



PENRITH FLOOD ALLEVIATION SCHEME, PENRITH, CUMBRIA

Archaeological Watching Brief

Oxford Archaeology North



February 2006

The Environment Agency

Issue No: 2005-6/447
OA North Job No: L9618
NGR: NY 51289 30486

Document Title: PENRITH FLOOD ALLEVIATION SCHEME, PENRITH,
CUMBRIA

Document Type: Archaeological Watching Brief

Client Name: The Environment Agency

Issue Number: 2005-6/447

OA Job Number: L9618

National Grid Reference: NY 51289 30486

Prepared by: David Tonks
Position: Assistant Supervisor
Date: January 2006

Checked by: StephenRowland Signed.....
Position: Project Manager
Date: February 2006

Approved by: Alan Lupton Signed.....
Position: Operations Manager
Date: February 2006

Document File Location Steve/Projects/L9618 Penrith
Flood/report/L9618Rep.doc

Oxford Archaeology North

Storey Institute
Meeting House Lane
Lancaster
LA1 1TF
t: (0044) 01524 848666
f: (0044) 01524 848606

w: www.oxfordarch.co.uk
e: info@oxfordarch.co.uk

© Oxford Archaeological Unit Ltd (2006)

Janus House
Osney Mead
Oxford
OX2 0EA
t: (0044) 01865 263800
f: (0044) 01865 793496

Oxford Archaeological Unit Limited is a Registered Charity No: 285627

Disclaimer:

This document has been prepared for the titled project or named part thereof and should not be relied upon or used for any other project without an independent check being carried out as to its suitability and prior written authority of Oxford Archaeology being obtained. Oxford Archaeology accepts no responsibility or liability for the consequences of this document being used for a purpose other than the purposes for which it was commissioned. Any person/party using or relying on the document for such other purposes agrees, and will by such use or reliance be taken to confirm their agreement to indemnify Oxford Archaeology for all loss or damage resulting therefrom. Oxford Archaeology accepts no responsibility or liability for this document to any party other than the person/party by whom it was commissioned.

CONTENTS

SUMMARY	2
ACKNOWLEDGEMENTS.....	3
1. INTRODUCTION.....	4
1.1 Circumstances of the Project	4
2. METHODOLOGY.....	5
2.1 Project Design.....	5
2.2 Watching Brief.....	5
2.3 Archive.....	5
3. BACKGROUND.....	6
3.1 Location and Topography	6
3.2 Geology.....	6
3.3 Archaeological and Historical Background	6
4. RESULTS.....	9
4.1 Watson Terrace (Fig 2)	9
4.4 Finds.....	10
5. DISCUSSION.....	12
5.1 Conclusion	12
5.2 Impact	12
6. BIBLIOGRAPHY	13
6.1 Primary Sources	13
6.2 Secondary Sources	13
7. ILLUSTRATIONS	15
7.1 List of Figures	15
7.2 List of Plates	15
APPENDIX 1: PROJECT DESIGN.....	16

SUMMARY

The Environment Agency propose to construct a flood defence system along the route of the Thacka Beck, Penrith, Cumbria. Halcrow were commissioned by the Environment Agency to undertake a programme of exploratory test pits at three locations in and around the town; Watson Terrace (NY 51289 30486), Corney Place (NY 51484 30391) and land near Gilwilly Industrial Estate (centred on NY 50605 30785). The groundworks were to comprise the excavation of two service inspection pits (SIPs) across the road on Watson Terrace, and one SIP across the road at Corney Place. These SIPs were to be up to 1.5m deep, c 0.5m wide and about 6m long. In addition, six machine-excavated test pits, roughly 2m square by 2m deep, were to be dug in fields in the Townhead/Gilwilly area of north-west Penrith, in the proposed area of a strategic storage pond.

Because groundworks were located within areas of archaeological potential (the Thacka Beck has been identified as a medieval leat while the gate piers at Corney Place are Grade II listed), Cumbria County Council Historic Environment Service (CCCHES) issued a verbal brief that a programme of archaeological monitoring should be undertaken during inspection-pitting. Following submission of a project design (*Appendix 1*) to meet the requirements of the CCCHES verbal brief, Oxford Archaeology North (OA North) were contracted by the Environment Agency, to conduct a watching brief during groundworks organised by Halcrow and undertaken by Norwest Holst. The archaeological monitoring was undertaken over five days between 3rd and 17th November 2005.

SIP 103 was excavated at Watson Terrace and encountered a Victorian brick-built culvert carrying the Thacka Beck; the culvert was not exposed to any significant extent. No other features or finds of archaeological significance were encountered during the groundworks within the urban area of Penrith. None of the six test pits excavated at the Gilwilly Industrial Estate produced any significant archaeological horizons. Three abraded sherds of nineteenth century pottery within the lower horizon of Test Pits 102 and 104 could indicate that the area had previously been subjected to some degree of disturbance, possibly relating to the construction of a nearby railway embankment.

ACKNOWLEDGEMENTS

Oxford Archaeology North (OA North) would like to thank Jonathan Griffin of the Environment Agency for commissioning the project and Mike Lilley of Halcrow for co-ordinating the work. OA North is also grateful to Mike Bridgemen, Alex Miller, and their colleagues, of Norwest Holst for their assistance on site.

The watching brief was undertaken by Stephen Clarke and David Tonks, who wrote the report. The drawings were compiled by Christina Clarke and the finds were examined by Jo Dawson. The project was managed by Stephen Rowland who also edited the report, together with Alan Lupton.

1. INTRODUCTION

1.1 CIRCUMSTANCES OF THE PROJECT

- 1.1.1 In exploring the logistics of installing a new flood defence system for Penrith, Cumbria, the Environment Agency (EA) contracted Halcrow to conduct a programme of reconnaissance for old services in key locations along the route of the Thacka Beck (Fig 1). These locations comprised Watson Terrace (NY 51289 30486), Corney Place (NY 51484 30391) and land near Gilwilly Industrial Estate (centred on NY 50605 30785) (Figs 2-4). The Thacka Beck has been identified as a medieval leat and, therefore, the groundworks were considered to lie within areas of archaeological potential. Accordingly, Cumbria County Council Historic Environment Service (CCCHES) issued a verbal brief that a programme of archaeological monitoring should be undertaken during test-pitting. Following submission of a project design (*Appendix 1*) to meet the requirements of the CCCHES verbal brief, Oxford Archaeology North (OA North) were contracted by the Environment Agency to conduct a watching brief during groundworks organised by Halcrow and undertaken by Norwest Holst.
- 1.1.2 The groundworks were to comprise the excavation of two service inspection pits (SIP) across the road on Watson Terrace (Fig 2), and one SIP across the road at Corney Place (Fig 3). These SIPs were to be up to 1.5m deep, c 0.5m wide and about 6m long. In addition, six machine-excavated test pits (TPs), roughly 2m square by 2m deep, were to be dug in fields in the Townhead/Gilwilly area of north-west Penrith, in the proposed area of a strategic storage pond (Fig 4).
- 1.1.3 The archaeological monitoring was undertaken over five days between 3rd and 17th November 2005. This report sets out the results of the watching brief in the form of a short document.

