

September 2000

---

**CUMBRIA COLLEGE OF ART AND  
DESIGN  
CARLISLE**

**Interim Report on the Phase 5 Evaluation of the  
Walled Garden**

Cumbria College of Art and Design  
Carlisle

---

Interim Report of Phase 5 Evaluation

Report no 2000-2001/13/AUA8039

Checked by Project Manager. ..... Date
Passed for submission to client. ..... Date

© Lancaster University Archaeological Unit  
Storey Institute  
Meeting House Lane  
Lancaster  
LA1 1TH

September 2000

---

## CONTENTS

---

<b>SUMMARY .....</b>	<b>2</b>
<b>ACKNOWLEDGEMENTS.....</b>	<b>3</b>
<b>1. INTRODUCTION .....</b>	<b>4</b>
1.1 Circumstances of the Project.....	4
1.2 Location and Topography .....	4
1.3 Archaeological Background.....	4
<b>2. METHODOLOGY .....</b>	<b>7</b>
2.1 Project Design.....	7
2.2 Evaluation .....	7
2.3 Finds.....	7
2.4 Archive.....	8
<b>3. PHASE 5 RESULTS .....</b>	<b>9</b>
3.1 Evaluation .....	9
3.2 Finds	10
<b>4. CONCLUSIONS</b>	<b>12</b>
4.1 Evaluation Summary	12
<b>5. IMPACT AND RECOMMENDATIONS</b>	<b>13</b>
5.1 Impact	13
5.2 Recommendations	13
<b>6. BIBLIOGRAPHY</b>	<b>14</b>
<b>APPENDIX 1</b>	<b>15</b>
Project design	
<b>APPENDIX 2</b>	<b>16</b>
Summary Context List	
<b>ILLUSTRATIONS</b>	<b>1</b>
.....	7
Fig 1 Location Map	

Fig 2 Location of Trenches 1, 2 and 3

Fig 3 Plans of Evaluation Trenches

Fig 4 South-Facing section Trench 1

## PLATES

.....1

8

Plate 1 Ditch 15, Trench 1 looking north-west

Plate 2 Ditch 15, Trench 1 looking north

---

## SUMMARY

---

An evaluation was carried out in July and August 2000 within the walled gardens at Cumbria College of Art and Design, Carlisle (NY 4030 5730). The work represented Phase 5 of a programme of archaeological work being carried out for the college jointly by Lancaster University Archaeological Unit and Newcastle University's Archaeological Practice, in accordance with a brief set by Helena Smith, Development Control Officer of Cumbria County Council.

The College is situated in an area which has been identified as being of high archaeological importance (County Sites and Monuments Record 5782, Scheduled Monument 28484). The main College building is situated between the line of Hadrian's Wall, and the probable course of the associated *Vallum*, c200m to the south-east of the Wall. It is also only approximately 60m north-east of the north-eastern defences of the Roman fort of Stanwix, believed to have been the largest fort along Hadrian's Wall.

Three trenches were excavated within the square walled garden to the west of the college buildings and to the east of the Stanwix Roman fort. Within the trenches in the centre and east of the survey area, only natural deposits and features associated with the garden were uncovered. However, excavation of the western end of the third trench revealed a ditch, which in profile appeared to be of Roman military type, although it contained few diagnostic finds. The ditch consisted of a steep-sided V-shaped cut running north/south, with a slight change in gradient towards the base, where it steepened. The fills appeared to demonstrate a very short period of use, with the ditch apparently back-filled very quickly.

It is tentatively suggested that this was a ditch of Roman military origin and therefore likely to predate the Hadrian's Wall fort at Stanwix. It may therefore be part of a temporary installation, although the date of this cannot be ascertained. It is therefore recommended that further evaluation trenching be undertaken to examine the area to the south of the third trench once the temporary buildings have been removed; this would assess the line and character of the ditch and also investigate the area to the immediate west of the ditch.

---

## ACKNOWLEDGEMENTS

---

Lancaster University Archaeological Unit would like to thank Malcolm Wilson (Architects Plus), Kirk Howie (Lambert and Gill Ltd), Helena Smith (Cumbria County Council), and Paul Austen (English Heritage) for their advice and encouragement. The practical assistance of Mike Baker, the Estates Manager for Cumbria College of Art and Design, was very much appreciated. Thanks are also due to Ken Hope Plant Hire for the meticulous machining.

Lancaster University Archaeological Unit is grateful to Cumbria College of Art and Design for its funding of the project, and for the College's hospitality on site.

The fieldwork was undertaken by Andy Bates, Neil Wearing, and Matt Town. Christine Howard-Davis commented on the pottery. This report was written by Matthew Town, and edited by Jamie Quartermaine and Rachel Newman. The project was managed by Jamie Quartermaine.

---

## 1. INTRODUCTION

---

### 1.1 CIRCUMSTANCES OF THE PROJECT

- 1.1.1 Lancaster University Archaeological Unit (LUAU) conducted an evaluation at Cumbria College of Art and Design, Carlisle (NY 4030 5730), between 31<sup>st</sup> July and 3<sup>rd</sup> August 2000. The work represented Phase 5 of a programme of archaeological fieldwork being carried out for the College jointly by LUAU and Newcastle University's Archaeological Practice, in accordance with the terms of a brief set by Helena Smith, Assistant Archaeologist, Cumbria County Council. The evaluation was undertaken in advance of proposals to develop the walled garden to the west of the college into a car park.
- 1.1.2 The College is situated in an area which has been identified as being of great archaeological importance (County Sites and Monuments Record 5782, Scheduled Monument 28484). The main College building lies between the line of Hadrian's Wall, and the probable course of the associated *Vallum* c200m to the south-east of the Wall. It is also only approximately 60m north-east of the north-eastern defences of the Roman fort of Stanwix, believed to have been the largest fort along Hadrian's Wall. The site has previously been evaluated by Carlisle Archaeology Ltd (CAU 1993; 1998). Trial trenches close to the main College building identified the presence of redeposited layers of clay, which may represent the remains of the fort's parade ground. A cut feature was revealed adjacent to the main Brampton Road entrance to the College and it was suggested that the course of the *Vallum* lay further to the south-east than had hitherto been thought (LUAU 1999).

