

VIII

The Cow Port at Berwick upon Tweed

Peter Ryder

Introduction

THE unusual position of the town of Berwick on the English–Scottish border, standing on the north bank of the Tweed which is otherwise the natural geographical divide between the countries, is responsible for its uniquely troubled history. Throughout the medieval period Berwick changed hands again and again; early prosperity as a Scottish Royal Burgh gave way to increasing decline and dereliction, after its first capture by Edward I in 1296. Construction of the town walls was ordered by Edward four days after its capture. One of the gateways in the new walls was the “Cow Gate”, through which the inhabitants of the town could lead their cattle to and from the pastures beyond. When Bruce’s forces scaled the town walls in 1318 it was near to the “Kow Yhat”.

The town’s defences—castle and the extensive circuit of walls—needed constant repair and maintenance, which they did not always receive. This state of affairs continued after the final English capture in 1482; there was constant apprehension of another attack by the Scots or French, and consequent pressure for the defences to be put in order and modernized. A survey of c. 1538 (P.R.O. E36/173; *Hist. Berwick Nat. Club* XIV (1892–3) 179) states “the same Cowgate Tower hath two places for ordnance containing the wideness of 8 feet, of either side of the tower, one which only shooteth along the walls and maketh no defence outward. The main wall is in thickness on the one side four foot and on the other side three foot, and the same tower is covered with flags wherethrough the wet hath issue and rotteth and wasteth the timber. Without the same gate and tower and straight before the

same is a bulwark of earth and divot made for the defence of the same gate which is sore decayed and necessary to be repaired with stone and lime for the defence of the same gate.”

Various attempts were made to bring the town’s defences up to date. Under Henry VIII the Lord’s Mount (a circular artillery fort) at the northern corner of the defences was constructed, and under Edward VI a new citadel was started on the line of the eastern walls. These schemes were no more than piecemeal repair and improvement of an antiquated system. With continuing threat from the Scots, and French troops stationed as near as Eyemouth, the appointment of Sir Richard Lee as Surveyor of the Works at Berwick in 1558 signalled the desire of the Crown to embark on a completely new scheme of fortifications. The defended area was reduced to about two thirds of its former extent, and a completely new system of artillery defences embarked upon, based on an Italian model. The construction of the defences, which proceeded in an irregular manner alternately fired by political crises or slowed by the diversion of resources elsewhere, has been documented by Colvin (1982) and MacIvor (1965 & 1972).

The principal gates of the Tudor town all seem to have replaced medieval predecessors, although with the contraction of the walled area the Scotsgate on the north was a considerable distance from the site of the St Mary Gate. The Tudor Cowport or Cowgate replaced and continued the function of the older medieval gate of the same name. When the new defensive scheme was first drawn up in 1558 it was intended that the new ramparts should follow the line of the medieval walls on this side of the

town, but by 1560–1 it had been decided to construct the new ramparts inside the earlier walls, which would then afford some protection as building proceeded.

Most published works on the defences appear to assume that the present Cowport is contemporaneous with the section of the defences in which it lies; MacIvor (1972, 12) explicitly states that “this part of the (1560–1) design included the surviving gate, Cowport”. However, there is copious documentary evidence, rehearsed by Cowe (1979), that this is not the case. An examination of a detailed and informative plan of the town of c. 1580 (BM Manuscript Cotton Augustus I ii 14) shows the medieval Cowport, a single embattled tower pierced by an arch, still standing outside a water-filled ditch crossed by a bridge or causeway. The Tudor defences are obviously incomplete, and a gap has been left where the present Cowport stands. On the north of the gap an earth rampart backs the new wall, rising to the height of its parapet walk; on the south, although some earthworks seem to have been commenced, the rear face of the stone wall with its counterforts (with segmental arches between) is clearly shown, with further south a flight of steps leading up to parapet level at Windmill Bastion.

The Cowgate recorded as being in need of repairs in 1582–3 (Calendar, I 96) must be the medieval gateway. This is made clear by the record of Jan 23 1586–7 that “the iron gate to be set up at the Cowgate being half done, it should be set up in the new wall in the place appointed by Sir Richard Lee knight then surveyor, rather than in the old wall where it was” (ibid. 242). On 14 December 1590 it was estimated that “the Cowgate in the new fortifications, and making a new bridge, the same being rotten and in great decay, will cost 300 l” (ibid. 370). So at this period the medieval gateway was still in use; what happened to its “half done” iron gate is not clear, as on 15 April 1594 John Crane wrote to Burghley that the Cowgate was . . . of firboards, in gear decay and weak; the following January it was “noisome and dangerous to that side of the town” (Calendar II 3) and by the following April the

Cowgate bridge was in “such decay that none dare ride over” (ibid. 28) and “cleane rotten” (ibid. 29).

At last the long-planned gateway on the thirty-year-old Tudor defence line was constructed. A certificate of the state of the town’s iron gates dated 10 August 1596 (ibid. 172) does not mention the Cowport, perhaps indicating that the new works were in progress, as by 29 September of the same year (ibid. 194) the “new Cow gate called Carey Porte” and adjacent bridge were costed at £498 4s 9d; in addition to this £21 13s 7d was charged for removing a great hill of earth “which did cloye and stop the passage to the newe gate and rampire”.

The new “Careygate” is also referred to in a reference to repair of the wall between it and “Bedford Mount” (Brass Bastion) (ibid. 273); in 1599 when the cost of a new stone bridge outside the gate is given as £22 10s 10d (ibid. 625), it has reverted to its traditional name.

A series of dams or batardeaux to hold water in the ditch outside the eastern defences must have been constructed, despite MacIvor’s assertion that only the one adjoining Brass Bastion was ever completed (1965, 82–3), as there are persistent references to the “stank” and bridges crossing it.

The military importance of Berwick clearly declined after the Union of the Crowns in 1603, but with the 1638 Scottish rebellion against the attempts of Charles I to impose unity in church practice, and then the English Civil War (when the town was occupied by the Scots from 1643–5), it regained its former status. Between 1639 and 1653 the defences were improved by the raising of an earthwork parapet above the stone curtains and bastions; these improvements included the construction of a drawbridge at the Cowport in the winter of 1638/9 (Scott 1888, 205), presumably replacing the 1596 stone bridge. When John Aston visited Berwick in 1639 (Surtees Society Vol CXVIII (1910) *Six North Country Diaries*, ‘The Journal of John Aston, 1639’, p. 20) he noted that the Cowgate was defended by “three small brass pieces in the mouth of the port”.

The Ravensdown Barracks, for the first time providing organized accommodation for the garrison of the town, were constructed in the wake of the 1715 Rebellion. Allied to this major scheme of works (accommodating 36 officers and 600 men, at a cost of £4937 10s 7d) may have been the construction of a new drawbridge at the Cowport, a plan of which exists dated 1719.

The last attempt to put in order the defences of Berwick, by now long outmoded, came after the 1745–6 Jacobite rising; this amounted to little more than repair of both masonry and earthwork structures; the half-round moulding or cordon which runs a few courses below the top of the scarp wall is thought to be part of these works (McIvor 1971, 24). The repairs to the Cowport were probably carried out by Lt Dougal Campbell RE (pers.comm Ian Stuart).

