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Excavation at 22 and 23 Joy Street, Barnstaple:
late Medieval to Modern Occupation

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EXCAVATION AT 22 AND 23 JOY STREET, BARNSTAPLE: LATE MEDIEVAL TO MODERN OCCUPATION

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An excavation at 22 and 23 Joy Street, Barnstaple, in the historic core of the town, revealed features of medieval, post-medieval and modern date. Although no Saxon evidence was found, the layout of these features may have its origins in the street system of the late Saxon burh. Most of the medieval and post-medieval features were pits of varying form, the few medieval examples lying close to the street frontage, while the post-medieval pits lay towards the rear of the site. Historic mapping shows the development of the site during the 19th and 20th centuries, and all the wall foundations recorded belong to this period. The recovery, among the mostly domestic waste, of slag, pinner's bones and a piece of bronze-founding mould, confirms the documentary evidence for metalworking on the site.

INTRODUCTION

Evidence for occupation dating from the late medieval period (13th–15th century) onwards was uncovered close to the centre of the historic core of Barnstaple during archaeological works following the demolition of 19th-century buildings at 22 and 23 Joy Street (Fig. 1). The works, which comprised an evaluation followed by archaeological monitoring and recording during groundworks (Wessex Archaeology 2014; 2015), were undertaken as a condition of planning permission being granted by North Devon Council for the building of a retail unit and the conversion of existing buildings within a larger development area.

Following demolition, the site consisted of a rectangular parcel of land of approximately 380 m² centred on NGR 255826 133350. The evaluation involved the excavation of three small trial trenches (Fig. 1). The monitoring and recording was undertaken during the subsequent groundworks. Initially two slots were excavated, at the south-west and north-east corners of the site, with subsequent areas cleared by machine as space became available. The site's long axis, which is reflected in the orientations of much of the archaeology, lies 15° west of north to 15° east of south, but for the purposes of this report it is described as being north–south.

The site is bounded to the south by Joy Street and to the east by a pedestrian route known as Green Lane. The building at 3 Green Lane, to the immediate north of the site, is Grade II listed (List entry number 1385133), and to the remainder of the north and west the site is bounded by the Green Lanes Shopping Centre and by commercial premises fronting onto Joy Street.

Joy Street possibly has its origins in the street system of the late Saxon town, which may have been one of the four Devon *burhs* mentioned in the Burghal Hidage dated to the years before c. 919 (Hill 1969). Indications of long-standing Saxon settlement are provided by the large Saxon cemetery which appears to have been in use immediately prior to the construction of the motte and bailey castle in the 11th century. The importance of the town is indicated by the fact that *Domesday* records a substantial settlement held in 1066 by

King Edward, with forty burgesses living within the borough (North Devon Council 2009). Late Saxon/early medieval remains have been found previously in the vicinity of the site, as at 4–6 Joy Street (Miles 1973) and 27–28 Joy Street (North Devon District Council Rescue Archaeology Unit 1986). The medieval town's eastern defences, marked by the line of Boutport Street, is reflected in the curving line of Green Lane, which originally ran from the north end of High Street to Joy Street.

Prior to their demolition, the premises at 22 Joy Street comprised a three-storey building, with attic, fronting onto Joy Street, with a two-storey range to the rear accessed from Green Lane. From at least the late 19th century until the late 20th century there had been a narrow yard to the west of this range, but this had subsequently been built on at the ground floor level, with a small second-storey extension at its southern end. The premises at 23 Joy Street similarly comprised a three-storey building fronting onto Joy Street, with a single-storey rear extension on the western side of the plot.

The site lies within a relatively flat area of land on the eastern side of the Taw Estuary, at an elevation of approximately 9 m OD. The underlying geology is mapped as Carboniferous and Devonian Mudstones of the Pilton Mudstone Formation, which is overlain by sand, gravel and silt of the Taw River Terrace Deposits (British Geological Survey online viewer).

EXCAVATION RESULTS

The natural geology into which many of the features were cut consisted of a mid-yellowish-brown clay. A number of features were sealed by extensive layers of mid-brown soil from which small quantities of finds were recovered (e.g. layers 695 and 727/744/749/763/784), which was in turn cut by later features. Features were sealed by varying depths of modern made ground.

There was no evidence for Saxon activity from the site, and the only objects pre-dating the medieval period were a piece of struck flint (from medieval ditch 402/619) and a Romano-British pin recovered from modern made-ground.

Medieval

Medieval activity is indicated by the presence of 13th–15th-century pottery, which accounts for over 10% (by weight) of the pottery assemblage from the site; a small proportion of the ceramic tile recovered is also medieval. While some of this material was residual in later features, a small number of features, mostly in the southern half of the site (Fig. 1), may be of medieval date, as may a number that are stratigraphically early but otherwise undated; these are summarised in the Appendix.

A slightly irregular east–west ditch (402/619) was recorded for 8 m near the southern edge of the site. It was up to 0.3 m wide and 0.2 m deep, and its single fill contained eight sherds of medieval pottery, as well as animal bone and a piece of roofing slate, the latter probably intrusive. It was cut by two modern north–south drains (621 and 624), and at its western end by stone-lined drain 401 (see Fig. 3 for modern features). Its line may have been continued towards the east by an unexcavated feature which was cut on the edge of the excavation by the construction trench of modern wall 602 (see below). The base of a sub-rectangular possible posthole (610), 0.25 m wide and 0.1 m deep, which lay just south of the terminal of 402/619, may be associated with it; its single fill contained a medieval sherd.

A number of other possibly medieval features lay in the southern part of the site, in two broad east–west bands. Immediately north of ditch 402/619 (within 2.2 m) were a circular pit (630) and two elongated features aligned north–south (617 and 606, the latter undated). At the west, pit 630 was 1.8–2 m wide and 0.6 m deep with concave sides and a flat base. Four medieval sherds and three pieces of animal bone were recovered from the lower of its two fills; a single post-medieval sherd was possibly intrusive, as the pit was cut by modern drain 624. To its east was a shallow oval feature (617), measuring 1 m by 1.8 m and 0.1 m

deep, which consisted mainly of large pieces of flat stone, and could represent either a dump of building material, or the base of a very truncated wall. Three medieval sherds and a piece of animal bone were recovered from among the stones. On the eastern edge of the excavation was an undated linear feature (606), 2.6 m long, 0.5 m wide and 0.1 m deep, the southern terminal of which lay immediately north of the unexcavated feature on the line of ditch 402/619 (above). It contained small quantities of slag and animal bone.

The second band of features lay approximately 6 m north of ditch 402/619. Pit 638, also cut by the modern drain, was 1.6 m wide and 0.2 m deep with shallow sides and a flat base. Its single fill contained 14 medieval sherds (and a single post-medieval sherd again probably intrusive) and animal bone. To its east was a 1.8 m deep well (628), 1.1 m in diameter with straight vertical sides and a slightly concave base. Its single backfill deposit contained 142 medieval sherds and 52 post-medieval sherds, as well as ceramic building material (CBM), slag and animal bone, suggesting the well filled up over a period spanning the medieval to early post-medieval period. Posthole 641 had a single fill containing three medieval sherds and one possibly intrusive post-medieval sherd, and animal bone. On the eastern side of the excavation there was a shallow scoop (626) extending under wall 602, measuring at least 1.5 m by 2 m and up to 0.2 m deep. Its northern edge was cut by a 0.4 m deep posthole (647) which was cut in turn by post-medieval pit 643 (see below). Neither scoop 626 nor posthole 647 contained any finds.

