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Southampton Archaeology Unit

Report 727

**Archaeological watching brief at the
Nuffield Sports Hall, Cambridge Road,
Portsmouth, Hants.**

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2006



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Front cover illustration: recording context 14

Report on the archaeological watching brief on phase 2 works at the Nuffield Sports Hall, Cambridge Road, Portsmouth, Hants

By PR Cottrell BA

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1. Summary.

A watching brief on the groundworks for an extension to the University of Portsmouth Nuffield Sports Hall revealed part of the stone foundations of the Amhurst Redoubt, part of the 18th century defences of Portsmouth and Portsea.

2. Introduction

The Archaeology Unit of Southampton City Council carried out an archaeological watching brief on the groundworks for the phase 2 development at the Nuffield Sports Hall, Cambridge Road, Portsmouth (fig 1) on behalf of Relkin Construction Ltd and the University of Portsmouth. The observations were made by A Marshall and R Radford between 21/7/2005 and 4/8/2005. The project was managed by PR Cottrell.

The development site lies within an area identified by the Portsmouth City Council's Sites and Monuments Record (hereinafter SMR) as containing archaeological potential. The site was believed to be on or near the site of a section of Portsmouth's defences known as the Amhurst Redoubt. It was therefore possible that the development might damage or destroy archaeological features that could contribute towards our understanding of the human activity in the area. In response to the application for this development, the local authority requested a watching brief to be undertaken.

