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LINDSEY ARCHAEOLOGICAL SERVICES

Caistor Grammar School, Caistor, Lincs Roman Wall Evaluation

Site Code: CGSW 02
LCNCC Museum Accession No: 2002.93
NGR: TA 0137 1163

Archaeological Evaluation

for

Hyder Business Services

on behalf of

Caistor Grammar School

By

M. McDaid and N. Field

LAS Report: 573

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Conservation Services

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Caistor Grammar School, Caistor, Lincs
Roman Defences
Site Code: CGSW 02
LCNCC Museum Accession No: 2002.93
NGR: TA 0137 1163

Summary

A hand-excavated evaluation trench revealed the remains of the Roman wall foundations. A later retaining wall was not built upon these foundations but rest on a deposit of grey silt overlying the Roman foundations. No footings for the retaining wall were noted. Lack of footings and a firm foundation possibly explains the reason for the movement of ground behind the retaining wall.

Introduction

An archaeological evaluation was undertaken by Lindsey Archaeological Services, for Hyder Business Services, on behalf of Caistor Grammar School, from 19/2/02 to 20/2/02, in accordance with the general requirements set out in the *Lincolnshire Archaeological Handbook* (Lincolnshire County Council Archaeology Section, 1998) and as discussed with the Inspector of Ancient Monuments (English Heritage).

Site Location and Description (Figs. 1 and 2, Pl.1)

The evaluation trench lies with in the grounds of Caistor Grammar School, next to the Science block, west of the 1992 evaluation, adjacent to the Roman walls (Scheduled Ancient Monument 148) and within the Area of Archaeological Interest defined by West Lindsey District Council in 1989.

Scope of Work

A footpath leading to the bridging link between the main school and the science block is suffering from subsidence. It is not known whether the adjacent building may also be affected. It sits inside the Roman walled area and is c.3m above the ground next to the wall outside the circuit.

Archaeological Background

Caistor was an important Roman town with a walled enclosure built in the late 3rd-4th century on top of the hill. There was also an extensive Roman settlement to the west of the walled area. It appears to have retained its importance in the Anglo-Saxon period and is thought to have been the capital of the North Riding of Lindsey with an early minster church located inside the Roman walls. It was a royal manor both before and after the Norman Conquest and in the medieval period was a thriving market town.

The site is located immediately adjacent to the Roman wall circuit. A sandstone retaining wall, follows the presumed line of the Roman wall but is thought to be post-medieval in date.

Excavations, in advance of the construction of the school science block in 1992, revealed Saxon rubbish pits immediately beneath the modern yard surface, cut into the top of a possible Roman ditch flanking the retaining wall. Adjacent to the retaining wall, which is assumed to be on the line of the Roman wall, were several large stones. It was not clear whether these were part of the Roman wall foundations because the area revealed was too small (Field 1992).

Aims and Objectives

The purpose of the evaluation was to

- determine the depth and nature of the retaining wall foundations
- establish whether the stonework found during previous evaluation work belongs to the Roman wall.
- To monitor the borehole programme which directly affects the fabric of the Scheduled Ancient Monument
- enable an informed decision to be made regarding the future treatment of any archaeological remains which may be disturbed during remedial works to the retaining wall
- consider any appropriate mitigatory measures either in advance of and/or during development

METHOD

Recording Systems

LAS operates a standard context recording system, developed by its staff over the past 20 years based on MOLAS and CAS models. A full written and photographic record was made of the site, the site plan was at a scale of 1:20 and section drawings at 1:20. Context numbers were assigned to all deposits for recording purposes which are referred to in the report and listed in Appendix 1.

A full photographic record, in 35mm colour print format, was made during the progress of the evaluation, covering principal features together with general site views.