Three further possible medieval features lay further to the north (at least 14 m from ditch 402/619. Feature 670/683 (Fig. 2), possibly an unlined well, was 1.6 m in diameter and at least 1 m deep (the base was not reached) with near-vertical sides. It had four recorded fills, the



Fig. 2. Central part of the site, viewed from the north-west, showing possible medieval well 670/683, stone-filled feature 657/703, and western end of wall 217/663 extending beyond wall 666 (scales 2 m).

lowest of which (from 0.5 m below the top) contained six sherds of late medieval pottery and animal bone; the overlying fills, which may have accumulated later as the underlying deposits compacted, contained both medieval and post-medieval pottery, as well as a piece of iron, animal bone and oyster shell. To its east was a feature (692) only partially exposed in a slot between later walls (666 and 669, see Fig. 4) containing slag, animal bone, and part of a possible coin, but no pottery. It was sealed by a 0.3 m thick layer of apparently dumped soil (695) which contained a late medieval sherd and animal bone, and which was cut by post-medieval pit 672/696/705 (see below).

One further feature (716), towards the north-west of the site, may also be of medieval date, containing single pieces of medieval pottery and animal bone (and an intrusive piece of modern brick). It was at least 0.5 m wide and 0.14 m deep, although its full dimensions could be determined as it was cut by post-medieval feature 718/720, and possibly also by post-medieval pit 714 (although the latter stratigraphic relationship was unclear).

Post-medieval features

Layer 695, which as noted above sealed possible medieval feature 692, was one of a number of layers separated by later walls and in some cases observed only in section, in the north-eastern quarter of the site. They were cut by post-medieval features and may all have been of broadly similar date. Layer 695 is likely to be the same as layer 784, recorded to the north, south and north of walls 778 and 776. Layer 784, in turn may be equivalent to layer 749 which either sealed, or was the upper fill of, a large post-medieval pit (747), but was cut by another (750). Layer 727, to the north of wall 737 (Fig. 4), may also be associated, as may layer 763 to the west of wall 743. Together these layers produced seven medieval sherds, nine post-medieval sherds, and small quantities of CBM, slag and animal bone. It is possible that they represent a build-up of soil and waste in the earlier part of the post-medieval period.

Most of the post-medieval features, which included pits of varying size and other features of uncertain function, lay in the northern half of the site (summarised in the Appendix). Only one, (614), a large oval pit in the south-east corner of the site, lay close to the Joy Street frontage, and its size suggests that it pre-dated any street-front building. It had steep to vertical sides curving to a flat base, and its single fill contained medieval and post-medieval pottery (the latter of early post-medieval date), animal bone, marine shells (limpet, cockle, oyster), as well as a piece of painted wooden moulding (probably intrusive). Its northern end was cut by the foundation trench for wall 109/603, and its western edge was cut by a short linear feature (612) (2.4 m by 0.3 m and 0.1 m deep) with a dark ashy fill containing small quantities of slag and post-medieval pottery. When fully infilled, pit 614 was cut by a sinuous stone-lined drain (116) running to the south (Fig. 4).

Only two other post-medieval pits were recorded within 13 m of the Joy Street frontage. Pit 633, which was 0.5 m deep with moderately steep sides and convex base, had two fills containing medieval and post-medieval pottery, CBM, slag, animal bone and oyster and limpet shell; it was cut on its western side by a shallow undated feature (636). A large irregular feature (643), only partly exposed on the eastern side of the excavation, was at least 0.9 m deep, its single fill producing one post-medieval sherd, an iron nail and a small quantity of animal bone.

In contrast, there appeared to be a much higher density of post-medieval features in the northern half of the excavation, many of them intercutting, indicating relatively intense activity in this area. This probably reflects the fact that once buildings had been put up along the street frontage, the area to their rear would have remained open ground. The full extent of some of these features was not established, some of them being visible only in section or in plan in narrow excavation slots. Most of the features fall within the site's north-eastern quadrant (corresponding to the rear of 22 Joy Street), while a smaller number of generally shallow and less regular large features lay in the rear of 23 Joy Street.

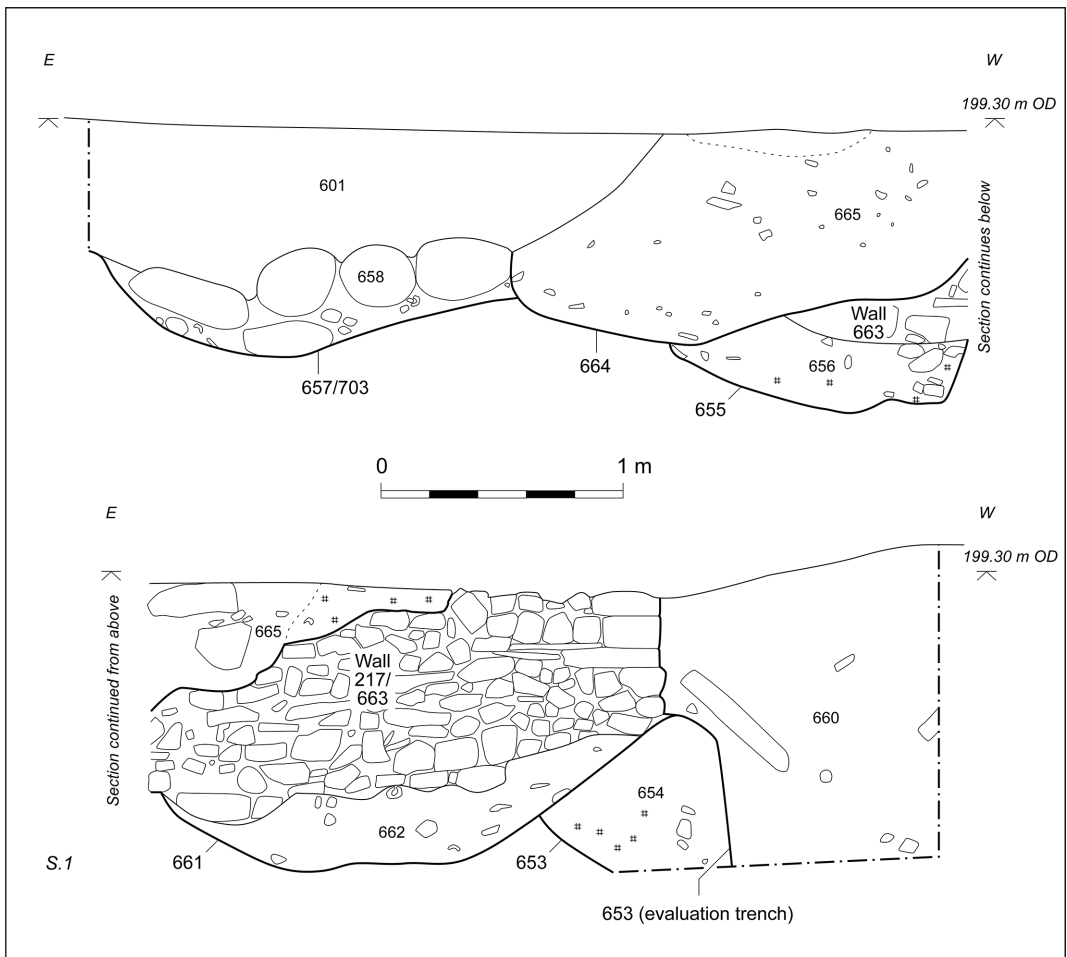


Fig. 3. South-facing section showing feature 657/703 and wall 217/663.

Where stratigraphical relationships were observed between pits and walls the pits were all earlier (Fig. 2). The pits varied considerably in their size and depth, and shape and profile. Some were wide and relatively shallow hollows, rather than having been dug as obvious pits. Most were recorded as having single fills, although occasionally up to four fills were recorded. They contained varying quantities of a generally small range of materials, some of which, as indicated by the frequent presence of medieval pottery, were residual. Most features contained pottery and animal bone, with smaller numbers containing marine shell, CBM, slag, clay tobacco pipe and stone; a small number of iron, copper alloy and lead objects were also recovered.

