ART. VI - Excavations on the City Defences, Carlisle. By M. R. McCarthy

N September 1979 construction work began for a new County Treasurer's Department on the site of the former County Gaol, Carlisle. Before work commenced it was apparent from boreholes and test pits dug on behalf of the County Architect's Department in the lower gaol yard that the gaol foundations which dated from 1820-27 were very substantial, often exceeding 1.50 m deep. Accordingly, it was decided not to carry out any archaeological investigation of this area beyond a watching brief as it seemed most unlikely that anything but the very deepest features would have survived. Archaeological investigations were confined to the very steep slope which marked the edge of the upper and lower gaol yards and which was believed from map evidence to be the site of the city walls and the former English Gate.

The project was carried out in September and October 1979 by Carlisle Archaeological Unit on behalf of the Department of the Environment, Carlisle City Council and Cumbria County Council. Grateful thanks for permission to carry out the work are due to Cumbria

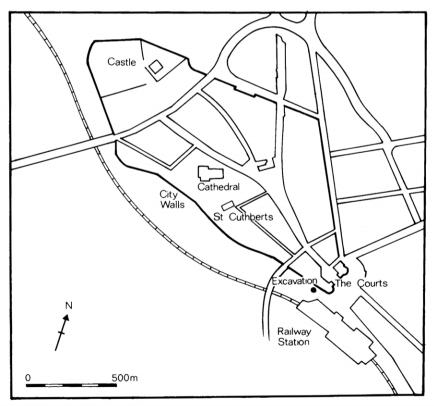


Fig. 1 - Location Plan.

County Council, especially the project architect, Mr S. Creighton and to the construction company, Balfour Beatty Ltd. I am also grateful to Mr D. Perriam, Carlisle Museum and Art Gallery, Mr B. Jones, Cumbria County Archivist, and Dr Henry Summerson, Unit Historian, for help with the documentation. Mrs L. Aiano drew the cell block and Mr A. Strogen prepared the drawings for this report. All the finds and site notes are deposited in Carlisle Museum and Art Gallery.

The Excavation (Fig. 2 & 3)

One cell block originally part of the women's prison remained on the site until August 1979. This was at the bottom of the steep slope separating the upper from the lower gaol yards and was drawn by Mrs L. Aiano for the Unit immediately prior to demolition. The removal of the cell block revealed a substantial, red, sandstone wall (27) battered back to an angle of 34-45 degrees and apparently providing a solid face to the steep slope. Protruding from this wall were two others (25, 31) each with a vertical face and each at an angle of 53 & 63 degrees to wall 27. As walls 25 and 31 were cut by the cell block, known to date from the building of the gaol in 1820, it was thought that together with wall 27 they may all be part of the city defences. Further work, however, showed conclusively that wall 27 and probably 25 and 31 are of nineteenth-century date and were probably intended to revet the unconsolidated rubble left behind on the steep slope after the demolition of the defences and English Gate in 1811. This rubble concealed the few remaining courses of the real city wall, which was located 2 m north-east of the base of the battered wall 27.

Two elements of the defences were located. Firstly, the city wall (33) which consisted of six surviving courses of red, sandstone ashlar blocks, mortared together and based on a single offset course of roughly tooled sandstone blocks which rested on bed-rock. This wall, which displayed twelve mason's marks (Fig. 4) of six types, was battered back to an angle of 75 degrees above the offset. Only the external (southern) face of this wall was exposed so no details of its thickness or construction are available.

Secondly, another wall (20) I 000 m wide and similarly constructed, though on two offset courses, protruded in front of 33 for a distance of I 50 m. This wall was battered back to an angle of 75 degrees above the lowest course and had clearly been cut through wall 33. No mason's marks were observed. The eastern face of 20 was extremely rough, no attempt having been made to square the blocks or to position them correctly. Wall 20 also cut into the steep slope and through 18 and 19, which contained pottery of medieval date. The offset courses and lower few centimetres of both walls were overlaid by 32 which contained eighteenth-century pottery.