Evaluation Trench (Pls.2 and 3, Figs.2 and 3)

A single trench, measuring 3m x 2m, was positioned to examine the ground next to the retaining wall which follows the presumed line of the Roman defences and defines the limit of the Scheduled Area. It was excavated by hand (Pl. 1) and stratigraphic relationships were recorded. A temporary bench mark was established on the site (79.86m O.D.).

Results (Pls.3 - 5, Fig.3)

Topsoil, **100**, was banked against retaining wall, **111,** which was faced with brick, **114**, to the north east. The topsoil sealed a 0.09m deep layer of gravel, **101**, which butted up to the pavement surrounding the science block, sealing the foundation for the paving slabs, **115**. Sealed by **101** was a layer of mortar, **102**, 0.11m thick.

Beneath **102** was a rectangular pit **112** (Pl.4), 1.00 x 0.80 x 0.42m, filled with a black humic soil, **113**, containing modern brick and tile fragments. A layer of black soil containing modern brick and tile, **103**, lay below **102**, covering a 0.10m deep deposit of chalk fragments, **104**, possibly some sort of surface. All the above deposits projected approximately 1.20m into the trench and were within construction cut **116**.

A light brown clay containing chalk flecks, **107** was within cut **117**. Excavation did not penetrate this feature.

Cut by construction trench **116** was a 0.20m thick layer of dark grey silt, **106**, containing fragments of modern pottery, brick and tile. It is likely that artefacts from this layer are intrusive, originating from the activity at Varlow's yard. Layers **105** and **106** may be the same deposit as **110**, which is cut by wall **111**.

Beneath layer **106** was a spread of large, irregularly shaped pieces of stone rubble **108** in a matrix of yellow clay **109**. The stones were up to 0.80m in length and the deposit was over 0.40m deep. This was the same as the deposit identified in 1992, which was interpreted as being the remains of the Roman wall foundations.

Discussion

Topsoil **100**, gravel **101** and pavement foundation **115** are all associated with the building of the existing science building. The chalk surface, **104** is probably associated with use of the site as a builders' yard prior to construction of the science block. The mortar (**102**) and the black silt and rubble, **103**, were possibly deposited during the yard's use.

The layer of light brown clay with chalk flecks, **107**, which was within cut **117**, is possibly a deposit relating to the Anglo – Saxon gully found in the 1992 evaluation trench.

The retaining wall, **111**, which is 2.91m in height, appears to cut into **105/106/110** (Pls.6 and 7). From the exposed two courses of stone at the base of the wall **111** it appears that no foundations appear to have been built for the wall, nor does it utilise the Roman foundations. No date could be given to layer **106/110**, due to contamination of the deposit, so it is not possible to determine the age of the retaining wall.

The Roman wall foundation (**108** and **109**), aligned north east – south west, was exposed at 80.23m O.D. This is almost the same height at which it was exposed in the 1992 trench. Although the wall's western foundation limit was not exposed, it seems likely that construction trench **116** and gully **117** did not cut the wall foundation but instead butted up to it, the large foundation stones acting as a deterrent to removal. Excavation of pit **112**, has shown that the foundations are at least 0.42m deep. Given that the Roman wall at Horncastle, which Caistor's Roman wall is often compared to, has a raft foundation 0.50m thick it is likely that the foundations revealed in the evaluation trench are not substantially deeper than the depth exposed.

Monitoring of the Boreholes (N. Field)

On April 3rd 2002 a series of boreholes were taken to establish the ground conditions immediately behind the wall. Scheduled monument consent for this part of the investigations was granted on March 4th 2002 (ref. HSD9/2/1251 (pt9)). Provision had been made for five holes to be bored but only two were required (Pls 8 and 9). In addition a test pit was dug 3.70m west of the archaeological evaluation trench in order to determine the level of undisturbed deposits (Pl. 10).

Core 1 was located 2.70m west of the return wall and 0.60m above existing ground level (Pl. 8) Core 2 was positioned 1m east of the brick retaining wall and 0.90m above existing ground level (Pl. 9). The two cores through the facing wall established that it was 300mm thick with a 300-400mm backing consisting of brick rubble, mortar.