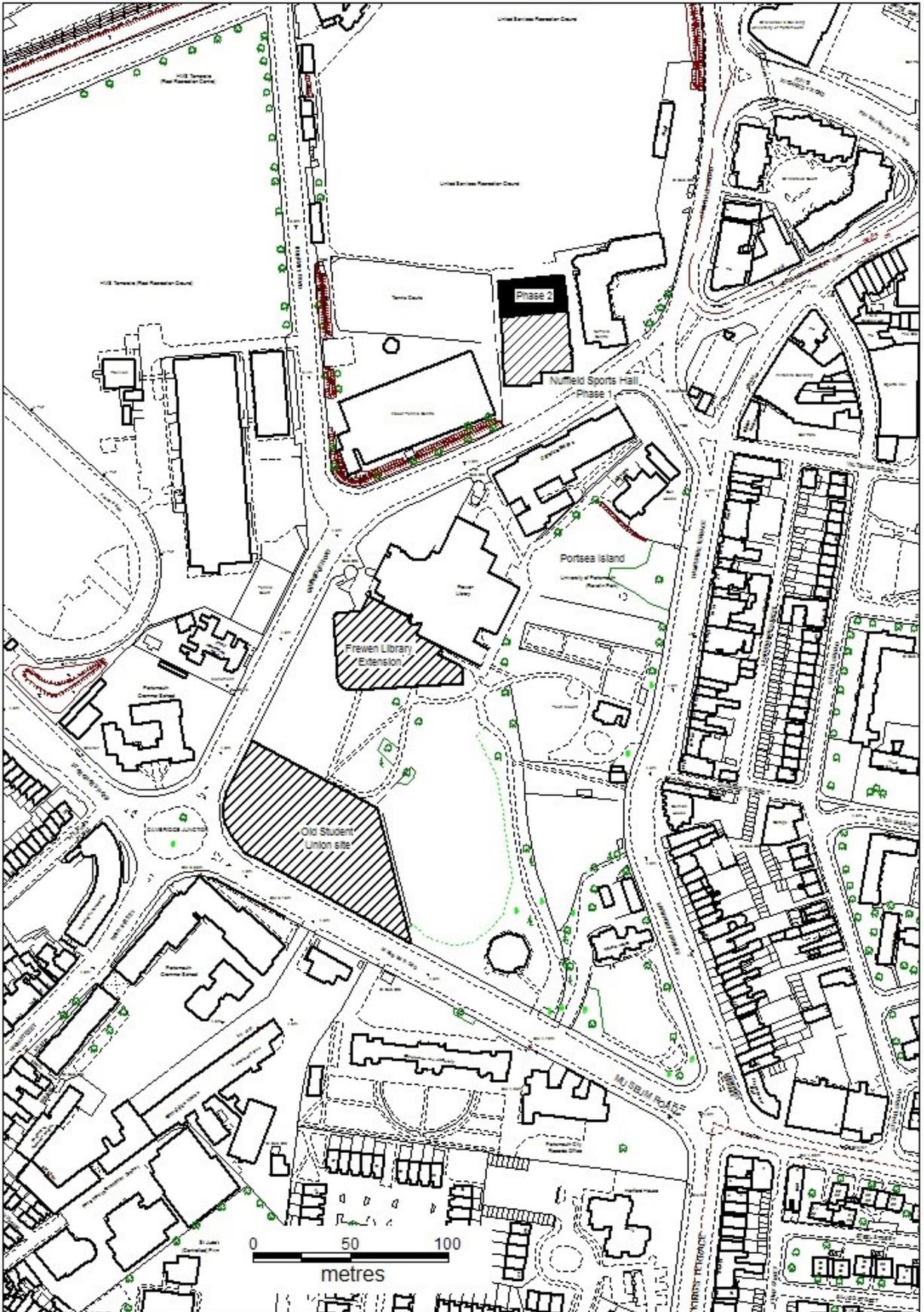


Figure 1. Site location

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3. Watching brief methodology.

The methodology followed that specified in the Scheme of Investigation. The archaeological work on site consisted of observation of the machine excavation of the ground beam trenches, foundation bases (hereinafter 'FB') and other groundworks (Fig 2). The exposed remains were manually cleaned where possible, planned, photographed and recorded.