Immediately south-east of 20 no trace of further walls were seen. Indeed, bed-rock and undisturbed layers (18, 19) with medieval pottery survived 2.50 m in front of the wall line. Overlying 18 and 19 was a substantial bank, aligned north-east/south-west and seemingly orientated at about 90 degrees to the city wall line. The bank was at least 10.00 m wide at the base but of uncertain height and width at the top as it was cut by three linear features (6, 7, 8). The relationship of these features to the overlying nineteenth-century destruction deposits could not be determined for certainty, due to the presence of a modern sewer trench.

Observation of contractor's sewer trenches, around the perimeter of the gaol yards and up the steep ramp connecting the two, revealed nineteenth-century disturbance to the bottom of the trenches in nearly every instance. The trenches varied in depth from 1·10 m

Fig. 2 - Site plan showing features in relation to the southern (reconstructed) bastion of the Henrician defences.



PLATE - City Wall (33) at rear and Wall 20 projecting forward. Photo: M. R. McCarthy.

in the southern part of the lower gaol yard to 3.00 m on the eastern boundary. Tip lines for layer 2 were seen here but observation was difficult due to the extreme instability of the ground in this area.

Interpretation

Walls 20 and 33 clearly belong to the city defences, the later being the wall itself. It seems reasonable to connect 2 as a possible ramp giving access up the steep slope into the English Gate, the site of which can be inferred from the absence of a wall east of 20. Wall 20 is probably a revetment for the ramp, though such alternative explanations as a barbican wall or the west wall of the gate-tower are possible.

The earliest features are probably layers 9, 18 and 19, all containing medieval pottery. Wall 33 has been cut back into the natural slope and may be inferred as having cut through the medieval levels, though this could not be confirmed. Wall 33 and layers 9, 18, 19 were all cut by wall 20, which is the latest feature identifiable before 32, a deposit accumulating at the base of the walls and 1 the demolition material.

Layer List (Figs. 2, 3.)

The following description of layers describes only those referred to in the report. For the present purposes all those layers which are of undoubted nineteenth-century date are amalgamated as layer 1. A full description of all layers are with the site archive in Carlisle Museum and Art Gallery.

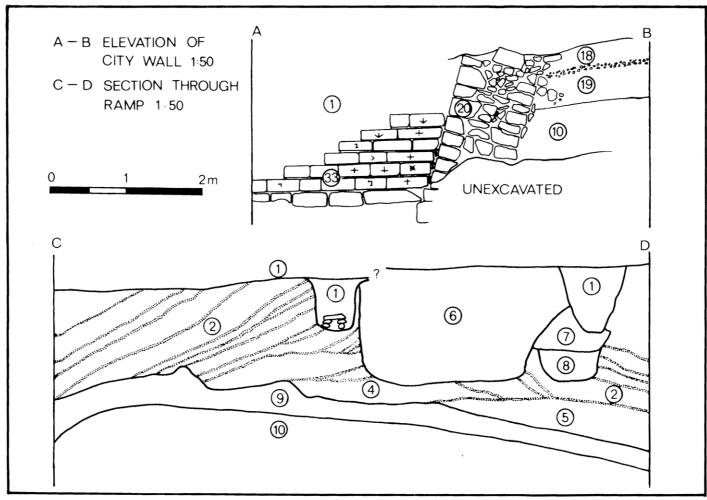


Fig. 3 – Elevation of City Wall and section through Ramp.