2. METHODOLOGY

2.1 PROJECT DESIGN

- 2.1.1 The project design (*Appendix 1*), approved by CCCHES, 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.

2.2 WATCHING BRIEF

- 2.2.1 Close liaison was maintained between OA North staff and the site contractors, Norwest Holst, during the watching brief. The programme of field observation accurately recorded 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 horizons and the correct processing of artefacts found during the excavations.
- 2.2.2 The recording comprised a full description and preliminary classification of features or structures revealed on OA North *pro-forma* sheets, and their accurate location in plan. In addition, a photographic record in colour slide and monochrome formats was compiled.

2.3 ARCHIVE

- 2.3.1 A full archive of the work undertaken has been produced to a professional standard in accordance with current English Heritage guidelines (English Heritage 1991). The archive will be deposited in the Cumbria County Record Office in Kendal, and a copy of the report will be forwarded to the Cumbria Historic Environment Record, also in Kendal.

3. BACKGROUND

3.1 LOCATION AND TOPOGRAPHY

3.1.1 Corney Place (NY 51484 30391) lies to the centre of Penrith and about 150m to the south-east of Watson Terrace (NY 51289 30486). The site by the Gilwilly Industrial Estate (NY 50605 30785) lies within fields *c* 900m to the north-west of Penrith and is bounded to the south by the Thacka Beck and to the east by the Lancaster to Carlisle railway line (built in 1845); an existing balancing pond is situated to the west of the proposed area of investigation. Penrith itself lies between the Rivers Eamont and Petteril, on the edge of the Eden Valley.

3.2 GEOLOGY

3.2.1 The geology of the Penrith area comprises New Red Sandstone overlain by thick post-glacial deposits, characterised locally by drumlin swarms (Geological Survey of Great Britain 1978). However, the soils in the vicinity of the specific sites are classified only as Urban by the Soil Survey (1983) and otherwise remain unclassified.

3.3 ARCHAEOLOGICAL AND HISTORICAL BACKGROUND

3.3.1 **Introduction:** this historical background is largely compiled from a client report held in OA North's archive (OA North 2005), a copy of which is available from the Cumbria Historic Environment Record in Kendal. This section is intended only as a brief summary of the archaeological development of the Penrith area, with specific reference to the development sites where possible.

3.3.2 **Prehistoric Period:** no prehistoric remains are recorded within the proposed development area itself, but prehistoric remains are fairly evenly distributed in the area surrounding Penrith (Cumbria County Council 2002, Map C). No remains have yet been identified that are of a Palaeolithic or Mesolithic date (*op cit*, 28). However, Neolithic axes have been relatively common finds (*ibid*). A Late Neolithic or Early Bronze Age henge about a mile to the south-east of Penrith, King Arthur's Round Table, is a monument of great importance (Burl 1979, 231; SM 23663) and is close to another, similarly-dated henge, that of Mayburgh (English Heritage 2006). Many Bronze Age finds such as axes, spearheads and knives, as well as monuments, including standing stones, cairns and cists, are also recorded within the wider area (Cumbria County Council 2002, 28). A single Iron Age and Romano-British monument near Sceugh Farm, to the north-east of Penrith, comprises a complex of enclosures and trackways (Lambert *et al* 1996, 17; SM 388). The prehistoric remains closest to the proposed development area are two poorly located finds - a Bronze Age cup and ring marked stone (Frodsham 1989, 16-7; Cumbria County Council 2002, 4), and battleaxes of uncertain prehistoric date (*ibid*; Cumberland Pacquet 1818).

- 3.3.3 **Roman:** the line of a Roman road between Manchester and Carlisle lies to the east of Penrith, and passes through the Roman fort at Brougham, situated to the south-east of the town and positioned to guard the nearby crossing of the River Eamont (Allan 1994, 6; Shotter 1997, 35). A large cluster of Roman landscape elements, structures, and stray finds have been recorded in this area (Cumbria County Council 2002, 29, map D). Two unstratified and poorly-located Roman coins have been discovered within Penrith, but there is no firm evidence to suggest any significant Roman activity ever took place within the town and, certainly no evidence of settlement (Cumbria County Council 2002, 5). Unsurprisingly, therefore, there is no record of Roman remains within the proposed development area.
- 3.3.4 **Early Medieval:** although there is no documentary evidence for settlement in Penrith prior to the twelfth century, it has been suggested that the street plan indicates pre-Norman settlement, with St Andrew's church (within 500m of both Watson Terrace and Corney Place) at its centre (Winchester 1979, quoted in Cumbria County Council 2002, 6). A cross-shaft fragment, dated to the late eighth to early ninth century, was found built into the wall of Tynefield House in Penrith (Richardson 1998, 32). This is of considerable importance since it is the only artefact that pre-dates the Viking domination of Penrith during the early tenth century (*ibid*). There are significant tenth century monuments (SM 23662) within St Andrew's churchyard, although they are not thought to be in their original locations (Anon 1947, 225). There is no record of early medieval remains within the proposed development area.
- 3.3.5 **Medieval:** as is perhaps to be expected, the surviving remains from the medieval period are high status buildings. They include St Andrew's Church, the earliest parts of which date to the twelfth and thirteenth centuries (Pevsner 1967, 173-4), Penrith Castle, dated to the fourteenth century, Hutton Hall (Anon 1947, 219), which dates to as early as the fourteenth or fifteenth century (Pevsner 1967, 176), and the Gloucester Arms, which was formerly known as Dockray Hall and dates to the late fifteenth century (*op cit*, 177). Below ground remains of the site of the late medieval friary founded in the late thirteenth century (Haswell 1903, 350; Moorhouse 1971, 137), and the site of the Old Grammar School, founded in the fourteenth century (Nicolson and Burn 1777, 410) also lie close to Corney Place and Watson Terrace.
- 3.3.6 Of particular significance is Thacka Beck in the Gillwilly area, which is listed on the CHER as a medieval earthwork. The course of this waterway runs directly adjacent to the intended test pits in the Gillwilly Industrial Estate area, particularly TP104, and is the watercourse canalised by a Victorian brick-built culvert running beneath Watson Terrace and near to Corney Place. The Thacka Beck is thought to have been first dug around AD 1300 as a leat to take water to Penrith from the river Petteril because the town's wells at the time were polluted (Bowen, 2005).
- 3.3.7 **Post-Medieval:** most of the post-medieval archaeological remains recorded on the CHER in the immediate surroundings of the proposed development area are buildings. A silver groat of Elizabeth I (who was on the throne from 1558 to 1603) was recovered during the mid-nineteenth century (Carlisle Journal 1846), but no other post-medieval finds have been recorded. The buildings in