### 1.2 LOCATION AND TOPOGRAPHY

- 1.2.1 The Phase 5 study area lies immediately south-west of the main College building, and south-east of Tarraby Lane, in a walled garden which at the time housed three portacabins, used as ancillary class-rooms for the college. The grounds within which the walled garden is situated on a raised platform overlooking the lower ground on which the college is located, and on which the putative parade ground was tentatively identified (LUAU 2000). The eastern wall of the fort is thought to be situated just beyond the walled garden. The walled garden therefore occupies a position of some importance, due to its proximity to both the Wall and the fort.
- 1.2.2 The site lies at approximately 30m AOD. The underlying solid geological deposits consist of Stanwix shales overlain by boulder clay (Dixon *et al* 1926).

### 1.3 ARCHAEOLOGICAL BACKGROUND

- 1.3.1 **Stanwix Fort:** excavations in the 1930s by Simpson and Hogg (1935) established the positions of the south gate of the Hadrian's Wall fort, and of the defences on the north-eastern, south-eastern and south-western sides, as well as the line of the *Vallum*. Internal buildings, including a granary, were located in the playground of Stanwix Primary School. From 1940 on, very little new information was obtained until the 1980s, when an excavation in the car park of the Cumbria Park Hotel, immediately north of the school playground, located the stone footings of the north wall of the fort and an interval tower on the north-western side, together with two ditches beyond. This discovery demonstrated that

the fort had been enlarged in the Antonine period so that it projected north of Hadrian's Wall. The other key discovery was that of a ditch underlying the interval tower. This ditch, clearly antedating the enlargement of the fort, was presumed to be associated with Hadrian's Wall, the foundations of which had been discovered by Simpson and Hogg in 1932-4 (McCarthy 1999).

- 1.3.2 In 1997, CAU carried out further work in the playground of the Primary School, in advance of the construction of an extension to the school. The earliest identifiable feature consisted of a turf deposit, probably a rampart of the fort or perhaps the Turf Wall which predated the rebuilding of the western section of Hadrian's Wall in stone. The front and rear faces of the turf were not seen, but the deposit identified was located some metres south of the stone Hadrian's Wall discovered in the 1930s. Overlying the turf was a substantial deposit of clay. The walls located by Simpson and Hogg were not reidentified, but stone and cobbled surfaces and rubble deposits are presumed to belong with the walls found in the 1930s. Timber buildings erected after the deposition of Huntcliff ware in the fourth century were also discovered (McCarthy 1999).
- 1.3.3 In 1997 and 1998, CAU dug two further trenches in a narrow passage immediately adjacent to the north-western side of the Victorian school, locating the inner ditch and the stone footings of the north wall of the fort. Work in 1993 in Barn Close, Stanwix, revealed two phases of walls and surfaces (McCarthy 1999).
- 1.3.4 ***The fort environs:*** in 1986, CAU excavated some deep stratified deposits, including remains of buildings, at the former Miles MacInnes Hall at Scotland Road, demonstrating the existence of extramural development beyond the west gate of the fort (McCarthy 1999).
- 1.3.5 Between the eminence on which the fort is situated, and the rising ground to the north-east centred on Wall Knowe, is an area of lower ground, where investigations by CAU in the grounds of Cumbria College of Art and Design in 1996 (CAU 1996) revealed an extensive clay platform up to 0.5m thick. The clay was tentatively provisionally interpreted as the parade ground for the fort, which, from a combination of observations, is suggested may be 7.5 acres (3.15 ha) in extent. Between this possible parade ground and the east gate of the fort is a raised area which has been tentatively identified as an associated tribunal. The putative parade ground sealed and preserved an old ground surface, extensive areas of plough marks, and field boundary ditches, including some discovered in 1976 by the Central Excavation Unit of English Heritage (Smith 1978). These investigations also revealed traces of buildings close to Dykes Terrace, south of the *Vallum*. In 1998, CAU located further buildings and possible industrial debris close to the entrance to Cumbria College of Art and Design on Brampton Road. The same investigation implied that within the College campus the *Vallum* was situated some 75m south of the position indicated on the maps (McCarthy 1999).
- 1.3.6 An excavation and watching brief was carried out at the College in 1999 by LUAU. Excavation to the south-west of the main College building revealed only twentieth century features, and suggested that modern disturbance had been heavy due to the modern building having been terraced into the slope. However, a watching brief at the main gate revealed a dump containing Roman pottery, the butt-ends of two possible beam slots, a larger linear feature, a pit, a posthole, and a possible kiln. The brief provided only for the recording of features that would be affected by the proposed development, and, as the putative kiln was below this depth, it was agreed that it should not be excavated, and thus a natural origin (tree bole) cannot be discounted. The evidence suggests Roman occupation close to Brampton Road, probably ending by the late third century AD. Although it had



been previously suggested that the *Vallum* extended through this area (CAU 1998, 5, paras 7.4-7.5), no evidence for the *Vallum* was revealed in the course of these investigations (LUAU 1999).