Layer No.	Description	Pottery No. Sherds
		and D ate
I	Various, much sandstone rubble, bricks, sewer pipes, ash and mixed soily rubble deposits.	Victorian & later discarded.
2	<i>Tip Lines</i> . Many lenses grey and brown sandy loams with heavy mortar element, some sandstone rubble and heavy clay lumps at base of lines.	ı × Roman
4	as 2 but without the sandstone and clay	$3 \times Roman$
5	as 2 but with exceptionally heavy mortar element - lumps up	
	to 0.05 m across.	
6	? robber trench. Fill essentially of sandstone rubble with lumps of clay, black silty soil on bottom.	$1 \times \text{med}$.
7	?robber trench as 6 but without silty soil.	
8	? robber trench laminated with bands of white mortar and grey coarse sandy loams.	$I \times Roman$
9	Brown silty clay with some pebbles, red sandstone, flecks of carbon.	$3 \times \text{med}$.
IO	Bed rock. Mixed grey-green and pink-brown mottled clay.	
18	Brown, fairly soft, sandy clay loam.	$4 \times \text{med}$.
19	as 9.	$4 \times \text{med}$.
20	<i>Wall.</i> W. Face. Sandstone ashlar blocks up to $0.50 \text{ m} \times 0.25 \text{ m}$	4 × med.
	× 0·15 m.	
	Core. Angular sandstone rubble with voids.	
	E. Face Roughly tooled and some partially worked sand- stone blocks. Size as N. Face.	
	Survived for a distance of 1.50 m west of 33.	
25	Wall. Sandstone wall, uncoursed. Rectangular blocks up to	
	$0.41 \times 0.25 \times 0.08$. Consists of one (northern) face only. Revets rubble of 1.	
27	Wall. Sandstone, uncoursed blocks up to $0.32 \times 0.16 \times 0.10$.	
,	Some re-used blocks with chamfers. Overlies destruction rubble 1.	
31	Wall. As 25 but with one (southern) face. Revets disturbed material possibly of nineteenth-century date.	
32	Grey brown silty clay with mortar flecks.	3 × Roman:
-	- , , , , , , , , , , , , , , , , , , ,	$1 \times \text{med}$:
		20 × 18th century
33	Wall. As 20 but with two courses forming a plinth resting on bed rock.	25 % Total century

Documentation

A considerable number of documents relating to the city defences survive in the Public Record Office and Dr Henry Summerson has examined some at the request of the present writer. Most of those inspected were chiefly concerned with the Castle and the Scotch and Irish Gates. The lack of specific references to the English Gate is probably not significant as a vast amount of material has not yet been examined.

In addition there are six maps, an engraving and a watercolour all showing the English Gate. The maps are dated c. 1542, c. 1560, 1604, 1684, 1749 and 1770-1, the engraving by Buck dates to 1739 and the watercolour by Robert Carlyle dated 1792. The evidence of this material is conveniently summarised under the headings below.

The Gate – Access to Carlisle from the south was altered during the reign of Henry VIII. The original medieval gate in the middle of English Street was incorporated in the Henrician Citadel designed by Stefan von Haschenperg in the 1540's.⁵ From this time entry into the city was by a new gate, later called the English Gate, immediately west of the south bastion of the citadel.

The three earliest maps appear to be consistent in showing the new gate as a simple arched opening with a finial above in the curtain wall. The later maps beginning in 1684 and Carlyle's watercolour all show the gate as a tower. The only discrepancy is between the map of 1684 showing the gate tower projecting forward of the city wall line and the maps of 1749, 1770-1 which show the front of the gate-tower flush with the wall.

The Barbican – An additional outer defensive work, perhaps a barbican, appears on the maps of 1684 and 1770-1 but not on that of 1749 or Buck's engraving of 1739. The 1684 map suggests that the outer defences were fairly substantial, consisting of two arms projecting well forward of the wall, which has no apparent entrance structure on the eastern side.

The Ramp – The only possible visual representation of a ramp giving easy access into the gateway up the steep natural slope is seen in Buck's engraving, which seems to show a mounted rider chasing a figure on foot.

Conclusion

The English Gate appears to have resembled a simple postern from the mid-sixteenth century to a date in the seventeenth century. Modifications to the defences suggested by the maps and consisting of the enlargement of the gate into a tower and the erection of an outer defensive work may date to the Civil War, the Commonwealth or the reign of Charles II. The archaeological evidence sheds no significant light on the history of the fortifications and merely confirms the position of the gate, the walls and ramp. It is possible that wall 33 dates to the sixteenth century and is part of the Haschenperg re-fortification. Wall 20 and the ramp could be equally sixteenth or seventeenth-century.

The medieval levels could not be identified as to function and no trace of Roman deposits survived *in situ* despite the presence of occasional sherds of pottery.

The Pottery (Fig. 4 Nos. 1-10) by J. Taylor.