central Penrith range from the sixteenth century Two Lions public house, originally built as a house for Gerard Lowther, through to the eighteenth century George Hotel, Mansion House, and Smith's grocers (Pevsner 1967, 177), the nineteenth century Old Grammar School (Ordnance Survey *c* 1865) and Clint Mill (Ordnance Survey 1925; Hopkins n.d.), and the twentieth century Regent Cinema (Ordnance Survey 1971). There are five further Grade II listed buildings within a 500m radius of the test pits at Gillwilly. The gate piers at the entranceway to Corney House are eighteenth century and Grade II listed. As indicated in *Section 3.3.6*, a known Victorian brick-built water culvert, carrying the medieval Thacka Beck, runs beneath Watson Terrace, directly underlying the locations of SIP101 and SIP102.

4. RESULTS

4.1 WATSON TERRACE (FIG 2)

- 4.1.1 **SIP101:** SIP101 was aligned north-east/south-west and extended across both the pavement and part of the road surface of Watson Terrace. The investigated portion of SIP101, of which for practical reasons only the southern half was excavated, measured 4.2m x 0.6m x 1.0m deep. Beneath the 0.15m thick asphalt road surface, a 0.7m thick mixed deposit of greyish-brown sandy-clay with inclusions of ash, gravel, rounded stones and occasional rubble was encountered. This layer is likely to relate to the make-up for the road surface itself and also to the backfill of service features beneath the road. Beneath the pavement, this make-up material sealed a layer of mid-brown very sandy clay mixed with gravel and stones. The bottom of this layer was not reached, and it could potentially represent the natural geology on the site. Beneath the road, a gas pipe, packed in sand, was encountered at a depth of c 0.9m. The shallow trench for this service pipe had been backfilled with 0.2m of yellowish-red clay, which was then sealed by the make-up deposit described above.
- 4.1.2 **SIP102:** for practical purposes, only the northern half of the proposed trench was opened (Fig 2). The excavated trench measured 2.43m x 0.7m x 0.25m deep and was aligned north-east/south-west. The modern asphalt road surface, 0.15m thick, directly overlay a 0.1m thick layer of concrete. This concrete sealed and protected the Victorian brick-built water culvert which runs beneath Watson Terrace. Although a very small area of the concrete was removed to expose the culvert (Plate 1), further removal could have potentially damaged the structural integrity of the culvert. Excavation was, therefore, curtailed at a depth of 0.25m. Other than the culvert, no archaeological features or finds were observed.

4.2 CORNEY PLACE (FIG 3)

- 4.2.1 **SIP103:** aligned roughly north/south across the road surface of Corney Place (Fig 3), SIP103 was excavated in two sections with an intervening gap of 2.8m down the middle of the road. The first, southern, section measured 4.7m x 0.55m x 1.2m deep. The observed stratigraphy comprised a 0.03m thickness of asphalt road surface overlying a grey stone-chip hardcore levelling layer, 0.2m thick. This directly overlay what appeared to be the natural geology, a reddish-brown sandy-silt with inclusions of medium-to-large sub-rounded cobbles. Several modern service pipes were exposed within the SIP, but there were no archaeological features or finds.
- 4.2.2 The northern section of SIP103 (Plate 2), measured 4.5m x 0.55m x 1.0m deep. The stratigraphy within the SIP comprised the 0.03m thick asphalt road surface, which overlay reddish-brown sandy-silt natural (previously described *Section 4.2.1*). Several modern service conduits were exposed, the cuts for which were clearly visible in section. They had been backfilled with pink crushed stone. There were no archaeological features or finds.

4.3 GILWILLY INDUSTRIAL ESTATE (FIG 4)

- 4.3.1 **Introduction:** each of the six test pits (TPs) excavated along the route of the Thacka Beck by the Gilwilly Industrial Estate measured 2m long by 0.6m wide by 2m deep. The ground into which TP101, TP102 and TP103 were excavated was very wet, resulting in frequent collapse of the unstable excavated sections.
- 4.3.2 **TP 101:** aligned north/south, the observed stratigraphy comprised 0.2m dark brown sandy-clay topsoil directly overlying 1.8m loose, mid-brown gravelly-clay-sand with many cobble inclusions and the occasional boulder (Plate 3). This material was observed to the bottom of the trial pit at a depth of 2m but noted to turn grey with depth, probably relating to the reduction of the ferrous soil mineral components in wet anaerobic conditions. There were no archaeological finds or features.
- 4.3.3 **TP102:** aligned north/south, the stratigraphy comprised 0.25m dark brown sandy-clay topsoil directly overlying 1.75m loose, mid-brown, gravelly-clay-sand with some cobbles. One small sherd of white-glazed pottery was recovered from the upcast spoil, but there were no significant archaeological horizons.
- 4.3.4 **TP103:** aligned east/west, the stratigraphy (Plate 4) comprised 0.2m dark brown sandy-clay topsoil directly overlying 1.8m loose, mid-brown, clayey, gravelly-sand with some cobbles. This material was observed to the bottom of the trench but noted to turn grey with depth, due to anaerobic reduction of the ferrous soil minerals. There were no archaeological finds or features.
- 4.3.5 **TP104:** aligned east/west, the stratigraphy comprised 0.5m dark brown sandy-clay topsoil directly overlying 1.1m loose, mid-brown silty-gravelly-sand with some clay, changing gradually with depth to wet, very loose clayey-gravel between 1.6m and 2.0m depth. Two small, abraded sherds of unstratified white-glazed pottery were recovered from the upcast spoil. There were no significant archaeological horizons.
- 4.3.6 **TP105:** aligned north/south, the stratigraphy comprised 0.5m dark brown sandy-clay topsoil directly overlying 1.15m loose, mid-brown silty-gravelly-sand with some clay, changing gradually between 1.65m and 2.0m depth to reddish-brown firm clay with some sand. There were no archaeological features or finds.
- 4.3.7 **TP106:** aligned east/west, the stratigraphy (Plate 5) comprised 0.5m dark brown sandy-clay topsoil directly overlying 1.5m loose, mid-brown silty-gravelly-sand with some clay and *c* 10% inclusions of sub-rounded cobbles and stones to a depth of 2m.