- 1.3.7 A watching brief was undertaken at the same time by the Newcastle University's Archaeological Practice on extensions to the south-east side of the main College building. The excavations failed to uncover any archaeology to the depth of the pile caps, except for thick plough-soil and hill-wash. A much deeper excavation was undertaken in advance of the construction of a lift-shaft, however, and this revealed an extensive area of cobbling similar to that encountered by CAU evaluations in 1993 to the north of the College building. Large postholes and slots were also discovered, apparently contemporary with the cobbled areas; these were cut by ditches and overlain by burnt deposits. The deposits appeared to concentrate at the east end of the trench, with the west end demonstrating truncation from the terracing of the college building into the slope (A Rushworth *per comm*).
- 1.3.8 An evaluation and watching brief were carried out in June 2000 by LUAU to the north of the modern college building. The watching brief on a pipe trench revealed a deposit of clay and cobbles running approximately two thirds of the length of the trench. The evaluation to the north of the main College building, and immediately south of the pipe trench, revealed mainly nineteenth and twentieth century features and soil horizons. However, excavation in the centre of the trench revealed a deposit of clay and cobbles as identified in the watching brief. This deposit consisted of two phases of clay/stone surface abutting a further metallated surface at their western end. Roman tile, brick and pottery were uncovered embedded in both surfaces. The brief provided only for the recording of features that would be affected by the proposed development, so little intervention was possible into the deposit. A sondage revealed the depth of the deposit to be approximately 0.3m. The evidence suggests that this may be part of a much more extensive surface, recognised also in the course of the earlier evaluation (CAU 1993), which could perhaps be interpreted as a parade ground associated with the Roman fort of Stanwix, south of Tarraby Lane (LUAU 2000).

---

## 2. METHODOLOGY

---

### 2.1 PROJECT DESIGN

- 2.1.1 A project design (*Appendix 1*) was submitted by Lancaster University Archaeological Unit and the Newcastle University's Archaeological Practice in response to a request from Architects Plus for an archaeological evaluation and watching brief of the study area, in accordance with a brief prepared by Cumbria County Council's Community Economy and Environment. The original brief anticipated that the work would be undertaken following the removal of temporary buildings on the site, but in the event it was considered to be expedient to undertake the evaluation earlier in order to allow time for mitigative recording. The implication was that a lower number and size of trenching was proposed in order to allow for excavation between the temporary buildings. The variation was defined in a letter by LUAU of 24th June 2000 and approved by Helena Smith in a letter of 5th July 2000. This varied design was adhered to in full, and the work was consistent with the relevant standards and procedures of the Institute of Field Archaeologists, and generally accepted best practice.
- 2.1.2 The interim results of the Phase 5 evaluation are presented within the present report.

### 2.2 EVALUATION

- 2.2.1 The Phase 5 development will involve the laying of a car-park within the walled garden area to the west of the modern college buildings. The enhanced brief required the excavation of three 10m by 1.5m trenches, their locations being dictated by the positions of portacabins in the area (Fig 2). The trenches were excavated by a 3 tonne 360 mini-digger, using a 1.5m wide toothless ditching bucket, working under full archaeological supervision. Mechanical excavation continued down to the level of the first potentially significant archaeological deposit, all subsequent excavation was by hand. All the trenches were cleaned, in their entirety, by hand, and displaced material (stored in appropriate spoil-heaps at the sides of the trenches) was scanned for the presence of archaeological artefacts and other potentially significant materials.
- 2.2.2 Recording was by means of the standard LUAU context recording system, with trench records and supporting registers and indices. A full photographic record in colour slide and monochrome formats was made, and scaled section drawings were made of the trenches at appropriate scales. All features and trenches were planned using digital planning, by means of surveying with a total station, and the processing of the results within a CAD package.
- 2.2.3 On completion of the site works, the trenches were backfilled in accordance with the instructions of the client, but were not otherwise reinstated.

### 2.3 FINDS

- 2.3.1 All finds were collected for washing, marking and spot identification and were recorded by the same integrated system applied for the site. The potential for ecofacts was to have been evaluated by the taking of 5litre bulk samples from appropriate deposits, but although samples were taken, none warranted further analysis.

### 2.4 ARCHIVE

- 2.4.1 A full professional archive has been compiled in accordance with the project design (*Appendix 1*), and in accordance with current IFA and English Heritage guidelines (*Management of Archaeological Projects*, 2nd edition 1991).
- 2.4.2 The paper and digital archive will be deposited in Tullie House, Carlisle, with the excavated material, and a further copy will be made available for deposition within the County Record Office (Carlisle).

---

### 3. PHASE 5 RESULTS

---

#### 3.1 EVALUATION

- 3.1.1 **Trench 1:** Trench 1 was excavated in the north-western quadrant of the walled garden and was aligned north-east / south-west, measuring 10m by 1.5m. The western end of the trench was dug to a depth of 1.64m while the eastern end to only 0.6m due to the underlying geology. The excavation of the trench involved the removal of the modern topsoil which consisted of approximately 0.33m of very dark grey fine sand clay silt topsoil overlying 0.27m of dark grey fine sand clay silt subsoil in the eastern part of the trench; these were collectively allocated the number [16]. Both deposits were heavily disturbed by root action. The machining of the trench revealed a natural boulder clay [17], consisting of a light orange grey medium sandy clay with a high percentage of stone within it.
- 3.1.2 A number of features cut this deposit. In the east of the trench, a land drain [2] was noted as a narrow linear feature, which ran north/south, disappearing out of the section in both directions. This was half sectioned and was found to have near vertical sides; at its base a ceramic pipe was uncovered. The fill of this feature was very similar to the topsoil and consisted of the mid-grey fine sandy silt containing irregular sandstone fragments [1]. The land drain cut through a further feature which was orientated in a similar direction; this was a U-shaped ditch [5] with gradual sides and a rounded base running north/south, and disappearing beyond the section in the same direction. The primary fill of this ditch consisted of a very dark grey fine sandy silt, which was quite firm, and contained irregular and water-worn sandstone [4 / 7]. This was overlain by a secondary fill which consisted of a firm mid-orange grey clay fine sand silt, containing irregular sandstone fragments [3]/[6]. Some post-medieval pottery was recovered from the fill of this ditch, and the suggestion is that it may have served as a drainage ditch for a field, which, upon silting, was re-dug with a land drain inserted at its base.
- 3.1.3 In the western part of the trench, a large deposit of friable mid-reddish brown sandy clay [12], containing less than 10% small stones and gravel, was noted. This was taken to be a subsoil, and was carefully machined to a depth of 0.3m. It was noted upon excavation that the deposit appeared to butt against the edge of a cut, and the machine excavation was halted in order to allow manual investigation of the deposit. Further investigation, by hand, revealed that the deposit was in fact the fill of a broad V-shaped ditch [15], which had fairly steep sides that steepened markedly towards the bottom, but had a rounded base. The depth of the ditch from the base of the topsoil was 1.25m. The full width of the ditch could not be established as part of it extended beyond the southern limit of the excavation, but it was certainly greater than 3.15m. This ditch was aligned north/south and is very likely to be Roman, as two pieces of abraded ceramics, probably tile, were recovered from the fill. A piece of decorated Samian ware (Central Gaulish Dr 37, probably part of a bowl), was recovered from the horizon between the topsoil and fill [12], but its provenance makes it difficult to use as a firm chronological indicator. At the point where the ditch steepened, a primary fill was noted [13], consisting of a dark, pinkish brown clayey sand, which was quite friable, with approximately 40% small to medium sub-rounded and rounded stones. The clean nature of both deposits [13 and 12] suggest that the ditch was not open for very long, as there is little in the way of water-borne and wind-borne silting at the base. It appears likely that deposit [13] consisted of the natural filling from the edges of the ditch while it was open, with fill [12] marking an episode of deliberate back-filling. A land drain was also noted on the same alignment as this ditch, and clearly cut it (Fig 4); it consisted of