Among the few features in the western half of the site (23 Joy Street) there was a cluster of three shallow irregular features towards the north, the two larger of which (714 and 718/720, Fig. 1) contained large amounts of mudstone rubble. Features 718/720 and 722 also contained significant quantities of domestic waste (pottery, animal bone and shell) as well as other materials suggesting industrial activity, including slag and, from pit 722, a pinner's bone (used for the manufacture of pins).

One irregular feature (657/703), at least 1.4 m wide and 2.2 m long, was filled with large

water-rounded stones (Figs 2 and 3). It was aligned approximately north–south, and lay on the line of the boundary between 22 and 23 Joy Street. In section at its southern end the cut had a concave profile, with one large stone in the base and a line of four forming a possible ‘course’, 1.3 m wide, above. The feature appeared to have been truncated at this point, with the stones being overlain by modern made ground. However, in a small slot just to the north, in which the base of the feature was not reached, at least three ‘courses’ of rounded stones were visible, interspersed with smaller pieces of mudstone. It is far from clear whether these stones had a structural function or had simply been dumped. As a building material they are quite distinct from the mudstone blocks used in most of the walls, although similar rounded stones were used in the foundations of the passage leading from Green Lane (see below). In addition, feature 657/703 contained 24 medieval and 124 post-medieval sherds, along with iron, slag, a bronze-founding mould for a vessel or possibly a small bell, CBM, animal bone, shell and another pinner’s bone.

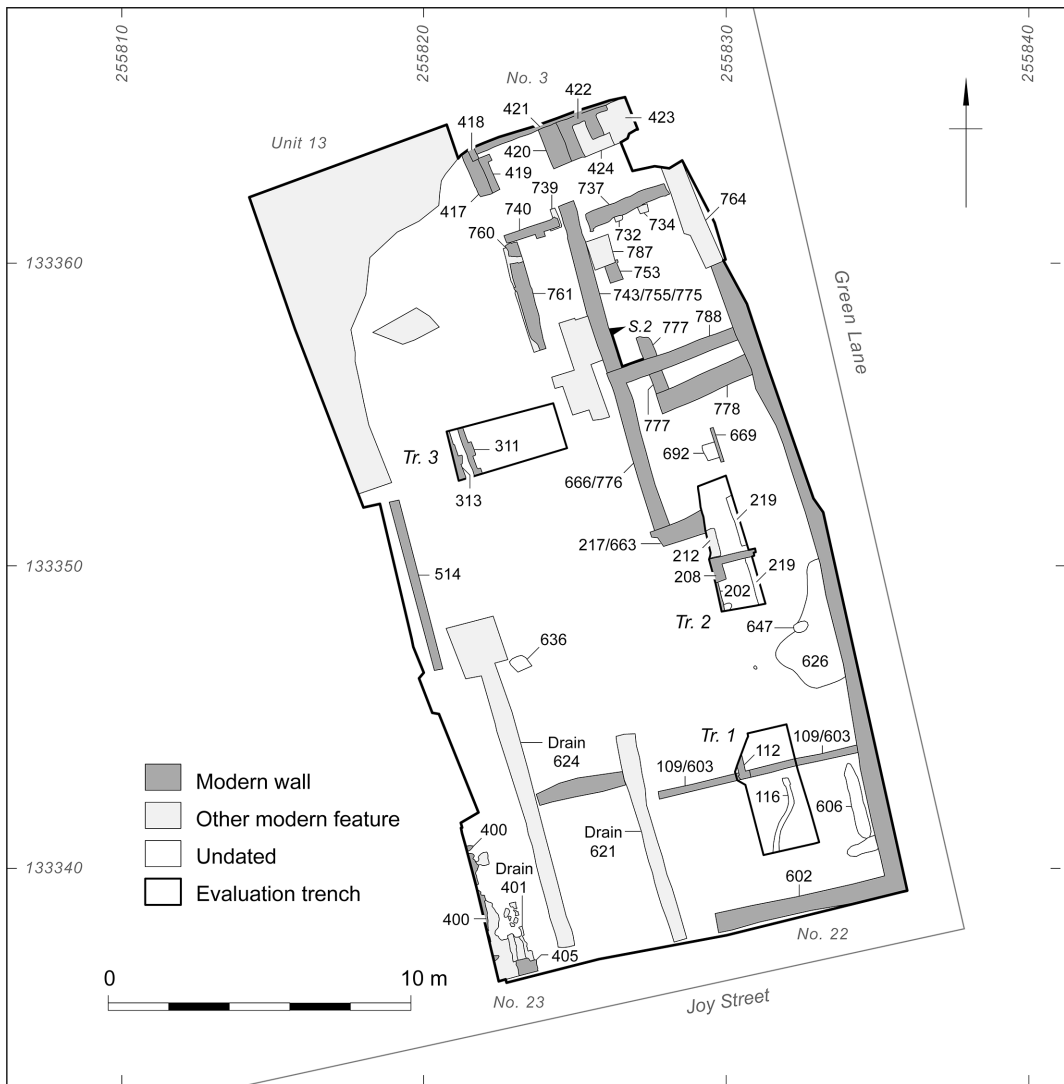


Fig. 4. Plan of modern features.

Modern features

An array of truncated stone and brick walls was recorded across the site (Fig. 4), all of them aligned either north–south or east–west, and many of them corresponding closely to the walls of the buildings of 22–23 Joy Street as depicted on the 1889 OS 1:500 Town Plan (Fig. 5). Only some of their construction trenches were identified.

The date and extent of the original buildings on the site is not known, although the earliest map, a lithograph in Gribble's 1830 *Memorials of Barnstaple*, shows that by that date there was a row of buildings fronting onto the full length of Joy Street at the southern limit of the site, but apparently not extending northwards along the western side of Green Lane. While the individual properties are not indicated on the 1830 map, John Wood's town plan of 1843 shows that from at least that date the site has comprised two adjacent properties.

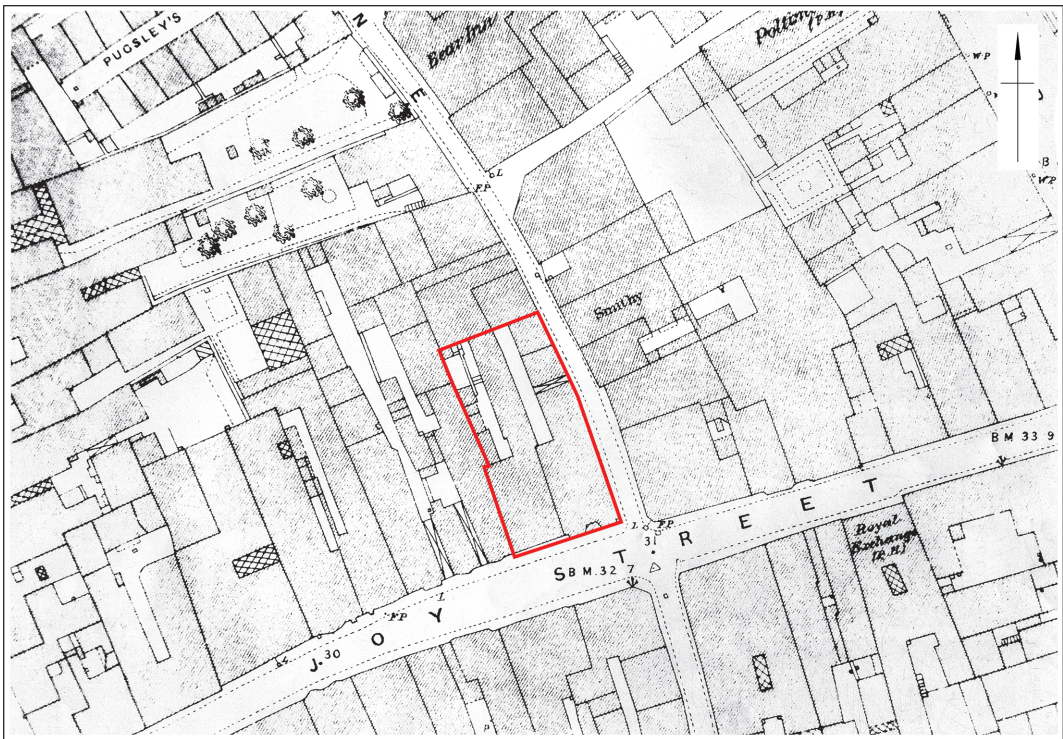


Fig. 5. 1889 Ordnance Survey 1:500 Town Plan.