In the early 19th century the town abandoned even the theory of defensibility; one by one the old gates were removed or remodelled; the Scots Gate was reconstructed in 1815–6 (Scott 311), the Bridge Gate removed in 1825 and various new openings pierced through the walls on the south and west. Only the Cowport, doubtless due to the fact that it caused little obstruction to the relatively limited traffic that passed through it, escaped unaltered. A pedestrian walkway round the ramparts was established in 1837 (*ibid.* 311–12) and trees planted as the defences passed from being a military necessity to a civic amenity.

Interest in the fortifications as an antiquity began in the early 1900s. The restoration of the “stone benches” (which may simply be projecting footings exposed by a lowering of the ground level) on either side of the internal opening of the Cowport was recommended (Fawcus 1905) under the mistaken interpretation that they were intended as seats for the garrison of an Edwardian gatehouse. The pair of wooden doors at the external arch of the gate, which probably dated from the mid-18th century, were renewed in 1978–9; a watching brief at this time revealed no more than the position of the foundation offset of the gate passage, and a relatively recent concrete platform at least 1 m deep with the sockets for two

de-mountable bollards (pers.comm Graham Fairclough).

Excavation at the Cowport Gate, March–May 1990

Published accounts of the Cowport have been limited to the briefest of descriptions. The gateway is situated on the east side of the walled town, roughly midway between Brass Bastion (at the north-east angle) and Windmill Bastion, midway along the eastern defences (fig. 1). It now opens from the east end of The Parade, the broad street running between the Barracks and the Parish Church (see Fuller, 1799, 172 for a view of soldiers being drilled here, taken from the “Walls above the Cow Port”). On the north side of the internal face of the gateway is a small building, probably a guardroom, dated 1755; on the south are two small late C18 or C19 buildings, now much altered fronting a walled enclosure. This enclosure, shown on the 1852 OS 10':1 mile map as “The Straw Yard”, is cut into the rear slope of the rampart.

Outside the gateway the roadway crosses the infilled ditches, now an open grassed area; on the south side of the road is a relatively recent wall and gateway, and on the north a low wall, stepping northwards in the same manner as did the south wall of a building or pair of buildings shown here on a map of 1725 (Berwick Town Archives).

The Cowport consists of a tunnel-vaulted passage 13.5 m in total length and 3.4 m wide, running beneath the ramparts. The segmental-headed outer archway (fig. 2), rebated internally for a pair of gates, has a single broad chamfer of jambs and head. The arch is set in a shallow projection, with above it two groups of three corbels, one on each side of the arch. McIvor (1972, 24) suggests that the corbelling may have been related to a structure containing the portcullis housing and perhaps displaying the Royal Arms; whatever superstructure there was, it was replaced by the C18 cordon moulding and three courses of stonework above. Midway along the passage is a second

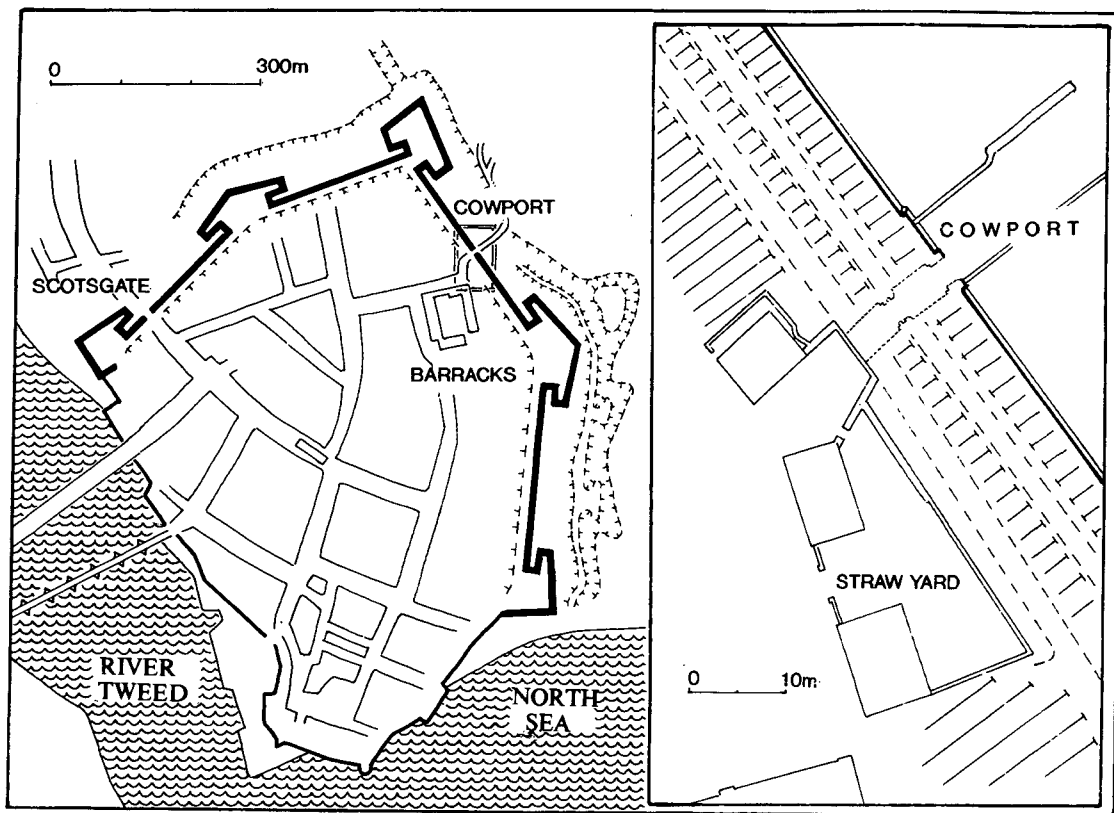


Fig. 1. Berwick upon Tweed and its Elizabethan defences; inset plan of Cowport area.

similar archway, this time with a slot for a portcullis which fronted another pair of gates. The rear section of the passage, beyond the portcullis, is rather higher, and is set on an alignment about 12° to the south of that of the front section and the two arches. The inner face of the gateway has a plain round-headed arch formed by the intersection of the vault and wall face.

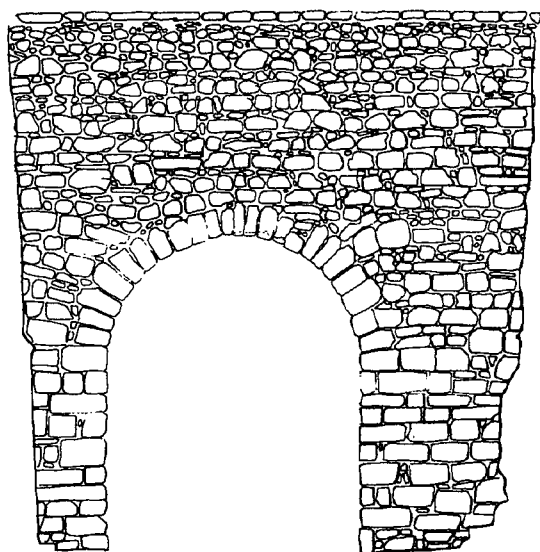
The earthen rampart topping the stone front wall continues unbroken above the gate passage. The earthen rampart now rises at an angle of 40° to a height of 3 m above the top of the stonework, where it is capped by a tarmac path; the rear slope descends at a gentler angle to a broader path running at the rear of the embankment.