a sharp steep-sided cut with the flat base containing a ceramic pipe [21]. The fill of this land drain [20] consisted of a very dark brownish grey sandy clay containing a moderate number of small to medium stones and abundant root activity. No sondage was excavated within this trench, as it was clear from the sides of the ditch [15] that the feature cut the natural subsoil solely.

- 3.1.4 **Trench 2:** Trench 2 was excavated in the centre of the walled garden, and was aligned north/south. The trench measured 10m by 1.5m and was machined to a depth of 0.7m across the whole trench. The machining involved the removal of identical topsoil and subsoil to that noted in Trench 1 [16], and uncovered the same pinkish red boulder clay [17]. A linear feature was noted running east/west across the southern end of the trench [11], which was partially excavated and identified as a cable trench. The fill of this feature consisted of a dark reddish brown friable clayey sand containing approximately 20% medium rounded stones [10]. This cut a further linear feature which ran from the south-west corner of the trench up to its north-east corner [9]. This contained a very dark brownish grey clay sand, which was highly root disturbed and contained approximately 30% small to medium rounded and sub-rounded stones [8]. It was believed to be a land drain; excavation of a sondage at the northern end of the trench confirmed this, as it exposed a ceramic pipe at the base of the feature. This sondage was excavated in order to ascertain the nature and depth of the natural deposits and proved beyond doubt that the red boulder clay [17] was indeed a natural deposit.
- 3.1.5 **Trench 3:** Trench 3 was excavated in the eastern half of the walled garden, and parallel to the eastern wall. It measured 12m x 1.5m and involved the machine removal of approximately 0.62m of overburden. The overburden [16] consisted of identical topsoil and subsoil to that noted within the other trenches; the deposit again overlay the natural boulder clay also identified in the other trenches [17]. Towards the south of the trench, an irregular feature was identified [18], selective intervention of its fill revealing a fairly firm light brown silt matrix incorporating c40% of large lumps of re-deposited natural subsoil and occasional large charcoal flecks, with pieces of modern pottery and glass. The feature, therefore, was taken to be associated with the use of the area as a garden and was not further investigated. Excavation of a sondage in the south end of the trench, in order to evaluate the natural deposits, revealed that the feature was only approximately 0.25m in depth; the excavation of the sondage, in line with those of the other trenches, also revealed that the red boulder clay was indeed a natural deposit. No further archaeological features were noted.

## 3.2 FINDS

- 3.2.1 A total of 16 fragments of artefacts was recovered from the excavation. Of these, nine were small and abraded fragments of tile and brick (from fills [3, 4, and 12]), which could not be assigned a date. There was also a single cow's tooth [16].
- 3.2.2 The ceramic assemblage comprised three fragments of garden wares (from overburden [16]), one small fragment of black glazed redware, a common post-medieval fabric (from land drain fill [8]), and a single abraded fragment of a samian bowl (Dr 37) of Central Gaulish manufacture (from overburden [16]). The latter dates to the second quarter of the second century AD; a more refined date may prove possible as a result of further analysis during the post-excavation phase of the project.

---

## 4. CONCLUSIONS

---

### 4.1 EVALUATION SUMMARY

- 4.1.1 The excavation of the three trenches demonstrate the absence of any deeply-stratified archaeology that could potentially relate to a tribunal or other extramural activity outside the fort. The excavation of Trenches 2 and 3 revealed only features relating to the use of the area as gardens in the Victorian period, with field drains providing evidence of post-medieval field systems which predated the construction of the garden. Sondages into the subsoils proved conclusively that the deposit was indeed natural boulder clay.
- 4.1.2 Trench 1, whilst showing similar post-medieval and later features in the form of a field drainage ditch and land drain, also yielded a quite substantial 'V'-shaped ditch of presumed Roman date, running north/south at the west end of the trench; this was greater than 3.15m wide. The ditch steepened towards the base and is comparable in shape to Roman military ditches, notably the Phase 1.4 ditch (056) from Kirkham, which was a 2.75m wide ditch interpreted as part of a temporary camp (Howard-Davis and Buxton 2000, 13). The dating of this ditch is difficult since it did not contain any diagnostic finds: two pieces of worn ceramic from the fill of ditch appear very likely to be remnants of Roman tile. A piece of decorated Samian ware (Central Gaulish Dr 37, probably part of a bowl), was recovered from the horizon between the topsoil and fill [12], which is datable to the second quarter of the second century AD; however, its position does not allow its use as a reliable dating tool. The fills show the ditch to have been rapidly and deliberately back-filled, and, coupled with its relatively small width and shape, it is tentatively suggested that this ditch forms part of an (?earlier) temporary camp, which presumably predated the Hadrian's Wall stone fort at Stanwix.