22 Joy Street frontage

Wall 602 marks the property's southern and eastern boundary, although it is clear from its variable construction that it represents more than one phase of building. Along the Joy Street frontage and the southern end of Green Lane, it comprised at least three courses of large and neatly laid undressed sandstone blocks with small stones in between. On Green Lane this followed a straight line for 13 m, at a right angle to the Joy Street frontage, before angling very slightly towards the west, this point marking the rear wall of the three-storey Joy Street building prior to its demolition. It also corresponds approximately to the rear of the row of buildings on Joy Street as depicted on the 1830 map, although it is unclear



Fig. 6. Brick wall 208, flagstone surface 212, and eastern end of wall 217/663, viewed from the east in evaluation trench 2 (scale 2 m).

how accurate that map was. To the north of this point the wall continued to turn marginally westward, the slightly curving line of Green Lane reflecting that of the medieval town wall, 28 m to the east (now followed by the line of Boutport Street).

The western wall of the 22 Joy Street building, as indicated on the 1843 and later maps, had been completely removed during demolition and ground clearance. The precise position of the 1830 rear wall is also unclear. It is not shown on the 1843 map (which shows the whole of the plot built up), and the 1889 OS map shows only the rear of the 1889 building at the southern end of the narrow yard to the rear; whether this matched the original line is uncertain, given that there may have been substantial rebuilding in the interim. The line of the pre-demolition rear wall was represented by a relatively insubstantial brick wall (208) recorded only in evaluation trench 2 (Figs 4 and 6). This extended east from a 0.8 m wide block of brickwork on the western side of the trench, from which another narrow wall (202) extended to the south; these brick walls were also removed during ground clearance and no further recording undertaken. It is possible that the block of brickwork, of which seven courses survived, marked the western side of a doorway in the rear wall; if the doorway had been over 1 m wide the evaluation trench would have been too narrow for its opposite side to be exposed.

However, another possible candidate for the rear wall of the 1830 building is an east-west stone wall (217/663), 1 m to the north of wall 208, and much more substantial in construction (Figs 3, 5 and 6). It was 0.8 m wide and over 0.9 m high and cut into the fills of post-medieval pits 653, 665 and 661. Only 2 m of wall was recorded, however; the squared

face at its eastern end was on the same line as the block of brickwork to its south, and so could also mark the western side of a doorway, but there was no evidence of it further to the east, or joining wall 602. However, at its western end, where it had been truncated, it is clear that it continued beyond the western face of the wall marking the eastern side of the narrow yard, raising the possibility that it had continued on to the western edge of the plot (Fig. 2).

A number of internal walls were recorded within the footprint of the building fronting 22 Joy Street. A narrow brick wall (109/603) spanning its full width marked the rear wall of a front room 4.2 m deep (Fig. 4). A similar wall (112) in evaluation trench 1 suggests that there had been at least two rooms to the rear, 3.8 m wide at the east and 2.7 m wide at the west, although wall 112 did not align exactly with wall 202 further to the north, suggesting that the layout of the rear part of the building may have been more complex.

22 Joy Street, Green Lane frontage

The 1830 map shows the rear part of this property to be open, while the 1843 map shows it to be entirely built over. Both maps, however, lack the significant detail of the 1889 OS map (Fig. 5), it is unclear how accurate their portrayals are of the buildings in this part of the site. The 1889 map shows buildings occupying all but a narrow yard along the western side of the property, accessed via a passage from Green Lane. The passage would have divided these rear buildings into two parts, at least at ground floor level, the part to the south shown as a rear extension to the Joy Street building, the part to the north shown as two buildings, the northern of which abutted 3 Green Lane. Because of the slight curvature of Green Lane, these rear buildings, the western side of which was represented by walls 666/776, 743/755/775 and 420, was wider at the south (4.4 m) than at the north (3 m).

If wall 217/663 does represent the rear of the original Joy Street building, it had certainly been replaced by 1889, and the 1 m wide gap between it and brick wall 208 was filled with the mortar and stone foundation (213) for a flagstone surface (212) (Fig. 6), possibly a short passage leading into the southern end of the yard.

Wall 602, on the eastern side of the property, was not recorded in detail along its full length, but there was considerable variation in its character. The neatly laid sandstone blocks noted around the south-east corner contrast with more random courses of smaller stones used further north, although the point of change was not identified. It may be significant that the stonework in wall 217/663 was closer in character to the northern part of wall 602 than to its southern part. Towards the northern end of the site wall 602 had been completely robbed of stone (cut 764). Also, its junction with the southern wall of 3 Green Lane lay just outside the excavation area.

The western side of the range of buildings along Green Lane was represented at the south by wall 666/776, the southern end of which appeared to be bonded into the northern face of wall 217/663. Wall 666/776, built of mixed stone and brick, was 0.5 m wide at ground level, with foundations 0.75 m wide, and with a total surviving height of at least 1.5 m where it cut through the fills of post-medieval pit 672/696/705. It ran north for 5 m before appearing to turn east for at least 0.7 m, where it was aligned on the foundation (788) for the northern side of the passage from Green Lane. The precise relationship between this wall and the passage walls was not established, the southern passage wall (778) appearing to have been truncated at its western end.

The foundations for the two passage walls were of very different construction to any of the other walls, consisting of large water-rounded stones (similar to those in feature 657/703) (Fig. 7). Wall 778 was 0.7 m wide, and at the west was recorded to within 1 m of wall 666/776. Wall 788 was 0.5 m wide and intersected at the west with a truncated wall comprising a single course of rough stonework (777), 2 m long north-south, which appeared to be cut by wall 778.

The northward line of wall 666/776 was continued, north of the passage, by wall



Fig. 7. Rounded stones in foundations 778 and 788 for walls of passage leading from Green Lane, viewed from the north (scale 0.50 m).

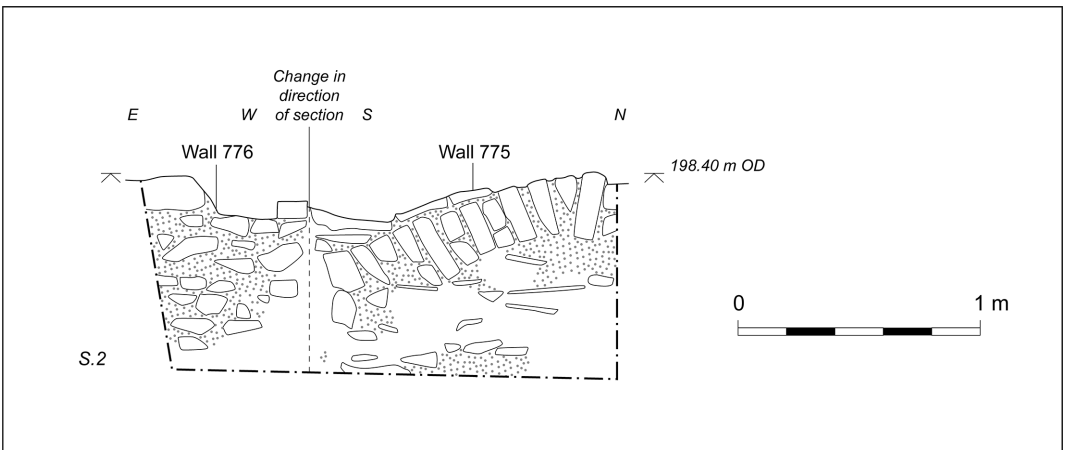


Fig. 8. East-facing section of collapsed walling in pit 768/771 used as foundation for wall 775.