The 1990 excavation was occasioned by the

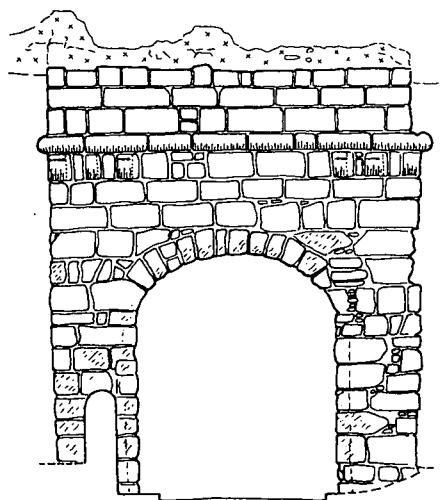
need to expose the superstructure of the passage for repair work to prevent water leaking through the vault, and the consequent decay of stonework.

A section 12.5 m long and 8 m wide was cut through the rampart directly above the Cowport; the main part of the excavation was carried out during March 1990, but a strip 2.5 m wide on the west side could only be cleared in May after the necessary formalities for closing the public footpath had been observed. Masonry structures above the passage were not disturbed; in other areas the site was cleared to a level c. 1.5 m below the level of the footpath and 4 m below the apex of the rampart. Most of the earth was removed by machine.

The structures exposed are here described in



Internal (West) Elevation



External (East) Elevation

Fig. 2. Cowport Gate, internal and external elevations. Scale 1:100.

order from east to west, that is from the outer to the inner face of the defences (see figures 3, 4 & 6).

(i) The Outer Parapet

This is a wall 1.6 m in thickness. The outer face of the wall is now capped by a raked concrete revetment (of earlier C20 date to judge from embedded pottery) clearly intended to stabilize the steep outer face of the earth rampart. The internal face of this wall now forms a parapet rising 0.5 m above the adjacent cobbled sentry walk, and is characterized by large squared blocks projecting up to 0.2 m from its face, at different levels and forming no apparent pattern; the cobbling of the sentry walk extends at least 0.15 m beneath this face. The irregular configuration of the internal face, and the way in which it overlies the edge of the cobbled walkway, suggests that the present wall never formed a parapet to the sentry wall (had it done so its projecting blocks would have occasioned a serious hazard to the knees of passing sentries) but in its rebuilt form simply served to retain the bank of the earth rampart.

(ii) The Sentry Walk

This is a cobbled path now 1.5 m wide, which remains in a fine state of preservation. The inner (western) edge of the path is bounded by a line of larger cobbles, and a series of even larger stones forms a transverse line overlying the apex of the vault beneath; the outer edge is concealed by the rebuilt thicker wall replacing the original parapet (see above). To the south of this a patch of much smaller cobbling probably represents a repair to the surface of the path. A somewhat similar cobbled sentry path has been exposed (and consolidated) on two sides of the western flanker to the Brass Bastion.

(iii) The "Screen Wall"

The inner face of the sentry walk is formed by a wall; the section of this above the passage vault, roughly corresponding in extent to the portcullis structure behind is 1.5 m in thickness, but to both north and south the internal face steps back to reduce the thickness to 0.75 m; this 0.75 m wall was probably a continuous feature accompanying the sentry walk.

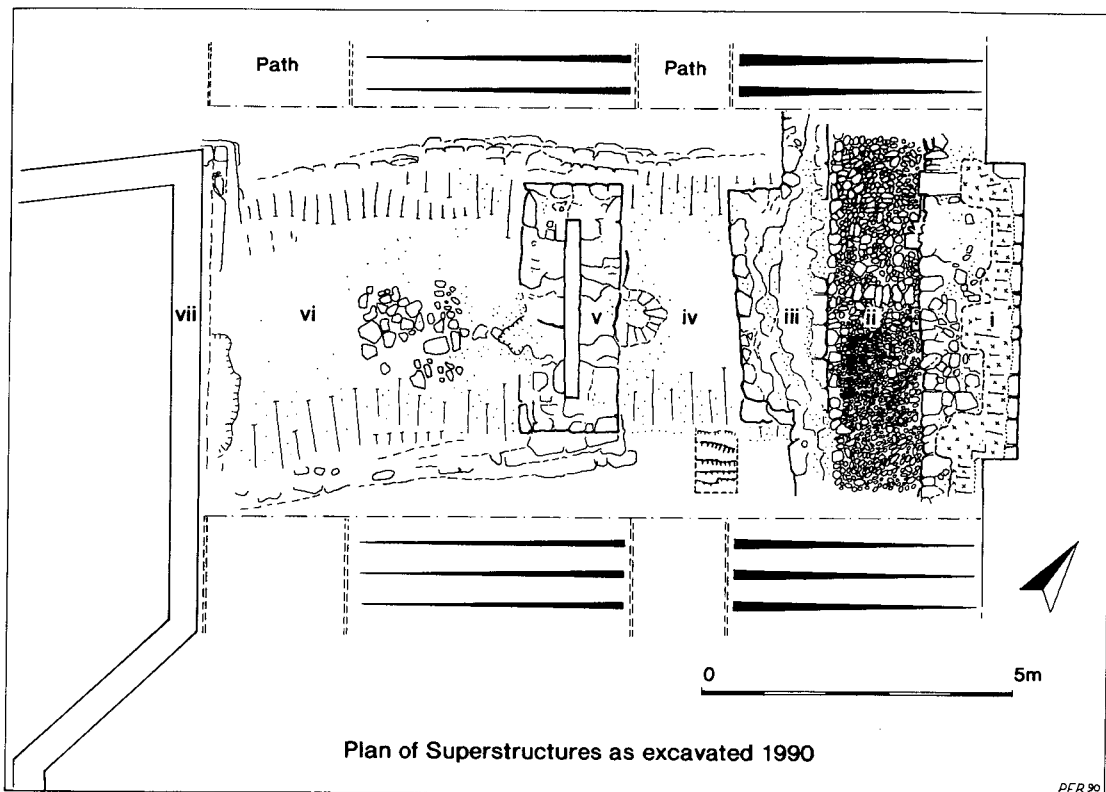


Fig. 3. Plan of superstructure.

The external face of the wall had been badly robbed, only a few facing stones remaining of the lowest course; in contrast the internal face of the central thicker section stood to a height of 1.2 m. A slight overhang in the internal face of the wall correlated with the horizon of mortar and small stones forming the “terre-plein” or fighting platform at the rear of the defences. For most of its length the lower stones of this face rest directly on the extrados of the vault beneath, although to its north end a wedge of clay remains between vault and the lowest courses.