4.4 FINDS

- 4.4.1 In total, three artefacts were recovered during the watching brief. The earliest fragment was a white salt-glazed stoneware plate fragment, dated to the mid-to late eighteenth century. It was recovered unstratified from Test Pit 104,

together with a white earthenware hollow-ware fragment, possibly with a grey 'Fibre' transfer-printed pattern, dated to the nineteenth century. The third artefact was a bone china saucer base, dated to the nineteenth to twentieth century. It was recovered from unstratified deposits in Test Pit 102.

5. DISCUSSION

5.1 CONCLUSION

- 5.1.1 With the exception of the Victorian culvert in Watson Terrace, the existence of which was previously known, no significant archaeological horizons or features were encountered as a result of the works. In the areas of the service inspection pits within the urban area of Penrith, this may be explained as the result of previous ground-disturbance associated with the many modern services encountered and the construction of the roads themselves.
- 5.1.2 The test pits excavated within the area of the Gilwilly Industrial Estate lay on the flood plain of the medieval Thacka Beck, an area which might be expected to be less disturbed and to have a high archaeological potential. The current ground conditions are unsuitable for arable use, and it is likely that such conditions prevailed in medieval times when the beck was created. It is possible, however, that the land could have been used as rough pasture but it is unlikely ever to have been otherwise occupied or used.
- 5.1.3 In addition, although recorded as unstratified, the pieces of pottery from TP104 appeared to have been within the lower stratum of the test pit. Whilst speculative, this would imply that the ground had been previously disturbed and it is very likely that the cause of this potential disturbance was the construction of the large railway embankment directly adjacent to, and to the east of, the test pits (Fig 4). The fact that this mid- to late eighteenth century pottery was abraded, may imply that at that time an attempt was made to improve the productiveness of the area by night soiling, but the very limited amount of material could imply that such activity was short-lived. A more plausible alternative may be that material containing secondary refuse from elsewhere was imported to build-up the railway embankment. It is also possible that the beck itself was disturbed in some way during the construction of the railway embankment.

5.2 IMPACT

- 5.2.1 A full assessment of the impact of any proposed development on the archaeological resource can only be ascertained on the basis of the exact locations of features relating to the development itself. That the proposed development will undoubtedly impact on an area of archaeological potential is certain, but the current programme of groundworks has indicated that within the area of the Gilwilly Industrial Estate there is the possibility that future groundworks may only effect previously disturbed areas. The impact upon the urban area is harder to ascertain, as the archaeological deposits here are likely to be more variable and complex.

6. BIBLIOGRAPHY

6.1 PRIMARY SOURCES

Geological Survey of Great Britain, 1978 *Geology of Northern England, 1:250,000*, Lancaster University

Ordnance Survey, c 1865 *Co. Cumberland Sheet LVIII.4*, first edition 1:2500

Ordnance Survey, 1925 *Cumberland Sheet LVIII.4, Edition of 1925*, third edition 1:2500

Ordnance Survey, 1971 *Plan NY 5029-5129*, 1:2500

Ordnance Survey, 1983 *Soil Survey of England and Wales*

6.2 SECONDARY SOURCES

Allan, M, 1994 *The Roman Route Across the Northern Lake District: Brougham to Moresby*, Lancaster

Anon, 1947 Proceedings, *Cumberland Westmorland Antiq Archaeol Soc*, n ser, **47**, 199-233

Bowen, V, 2005 *Penrith at the Crossroads of History*
http://www.penrithandnorthlakesu3a.org.uk/NewNewsletters/Dec_Jan2005/penrith_at_the_crossroads_of_his.htm

Burl, A, 1979 *The Stone Circles of the British Isles*, New Haven

Carlisle Journal, 1846 Transcript of news article dated 10th January 1846, in SMR file 4911

Clarke, J, 1787 *A Survey of the Lakes of Cumberland, Westmorland, and Lancashire*, London

Countryside Commission, 1998 *Countryside Character Volume 2: North West*, Cheltenham

Cumberland Pacquet, 1st September 1818 News article recording the find of a Roman coin and two battleaxes

Cumbria County Council, 2002 *Extensive Urban Survey, Archaeological Assessment Report, Penrith*, unpubl rep

Department of the Environment (DoE), 1983 *List of Buildings of Special Architectural or Historic Interest, District of Eden, Cumbria: Area of the former urban district of Penrith*

English Heritage, 1991 *Management of Archaeological Projects*, 2nd edition, London

English Heritage, 2006 *Mayburgh Henge*, <http://www.english-heritage.org.uk/server.php?show=ConProperty.154>

Frodsham, PNK, 1989 Two Newly Discovered Cup and Ring Marked Stones from Penrith and Hallbankgate, with a Gazetteer of all known Megalithic Carvings in Cumbria, *Trans Cumberland Westmorland Antiq Arch Soc*, n ser, **89**, 1-19

Haswell, F, 1903 Notes on the Friary at Penrith, *Cumberland Westmorland Antiq Archaeol Soc*, n ser, **3**, 350-2

Hopkins, B, n.d. Field observations at Clint Mill, Penrith, from SMR file 2824

Lambert, J, Hair, N, Howard-Davis, C, Newman, R, and Oliver, T, 1996 *Transect Through Time: The Archaeological Landscape of the Shell North Western Ethylene Pipeline*, Lancaster Imprints **1**, Lancaster

Moorhouse, S, 1971 Medieval Britain in 1970 II. Post-Conquest, *Med Archaeol*, **15**, 137-79

Nicolson, J, and Burn, R, 1777 *The History and Antiquities of the Counties of Westmorland and Cumberland*, **2**, London

OA North. 2005 Southend Road, Penrith, Cumbria, Archaeological Desk-Based Assessment, unpubl clnt rep

Pevsner, N, 1967 *The Buildings of England: Cumberland & Westmorland*, Harmondsworth

Richardson, C, 1998 A catalogue of recent acquisitions to Tullie House Museum and reported finds from the Cumbrian area 1990-1996. Part I: Tullie House accessions, *Cumberland Westmorland Antiq Archaeol Soc*, n ser, **98**, 1-60