---

## 5. IMPACT AND RECOMMENDATIONS

---

### 5.1 IMPACT

- 5.1.1 The excavations within the walled garden have revealed conclusively that the area does not contain extensive surviving Roman deposits as has been previously suggested, and that the area has quite likely been truncated by activity associated with the garden, and its use prior to the establishment of the garden as fields. The presence of any further Roman deposits, however ephemeral, is unlikely; but the discovery of the deeply cut ditches of Roman military type at the western end of Trench 1 suggests that the survival of cut Roman features is highly likely, particularly continuing the line of the rest of the ditch to the north and south. If the ditch does represent the boundary of a temporary camp, it is likely to have formed the eastern side of the camp, since the ground drops away to the east, leaving insufficient space for any camp, and therefore it is likely that the centre of any such putative camp lay to the west of the ditch and therefore at least in part under the stone fort of Stanwix. On this basis it is possible that there will be further evidence of activity, such as deep pits or other features, yet to be uncovered, between the ditch and the western wall of the gardens.

### 5.2 RECOMMENDATIONS

- 5.2.1 If the tentative suggestion that the ditch belonged to a temporary camp is substantiated, the significance of the find is considerable; there is consequently a strong case for undertaking further archaeological investigations in order to investigate these remains further. It is recommended, therefore, that further evaluation trenching be undertaken along the line of the ditch to confirm its form, and, if possible more of the enclosure it represents, and also to investigate the interior of the putative camp. This can not be undertaken at present because of the temporary buildings, and thus it is suggested that this additional programme of trenching be undertaken following the removal of the buildings.
- 5.2.2 It is also recommended that the stripping of the garden surface deposits be closely monitored by watching brief to further investigate the course of the ditch and the potential for shallow archaeological features that could be affected by the ground works for the carpark.

---

## 6. BIBLIOGRAPHY

---

Carlisle Archaeological Unit (CAU), 1993 *Cumbria College of Art Carlisle. An archaeological investigation*, unpubl rep

Carlisle Archaeological Unit (CAU), 1997 *Tarraby Lane and Beech Grove, Carlisle: Report on an archaeological evaluation*, unpubl rep

Carlisle Archaeological Unit (CAU), 1998 *Cumbria College of Art and Design, Carlisle: Report on an archaeological evaluation*, unpubl rep

de la Bedoyere, G. 1988 *Samian Ware*, Aylesbury

Dacre, JA, 1985 An excavation on the Roman fort at Stanwix, Carlisle, *Trans Cumberland Westmorland Antiq Archaeol Soc n ser*, **85**, 53-69

Dixon, EEL, Maden, J, Trotter, FM, Hollingworth, SE, and Tonks, L, 1926 The geology of the Carlisle, Longtown and Silloth districts, *Memoir Geological Survey of Great Britain*, sheets 11, 16, 17, London

Howard-Davis, C and Buxton, K, 2000 *Roman forts in the Fylde: Excavations at Dowbridge, Kirkham*, Lancaster

Lancaster University Archaeological Unit, 1999 *Cumbria College of Art and Design: Phase 2 Interim Report*, unpubl rep

Lancaster University Archaeological Unit, 2000 *Cumbria College of Art and Design: Phase 4 Interim Report*, unpubl rep

McCarthy, MR, 1999 *Stanwix – Petriana*, in P Bidwell (ed), *Hadrian's Wall 1989-1999: A Summary of Recent Excavations and Research*, Newcastle Upon Tyne

Simpson, FG, and Hogg, R, 1935 Stanwix, *Trans Cumberland Westmorland Antiq Archaeol Soc n ser*, **35**, 256-7

Smith, GH, 1978 Excavations near Hadrian's Wall at Tarraby Lane, *Britannia*, **9**, 19-56



---

## APPENDIX 1 PROJECT DESIGN

---

## APPENDIX 2

### SUMMARY CONTEXT LIST

Context No.	Site Subdivision	Description
1	Trench 1	Fill of Field Drain [2]
2	Trench 1	Cut of Field Drain
3	Trench 1	Secondary fill of ditch [5] – same as [6]
4	Trench 1	Primary fill of ditch [5] – same as [7]
5	Trench 1	Cut of post-medieval ditch
6	Trench 1	Secondary fill of ditch [5] – same as [3]
7	Trench 1	Primary fill of ditch [5] – same as [4]
8	Trench 2	Fill of land drain [9]
9	Trench 2	Cut for land drain
10	Trench 2	Fill of cable trench [11]
11	Trench 2	Cut for cable trench [11]
12	Trench 1	Secondary fill (backfill) of ditch [15]
13	Trench 1	Primary fill of ditch [15]
14	VOID	VOID
15	Trench 1	Cut for Ditch of Roman military type
16	All trenches	Overburden (topsoil and subsoil)
17	All trenches	Natural subsoil – reddish pink boulder clay
18	Trench 3	Cut of Victorian garden feature
19	Trench 3	Fill of [18] – Victorian garden feature
20	Trench 1	Fill of [21] – land drain
21	Trench 1	Cut for land drain

---

## ILLUSTRATIONS

---

- Fig 1 Location Map
- Fig 2 Location of Trenches 1, 2 and 3
- Fig 3 Plans of Evaluation Trenches
- Fig 4 South-Facing section Trench 1