(iv) The Extrados of the Front Passage Vault

To the west of the “screen wall”, the top of the arching presented a curving surface of mortar with small embedded stones, with to either side exposed masonry in the form of large unshaped

or roughly-shaped blocks laid in rough courses, dropping in narrowing “steps” to a more or less vertical face. This unmortared masonry would of course have been concealed by a contemporary earth bank.

(v) The Portcullis Housing

This consisted of a rectangular structure 4 m by 1.5 m, containing the portcullis slot 2.8 m by 0.2 m. The centre of the structure had been broken away by a later pit, which also cuts deeply into the adjacent section of the front passage vault. The housing is built of roughly-squared stones, some quite large, laid in irregular courses; at each end the projecting footings appear to be aligned with the rear passage vault rather than with the superstructure of the housing.

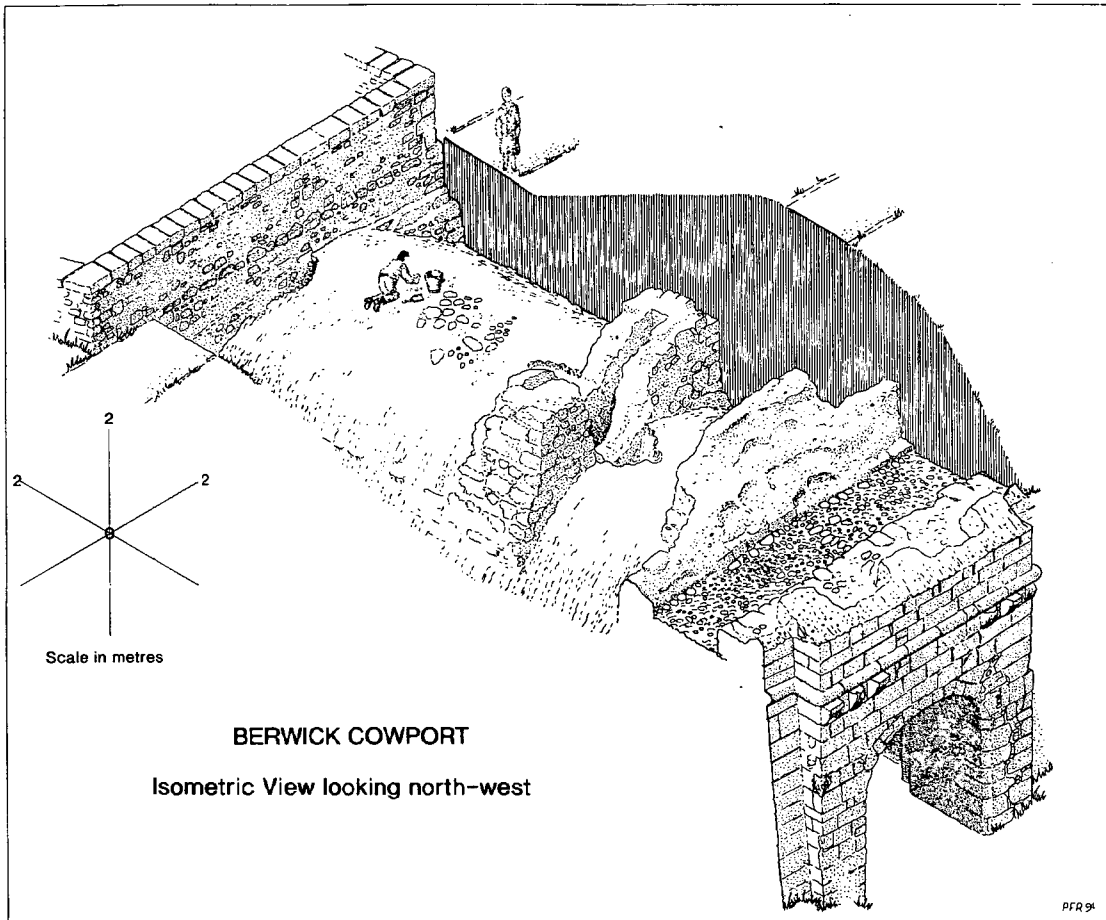


Fig. 4. The excavated structures, isometric view.

(vi) The Extrados of the Rear Passage Vault

This is set at a higher level than that of the front passage, and is treated somewhat differently. The central curved section has large stones and cobbles embedded in the mortar, with a pronounced shelf or ledge at each side, below which are a series of smaller steps formed by irregular masonry of the same type as that at the sides of the front passage; although there is a marked deviation in alignment between the two sections of passage, the rough rear faces of the masonry of the side walls appear to course through for the whole length of the gate passage. The apex of the rear

vault appears to have been eroded, leaving an irregular surface of large rounded stones corresponding to the mortared horizon or "terre-plein" already mentioned.

(vii) The internal parapet

The wall at the west end of the Cowport (i.e. the rear face of the parapet above the inner arch) was shown to have stepped footings; on the south side of the arch these had been hacked away when a pit was dug, which had then been infilled with clay and a layer of dark ashy soil before being sealed beneath the above-mentioned mortar horizon.

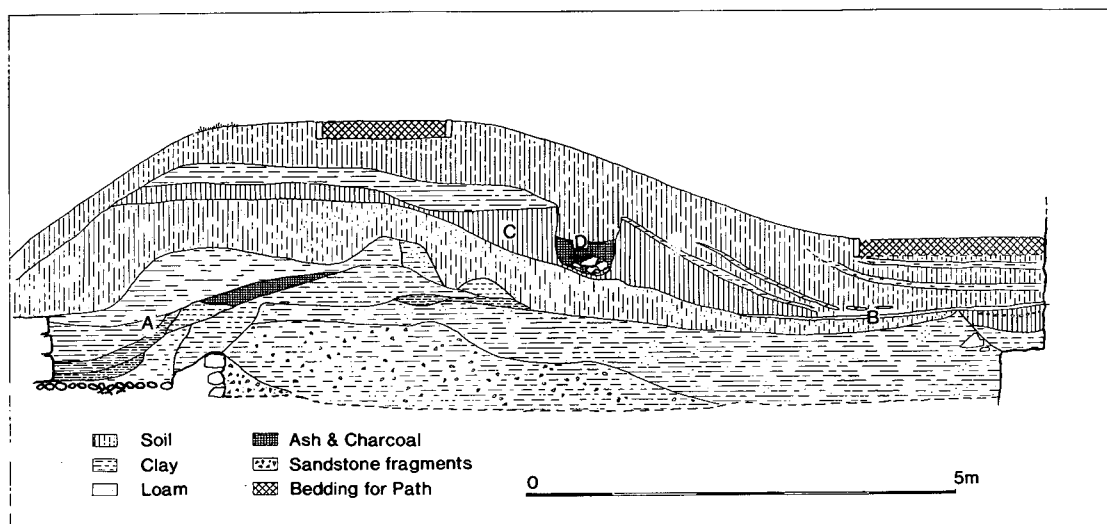


Fig. 5. South section through upper part of rampart.