The test pit was dug to a depth of 1.5m by hand and augered beyond to a depth of 3m. There was a silty orange clay to a depth of 1m below the existing ground surface which merged into a stiff clay at a depth of 1.20m. The water table was reached at a depth of 1.1m.

Discussion

There was no evidence for stonework behind the existing retaining wall or any indication of Roman deposits. It is possible that before the present wall was constructed the ground sloped as it does to the west of the retaining wall (Pl. 11). After its construction the void behind it would have been filled with rubble and soil, which would explain the absence of any archaeological remains. Either the Roman wall has been completely robbed above ground level or its core remains intact some distance behind the present wall.

Conclusion

The evaluation established the presence of the Roman wall foundations, at a depth of 80.23m O.D. The retaining wall is not built upon these foundations but cuts into a deposit of grey silt overlying the Roman foundations. No footings for the retaining wall were noted. The borehole survey showed that there was no evidence for any stonework behind the present

wall and that the Roman wall may not survive above the level revealed in the evaluation trench. There was no visible damage to any archaeological remains caused by the borehole investigations.

Mitigation

The results of the evaluation and the borehole survey have shown that the present retaining wall is not founded and that pressure behind the retaining wall cannot be sustained by the structure, which has resulted in lateral movement (P. Smallwood C.Eng. MICE). The proposed solution is to build a new retaining wall in front of the existing wall and along 11m the boundary wall to the east of the new science block, based on a reinforced concrete raft with a single row of stabilising piles and a row downstand beams (Fig. 4). All of these works will lie beyond the area of the Scheduled Monument area.

The piles will be 175-200mm in diameter and drilled at 1.5-2m centres. The two parallel rows will be 2m apart and the piles will be long to hit the solid bedrock (up to 8m in depth). A total of 4 piles will be placed parallel to the Roman wall line with a further 5 along the east wall. Up to 15 raking piles will be positioned at a distance of 2m from this row of piles. The concrete raft will be 400mm thick and sit on top of the existing ground surface with no impact on archaeological remains. The piling works will cause disturbance to below ground archaeological remains including the Roman wall foundations. In practical terms, however, the methods of construction will mean that little can be recorded from the residue of the drilling for the piles and it is recommended that no further archaeological monitoring be carried out.

Acknowledgements

LAS would like to thank staff at Caistor Grammar School for their assistance. All fieldwork was carried out by the author and Mark Williams. This report was edited by Naomi Field and produced and collated by Jane Frost.

Mick McDaid and Naomi Field

July 2002

References

Field, N 1992 *Caistor Grammar School, Archaeological Evaluation*. Lindsey Archaeological Services developer report.

Archive List

Plan

Section

Levels

Correspondence

Photographs: LAS Film No. 02/16/ negs. 12-28; film 02/29/1-11

APPENDIX 1

APPENDIX 1

Caistor Grammar School (CGSW 02)
Context List

Context	Type	Length	Width	Depth	Description
100	Layer	3m+	0.55m	0.30m	Topsoil
101	Layer	3m+	2.20m	0.09m	Gravel
102	Layer	3m+	2.10m	0.11	Mortar
103	Fill	3m+	1.20m	0.07m	Fill of 116
104	Fill	3m+	1.20m	0.10m	Fill of 116
105	Layer	3m+	1.20m	0.06m	Grey Silt
106	Layer	3m+	1.20m	0.20m	Grey Silt
107	Fill	3m+	1.20m	n/a	Fill of 117
108	Fill	3m+	1.20m	0.42m+	Foundation Stones
109	Fill	3m+	1.20m	0.42m+	Foundation bonding
110	Layer	3m+	n/a	0.08m	Grey Silt
111	Wall	n/a	n/a	n/a	Retaining Wall
112	Cut	1m	0.80m	0.42m	Pit
113	Fill	1m	0.80m	0.42m	Fill of 112
114	Wall	n/a	n/a	n/a	Brick Wall
115	Cut	3m+	0.10m+	0.11m	Foundation for Pavement
116	Cut	3m+	1.20m	0.15m+	Construction Trench
117	Cut	3m+	1.20m	n/a	Gully