Shotter, D, 1997 *Romans and Britons in North-West England*, Lancaster

7. ILLUSTRATIONS

7.1 LIST OF FIGURES

Figure 1: Location map

Figure 2: Trench location plan - Watson Terrace

Figure 3: Trench location plan - Corney Place

Figure 4: Trench location plan - Gilwilly Industrial Estate

7.2 LIST OF PLATES

Plate 1: Brick culvert in SIP 102, facing north-east

Plate 2: Northern half of SIP 103, facing north

Plate 3: Test Pit 101, facing south

Plate 4: Test Pit 103, facing north

Plate 5: South-facing section within Test Pit 106

APPENDIX 1: PROJECT DESIGN

PENRITH FLOOD ALLEVIATION SCHEME, PENRITH, CUMBRIA

Watching Brief Project Design



Oxford Archaeology North

November 2005

The Environment Agency

OA North Job No: L9618
NGR: NY 51484 30391

1. INTRODUCTION

1.1 PROJECT BACKGROUND

- 1.1.1 As part of the Penrith Flood Alleviation Scheme, Oxford Archaeology North were commissioned by Halcrow (hereafter the Client), on behalf of the Environment Agency, to undertake a watching brief during the excavation of service inspection pits and test pits at three locations in Penrith, Cumbria. The groundworks will comprise the excavation of two service inspection pits (SIP) across the road on Watson Terrace, and one SIP across the road at Corney Place. These SIPs will be up to 1.5m deep, c0.5m wide and about 6m long. In addition, six machine-excavated test pits, roughly 2m by 2m by 2m deep, will be dug in fields in the Townhead/Gilwilly area of north-west Penrith, in the proposed area of a strategic storage pond. The following document comprises a project design for the methodology for the programme of archaeological monitoring to be undertaken during the groundworks and has been compiled in accordance with a verbal brief issued by Cumbria County Council Historic Environment Section (CCCHES).

1.2 GEOGRAPHICAL, HISTORICAL AND ARCHAEOLOGICAL BACKGROUND

- 1.2.1 Corney Place (NY 51484 30391) lies to the centre of Penrith and about 150m to the south-east of Watson Terrace (NY 51289 30486). The site by the Gilwilly Industrial Estate (NY 50605 30785) lies within fields and is bounded to the south by the Thacka Beck and to the east by the Lancaster to Carlisle railway line (built in 1845); an existing balancing pond is situated to the west of the proposed development area. The geology of the Penrith area comprises New Red Sandstone overlain by thick post-glacial deposits, characterised locally by drumlin swarms. Penrith itself lies between the River Eamont and the Petteril on the edge of the Eden Valley. The town stands at the junction of major north/south (now the A6 and M6) and east/west (the modern A66) routeways that have been important since prehistoric times and which formed part of the Roman Road network. Prehistoric finds from the immediate area of Penrith are restricted to a cup and ring-marked stone, although a number of important monuments, including three henges, are known from the wider area. Similarly, few Roman finds have been encountered within Penrith itself, although a fortress, *Voreda*, to the north and a settlement at Yarnwath, to the south, are present within the wider area.
- 1.2.2 The presence of Anglian crosses and Anglo-Scandinavian hog-backed gravestones within St Andrew's churchyard, which lies close to both Corney Place and Watson Terrace, may indicate that Penrith has pre-Norman origins. By 1222 the town was a Royal Borough and was an important market centre and it is possible that from about 1345 the settlement was protected by a dyke. Around the turn of the fifteenth century Penrith castle, which again stands close to the current areas of investigation, was built as a defence against repeated Scottish raids. Within the area of Watson Terrace, a large Victorian culvert is known to exist.

1.3 OXFORD ARCHAEOLOGY NORTH

- 1.3.1 OA North has considerable experience of excavation of sites of all periods, having undertaken a great number of small and large scale projects throughout Northern England during the past 24 years. Evaluations, desk-based assessments, watching briefs and excavations have taken place within the planning process, to fulfil the requirements of clients and planning authorities, to very rigorous timetables. OA North has the professional expertise and resources to undertake the project detailed below to a high level of quality and efficiency. OA North is an **Institute of Field Archaeologists (IFA) registered organisation, registration number 17**, and all its members of staff operate subject to the IFA Code of Conduct.

2. OBJECTIVES

2.1 The following programme has been designed to record the presence, extent, significance and state of preservation of any archaeological features and deposits within the areas of investigation. To this end, the following programme has been designed. The results will provide information regarding the nature archaeology in the area and will help to inform future planning decisions. The required stages to achieve these ends are as follows:

2.2 *Archaeological Watching Brief*

To undertake observation during any ground disturbance beneath the level of the topsoil in order to determine and record the presence, extent and character of any archaeological remains.

2.3 *Report and Archive*

An evaluation report will be produced for the Client within eight weeks of completion of the fieldwork. A site archive will be produced to English Heritage guidelines (1991) and in accordance with the *Guidelines for the Preparation of Excavation Archives for Long Term Storage* (UKIC 1990).

3 METHOD STATEMENT

3.1 WATCHING BRIEF

- 3.1.1 **Methodology:** a programme of field observation will accurately record the location, extent, and character of any surviving archaeological features and/or deposits within the whole area of the proposed ground disturbance. This work will comprise observation during the excavation for these works, the systematic examination of any subsoil horizons exposed during the course of the groundworks, and the accurate recording of all archaeological features and horizons, and any artefacts, identified during observation.
- 3.1.2 Putative archaeological features and/or deposits identified during groundworks, together with the immediate vicinity of any such features, will be cleaned by hand, using either hoes, shovel scraping, and/or trowels depending on the subsoil conditions and, where appropriate, sections will be studied and drawn. Any such features will be sample excavated (ie. selected pits and postholes will normally only be half-sectioned, linear features will be subject to no more than a 10% sample, and extensive layers will, where possible, be sampled by partial rather than complete removal).
- 3.1.3 During this phase of work, recording will comprise a full description and preliminary classification of features or materials revealed, and their accurate location (either on plan and/or section, and as grid co-ordinates where appropriate). Features will be planned accurately at appropriate scales and annotated on to a large-scale plan provided by the Client. A photographic record will be undertaken simultaneously.
- 3.1.4 A plan will be produced of the areas of groundworks showing the location and extent of the ground disturbance and one or more dimensioned sections will be produced.
- 3.1.5 **Treatment of finds:** all finds will be exposed, lifted, cleaned, conserved, marked, bagged and boxed in accordance with the United Kingdom Institute for Conservation (UKIC) *First Aid For Finds*, 1998 (new edition) and the recipient museum's guidelines.
- 3.1.6 **Treasure:** any gold and silver artefacts recovered during the course of the excavation will be removed to a safe place and reported to the local Coroner according to the procedures relating to the Treasure Act, 1996. Where removal cannot take place on the same working day as discovery, suitable security will be employed to protect the finds from theft.