Rampart Stratigraphy

The bulk of the rampart deposits were removed by machine under archaeological supervision, and the sections of the rampart on the north and south of the excavated area were recorded, along with that on the west, beneath the adjacent path; these yield valuable information as regards the multi-phase development of the ramparts in the 17th century (fig. 5).

Interpretation

(i) Initial construction

A brief examination of the masonry of the passage walls, prior to the excavation, had suggested that both inner and outer passages had been butted up to the wall containing the portcullis arch. The excavated evidence does not clarify these relationships as much as had been hoped. Despite various anomalies (i.e. the way in which the rear angles of the portcullis housing seem to have been cut away) the visible evidence appears to suggest that both passage vaults—or at least the passage side walls—are more or less contemporary. Although it appears to sit rather awkwardly

upon the rear passage vault, it is difficult to see the portcullis superstructure as being part of a separate constructional phase. However, it must be admitted that the relationships of the various elements of the gateway still remain, to some extent, a little unclear (see fig. 6).

The way in which the “screen wall” simply sits on top of the underlying vault, without any structural expression at the level of the gate passage, suggests that it was never intended to form part of a weighty superstructure such as a tower. It would seem more likely that its function was as a revetment to the earth rampart known to have been intended in the original Tudor defensive scheme; documentary sources suggest that these ramparts had still not been constructed in 1569 (Colvin *op. cit.* 661). Most authorities seem to imply that no earth ramparts were raised until the C17; this may not be the case, as the gate passage was clearly intended to be covered by earth from the first.

The masonry of the portcullis housing and “screen wall” is very similar, and of rather poor quality; the surviving fabric (except perhaps for the uppermost courses) may well have been intended to be sub-surface footings. The portcullis housing need not have been

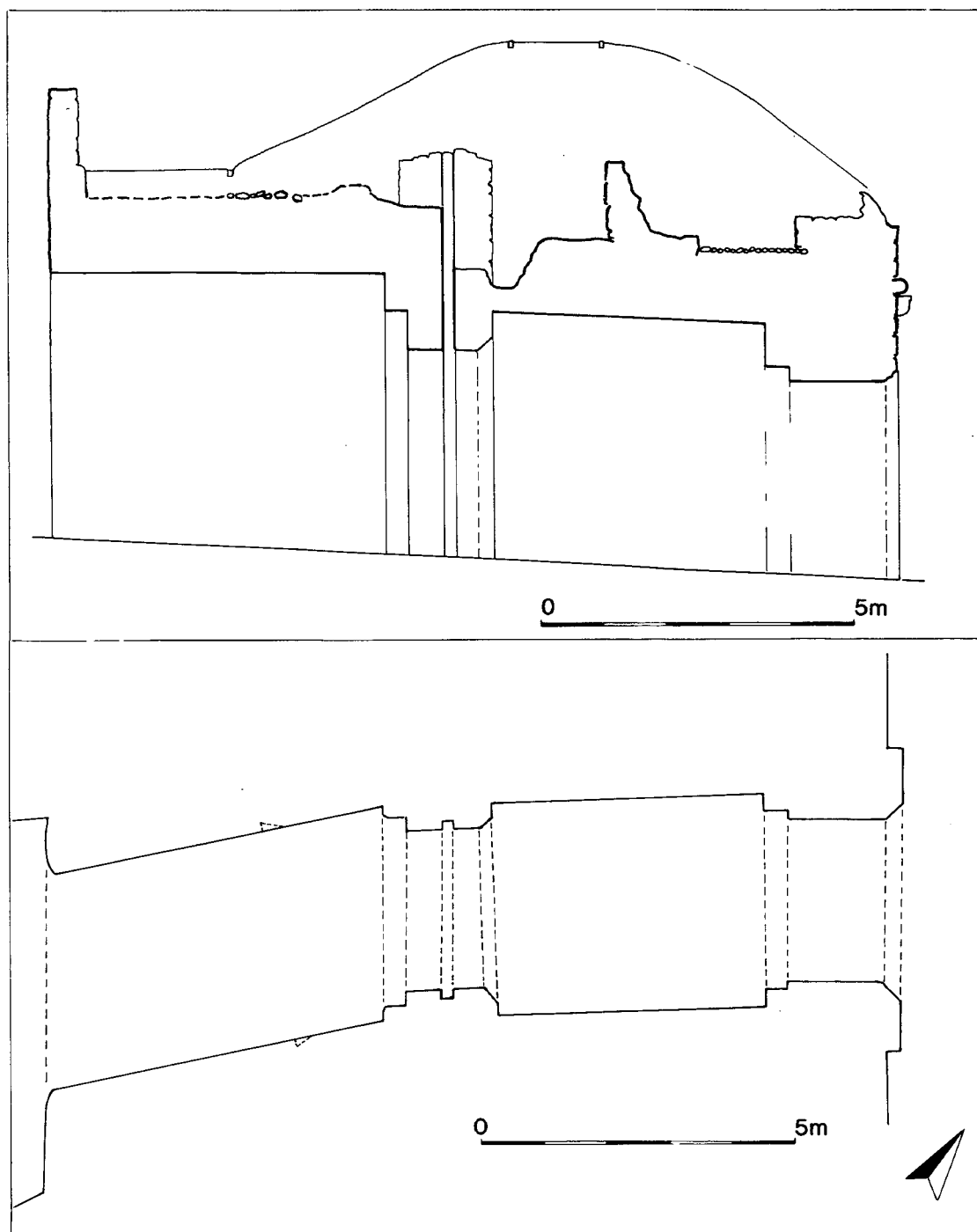


Fig. 6. Plan at ground level and longitudinal section looking north.

carried up more than 1.0 m above its surviving extent; unfortunately its remains shed no light as to the *modus operandi* of the portcullis; possibly a windlass stood adjacent to the masonry structure. One stone found jammed in the portcullis slot has a worn curved surface and a notch on the rear face; it hardly looks like an architectural member, and may be a "stone cam" forming part of a lifting device.

All these structures, except for the rebuilding of the outer parapet, seem to relate to the original late C16 construction of the gateway; the various structural discrepancies and multi-phase development would tie in well with the known stop-start nature of this work (and the large number of relatively unskilled labourers known to have been employed). If the ramparts were constructed first, and the gate tunnel only cut through at a later date (as Colvin's map suggests), then the change in alignment between front and rear passages might be more easily explained, either as a mistake in setting-out, or perhaps due to the rear passage being aligned on the medieval gateway which may have been initially retained; it is known that the Tudor builders were concerned to leave the earlier defences in position whilst their works proceeded, for fear of a Scottish attack.

(ii) Later modifications

The second major phase of works on the Berwick defences took place in the mid-C17, when the present earth ramparts were raised. Once again there seem to have been several phases of construction; the 1961–2 excavations at Brass Bastion (MacIvor 1965, 96) showed three pre-1730 phases within the cavalier (the earthwork structure topping the C16 masonry). The stratigraphy recorded at the Cowport also shows several phases of C17 rampart construction. The first phase involved the partial demolition of the "screen wall", and a bank made up of various dumps of clay being raised over the Elizabethan sentry walk (fig. 5, A). A new walkway may have been provided between the inner face of the screen wall and the remains of the portcullis structure, as is suggested by a layer of mortar and small stones continuous over a large part of the excavated section,

including the area to the rear of the portcullis housing (and at the level of the top of the rear passage vault) which seems to have formed part of a continuous terreplein or fighting platform (fig. 5, B). The upper parts of the portcullis housing were demolished; the large pit dug in the centre of it was presumably made to remove the portcullis grille which had jammed or rusted into its slot. The diggers came within 0.25 m of breaking through the vault of the front passage, and an inadvertent descent to the roadway beneath.