Apart from small amounts of modern pottery from layer 1 which were discarded, the excavation produced 41 sherds (1070 gms) of pottery from a minimum of 21 vessels.

Roman

All the stratified Roman pottery (8 body sherds) was recovered from medieval or later contexts and included orange/grey sandy fabrics and plain Central Gaulish Samian. A rim fragment from a white mortarium (Gillam 1970, no. 238) was unstratified.

Medieval

13 sherds of medieval pottery were recovered representing a minimum of seven vessels. Although no forms could be distinguished, seven fabrics have been identified, of which five are dateable in general terms. The fabric numbers refer to the pottery fabric series currently being produced by the Carlisle Archaeological Unit.

Fabric 1 (Layer 18, 1 sherd; Layer 32, 1 sherd). A hard and smooth reduced fabric with a patchy, thin, dull green glaze. Falling within the long tradition of northern Reduced Wares this fabric may have been used in Carlisle from c. 1250 (Jarrett and Edwards 1964, 43; Taylor 1980, Fig. 6, 1-4).

Fabric 2, 3 and 6 (Layer 6, 1 sherd; Layer 9 2 sherds; Layer 18, 1 sherd; Layer 19, 3 sherds). These are all lightly gritted reduced fabrics with differing core, margin, and surface colours and usually an all over, dull, light green glaze. Very similar pottery has been recovered in large quantities from a timber-lined well (KLA B 66) during the recent excavations on The Lanes, Carlisle. The well is currently dated by the association of a leather shoe to the fourteenth/fifteenth centuries.

Fabric 27 (Layer 18, 1 sherd; Layer 19, 1 sherd). A hard and coarse yellowish red fabric, usually unglazed. This is an example of Gritty Ware, part of a long northern tradition (Holdsworth 1978, 11) which in Carlisle is probably centred on the early thirteenth century.

Post Medieval

21 sherds of post-medieval pottery were recovered representing a minimum of 10 vessels. Apart from a rim sherd of English Delftware (Fig. 4, 3) found in association with the neck of an early nineteenth-century bottle (Fig. 4, 13) in layer 23, all the post-medieval pottery was recovered from layer 32.

Nottingham Stoneware. Fabric No. 54 (Layer 32, 1 sherd). The two sherds are probably from the same vessel, a jar which is decorated with at least three lines of external rouletting (Fig. 4, 4). Eighteenth-century.

'Yellow Glazed Ware'. Fabric 57 (Layer 32, 2 sherds). This fairly coarse reddish-yellow fabric is represented by two sherds from a deep bowl (Fig. 4, 5) with an all-over yellowish brown glaze. It is probably a Staffordshire product of the late seventeenth/eighteenth century.

Slipwares. Fabric 58 (Layer 32, 1 sherd). This fairly coarse buff fabric is represented by a base sherd with traces of circular moulded decoration and brown slip trailing, which also fills an impressed circular motif (Fig. 4, 2). It is probably a Staffordshire product of the late seventeenth/eighteenth century.

Fabric 59 (Layer 32, 1 sherd). This fairly coarse, light red fabric is represented by a base sherd from a plate (Fig. 4, 1) decorated with an internal white slip but turned yellow beneath the lead glaze. Trailed lines and circles of a dark brown slip are partly overlain by a yellowish red slip. Finally the plate has been 'jewelled' by the placing of spots of the original white slip along the centre of some of the dark brown trailing. It is probably a Staffordshire product of the late seventeenth/early eighteenth century.

'Iron glazed' earthenwares. Fabric 68 (Layer 32, 9 sherds). This is a coarse hard red fabric with a reddish black glaze which is represented by the base of a large storage vessel (Fig. 4, 10), a rim fragment of a jar (Fig. 4, 6), and the remains of a posset pot (?) (Fig. 4, 7).

Fabric 69 (Layer 32, 5 sherds). This fine hard pale brown fabric with a reddish black glaze is represented by the base of a storage (?) vessel (Fig. 4, 9) and the rim of a deep bowl (Fig. 4, 8).

These fabrics are generally similar to two types recently excavated from below the floor of the Old Fort, Whitehaven (Taylor, forthcoming, Fabrics C and E) and dated to c. 1740-70. They are probably local products.