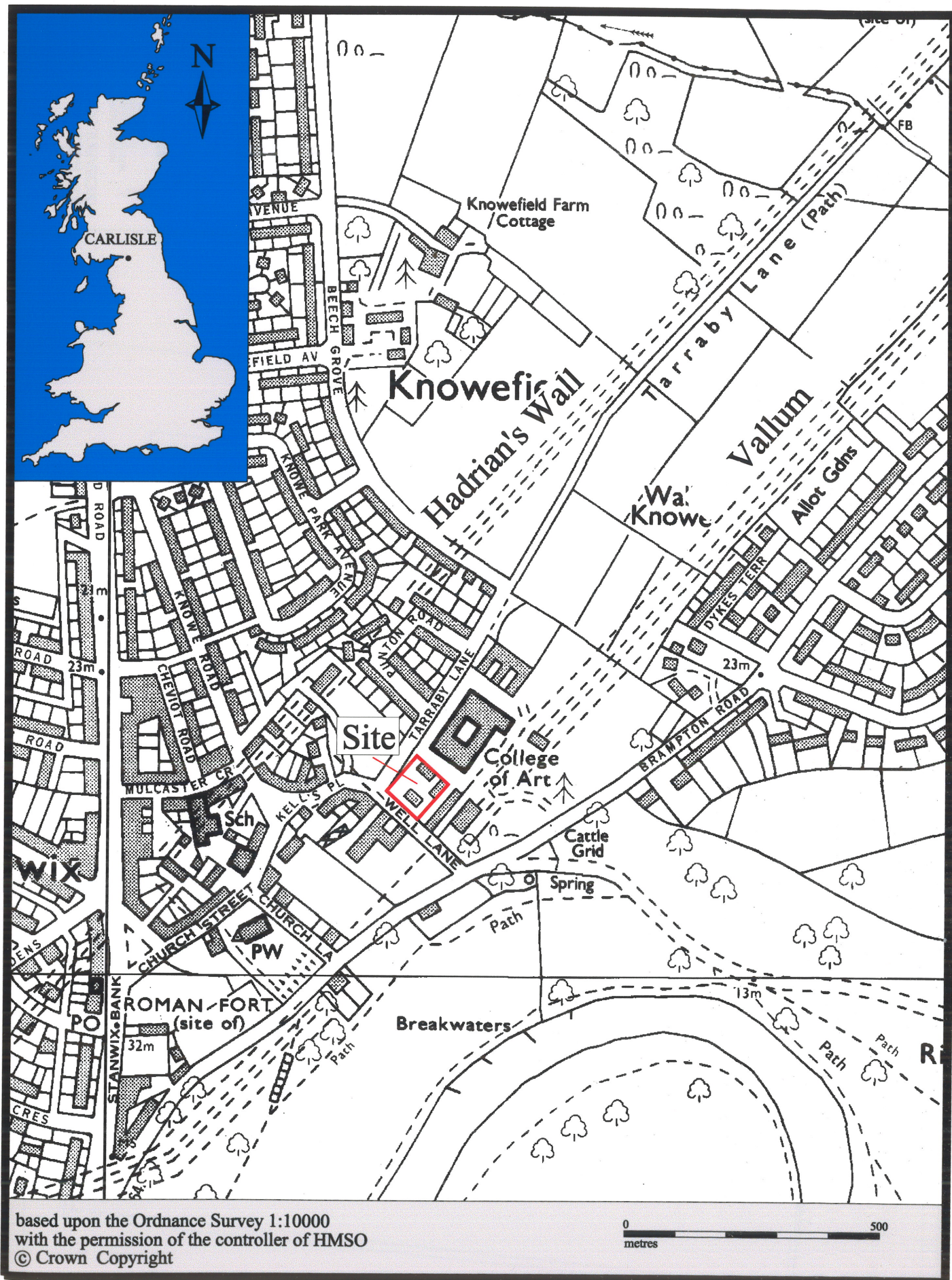
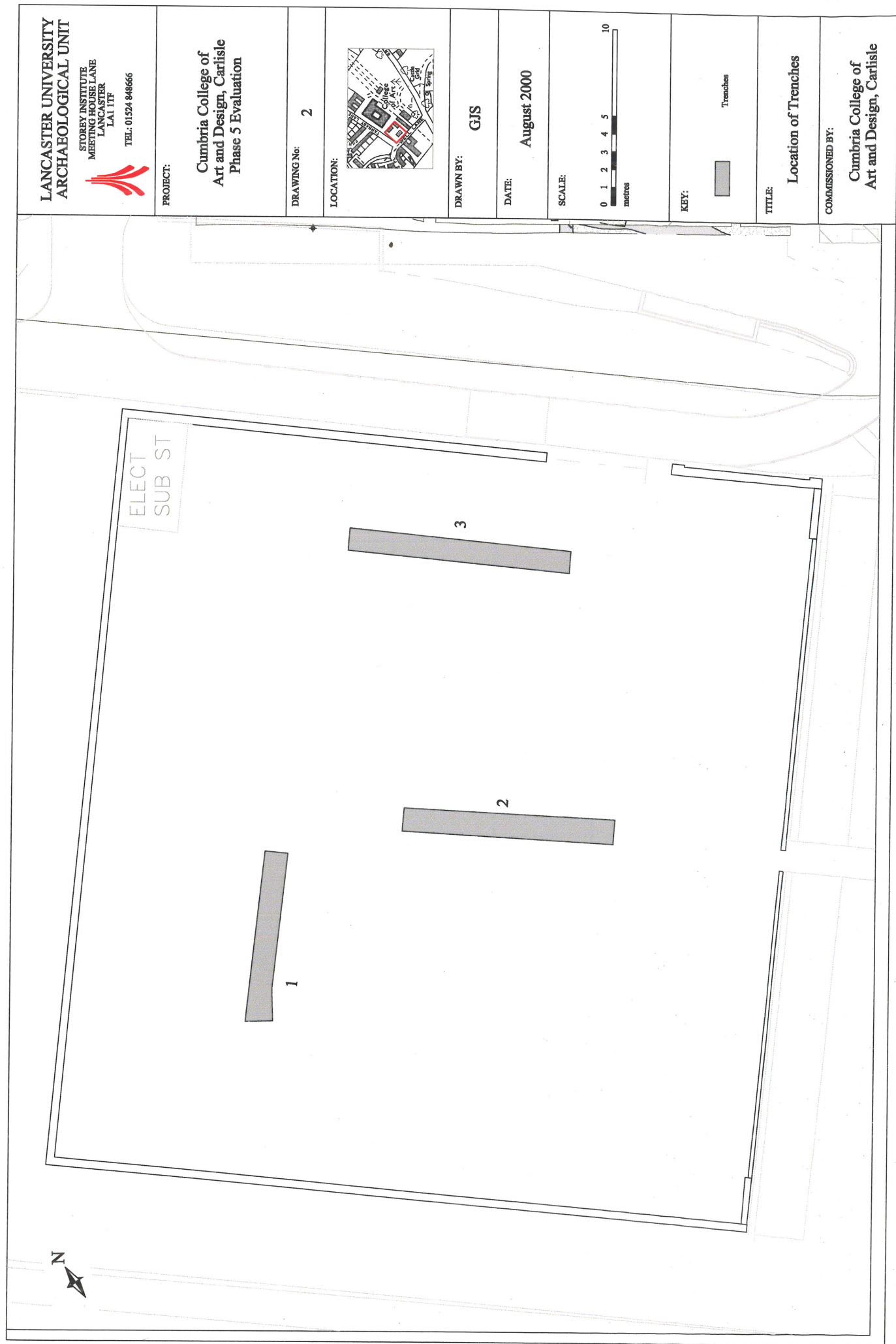