743/755/775, the southern end of which was built into the fills of post-medieval pit 768/771 (Figs 1 and 4). The 1 m length of it exposed when the pit was excavated showed that the foundation incorporated, above its lower levels, a section of what appeared to be collapsed brick walling, comprising a slightly curving horizontal stack of fallen brickwork, above which a number of horizontal slabs had been laid down for levelling purposes (Fig. 8). The pit was not fully excavated, but the foundation was exposed to a depth of at least 0.7 m. Further north, in a slot excavated across the full width of the plot, the foundation was recorded to a depth of at least 0.8 m below ground level, cutting into the fill of post-medieval pit 745.

In the excavated slot at the northern edge of the site, the line of this wall appeared to be continued by wall 420. It is noted, however, that none of the north–south walls exposed in this slot are precisely aligned on those to the south, although it is unclear whether this is the result of a surveying error, or to some realignment of the walls within the 1.2–1.7 m wide unexcavated strip south of the slot.

Wall 420 was 0.5 m wide and comprised three irregular courses of large stone blocks, overlying 0.2 m of dark soil, possibly the fill of a shallow pit. It abutted the foundation (421) of the southern wall of 3 Green Lane, which was of mortared flint, and exposed to a depth of 1.2 m, sloping outwards towards its base. Against the eastern face of wall 420 was a brick wall (422) which turned east and lay against the foundation of wall 421, with a short



Fig. 9. Sloping stone foundation of wall 421 on the south side of 3 Green Lane, with brick walls 419 (to rear) built clear of the foundation and wall 422 (centre) bonded to it, viewed from the east (scale 1 m).

Fig. 10. Stone wall 417, with brick facings 418 and 419, viewed from the south (scale 0.50 m).



southward return laid over a flagstone floor (424) (Fig. 9). To the east, the flagstone floor was covered by a 0.2 m thick deposit of hard mortar (423) only partly excavated.

The wall on the western side of the narrow yard, forming the boundary between 22 and 23 Joy Street, had been largely removed during demolition (as it had been further south) (Fig. 4), although as noted above feature 657/703 (post-medieval), containing the water-rounded stones, lay on the boundary. However, two short lengths of wall (761 and 417) survived towards the northern end of the boundary, both comprising random courses of mortared stone. Wall 761 (in cut 760) was 0.4–0.5 m wide and survived to a maximum height of 0.2 m, and had been cut at its northern end for the insertion of a later east–west brick wall (740, see below). Its possible northward continuation, as wall 417 (again apparently slightly misaligned), joined the southern wall (421) of 3 Green Lane. However, the depth of wall 417, and nature of the join with wall 421, were obscured by the later re-facing with brick (418) of its eastern face at the point of junction (Fig. 10); the western side of the junction was not fully exposed. Subsequently, a later facing of brick (419), one stretcher wide and over 1 m deep was added to the eastern side of wall 417, turning to east for 0.35 m at its northern end; its base abutted the base of the sloping foundation of wall 421, but was not bonded to it, leaving a narrow gap above where the foundation sloped backwards (Fig. 9).

There were a number of internal walls within the rear part of the property. Prior to demolition there was a single room at ground floor level north of the passage, although on the 1889 map this was shown as divided into two equal parts. This division may be represented by an east–west stone wall (737), although this would have created a larger southern room and a smaller northern one. The wall was 0.4 m wide and at least 0.4 m deep, and at its eastern end it was truncated by robber trench 764. At the west it appeared to turn stop 0.2 m from wall 742/754, then turn the south where it had been cut by a later feature, probably the construction cut for a modern rectangular brick shaft (787). This southward turn lined up with a short length of wall (753), 0.7 m long, 1.2 m to the south, suggesting a possible doorway in an earlier wall line. The truncated wall 777, apparently cut by passage wall 788, is also on the same line and so could be related.

If walls 753 and 777 and the southern turn of wall 737 do represent an earlier wall line, it would have lain near the central north–south axis of the plot, creating spaces of approximately equal width on either side. This could indicate that the entire rear of the property was built on, as suggested by the 1843 map. Alternatively, it is possible that only the eastern side was built up, in which case the building that these walls defined, would have been of regular rectangular shape, 2.7 m wide along its full length, rather than narrowing to the north as seen in the later (but wider) building.

Two small subsquare features (732 and 734) abutted the southern face of wall 737. They were 0.2 m wide and 0.2 m deep, with vertical sides and flat bases. Each had a very stained reddish brown sandy fill, which in feature 732 also had a narrow darker cone of material at



Fig. 11. Wall 400, with adjacent cobbled surface and stone-lined drain 401, viewed from the north (scale 1 m).

its centre. Their function is unclear, but may have been related to some industrial activity in this building.

A short length of north–south brick wall (669) was recorded south of the passage, which lines up with an undated cut (219) noted in evaluation trench 2.

A short brick wall (740) spanned the narrow yard at its northern end, on approximately the same line as wall 737. It may be related to the brick facing (419) on the eastern side of wall 417. It does not correspond to any of the walls extant prior to demolition.

23 Joy Street

Much less survived of the former buildings within the property of 23 Joy Street. The 1830 map shows its Joy Street frontage as a continuation of the adjacent properties, while the 1843 map shows building to have been extended northwards to fill approximately two-thirds of the property, with a small open yard at the rear. By 1889, however, the layout was similar to that of 22 Joy Street, with a narrow range extending from the rear of the Joy Street building along the full length of the property's eastern side, and with a series of very small structures, possibly stores or outhouses, along its western side and northern end, and a narrow open space down the centre.

At the south-west corner, walls 400 and 405 represent its western and southern sides, respectively (Fig. 11). Further north, the western side was continued by a drystone wall (514). Wall 400 appeared to be flanked to the east by rough stone cobbling, down the eastern side of which was a shallow stone-lined drain (401). It is possible that the cobbling marked a passage leading back from Joy Street (not shown on any map), giving access to the area behind the front building.

An east–west wall, surveyed but not further recorded, probably marks the rear wall of the front room, slightly further to the north than the corresponding wall (109/603) in 22 Joy Street. The only other walls in this property (north–south brick walls 311 and 313) were recorded in evaluation trench 3; it is unclear what they represent.

A brick-lined drain (621) was recorded for 7 m running north from the southern edge of excavation, probably close to the eastern edge of 23 Joy Street. It was 0.5 m wide and 0.2 m deep, its sides surviving as single courses of bricks (622) with the capping stones missing. The bricks were laid flat on the west side and on edge on the east side, leaving a channel up to 0.3 m wide. One sherd of post-medieval pottery was recovered from 621.

Also within the western property was the cut (624) for a ceramic drain. It was recorded for 11.3 m, and was 0.6 m wide and at least 0.25 m deep. It cut medieval pits 630 and 638, and had a 1.6 m wide square cut at its northern end. The single fill around the pipe produced no finds.

FINDS

Pottery by Lorraine Mephram

The pottery assemblage amounts to 1583 sherds, weighing 36.603 kg, and includes material of medieval and post-medieval date, although a high proportion of the medieval sherds were found as redeposited sherds in post-medieval contexts. This is likely to have had an effect on the condition of the medieval sherds, which are considerably more fragmented than the post-medieval sherds, although it should be noted that the medieval sherds are generally from smaller, thinner-walled vessels, and in more friable fabrics than the post-medieval sherds. Mean sherd weight for the medieval assemblage is 9.9 g, and for the post-medieval assemblage 27.4 g.