THE FIGURES

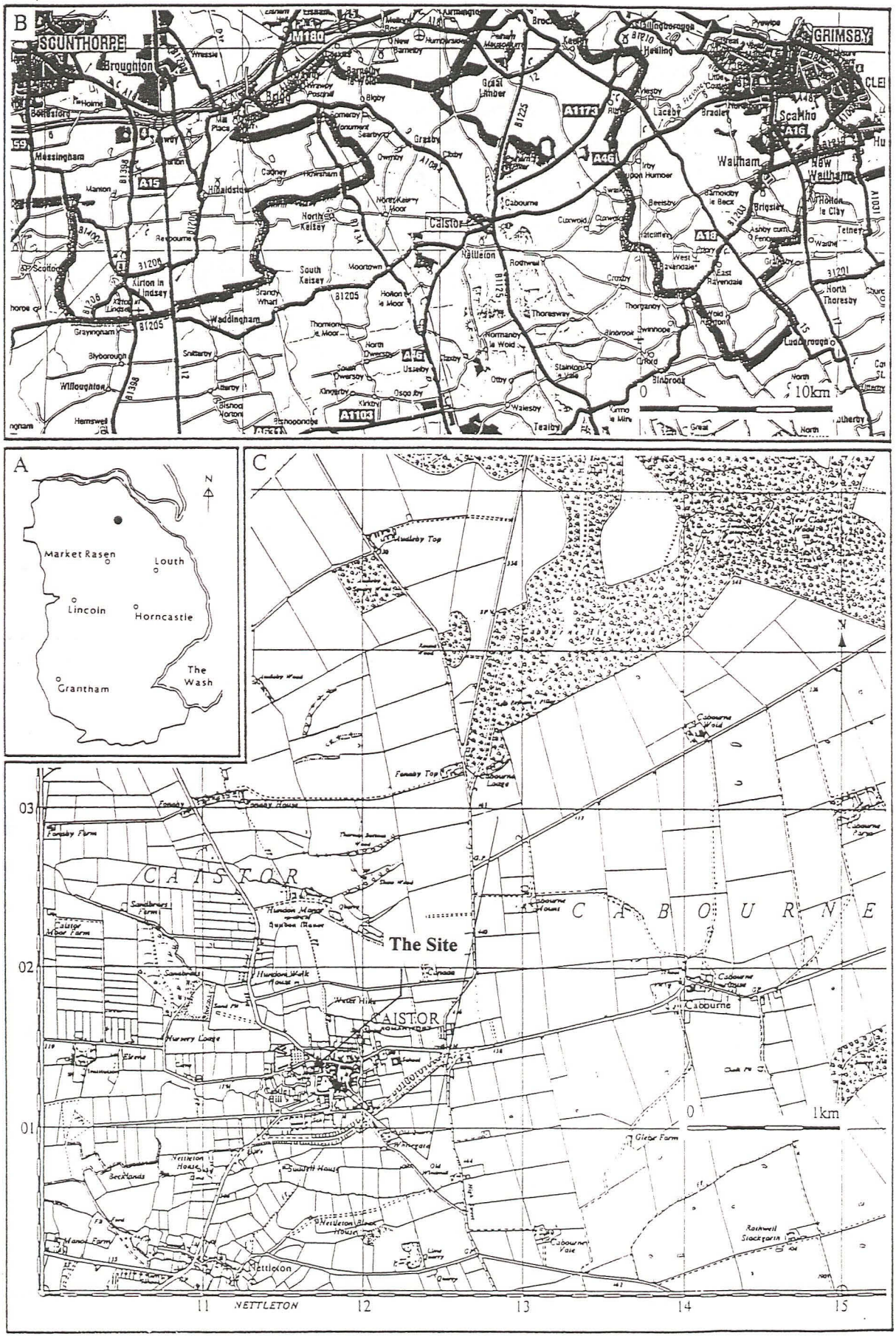


Fig. 1 Caistor site location. (Insert C based on the 1953 Ordnance Survey map. © Crown Copyright. Reproduced with the permission of the Controller of HMSO, LAS licence number AL 100002165)