Catalogue of Illustrated Vessels. (Fig. 4)

- 1. Base fragment of a plate. Slipware, fabric 59.
- 2. Base sherd. Slipware, fabric 58.
- 3. Rim fragment of a plate. English Delftware, fabric 55.
- 4. Jar. Nottingham Stoneware, fabric 54.
- 5. Bowl. Yellow Glazed Ware, fabric 57.
- 6. Jar. 'Iron-glazed' Earthenware, fabric 68.
- 7. Posset pot. 'Iron-glazed' Earthenware, fabric 68.

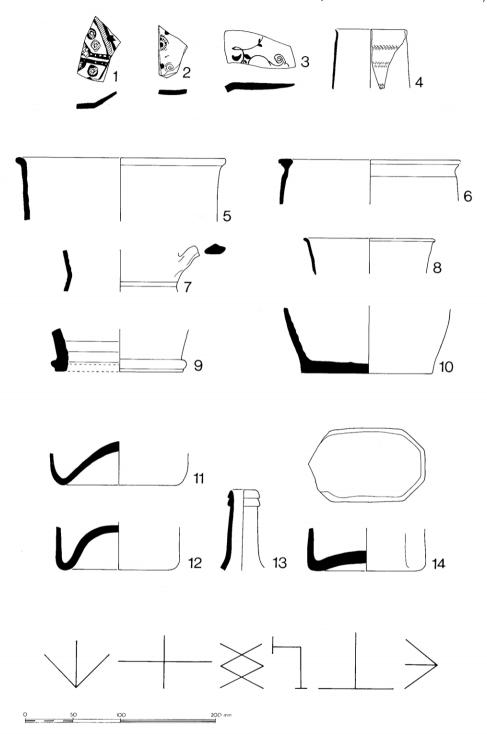


Fig. 4 – Pottery, glass and masons' marks. Scale $\frac{1}{4}$.

- 8. Bowl. 'Iron-glazed' Earthenware, fabric 69.
- 9. Base of a storage vessel. 'Iron-glazed' Earthenware, fabric 69.
- 10. Base of a storage vessel. 'Iron-glazed' Earthenware, fabric 68.

Mason's Marks (Fig. 4) by M. R. McCarthy

The writer has examined the visible stonework of possible sixteenth-century date in the north bastion of the citadel and the half moon battery in the Castle. No marks comparable to those cut on the blocks of Wall 33 were noticed.

Glass (Fig. 4 nos. 11-14) by J. Taylor

The excavation produced 34 fragments of glass. Apart from the neck of an early 19th-century bottle (Fig. 4, 13) from layer 23, all the glass was recovered from layer 32. This included fragments of 18th-century wine bottle bases, of which the main forms distinguished were two variations on a circular base with a slight upkick (Fig. 4, 11, 12) and an elongated octagonal base (Fig. 4, 14).

Fig.

- 11. Base in cloudy green glass. 18th-century.
- 12. As 11
- 13. Neck in clear olive green glass. Early 19th-century.
- 14. Base in cloudy light green glass. 18th-century.

References

- ¹ For a discussion on the Gaol see D. R. Perriam 1978, "The dating of the County Gaol, Carlisle", CW2 lxxviii, 129-140.
- ² This was reported in the *Evening News*, Monday 1st October, 1979. A similar length of walling, also thought to be part of the city walls, was reported in a letter to the *Cumberland News* by John Minns dated 8th December, 1928.
- ³ For a discussion on the demolition see D. R. Perriam, 1976 "The demolition of Carlisle City Walls", CW2 lxxvi, 184-98.
- ⁴ The following documents were read: PRO Class E101/483/17, E101/545/15-18, E351/3199-3201, E351/3204, E351/3213, E351/3606, W049/17-18, W055/1696, SP1/238; map MR 557 (1).
- ⁵ For a discussion on the Henrician fortifications see B. H. St. J. O'Neil 1945, "Stefan von Haschenperg, an Engineer to King Henry VIII, and his Work", *Archaeologia* 91, 137-56.

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