The assemblage has been analysed to nationally recommended standards (Medieval Pottery Research Group 2001) and following the standard Wessex Archaeology recording system for pottery (Morris 1994). Fabrics and vessel forms have been correlated where possible to local and regional type series. Table 1 gives the quantified breakdown of the assemblage by ware type, while Table 2 presents a correlation of vessel form to ware type.

Description	No. sherds	Weight (g)
North Devon coarseware (NDCW)	310	2828
North Devon slate-tempered coarseware (NDSLW)	53	736
Sandy wares	26	289
<i>Sub-total medieval</i>	389	3853
Imported whitewares	9	53
Redwares, source unspec	11	361
North Devon gravel-tempered ware	406	14,358
North Devon gravel-free redware	232	5264
North Deon gravel-free calcareous redware	492	11,835
Merida-type wares	4	86
Staffs-/Bristol-type slipware	3	48
Beauvais sgraffito	4	53
Tinglazed earthenware	4	97
Refined whiteware	5	34
Creamware	2	19
Pearlware	4	103
Raeren stoneware	7	229
Frechen stoneware	5	61
English stoneware	6	149
<i>Sub-total post-medieval</i>	1194	32,750
Overall total	1583	36,603

Table 1. Pottery totals by ware type.

Ware type	Bowl	Cup	Dish	Jar	Jug	Total
Redwares, non-local	-	-	-	1	1	2
N Devon gravel-tempered	46	-	17	4	11	78
N Devon gravel-free redware	5	1	2	7	10	25
N Devon calcareous gravel-free redware	5	-	3	18	19	45
Beauvais sgraffito	-	-	1	-	-	1
Raeren stoneware	-	-	-	-	1	1
Frechen stoneware	-	-	-	-	1	1
Total	56	1	23	30	43	153

Table 2. Vessel form by ware type (based on rim sherds).

Medieval

The overwhelming majority of the medieval assemblage comprises coarsewares, with just one sherd of finer glazed ware. Earlier work on medieval pottery from the town identified only two coarseware types, one containing angular grains, and one sandy (Markuson 1980, fabrics A and B), the former equating to a type defined as North Devon coarseware (e.g. Allan and Perry 1982, fabric 1), and assumed, from the evidence of wasters, to have been made in Barnstaple. More recent analysis on assemblages such as that from Launceston Castle, combined with petrographic analysis, has revealed a more complex picture, and it is apparent that a number of different types were in use. Amongst the current assemblage, North Devon coarseware (NDCW) is indeed predominant (73% of the medieval total by sherd weight), but North Devon slate-tempered ware (NDSLW) is also well represented (19% of the total). Sandy wares are scarcer; the majority contain calcareous inclusions.

NDCW and NDSLW are used predominantly for jars, often with a slightly dished or lid-seated profile (Fig. 12, nos 1–2), with a very few glazed jugs; while the sandy wares were used mainly for glazed jugs, with one jars. No bowls or dishes were recorded in either fabric group. Decoration is sparse: there is one coarseware sherd with an applied strip, one with scored lattice decoration, and one, or possible two, jars with stabbed dots just below the rim, while one of the sandy ware sherds bears applied slip decoration.

Following the dating suggested for the pottery from earlier excavations in nearby Bull Court, a date range of 13th to 15th century is suggested for the medieval assemblage, although the coarsewares, in particular, do not lend themselves to particularly close dating. Apart from the local wares, the only other wares represented are one small body sherd from a glazed jug of unknown (probably regional) source, and one sherd of Saintonge monochrome green-glazed ware.

Most of the medieval pottery from the site came from a single feature, well 628, which produced 194 sherds (all from a single fill), 142 of which comprise medieval coarsewares, a mixture of NDCW and NDSLW. The remaining 52 sherds from the well comprise post-medieval calcareous redwares and a handful of non-local redwares, suggesting either that the well filled up over a period spanning the medieval to early post-medieval period, or that the well assemblage is transitional, dating around the 15th or 16th centuries. While no other features could be categorically dated as medieval, a few produced only medieval sherds (albeit in very small quantities), and the remaining medieval sherds occurred residually in post-medieval features.

Post-medieval

Coarse redwares dominate the post-medieval assemblage. Nearly all are likely to be locally produced, i.e. North Devon wares, although some could come from further afield, e.g. south Somerset. They can be divided into two main groups: gravel-tempered and gravel-free, and include both glazed and unglazed wares. Vessel forms have been correlated as far as possible with the regional type series (Allan *et al.* 2005, figs 17–18), but there is clearly some variation in the rim forms, and a few forms could not be paralleled in the type series, perhaps for chronological reasons.

The gravel-tempered redwares are used predominantly for bowls of various sizes (and presumably fulfilling a number of domestic functions, e.g. as cream pans or washing pans), but with an emphasis on larger examples (Figs 12, 13, nos 3–8, 14). There is a small group of shallow, straight-sided, subrectangular dishes, presumably baking dishes (type 13), including both internally glazed and unglazed examples (Fig. 13, nos 15–16; see Allan *et al.* 2007, fig. 14, no. 221). Jars are comparatively few, although there are two examples of particularly small jars (type 22). There is also at least one base from a ‘tall jar’ (type 10), and some of the jar rims may also belong to vessels of this form (Allan *et al.* 2007, fig. 13, nos 206–10), but there are no whole profiles. There are a few jugs, pipkins (Fig. 13, no. 9), and possible porringers. A group of unglazed sherds, largely from pit 696, appear to belong to straight-