Figure 1: Location Map





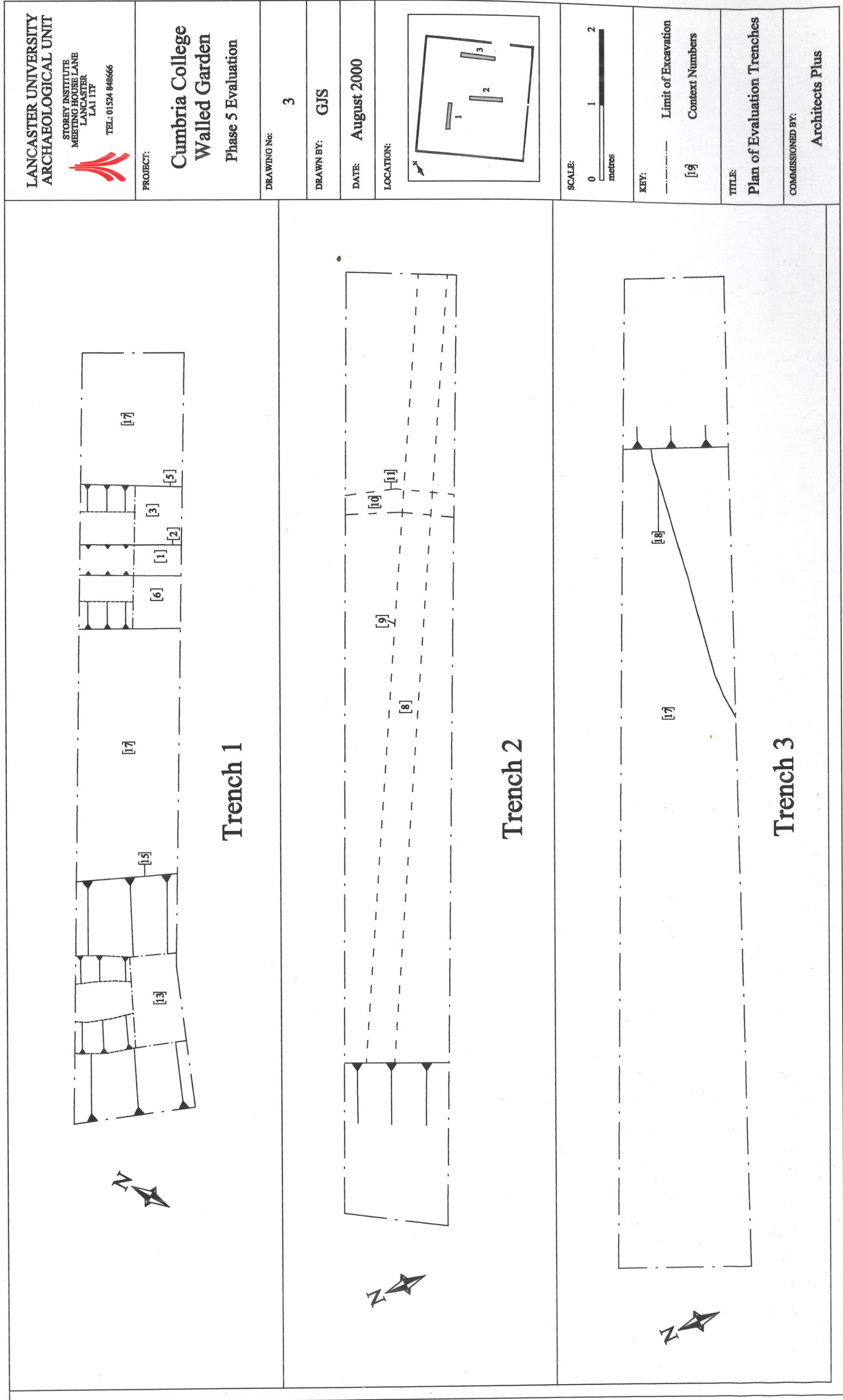


Figure 3: Plans of Evaluation Trenches

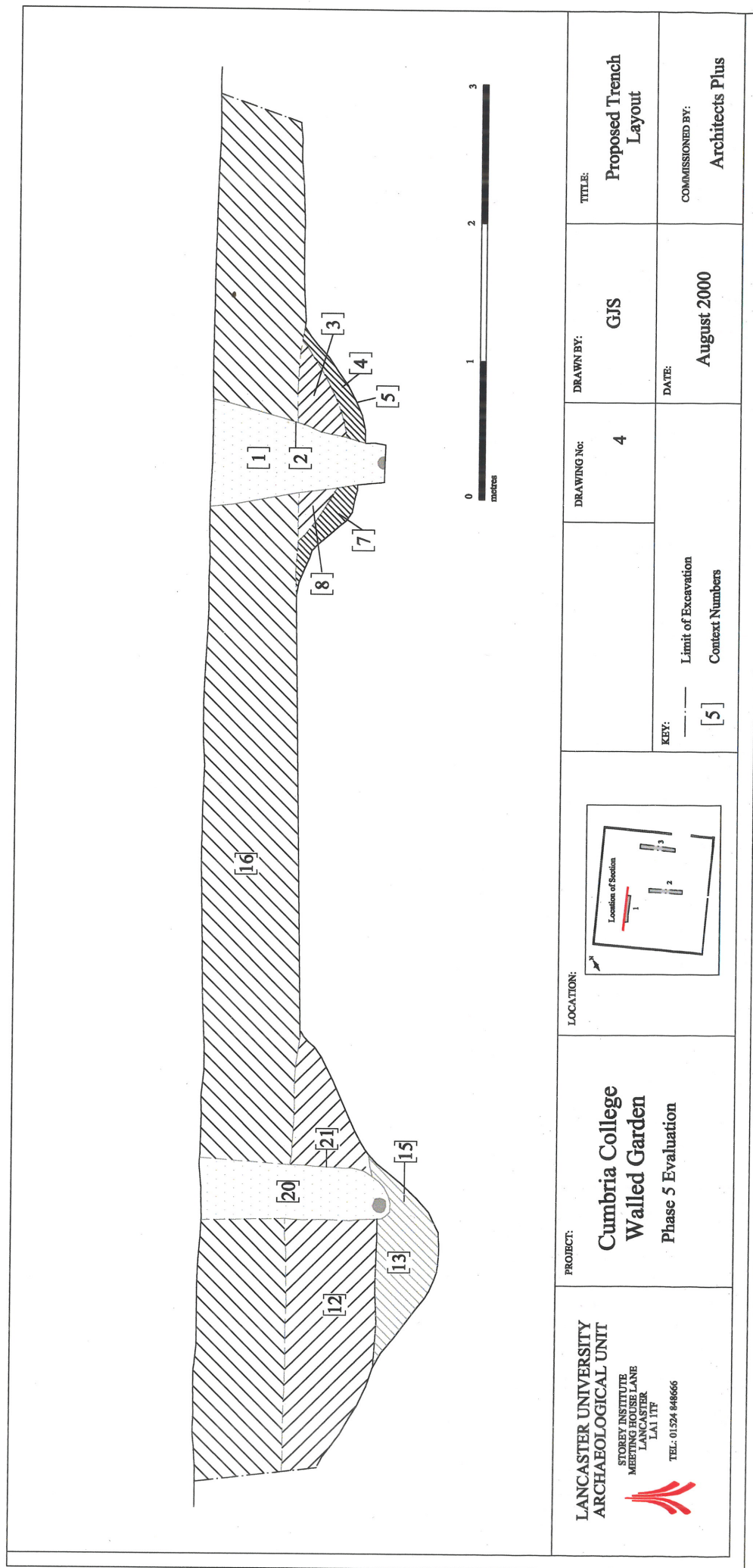


Figure 4: South-Facing Section of Trench 1

---

## PLATES

---