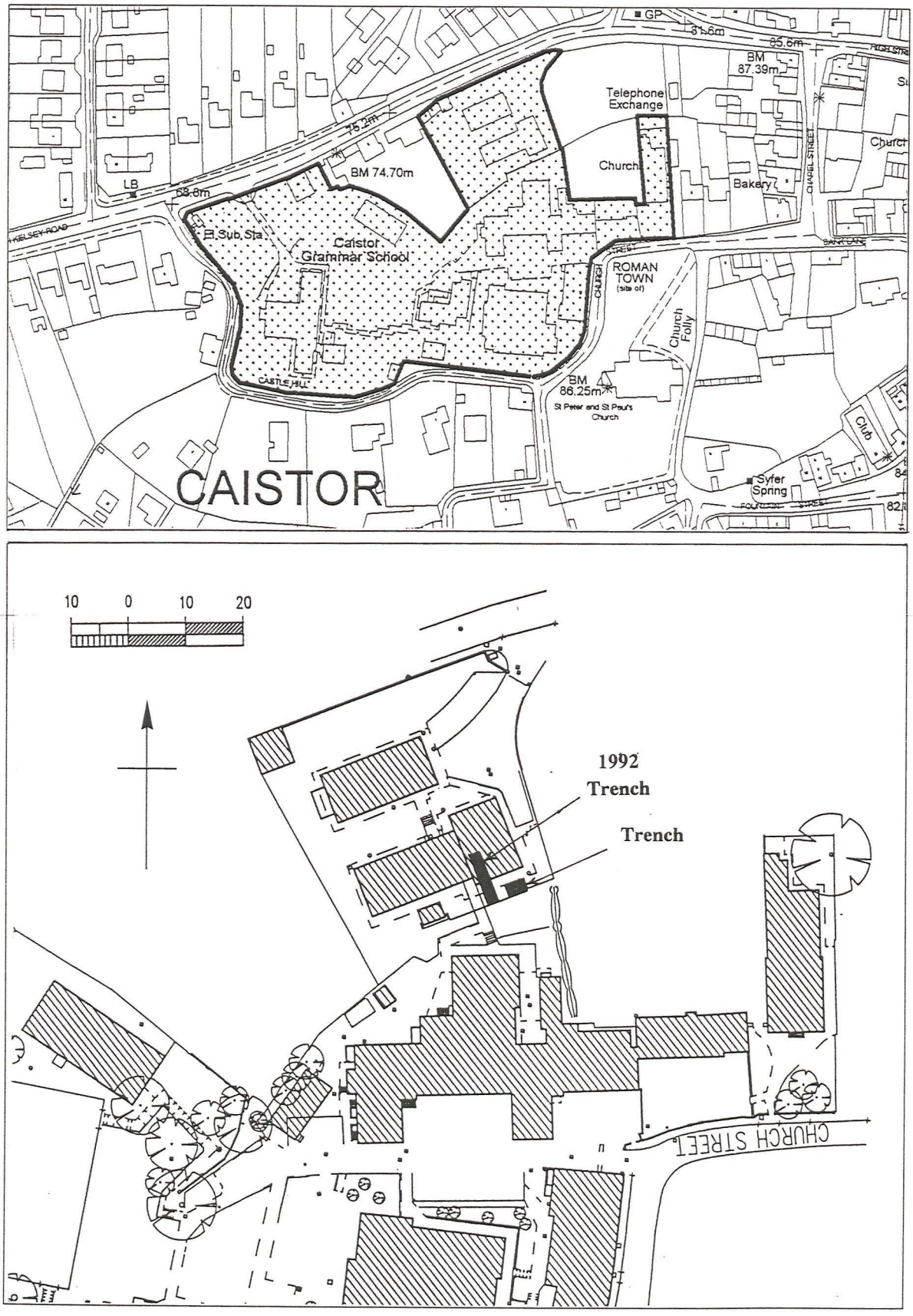


Fig. 2 a) Site location in the school grounds. Based upon a reduced 1:2500 map.
b) Trench location. Based upon a plan provided by HBS (Sheet No. W0150 (sp))