- 3.1.7 All identified finds and artefacts will be retained, although certain classes of building material can sometimes be discarded after recording if an appropriate sample is retained on advice from the recipient museum's archive curator.
- 3.1.8 **Human Remains:** any human remains uncovered will be left *in situ*, covered and protected. No further investigation will continue beyond that required to establish the date and character of the burial. CCCHES and the local Coroner will be informed immediately. If removal is essential, the exhumation of any funerary remains will require the provision of a Home Office license, under section 25 of the Burial Act of 1857. An application will be made by OA North for the study area on discovery of any such remains and the removal will be carried out with due care and sensitivity under the environmental health regulations.
- 3.1.9 **Contingency plan:** in the event of significant archaeological features being encountered during the watching brief, discussions will take place with the Planning Archaeologist or his representative, as to the extent of further works to be carried out. All further works would be subject to a variation to this project design. In the event of environmental/organic deposits being present on site, it would be necessary to discuss and agree a programme of palaeoenvironmental sampling and or dating with the Planning Archaeologist.

3.2 REPORT AND ARCHIVE

- 3.2.1 **Report:** one bound and one unbound copy of a written synthetic report will be submitted to the client, and a further three copies submitted to the Cumbria HER within eight weeks of completion. The report will include:
- a front cover to include the planning application number and the NGR
 - a site location plan, related to the national grid
 - the dates on which the fieldwork was undertaken
 - a concise, non-technical summary of the results
 - a description of the methodology employed, work undertaken and results obtained
 - plans and sections at an appropriate scale, showing the location of features
 - other illustrations and photographic plates showing, as appropriate, features of interest or to demonstrate the absence of archaeological features.
 - a description of any environmental, finds, or other specialist work undertaken, and the results obtained
 - the report will also include a complete bibliography of sources from which data has been derived.
 - a copy of this project design in the appendices, and indications of any agreed departure from that design
- 3.2.2 This report will be in the same basic format as this project design; a copy of the report can be provided on CD, if required.
- 3.2.3 **Archive:** the results of all archaeological work carried out will form the basis for a full archive to professional standards, in accordance with current English Heritage guidelines (Management of Archaeological Projects, 2nd edition, 1991). The project archive represents the collation and indexing of all the data and material gathered during the course of the project. It will include summary processing and analysis of all features, finds, or palaeoenvironmental data recovered during fieldwork, which will be catalogued by context.

All artefacts will be processed to MAP2 standards and will be assessed by our in-house finds specialists.

- 3.2.4 The deposition of a properly ordered and indexed project archive in an appropriate repository is considered an essential and integral element of all archaeological projects by the IFA in that organisation's code of conduct. OA North conforms to best practice in the preparation of project archives for long-term storage. This archive will be provided in the English Heritage Centre for Archaeology format and a synthesis will be submitted to the Cumbria HER (the index to the archive and a copy of the report). OA North practice is to deposit the original record archive of projects with the County Record Office, Kendal. The material archive (artefacts and ecofacts) will be deposited with an appropriate museum following agreement with the client.
- 3.2.5 **Collation of data:** the data generated will be collated and analysed in order to provide an assessment of the nature and significance of the known surface and subsurface remains within the designated area. It will also serve as a guide to the archaeological potential of the area to be investigated, and the basis for the formulation of any detailed field programme and associated sampling strategy, should these be required in the future.
- 3.2.6 The Arts and Humanities Data Service (AHDS) online database project Online Access to index of Archaeological Investigations (OASIS) will be completed as part of the archiving phase of the project.
- 3.2.7 **Confidentiality:** all internal reports to the client are designed as documents for the specific use of the client, for the particular purpose as defined in the project brief and project design, and should be treated as such. They are not suitable for publication as academic documents or otherwise without amendment or revision. Any requirement to revise or reorder the material for submission or presentation to third parties beyond the project brief and project design, or for any other explicit purpose, can be fulfilled, but will require separate discussion and funding.

4 HEALTH AND SAFETY

- 4.1 OA North provides a Health and Safety Statement for all projects and maintains a Unit Safety policy. All site procedures are in accordance with the guidance set out in the Health and Safety Manual compiled by the Standing Conference of Archaeological Unit Managers (1997). A risk assessment will be completed in advance of any on-site works and copies will be made available on request to all interested parties.

5 WORK TIMETABLE

- 5.1 **Archaeological Watching Brief:** the duration of this element is dependant upon the duration of any ground disturbing activities on the site.
- 5.2 **Report and Archive:** an evaluation report will be submitted within eight weeks of the completion of the fieldwork. However, should an interim statement be required this can be issued within two weeks but instruction must be received from the client prior to completion of the fieldwork.
- 5.3 **Written Instruction:** OA North can execute projects at very short notice once written confirmation of commission has been received from the Client. One weeks notice would be sufficient to allow the necessary arrangements to be made to commence the task and inform CCCHES.

6 PROJECT MONITORING

- 6.1 **Access:** liaison for site access during the evaluation will be arranged with the client unless otherwise instructed prior to commencement of the archaeological investigation.
- 6.2 Whilst the work is undertaken for the client, the County Archaeologist will be kept fully informed of the work and its results, and will be notified a week in advance of the commencement of the fieldwork. Any proposed changes to the project design will be agreed with CCCHES in consultation with the Client.

7 STAFFING PROPOSALS

- 7.1 The project will be under the direct management of **Stephen Rowland** (OA North project manager) to whom all correspondence should be addressed.
- 7.2 All elements of the archaeological investigation will be supervised by either an OA North project officer or supervisor experienced in this type of project. Due to scheduling requirements it is not possible to provide these details at the present time. All OA North project officers and supervisors are experienced field archaeologists capable of carrying out projects of all sizes.
- 7.3 Assessment of the finds from the evaluation will be undertaken under the auspices of OA North's in-house finds specialist **Christine Howard-Davis BA MIFA** (OA North project officer). Christine has extensive knowledge of all finds of all periods from archaeological sites in northern England. However, she has specialist knowledge regarding glass, metalwork, and leather, the recording and management of waterlogged wood, and most aspects of wetland and environmental archaeology.
- 7.4 If there is a requirement for assessment of any palaeoenvironmental samples which may be taken, it will be undertaken by **Elizabeth Huckerby MSc** (OA North project officer). Elizabeth has extensive knowledge of the palaeoecology of the North West through her work on the English Heritage-funded North West Wetlands Survey. Assessment of any faunal material will be undertaken by **Andrew Bates MSc** (OA North Supervisor).