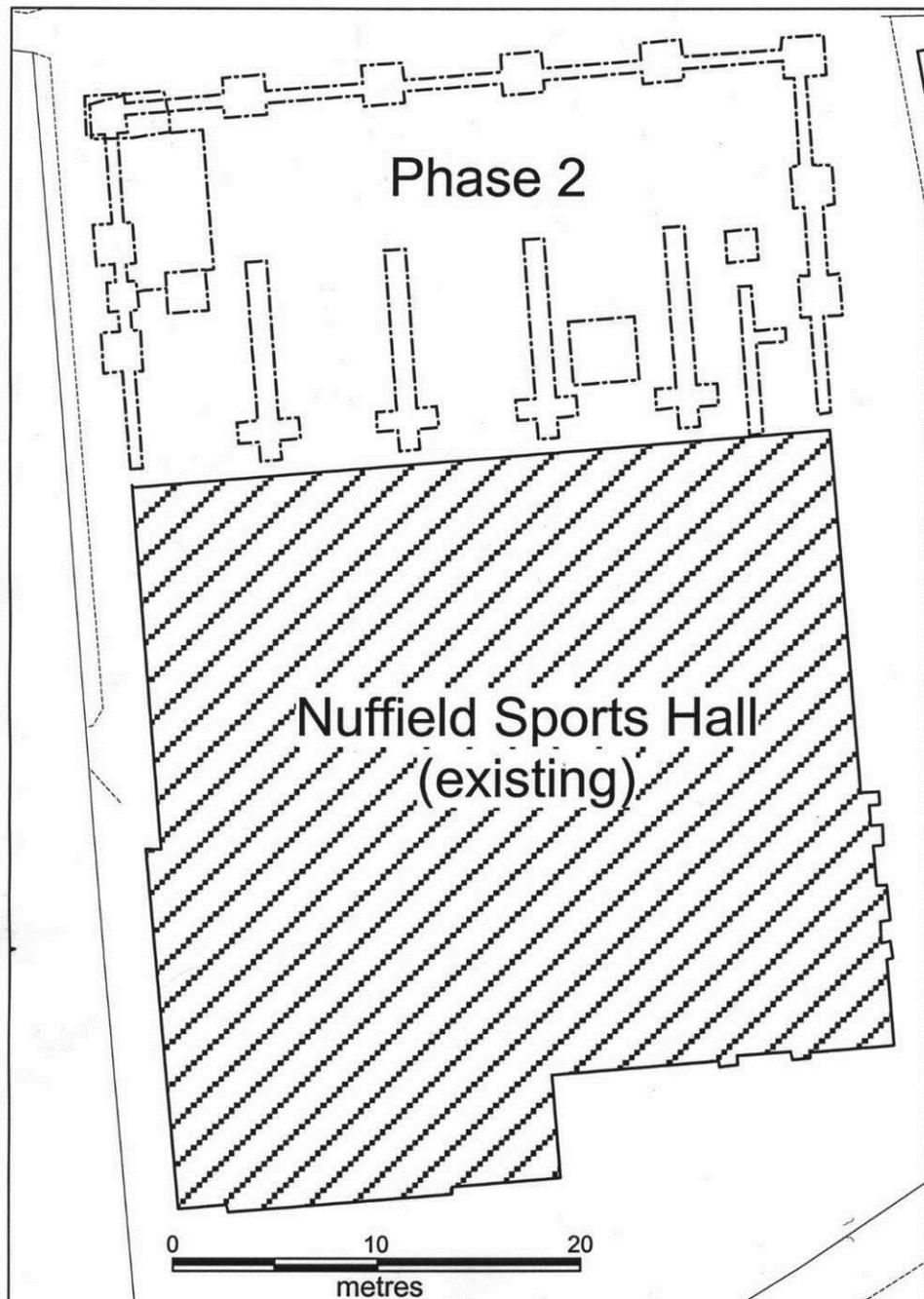


Figure 2. Location of trenches and other groundworks observed

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All archaeological records were made using the Southampton City Council archaeological recording system (SMART system). The colours of deposits were recorded using the Munsell Soil Color Chart and these are used in this report (Munsell Color 1975). The archive is stored on Portsmouth City Council premises.

4. Site location and topography.

The site is located immediately to the north of the existing Nuffield Sports Hall building on the north side of Cambridge Road, between Old Portsmouth and Portsea.

The area of the site was generally level at a height of about 4.2m OD. The geological survey map (Ordnance Survey 1976) shows the site to lie on gravel.

5. Historical and archaeological background.

The harbour town of Portsmouth at the south-west corner of Portsea Island was in existence by the late 12th century and received a charter from Richard I in 1194. It developed into an important port for trade with Europe. During The Hundred Years War it was raided and burnt by the French in 1338 and 1369. As a result, the first fortifications were built, a simple earth and timber rampart surrounded by a ditch, with towers at the corners (Patterson, 1985).

By the early 16th century the landward defences were in a ruinous condition. The adoption of Portsmouth by Henry VII as a base for the building and repair of the king's ships and the threat of war with France prompted a major period of rebuilding, updating and repair during the reigns of Henry VIII and Elizabeth I, and further improvements were carried out up to the outbreak of the Civil War.

In the area of the roundabout about 280m to the south-west of the site was the site of the Town Mount. This was an earthwork that protected the main gate out Portsmouth on the road to London, and was an early form of bastion. This was described by Leland in 1542 as 'a gate of tyMBER at the North East Ende of the Town and by it is cast up an hille of erth diche wherein be gunnes to defend the

entire town by land'. The Town Mount bastion had been enlarged by 1568 and completely redesigned by 1600.

The restoration of Charles II in 1660 prompted a major rebuilding of the defences in the most up to date style, with extra moats, outworks and fieldworks designed by the military engineer Bernard De Gomme and begun in 1665. The Town gate was moved further west, the Town Mount Bastion was enlarged and by 1700 a new fortification, the East Ravelin, with a series of outworks and a moat to the north and east, was built to the east of the bastion, in the south part of what is now Ravelin Park. The East Ravelin was part of the outer line of defences protecting the bastions of the inner line.

During the 1740s and 1750s the outer defences were remodelled. The outer moat was filled in and replaced by a wider glacis. Maps of the 18th and early 19th centuries show the great width of the moats and outworks (Currie, 2004 (b)).

Early in the 18th century the land east of the Dockyard began to be developed to house the dockyard workers. This developed into the town of Portsea. During the 18th century schemes were proposed for the fortification of Portsea and the Dockyard and work on the Portsea Lines began in the 1770s.

