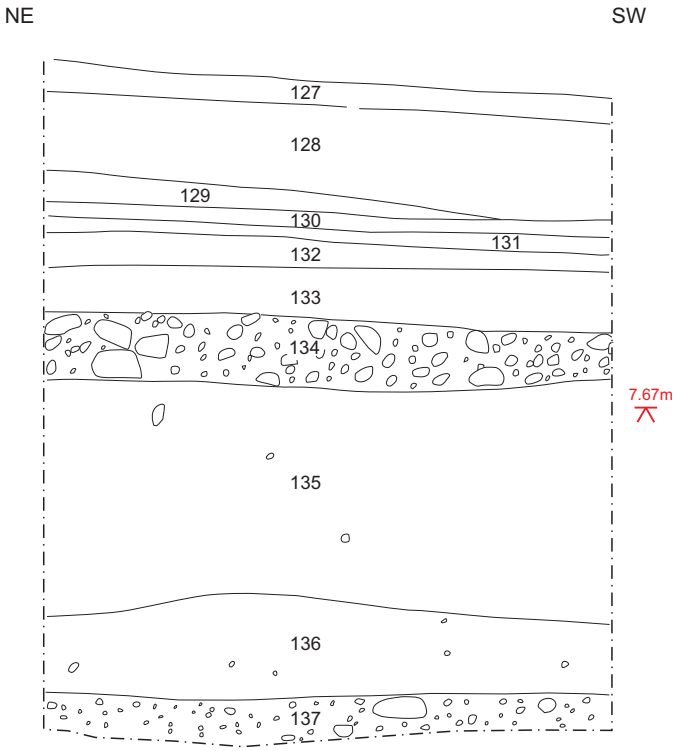


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Fig. 3: Sections

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a) Elevation of trench along perimeter wall

Lime mortar

Concrete

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Fig. 4: Elevation

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Plate 1: The southeast boundary wall, showing the truncated south end, viewed from the northwest (scale 1m)

Plate 2: The current main entrance in the northeast boundary wall, viewed from the southwest (scale 1m)

Plate 3: The blocked eastern entrance in the northeast boundary wall, viewed from the southwest (scale 1m)

Plate 4: The front of the wharf, showing the siding rails, viewed from the southeast (scale 1m)

Plate 5: Deposits associated with the 19th-century wharf visible in the trial trench, viewed from the northwest (scale 0.30m)

Plate 6: The masonry associated with the opening in the northeast boundary, viewed from the southwest (scale 1m)

Plate 7: The exposed siding rails at the southern end of the site, viewed from the southeast (scale 1m)

Plate 8: Section through the trench for the siding rails at the north end of the site, viewed from the southeast (scale 1m)

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