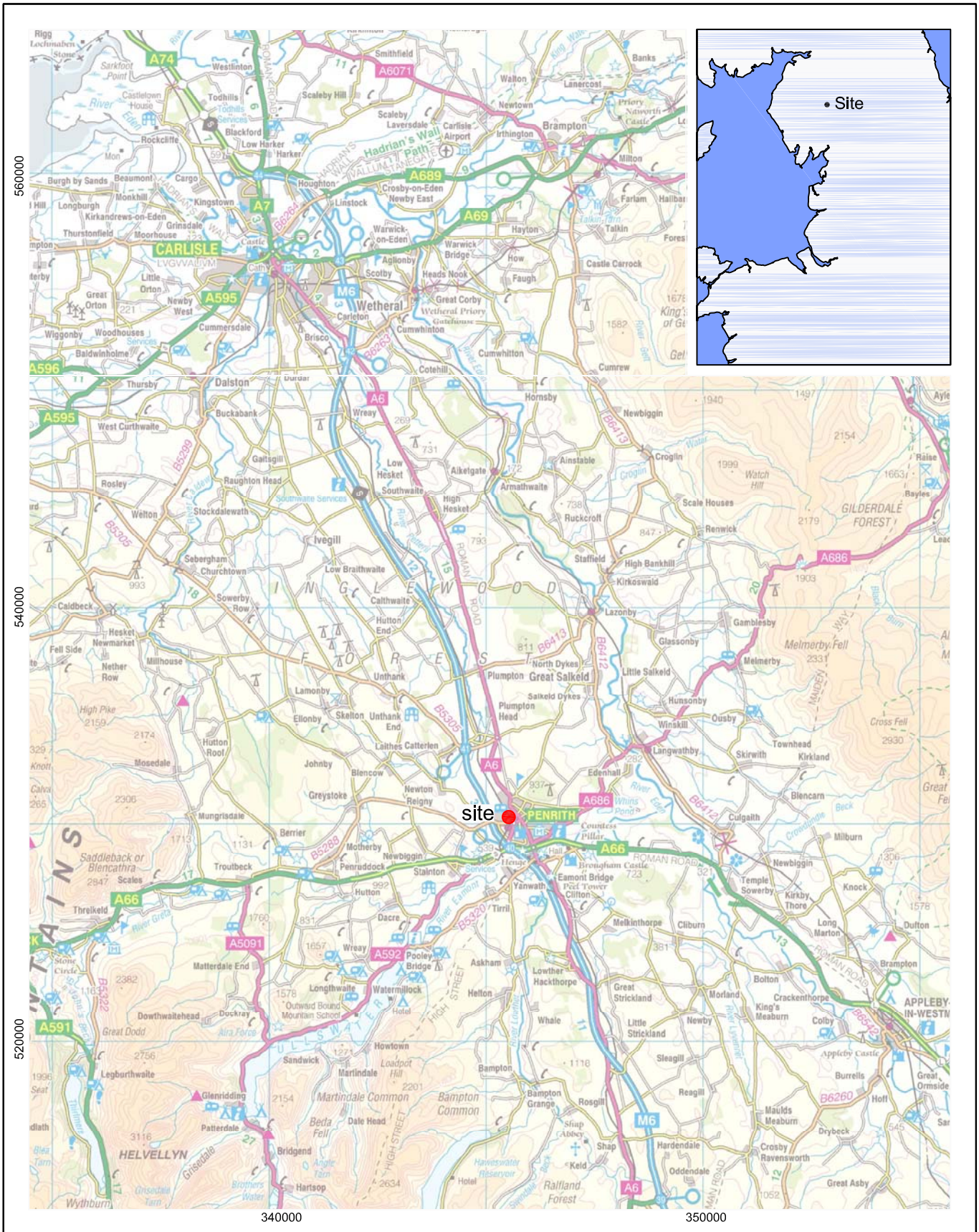
8 BIBLIOGRAPHY

Institute of Field Archaeologists (IFA), 1992, *Guidelines for data collection and compilation*

SCAUM (Standing Conference of Archaeological Unit Managers), 1997, *Health and Safety Manual*, Poole

United Kingdom Institute for Conservation (UKIC), 1990, *Guidelines for the preparation of archives for long-term storage*, London

United Kingdom Institute for Conservation (UKIC), 1998, *First Aid for Finds*, London



Reproduced from the Landranger 1:25,000 scale by permission of the Ordnance Survey on behalf of The Controller of Her Majesty's Stationery Office. © Crown copyright 1990. All rights reserved. Licence No AL 100005569

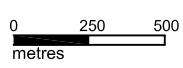
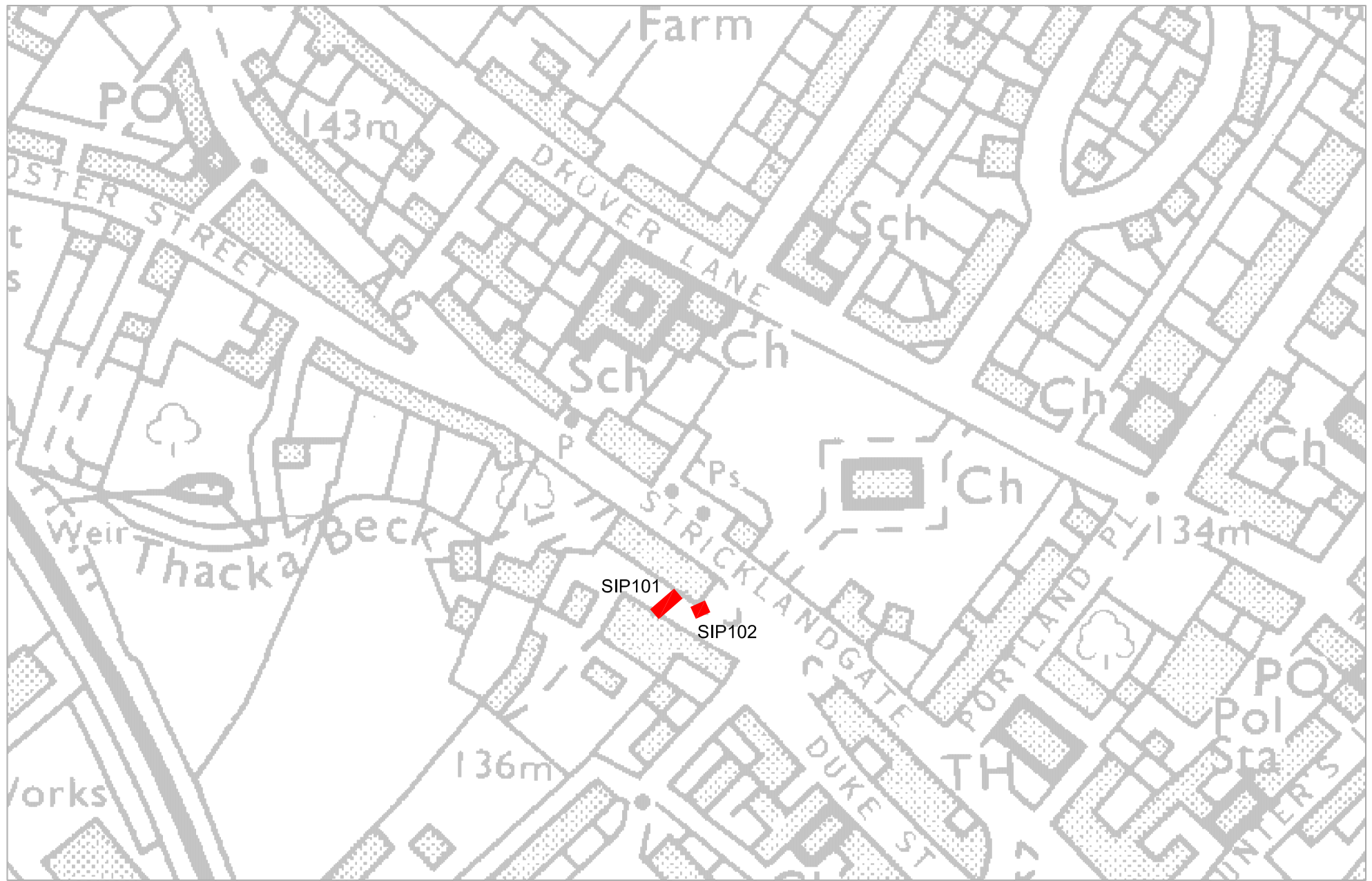