Old turf lines in the cut sections through the rampart also show a distinct firing step in its rear face, presumably relating to one of the C17 phases. This was most clearly visible in the section on the north of the excavation. The abandonment of the terreplein is marked by a final heightening of the rampart in soil, with odd clay dumps (fig. 5, C).

The present upper and lower pathways following the ramparts were established in 1837; a pit (containing slag, pottery fragments and other rubbish) adjacent to the lower path is probably of later C19 date (fig. 5, D). Slumping of the steep outer face of the rampart below the upper path prompted revetment with concrete in the earlier C20, as already noted.

THE FINDS: CERAMIC AND GLASS

Margaret Ellison

Although the finds assemblage is essentially unstratified, the group does appear to represent one main period of deposition from the mid-17th century into the early 18th century. The few late medieval and 16th century wares can be regarded as residual, and some intrusive 19th century material is included.

The provenance of the finds is of interest. As on other sites in Berwick (Hunter 1982), both pottery and tobacco pipes indicate links with the Netherlands. Tyneside pipemakers are clearly well represented, but the pottery assemblage, apart from the continental wares present, clearly has a different, possibly more

local, provenance than the 17th century material excavated in Newcastle (Ellison, Finch, Harbottle 1979; Ellison, Harbottle 1983; Harbottle, Fraser 1987), much of which seems to originate in the London area.

Unfortunately, there are no other published groups of this period from Berwick, but I was able to look at a small group of pottery from the Hirsell (Coldstream) in the Durham University Department of Archaeology. My thanks to Susan Mills for letting me know about this group, and to the Department for giving me access to it.

THE POTTERY

17th and early 18th century wares

17th century buff earthenwares

Fairly soft earthenwares with very low iron content. Two similar clays are used: one very pale buff and pink/buff; the other buff to light red. These are possibly sometimes wedged together and probably used to make both the red/brown and white slips trailed on the decorated wares.

The darker fabrics show a pale orange or light orange/brown through glaze, the lighter fabrics, yellow or yellow/buff.

Fragments of similar fabric and glazing were recovered from the Hirsell, so these may be from a fairly local source.

(Illustrations Figs 7 and 8. * = not illustrated)

1.2.3. Fragments of three sizes of plates. The fabric is pale pinkish buff with occasional iron oxide inclusions. Internal red/brown slip trailing and yellow/buff glaze.

Fragments of 11 other similar plates occurred: the majority with the same rim form glazing and decoration, 2 vessels are undecorated, one slip decorated vessel has a simple rounded rim and one is in a partly reduced fabric.

22. Fragments of a posset of the type illustrated by Jennings 1987 n. 709). The pink/buff fabric, brown slip trail and yellow

glaze are the same as the plates above.

- 4.* Rim fragment and a body fragment of two hollow vessels, probably mugs. Pale buff fabric external red/brown slip trailing internal and external yellow glaze.
23. Base and lower body. A jar form in a pink/buff fabric with internal and patchy external yellow glaze and external sooting. Possibly a vessel similar to Black Friars no. 12 (Vaughan in Harbottle and Fraser 1987) that could have been used to heat beverages.
- 5.* Fragment of the base of a plate: white slip trailing (yellow under glaze) and pink/buff body (pale orange under glaze).
6. Fragment of the rim of a bowl. Pale buff fabric. Internal glaze.
- 7.* Fragment of the rim of a bowl with simple turned over rim. Fabric and glaze as 6.
- 8.* Fragments of a bowl and a hollow vessel with an external cordon in a buff fabric are covered internally with a light copper green stained glaze.
- 9.* Fragment of a storage jar. Light red/buff fabric with internal light brown glaze.
- 10.* Fragment of a base with projecting foot. Light red/buff fabric and internal orange/brown glaze.
24. Rim fragment of a plate in a pale pinkish red fabric. Internal pale orange glaze over decoration in relief. The different rim form and decoration suggest a different source from the other plates, though the fabric is similar.
25. Rim fragment, probably a cooking pot. Same fabric and internal glazing as 24. External sooting.

Fragments of about 7 other vessels similar to those recorded above were recovered.

17th and early 18th century redwares

Fragments of 16 vessels were recovered. A number of these in a hard pink/red fabric were also similar to fragments excavated at the Hirsell (see above). Others are more similar to metropolitan wares, though not necessarily from that source. Vessels include; flatwares