- Plate 1 Ditch 15, Trench 1 looking north-west  
Plate 2 Ditch 15, Trench 1 looking north



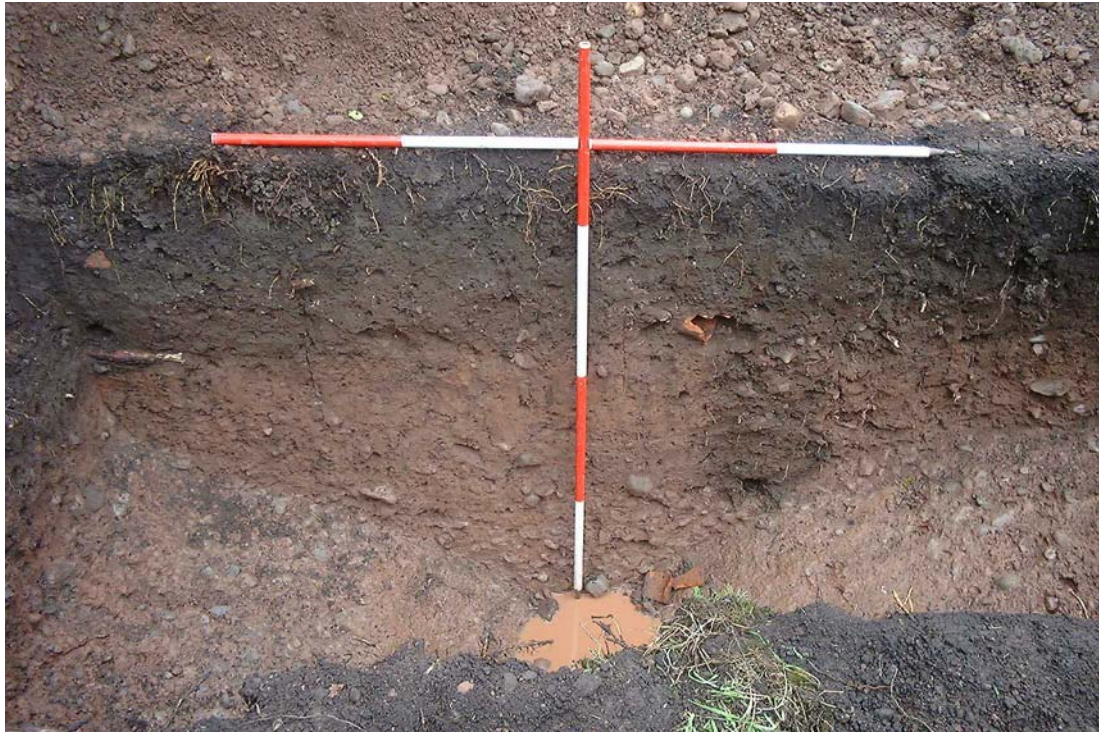


Plate 1 Ditch 15, Trench 1 looking north-west



Plate 2 Ditch 15, Trench 1 looking north