Figure 1: Location Map



▲ Reproduced from the Landranger 1:10,000 scale by permission of the
 Ordnance Survey on behalf of The Controller of Her Majesty's Stationery
 Office. © Crown copyright 1990. All rights reserved.
 Licence No AL 100005569

Scale 1:2000 at A4



Figure 2: Watson Terrace Service Inspection Pit Location Plan

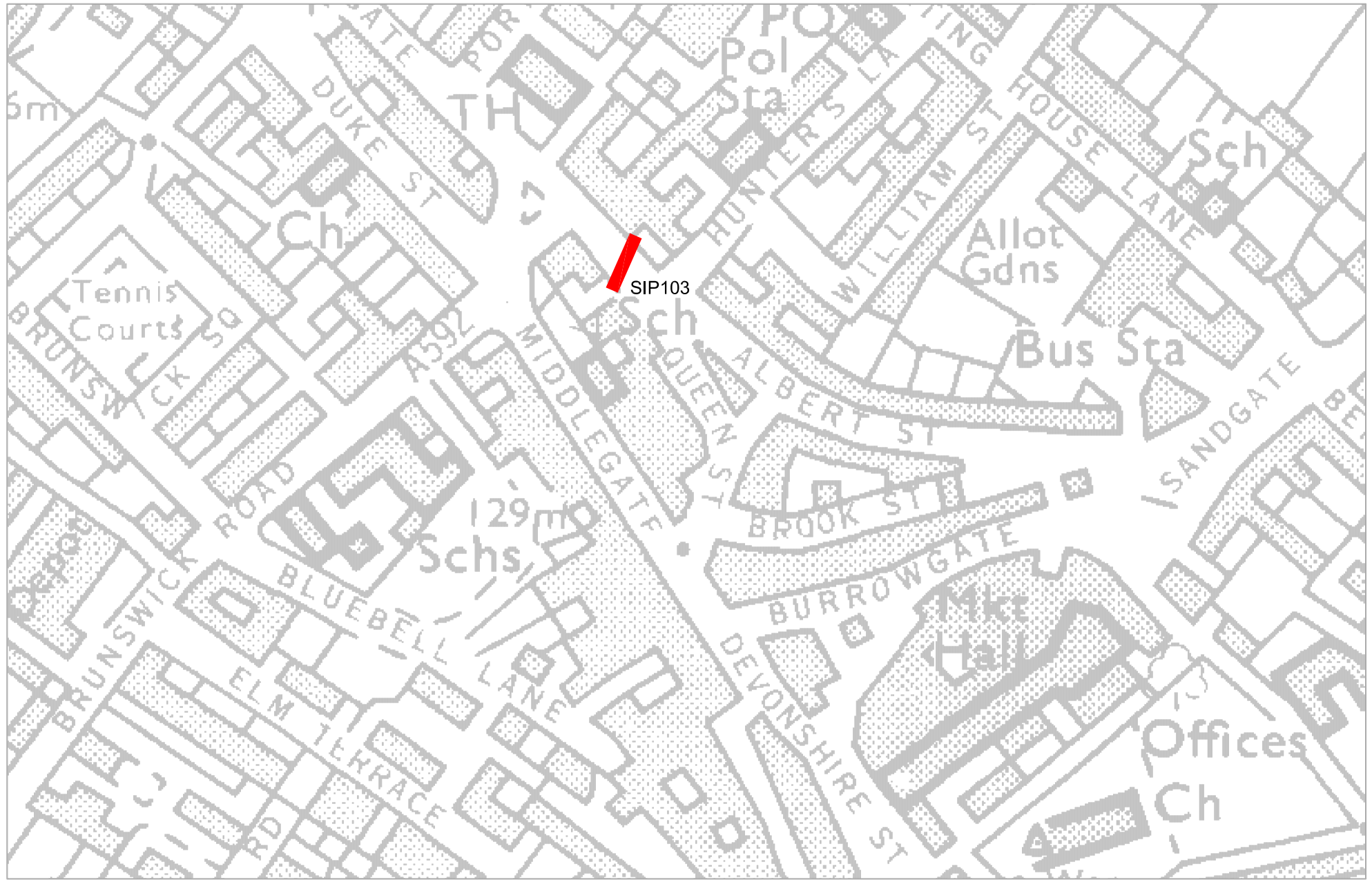


▲ Reproduced from the Landranger 1:10,000 scale by permission of the
 Ordnance Survey on behalf of The Controller of Her Majesty's Stationery
 Office. © Crown copyright 1990. All rights reserved.
 N Licence No AL 100005569

Scale 1:2000 at A4



Figure 2: Watson Terrace Service Inspection Pit Location Plan



▲ Reproduced from the Landranger 1:10,000 scale by permission of the
 Ordnance Survey on behalf of The Controller of Her Majesty's Stationery
 Office, © Crown copyright 1990. All rights reserved.
 Licence No AL 100005569

Scale 1:2000 at A4



Figure 3: Corney Place Service Inspection Pit Location Plan



Plate 1: Brick-built culvert in SIP102, facing north-east



Plate 2: Northern half of SIP103, facing north



Plate 3: Test Pit 101, facing south



Plate 4: Test Pit 103, facing north



Plate 5: South-facing section Test Pit 106