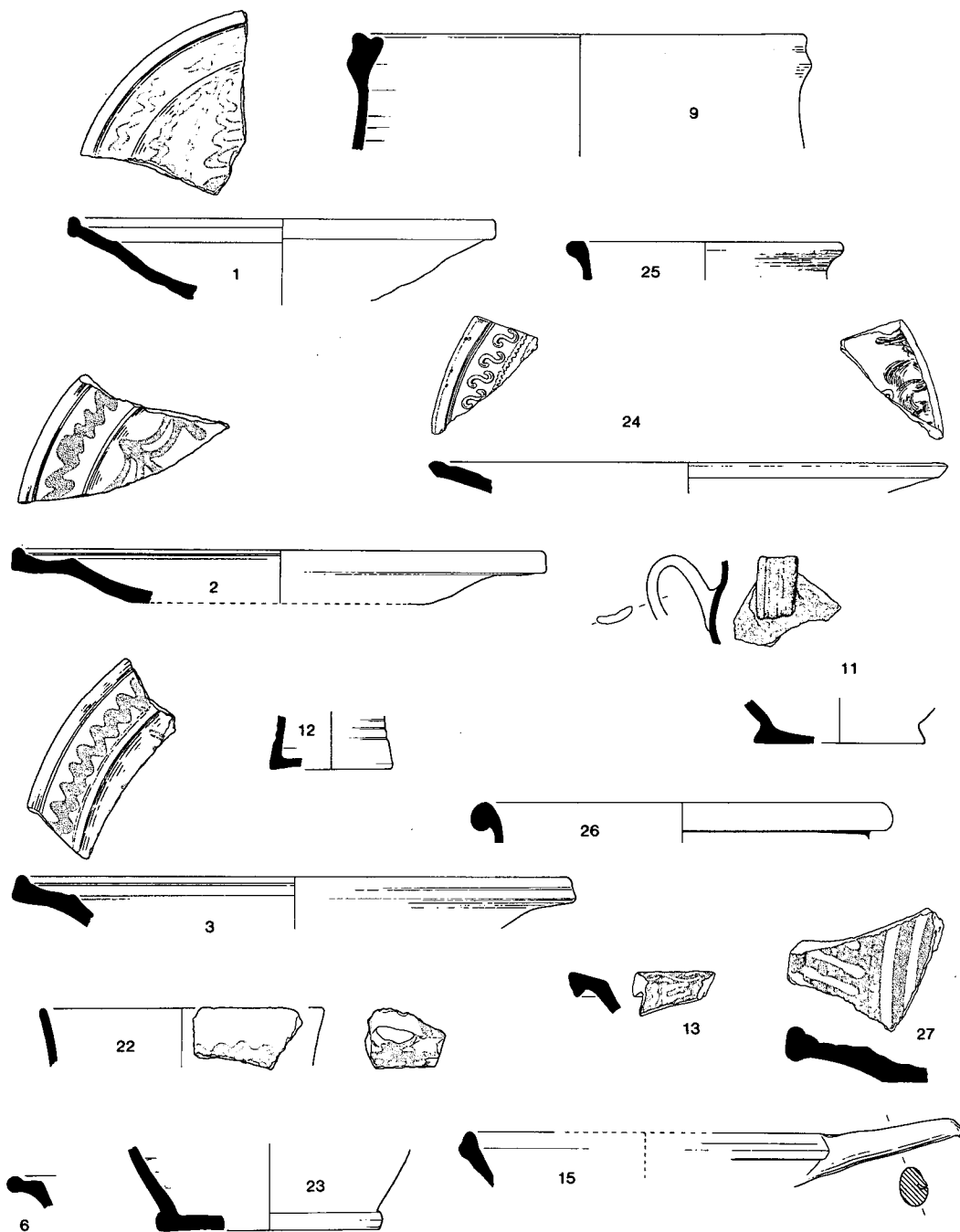


Fig. 7. Pottery. Scale 1:4.

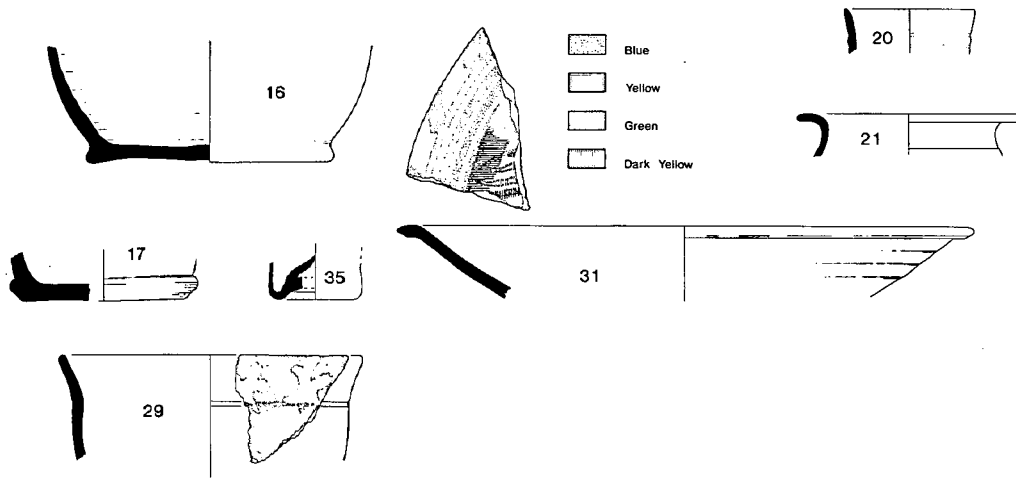


Fig. 8. Pottery and clay pipes. Scale 1:4.

Pipes: Tyneside forms, No. 5 type 1a? 1635–50; No. 3 type 2a; No. 4 type 2b 1645–60; No. 1 type 3a; No. 2 type 3b 1650–75.

Possibly Netherlands and London pipes, No. 6 probably Dutch mid-17th century; No. 9 unknown provenance, possibly Dutch; No. 15 possibly Dutch 1630–50; No. 16 probably a London pipe, form 10 1640–60.

(probably plates) white slip trailed and white slip coated with brown slip trail; bowl with simple turned over rims, internally slip coated and plain glazed; fragments of cooking pots.

12. Fragment of the base of a ridged cup. Hard red ware and dark grey fabric. Full red/brown glaze.
11. Fragments of a chamber pot? Hard orange/red fabric with fine quartz inclusions (also with parallels at the Hirsell). Internal and external brown glaze. External slip trailing. Scale internally. Possibly 18th century.
26. Fragment of the rolled over rim of a jar in a medium quartz tempered bright orange fabric (similar to 11). Internal and external lustrous dark brown glaze. External soot blackening. Probably 18th century.

17th century Low Countries redwares

27. Fragment of a dish with pinched feet (see Ellison and Harbottle 1983 n. 34). Sandy orange/buff fabric. Stiff slip trailing and internal yellow/orange glaze.
- 14.* Fragment of the base of a plate. Internal slip trailing and glaze similar to above.
13. Rim fragment of a bowl. Fine sandy light orange fabric. Internal slip trailing (slightly stiffer consistency than is usual on English redwares). Bright orange internal glaze. Probably Low Countries.
15. Rim and handle of a skillet. Light orange sandy fabric. Yellow/orange glaze. Low Countries.

17th century English whitewares

16. Fragments of the base and lower body of a chamber pot. Hard cream fabric with fine iron oxide inclusions. Internal and external yellow glaze. Internal scale. Surrey Hampshire type.
17. Fragment of a base with projecting foot. Cream fabric sooted externally. Same type of vessel as 23. Surrey Hampshire type.

There was one other fragment of a vessel in this fabric and glazing.

17th and 18th century tin glazed wares

31. Fragment of a dish. Pink/buff fabric. Internal tin glaze and polychrome (yellow green and dark blue) painting. External lead mixed with tin glaze.

There was one other fragment of the base of a similar polychrome painted dish and a similar base with internal blue painting. Both have lead glazed backs. The three vessels are probably Netherlands wares of the mid-17th century.

- 18.* Fragment of the rim and handle of a porringer. Cream fabric, internal pink tinged tin glaze with dark blue painting. External blue tinged tin glaze. What survives of the form and painted design is very similar to an early 17th century vessel from the Netherlands recorded at Norwich (Jennings 1987 no. 1415) but the glazing suggests it may be somewhat later and possibly English.
- 19.* Fragment of the handle and body of a small mug. Pink/buff fabric. Internal tin glaze. External manganese sprinkled tin glaze.
- 32.* Fragment of a foot ring and base of a bowl or dish. Internal lustrous blue tinted tin glaze and bright blue painting. External pinkish lustrous tin glaze. 18th century. English or Netherlands.

One other fragment similar to 32 and a fragment stripped of glaze were the only other examples of this ware.

Late 17th/early 18th century buff earthenwares

Fine hard buff fabric with yellow/brown glaze. The style is probably copied from Nottinghamshire brown glazed stonewares.

20. Rim fragment of a mug or tankard. Fully glazed.
21. Fragment of a turned over rim. Glazed internally sooted externally.

Creamware

- 33.* Rim fragment of a moulded plate with "feather edge" (Jennings 1987 plate 1) and one other fragment. Creamwares date from c. 1730 to the end of the 18th century.