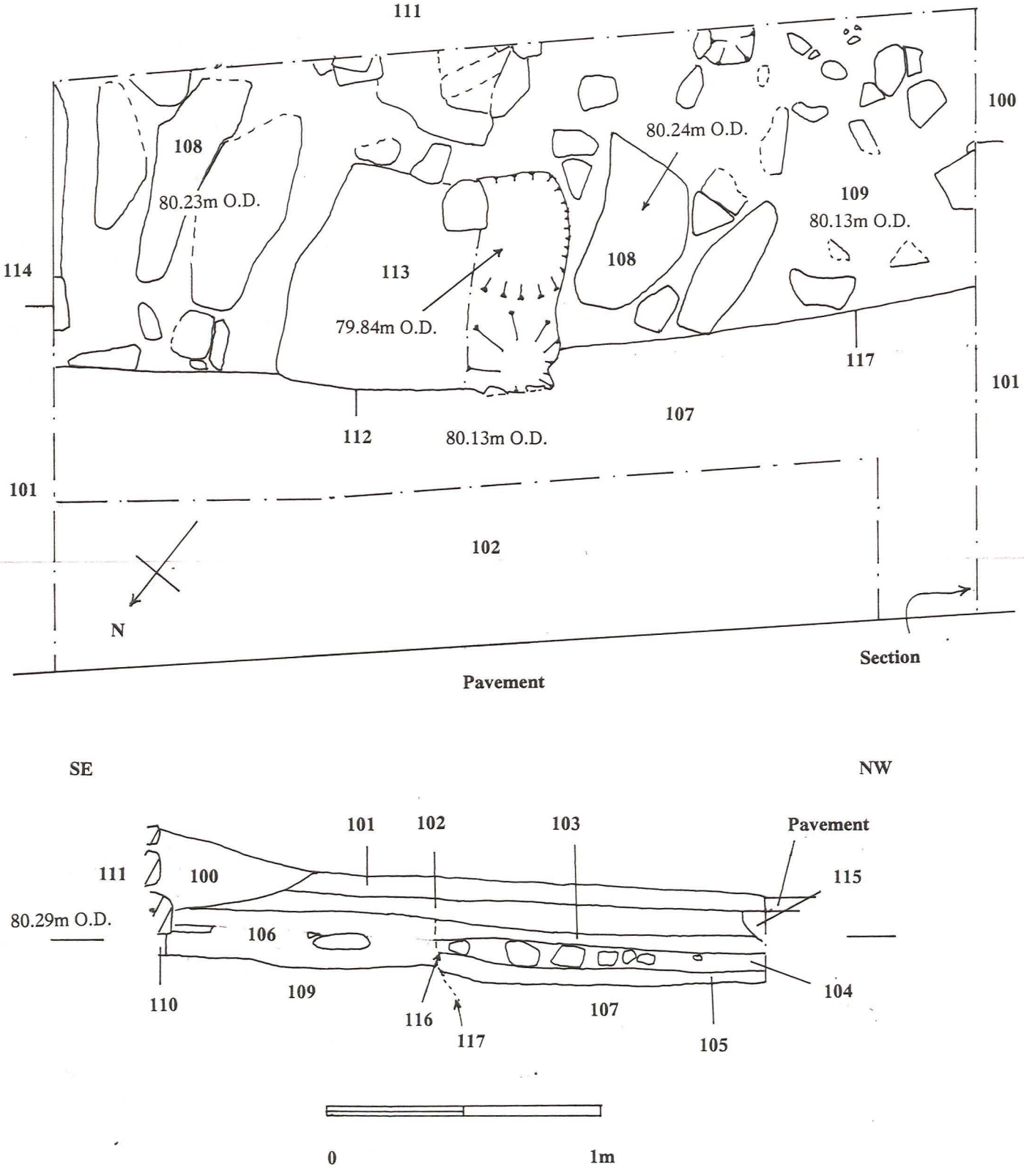
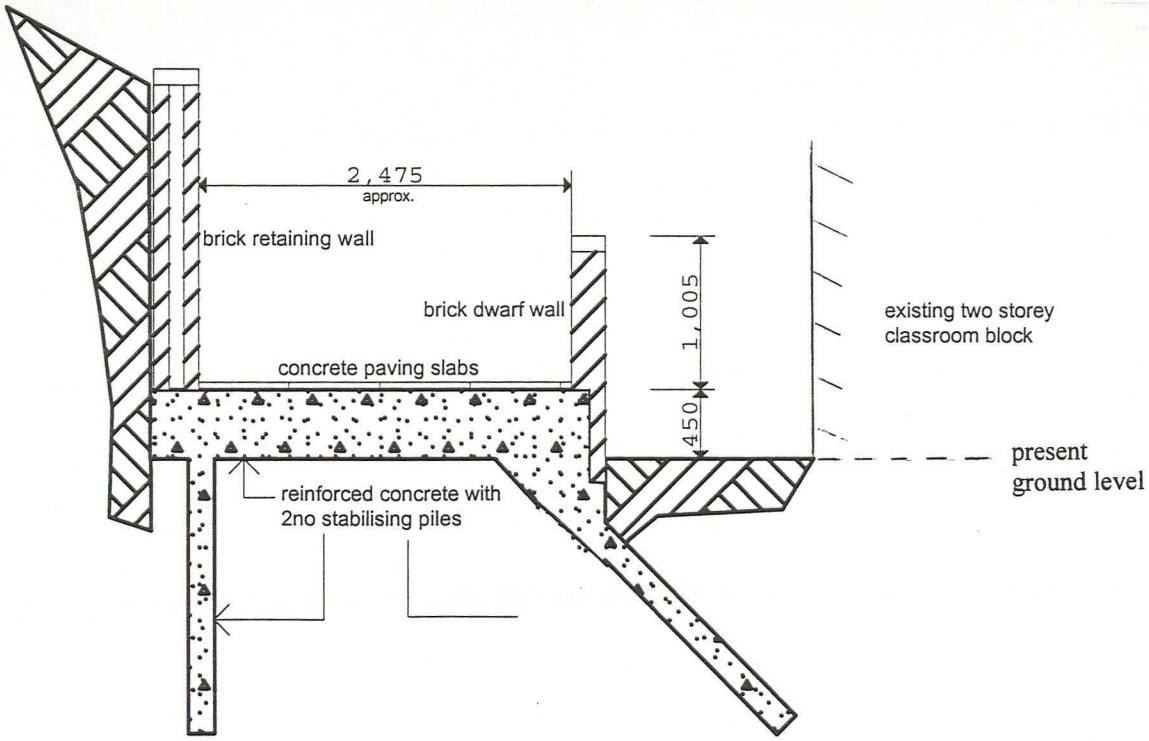
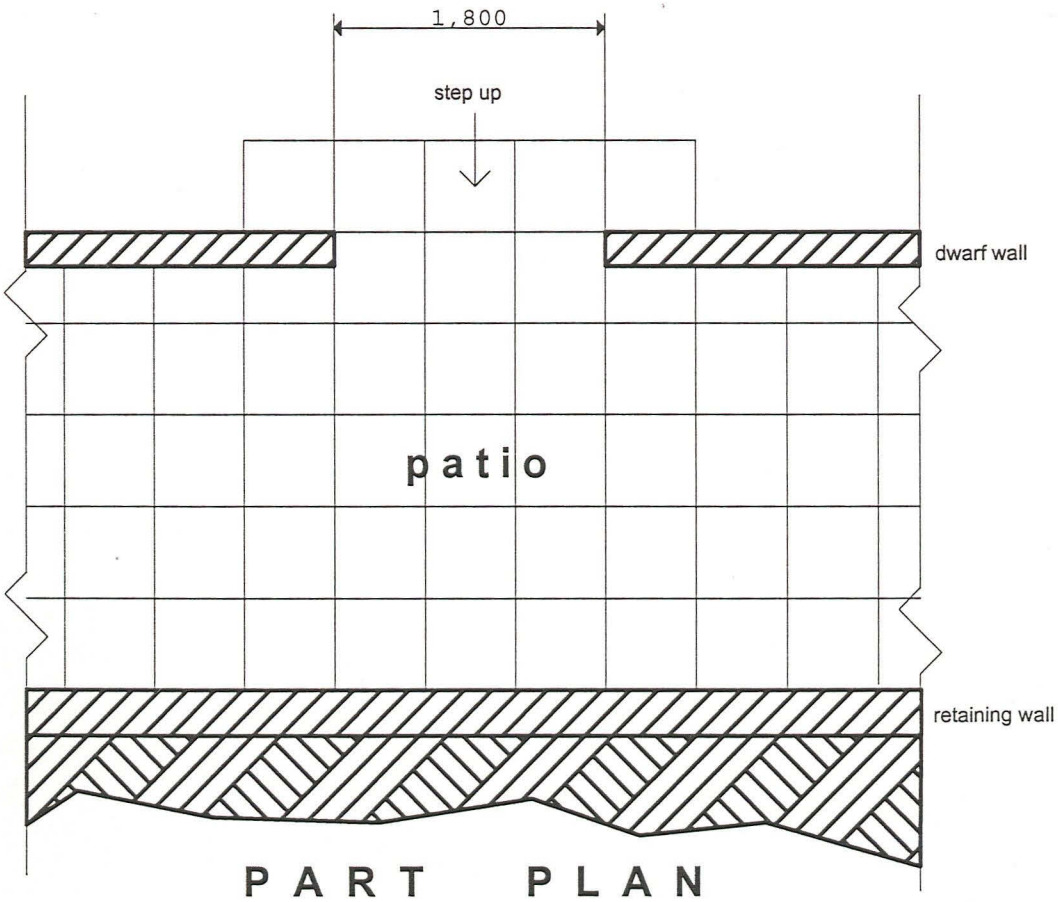


Fig. 3 Plan and section of the evaluation trench.



SECTION



PART PLAN

Fig. 4 Proposed new retaining wall, section and plan, scale 1:50. Based on drawing supplied by HBS.

THE PLATES

Pl. 1 Evaluation trench location during clearance.

Pl. 2 General view of site from the bridge, with science block to left. Looking north east.

Pl. 3 The evaluation trench, post-excavation. Looking north east. Scales 1m and 0.50m.

Pl. 4 Pit 112, half-sectioned, looking north east. Vertical scale 0.30m, horizontal scale 0.50m.

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Pl. 6 Retaining wall 111 with all courses of stonework exposed. Looking east. Scales 0.50m and 1m.

Pl. 7 Lower courses of stonework of wall 111 above layer 110. Looking south-east.
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Pl. 8 Borehole 1 at the east end of the retaining wall.

Pl. 9 Borehole 2 at the west end of the retaining wall.

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Pl. 11 View of retaining wall and sloping ground beyond, looking north-east.