The development site lies just outside the late 18th-century defences of the towns of Portsea and Portsmouth, apparently on the site of an outlying defensive feature known as the Amhurst Redoubt. The southern part of the Portsea Lines was divided from the Portsmouth town fortifications by the Mill Pond and the Mill Dam. The Amhurst Redoubt was built to cover this vulnerable space. It was located at the south-east end of the Mill Pond, which was extended around it as a moat to form an island. The design, in plan a triangle with the apex to the east, was similar to a ravelin, having the same features for frontal defence, but it was open to the rear. It was designed to provide covering fire across the eastern face of the Portsmouth and Portsea lines. Access was by means of a footbridge from the Mill Dam Road, which was slightly to the east of the modern Burnaby Road.

The defences were demolished in the 1860s and 1870s without any record being made of the upstanding remains. Cambridge Road, one of the first roads to be cut through the defences, was opened in 1864. An Ordnance Survey plan dated 1867 shows the location of the Amhurst Redoubt and its moat, with the new Burnaby Road crossing the site of the moat to the west of the wooden bridge which formerly carried Mill Dam Road across the moat.

After the demolition of the defences the area of open ground they formerly covered between the railway and Cambridge Road became playing fields for the Royal Navy. Parts of these subsequently became part of the campus of the University of Portsmouth. Prior to commencement of the Nuffield Sports Hall development, the site was partly built over by sports facility buildings, tennis courts and playing fields dating from the 1930s and 1940s. In 2003 the University built phase 1 of the Nuffield Sports Hall on the site. The present site, phase 2, comprises an extension to the north end of the sports hall.

A watching brief on the 2003 works, undertaken by CKC Archaeology, failed to find any traces of the Amhurst Redoubt (Currie 2003).

6. Results of the watching brief.

6.1. Natural deposits.

The earliest deposit exposed was context 1, gravel in a sandy clay matrix. This was exposed in Trenches 1, 2, 3 and 7 at between c3.3m OD and c3.64m OD and was interpreted as the natural gravel.

6.2. The Redoubt

The trenches in the north-west part of the site revealed a series of massive stone features (fig 3).