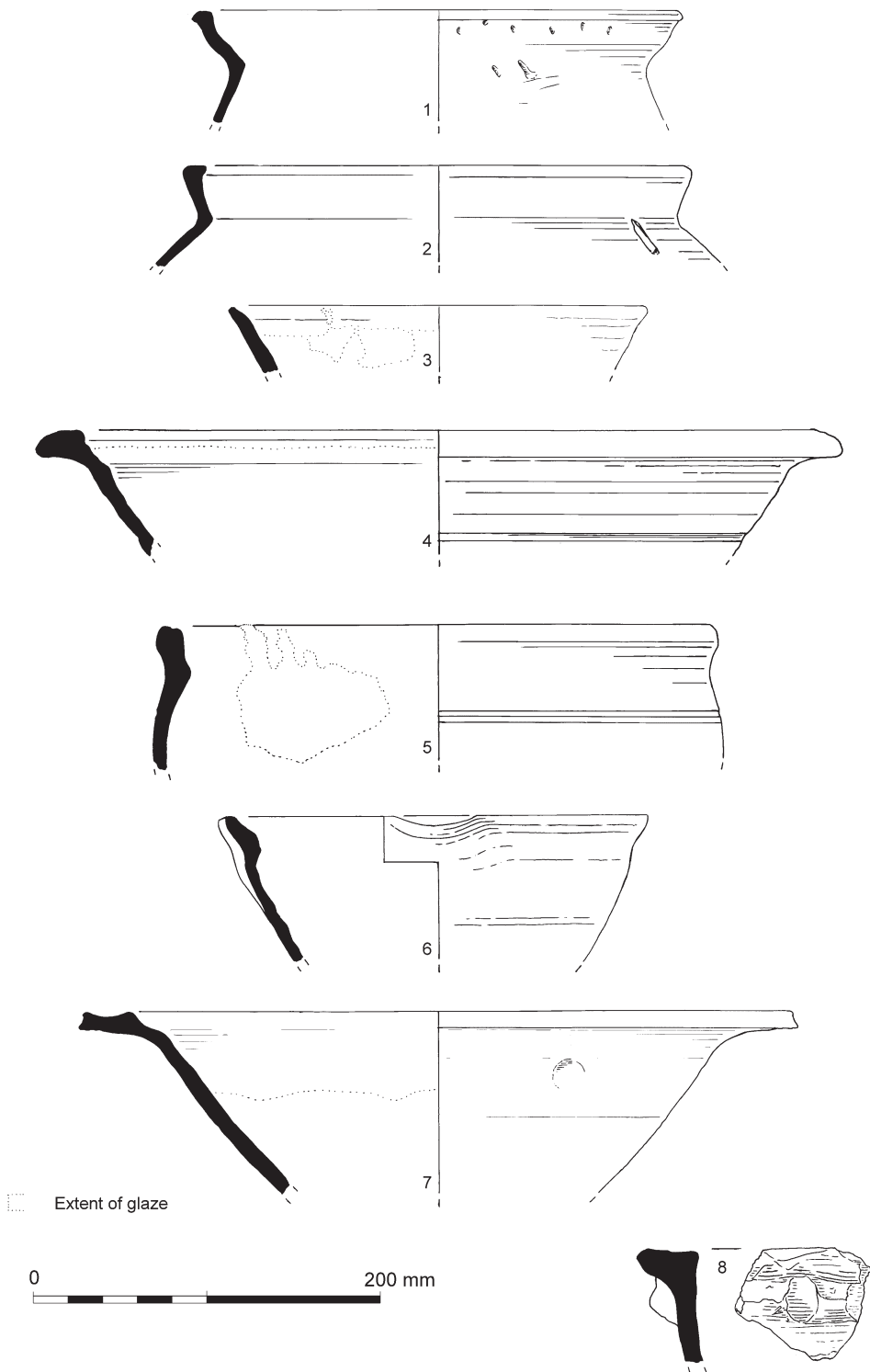


Fig. 12. Medieval (1-2) and post-medieval pottery (3-8).

sided vessels with small pre-firing perforations in the walls and/or bases (Fig. 12, no. 18); their overall form and function is unknown, and no parallel has been found.

Open forms are less common in the gravel-free wares, which are more commonly seen here in jug and jar forms (Fig. 13, nos 11–13). There are also two candlesticks (Fig. 13, no. 19), a small, flanged bowl or cup (Fig. 13, no. 17), a bung-hole spout, and a base from a possible chafing dish. Two jugs with twisted handles are more likely to be South Somerset products (Allan 1984, fig. 64, type 2B), as is a bucket-handled jar (*ibid.*, fig. 65, type 12). The close connection between the production of both gravel-tempered and gravel-free wares is demonstrated by the presence of applied gravel-tempered neck cordons on two gravel-free jars (Fig. 13, no. 10).

In both gravel-tempered and gravel-free wares, a few unglazed sherds carry white slip-painted decoration, and a small proportion are white-slipped under the glaze, but what are notably absent here are the sgraffito wares which are so characteristic of the North Devon kilns in the 17th and 18th centuries.

The North Devon coarsewares have a lengthy currency through the post-medieval period, but there are chronological clues here. First, the presence here of calcareous wares amongst the gravel-free group (approximately 65% by sherd count of the total gravel-free redware assemblage from the site) suggests a focus in the early post-medieval period – these calcareous wares are characteristic of the 16th and early 17th centuries, and seem to have gone out of production by the mid-17th century (Allan *et al.* 2005, 172; Allan *et al.* 2007, 148). This date is supported by the apparent absence of sgraffito wares, produced at Barnstaple, Bideford, Great Torrington and several of the surrounding villages from the early 17th century; the evidence suggests that production of these wares began *c.* 1620 (Allan 1981, 132).

Although locally-produced sgraffito wares are apparently absent, their imported predecessors are represented here by four sherds of Beauvais ware, two of single sgraffito and two of double sgraffito, all from bowls or dishes. It is suggested that these wares acted as a stimulus to the North Devon industry, either through copying of decorative styles and techniques by local potters, or through the direct input of immigrant potters (Grant 2005, 39). Beauvais sgraffito ware is generally dated to the 16th century, although it appears in some early 17th-century contexts in south-west England, such as Plymouth and Totnes (Hurst *et al.* 1986, 108–14; Allan and Barber 1992, fig. 3, no. 15; note 30).

A few sherds of Raeren stoneware belong to the late 15th or 16th century. One vessel can be dated more closely: this is a jug from pit 722, with an applied moulded body-frieze of peasant scenes (Fig. 14, no. 20). Below the figures (two sets of dancing couples are shown on this fragment) is an inscription, which is only partly legible (... VERDANBDI ... RM ... [?LRINK]...). Panel jugs such as these were developed in 1576 and became a characteristic feature of Raeren jugs during the last quarter of the 16th century. A close parallel in the British Museum is dated 1576; another in the Museum Boymans-van Beuningen is dated 1598 (Gaimster 1997, 239–40; cat. 92; Hurst *et al.* 1986, 202–3, fig. 97.314). The scenes are based on a series of engravings published in 1546/7.

Some sherds of tinglazed earthenwares could also date to the 16th century and could include imports, but the remainder of the wares present date to the 17th century or later. These include Frechen stonewares, Staffordshire-/Bristol-type feathered slipwares, porcelain and creamware. There are four sherds in visibly micaceous redwares, falling within the group usually termed ‘Merida-type ware’, although it is now recognised that this group can also encompass coarsewares made elsewhere on the Iberian peninsula (Gerrard *et al.* 1995, 288). Diagnostic sherds here include a rim from a large bowl (pit 718). The ware was imported from the 13th century onwards, but a wide range of forms became common in the 16th and 17th centuries, and it is likely that these sherds belong to this date range. Merida-type wares have previously been recorded from Barnstaple, amongst several other findspots from the south-west (*ibid.*, fig. 20.5c). The date range is extended into the modern