Staffordshire white salt glazed stoneware

- 34.* Rim fragment of a chamber pot with rolled over rim (Jennings 1987 no. 1627). These wares date from c. 1720 to the late 18th century.

Westerwald type stoneware

A fragment of a handle in light grey salt glazed stoneware with blue staining is probably a 17th century Westerwald ware or a contemporary Rhenish product.

Weser Slipware

One small fragment, probably a dish. A large group of these vessels was recovered at the Black Friars, Newcastle (Harbottle and Fraser 1987).

*Medieval and early post-medieval wares**Local Reduced Greenwares*

Three fragments, which are probably late medieval, are in a buff firing fabric (mid grey when reduced) with fine quartz and iron oxide inclusions. One has internal yellow/green glaze and the others external copper stained glaze. A fragment of a knife-trimmed base in a hard dark grey fabric with very fine quartz inclusions and internal yellow/green glaze could be a 16th century ware.

- 28.* A fragment of a hollow vessel with the base of a handle, is in a hard mid grey (orange/buff in oxidized patches) fabric with abundant fine quartz, similar to late

medieval reduced greenwares from the Hirsell, but fully glazed internally and externally with lustrous green glaze.

- 29.* Fragment of a cup or posset. The same fabric as 28 with rather stiff slip decoration and sooting externally.
- 30.* A jar or jug rim in a similar fabric and glazing to 28 and 29 but with no visible temper.

These three vessels are post-medieval wares, certainly 16th century and possibly not much earlier than the principal period of deposition in the 17th century.

Scarborough ware

One fragment of the bridge spout of a jug of type 1 fabric (Farmer 1979).

Langerwehe stoneware

Fragment of the frilled base of a small drinking mug. External thin iron wash and salt glaze. 15th century (Hurst 1977a).

Martincamp flask

Fragment of a type 1 (earthenware) flask (Hurst 1966, 1977b).






19th century wares

One fragment of blue transfer printed English porcelain and a small fragment, possibly Chinese export porcelain. Fragments of utility white glazed earthenwares and stonewares.

TILES

Fragments of red earthenware pantiles occurred in association with the pottery and pipes. They can be contemporary with the 17th and early 18th century wares. Pantiles have been found at sites in Newcastle of this date (Ellison, Finch, Harbottle 1983) but may be imports from the Netherlands rather than of north-east manufacture.

Table 1.

Pipe no.	Bowl form	Foot form	Stamp type	Stem bore	Mark	Description
5.	T1a?	?		?		incomplete bowl
3.	T2a	round		8/64		
4.	T2b	round		8/64		
1.	T3a	heart	A	8/64		damaged, probably as Black Friars no. 272, John Grayson c. 1653–4 Newcastle.
7.	T3a	round	E	6/64		this type of moulded stamp is not previously recorded on this foot type, possibly a transitional type c. 1675–80.
10.	T3?	heart	B	8/64		possibly Simon Porterhouse of Gateshead 1671 (Parson's list of makers, 1964)
11.	T3a?	heart?		8/64		
12.	T3?	flat				
2.	T3b	heart		8/64		
8.	T3b?	heart?		6/64		RE or RF or RP
15.	?	spur		8/64		late 17th century?
6.	B11c	round		8/64		larger than 11c (Davey 1982) which is dated 1610–40, so possibly later; probably Dutch.
9.	?	oval		6/64		the foot is not flat but roughly rounded; same clay as no. 6.
13.			stem	8/64		the stamp is the same as Black Friars no. 281 (Edwards 1987) and similar to Jan Muur pipes from Amsterdam c. 1640.
14.	B11c?					a bowl fragment possibly the same pipe as 13.
15.	B11e	round		6/64		the 11e pipe (Davey 1982) is marked and dated 1630–50; probably from Amsterdam.
16.	L10	round		8/64		milling absent from most of the rim; 1640–60 (Atkinson/Oswald typology) made from a more cream coloured clay than the possible Dutch pipes.

T Tyneside series

B Berwick catalogue numbers (Davey 1982)

L London series

GLASS

35. Pushed-in base of an apothecary's flask. Blue/green high quality metal. A plug of glass has accidentally stuck inside the base during manufacture. Second half of the 17th century, or later.

CLAY TOBACCO PIPES

Most of the pipes appear to be of Tyneside manufacture, from the middle years of the 17th century (c. 1635 to 1675). They are in fact a very homogeneous group in a cream/white clay with orange/buff external bloom.

A few fragments, representing 4 or 5 pipes, are clearly different: manufactured in a whiter clay with no surface bloom. Most are probably from the Netherlands, of a similar date to the Tyneside pipes (see parallels Davey 1982 p. 95, Edwards 1987). One may be a London pipe.

The bowls and marked fragments are listed in Table 1, and the forms illustrated in Fig. 8. In addition, there were 41 stem fragments. The stem bores of the whole assemblage were: 35 of 8/64; 9 of 6/64; 1 of 4/64.

Atkinson and Oswald (1969, 208) discuss and give examples of the use of stem bore as an indicator of date related to dating based on typology and associated pottery.

A high proportion of bores of 8/64, but no larger bores, would place this group in the second half of the 17th century. The occurrence of one stem bore of 4/64 indicates the presence of early 18th century material. This is consistent with the date range ascribed to the main pottery group (see above).

METAL OBJECTS

Unstratified metal finds included a bronze turner of both Charles I and Charles II, two 18th century military buttons, and a discoidal lead object c. 30 mm in diameter, either a stud or a button, with a roughly pecked cruciform design.

Musket/pistol balls

Eight pieces of lead shot were retrieved, all

from non-stratified contexts. Four ranged between 17.6 mm and 18.6 mm in diameter (and 30.05 and 38.8 gm in weight), the others were 10.1 mm (6.8 gm), 13.0 mm (16.3 gm), 13.6 mm (14.5 gm) and 15.8 mm (20.05 gm). Amongst the Civil War period material from the 17th century bastion at the Castle, Newcastle upon Tyne (Ellison & Harbottle 1983, 205) musket balls averaged 17.0 mm in diameter and pistol balls 12.5 mm.

Acknowledgements

The excavation was carried out by the Newcastle University Archaeological Practice (Managing Archaeologist Colm O'Brien), at the request of English Heritage. The digging team comprised David Fletcher, Peter Ryder (supervisor) and Ian Wood, aided by David Sims who searched the spoil heap with his metal detector, and was responsible for the retrieval of many of the small finds. Mr Francis Cowe has been of great help with his expert knowledge of the Berwick defences, and in assisting my search for obscure references; Graham Fairclough and Ian Stuart (Inspectorate of Ancient Monuments) have also assisted my researches. Thanks are due to the English Heritage staff who provided assistance on site, digging equipment, fencing, shoring etc., the ever-helpful custodial team at Berwick Barracks, and the local police who cheerfully and ably handled the situation when the Cowport had to be closed as collapsing fill turned the portcullis slot into a potential meutriere or murder-hole; the Berwick defences may never have withstood a formal siege, but motorists and pedestrians alike were duly repulsed for an entire afternoon.

Publication of this report has been assisted by a grant from English Heritage.

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