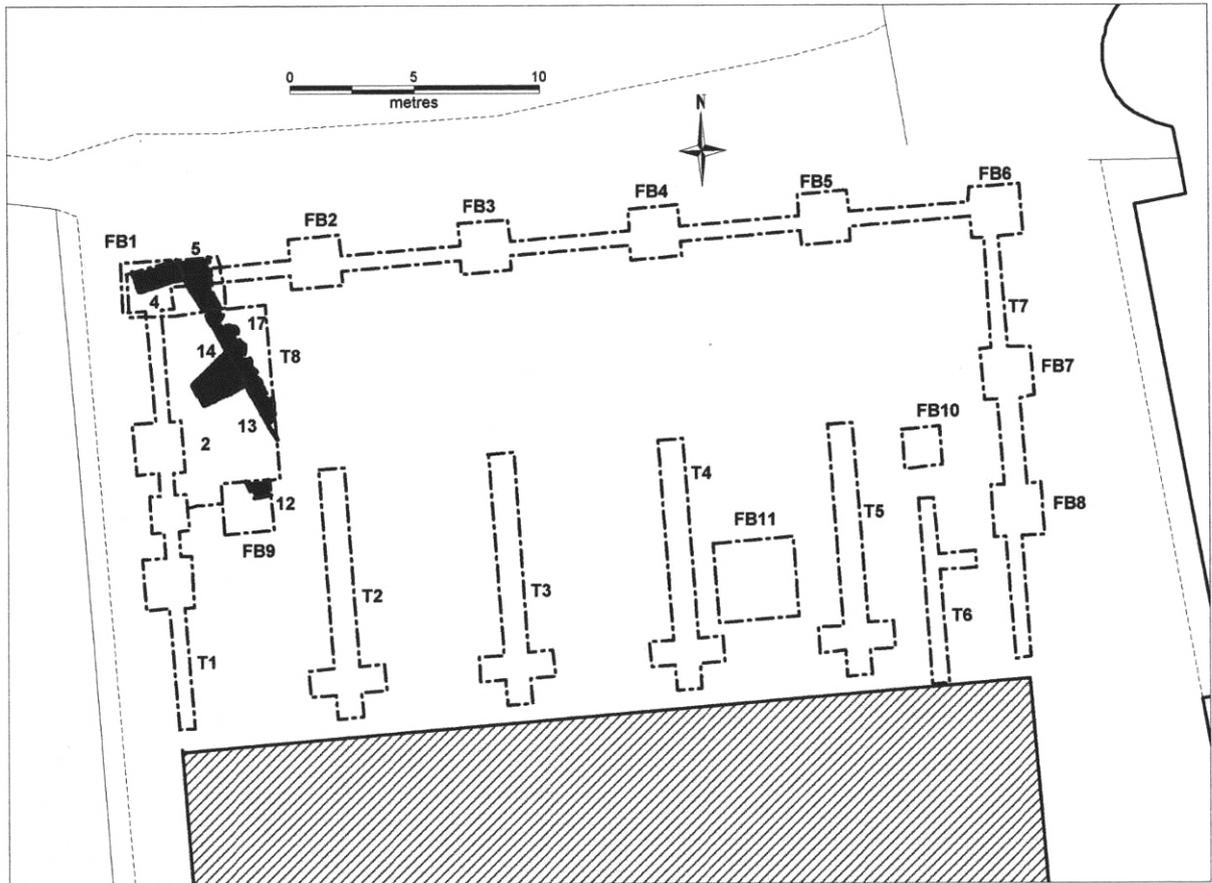


Figure 3. Location of stone features observed

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Contexts 5 and 13 comprised a substantial linear stone foundation consisting of limestone bonded with lime mortar, exposed in Trench 8 and FB 1. Its south-west face was straight but at the exposed level it had been robbed of stone behind this face and did not survive beyond a width of 0.6m.

Context 14 was a stone feature, tapered in plan, extending south-westward from the face of 13, and of similar construction. It was 1.9m long, 1.6m across its wider end where it joined 13, and 0.94m across its narrower, outer end. Its top was relatively smooth and appeared to form a finished surface, rather than a level at which demolition had ceased. This surface sloped down gently from 3.28m OD by the wall to 3.07m OD at the outer end.

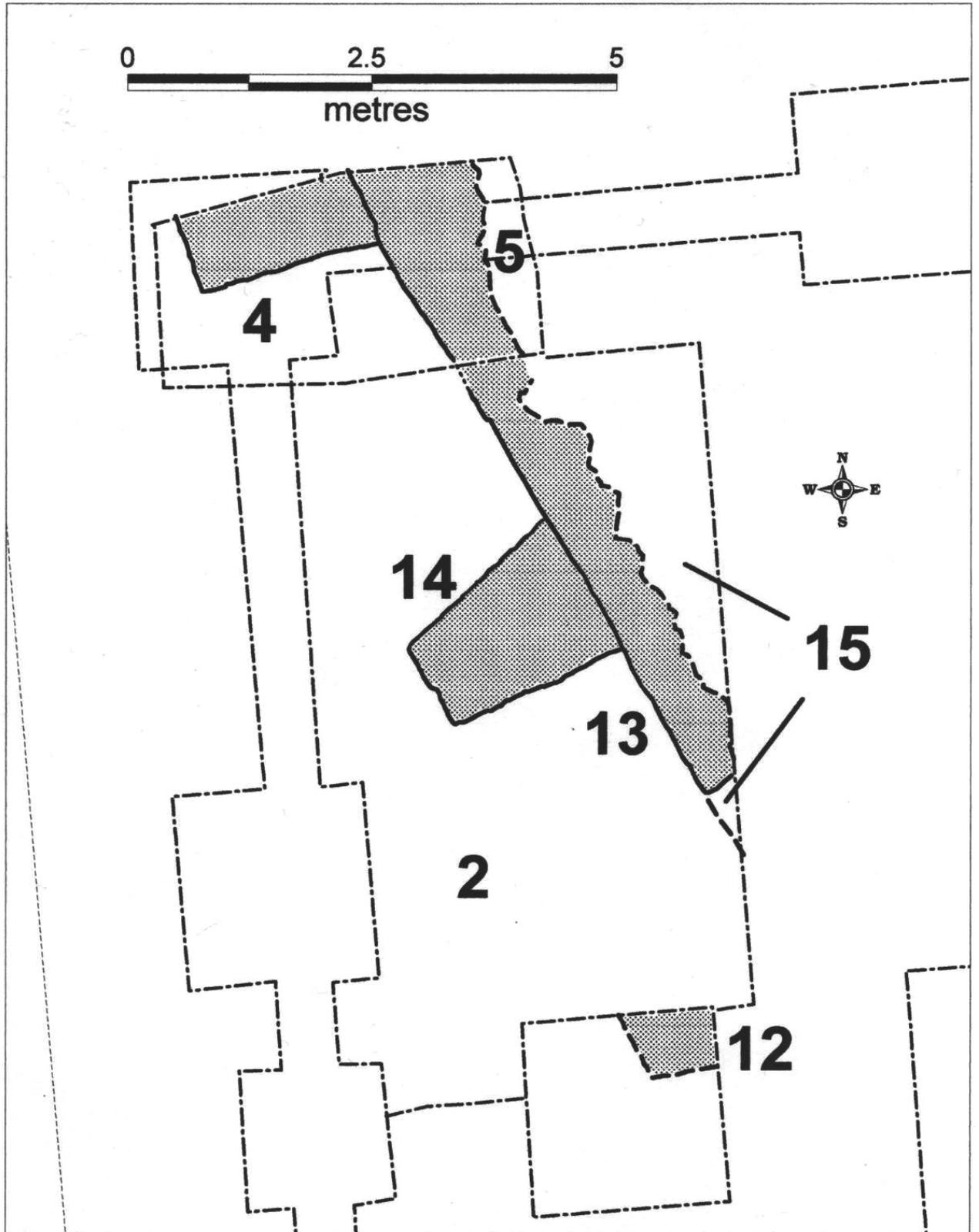


Figure 4. Plan of stone features

Context 4, in FB 1, was similar to 14 in plan and dimensions but was not completely exposed. Another feature, 12, was exposed in FB 9 in a position consistent with it being a feature similar to 4 and 14. This was badly damaged by machining and access to examine it was not possible on safety grounds, hence it was not fully recorded. It is possible that it formed a third feature comparable with 4 and 14, although the interval between 12 and 14 was less than that between 4 and 14.

This group of stone features were interpreted as forming the internal face of the foundation for the north-east facing stone wall of the Redoubt, with a series of internal stone reinforcements or low buttresses.

Context 2 was loose gravel in a yellowish brown, silty clay matrix. It was found adjacent to the west side of the stone features, below the level to which the wall had been demolished. It overlaid the tops of the buttresses and also the truncated remains of the demolished wall. This was interpreted as the remains of the earth mound that formed the main bulk of the Redoubt and, where it overlaid the remains of the wall, as a deposit resulting from levelling the site after demolition and derived from the earth mound. A single sherd of pottery dating from the second half of the 19th century and a fragment of roof tile were recovered from 2.

Feature 15 was located at the south end of the surviving stonework of 13. Its west edge continued the line of the west edge of the wall for a length of 0.7m at the south end of Trench 8. This was interpreted as a robber trench, caused by the removal of stone from the wall. The robbed part of wall 13 to the east of the surviving stonework was also included as part of 15. Its fills were context 16, very dark greyish brown silty clay and context 17, light brownish grey clay.

To the west of the stone features, in Trench 1, natural gravel was observed immediately below the modern overburden.

6.3. The moat area

In the remainder of the site, to the east of the stone features, the trenches and foundation bases revealed a generally similar series of deposits. Below the modern overburden (3) was layer 6, very dark greyish brown clay, 80mm – 280mm thick, containing small brick fragments and a few charcoal fragments. Below this was context 7, a thin, generally level, layer of chalk fragments, 30mm – 100mm thick. The top of the deposit was at about 3.6m – 3.7m AOD. In Trench 3 these layers were separated by context 9, a band of greyish brown silty clay, 80mm thick.

The historic plans (Patterson, 1984, 45) suggest that a strip of land some 6m wide lay between the outer face of the Redoubt wall and the moat. However, in the whole area to the east of the stone features layer 7 was generally level, at 0.5m – 0.6m below the modern ground level. This suggests that context 7 may have been a deposit related to the demolition of the Redoubt, possibly a spread of mortar fragments left after removal of the stones.

Context 8 was observed below layer 7 in Trench 2 and in FBs 3, 4 and 5. It was moderately stony, yellowish brown, silty clay. In FB 11, layer 7 overlaid context 18, olive grey, silty clay at least 0.7m thick. In the remaining excavations context 11, dark greyish brown silty clay, lay below 7. This was generally over 0.3m thick and continued below the limit of excavation apart from in Trench 7 where it was 0.3m thick and overlaid natural gravel.

Contexts 7 and 8 were observed in Trench 2 in a location SSE of and approximately in line with the exposed stone wall 13. Natural gravel was present below layer 8. The presence of these layers at this point, rather than evidence for a robber trench, suggests that the location may not have been part of the wall and that stone feature 12 may possibly represent the return of the south-east facing wall. However it is also possible the location of the recorded section may have been just off the line of the wall.

The silty clay deposits, 11 and 18, were probably related to the moat and may represent an accumulation of alluvium. The absence of context 11 in Trench 3, where layer 7 directly overlaid natural gravel, suggests that this point formed part of the strip of land between the wall and the moat. The more stony deposit, 8, may have been backfill. This suggests that the moat was filled in, probably for convenience, prior to the demolition of the stone structure. Layers 6 and 9, above the chalk spread, 7, probably represent levelling of the area after demolition, probably with material derived from the glacis and the raised part of the Redoubt.

7. Conclusions.

The stone features, 5 and 13, represent the base of the main north-east facing wall of the Amhurst Redoubt. The reinforcements or low buttresses, 4 and 14, strengthened the base of the wall, and would have been buried beneath the earth platform that formed the main bulk of the redoubt. Context 12 was probably a third internal buttress but it is possible that it represented the return of the wall from the eastern apex of the triangle. However the suggested location of the Redoubt in relation to the modern street layout (Patterson, 1985, 45) would be too far south for this to be likely.

The internal buttresses exposed were similar in plan, although not in dimensions, to those exposed in Fox's 1988 excavation of the Spur Redoubt (Fox, 1991). There they reinforced the rear of an additional wall, added to the south-east face of the earlier redoubt and attributed to the modifications of the 1730s – 1750s. The Spur Redoubt was smaller than the Amhurst Redoubt, which probably explains the larger dimensions of the buttresses at the Amhurst Redoubt.

The demolition of the Redoubt included the partial robbing of the foundations below ground level. This may explain the absence of evidence from the watching brief on the first phase of the Sports Hall. Alternatively, if context 12 did represent the south-east facing wall, the Redoubt itself was positioned outside the area of that site.

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Appendix 1. Context list.

Number/letter codes (eg 10YR 3/1) = Munsell soil colour codes.

sa = stone abundance – 0 = virtually stone free; 5 = gravel

Context	Type	Description
1	Layer	sandy clay, sa 5, natural gravel
2	Layer	10YR 5/6 silty clay, sa 5
3	Layer	modern overburden
4	Fill	limestone foundation, fill of 19
5	Fill	limestone foundation, fill of 19
6	Layer	2.5Y 3/2 clay, sa 1
7	Layer	chalk
8	Layer	10YR 5/8 silty clay, sa 3
9	Layer	10YR 5/2 silty clay sa 0
10	Fill	lime mortar on 5, fill of 19
11	Layer	2.5Y 4/2 silty clay, sa 1
12	Fill	limestone foundation, fill of 19
13	Fill	limestone foundation, fill of 19
14	Fill	limestone foundation, fill of 19
15	Feature	robber trench
16	Fill	10YR 3/2, silty clay, sa 1, fill of 15
17	Fill	2.5Y 6/2, silty clay, sa 1, fill of 15
18	Layer	5Y 5/2 silty clay, sa 0
19	Feature	foundation trench
20	Feature	Redoubt moat