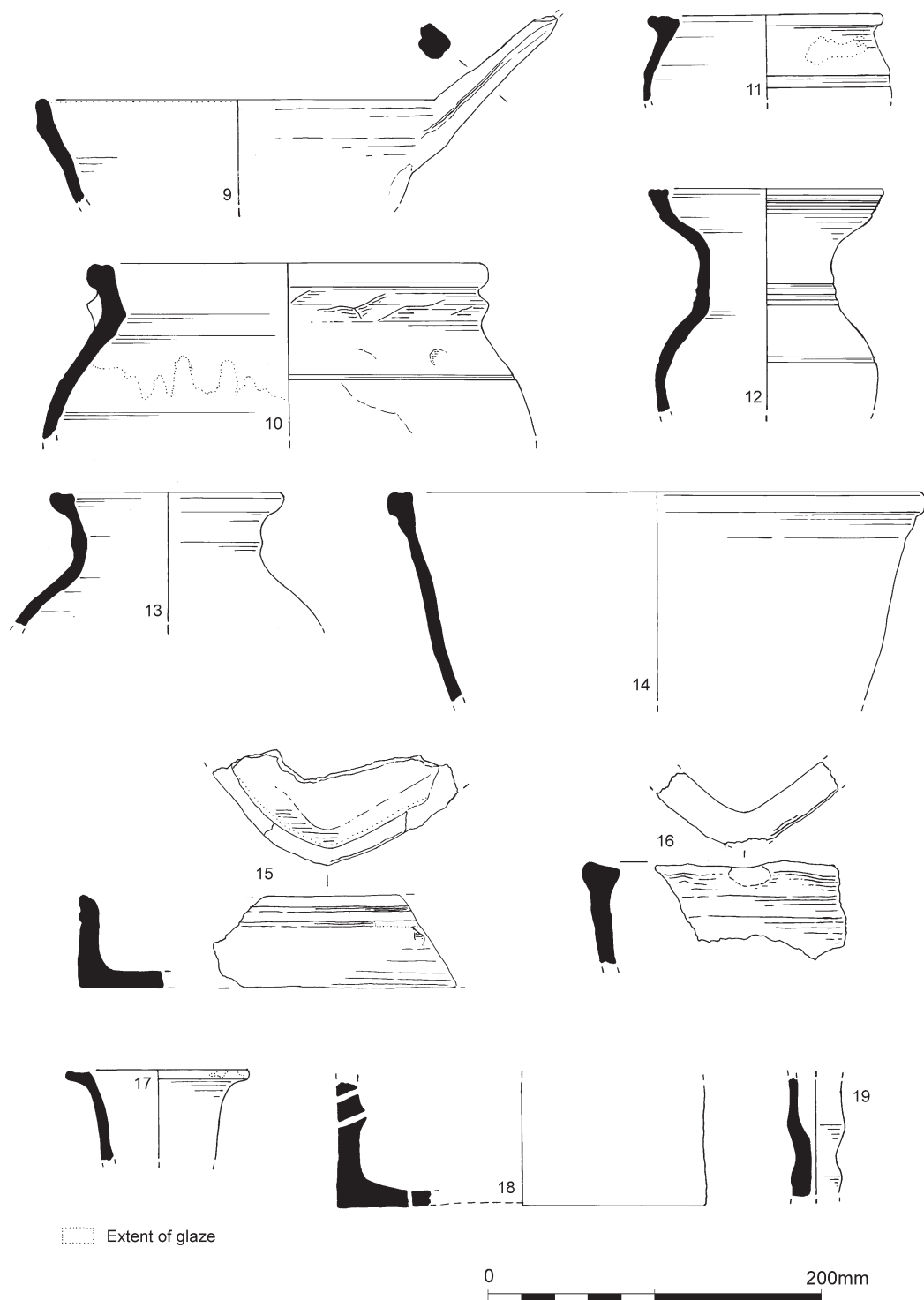


Fig. 13. Post-medieval pottery (9–19).

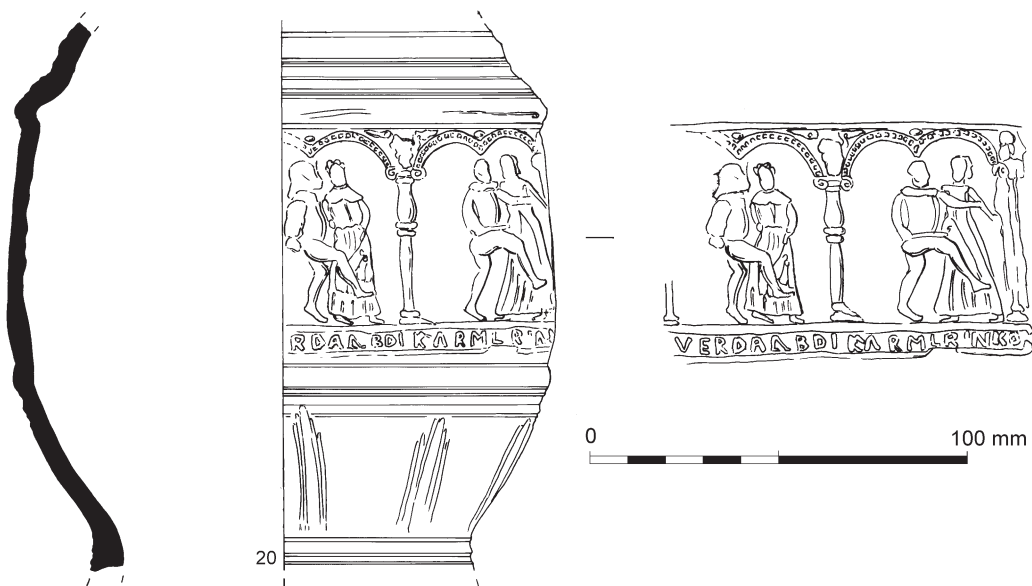


Fig. 14. Post-medieval pottery (20).

period (19th/20th century) by the presence of a few sherds of refined whitewares and feldspathic-glazed stonewares.

Most of the post-medieval assemblage derived from pits, with just over 100 sherds from layers, and less than 100 sherds from other cut features (postholes, construction cuts, robber trenches, etc). The distribution of pottery between the pits, however, was uneven. The largest group came from pit 696 (176 sherds), with 139 sherds from pit 722 and 101 sherds from pit 703. Only two other features yielded more than 50 sherds (74 sherds from pit 633 and 61 sherds from pit 718). Most of these pits lay in the northern half of the site (where there was in any case a greater concentration of features), although pit 633 lay just south of the centre. While there is an overall similarity in composition to these large pit groups (all of which are likely to date to the 16th or early/mid-17th century), each has a sufficiently individual character as to suggest that pits were filled one by one in separate episodes of dumping, rather than as a single operation. For example, pit 696 contained a high proportion of unglazed gravel-tempered ware, including most of the examples of perforated sherds, and several baking dishes. This pit also produced a clay pipe assemblage dating to the mid-17th century (see Macey-Bracken, below). Pits 718 and 722, in contrast, produced higher proportions of calcareous gravel-free redwares including (in the case of 722) at least two 'tall jars'. No cross-context joins were observed (except within single features), and while the lack of wholly reconstructable profiles suggests that pottery made its way into the pits via a midden dump, the condition of the sherds, and the fact that some partial profiles were present, indicates that little reworking took place in between initial discard and eventual deposition in the pits.

List of illustrated vessels (Figs 12–14)

1. Medieval jar rim; decorated with stabbed dots around rim, and slashed lines at neck/shoulder junction. Fabric R400, context 629, well 628.
2. Medieval jar rim; applied vertical strip below neck. Fabric R401, context 629, well 628.

3. Bowl or dish, internally glazed. North Devon gravel-tempered ware, context 748, pit 747.
4. Large flared bowl, internally glazed. North Devon gravel-tempered ware, context 697, pit 696.
5. Convex bowl, internally glazed. North Devon gravel-tempered ware, context 729, pit 728.
6. Convex bowl with pulled lip, internally glazed. North Devon gravel-tempered ware, layer 105.
7. Flanged bowl, internally glazed. North Devon gravel-tempered ware, context 615, pit 614.
8. Large, straight-sided bowl with heavy rim, and applied thumbed strip below rim, internally glazed. North Devon gravel-tempered ware, context 721, pit 720.
9. Pipkin with straight handle, internally glazed. North Devon gravel-tempered ware, context 697, pit 696.
10. Jar with applied thumbed strip (in gravel-tempered ware) around neck, internally glazed. North Devon calcareous ware, context 706, pit 705.
11. Small jar, internally glazed. North Devon calcareous ware, context 723, pit 722.
12. Jug with convex rim, internally glazed; heavy internal limescale up to rim. North Devon calcareous ware, context 723, pit 722.
13. Jug, internally glazed. North Devon calcareous ware, context 723, pit 722.
14. Straight-sided bowl, unglazed; slightly warped? North Devon gravel-tempered ware, context 697, pit 696.
15. Corner from subrectangular baking dish, internally glazed. North Devon gravel-tempered ware, context 704, pit 703.
16. Corner from subrectangular baking dish, unglazed. North Devon gravel-tempered ware, context 697, pit 696.
17. Small flanged vessel, probably bowl or cup, internally glazed. North Devon gravel-tempered ware, context 752, pit 750.
18. Basal angle from straight-sided vessel; post-firing perforations in base and body wall, unglazed. North Devon gravel-tempered ware, context 697, pit 696.
19. Candlestick shaft, green glazed over white slip. North Devon calcareous ware, context 615, pit 614.
20. Raeren stoneware panel jug, showing peasant dancing scene, motto below. Context 723, pit 722.

Clay tobacco pipe by Erica Macey-Bracken

The clay tobacco pipe assemblage consists of 170 fragments, the bulk of which were recovered from a layer of made ground (601) and the fill of pit 672/696/705, with the remainder of the assemblage coming from other post-medieval features (pits 745 and 756) or unstratified areas of the site.

The assemblage includes 73 bowls, of which 70 bowls are sufficiently complete to be datable, and 39 carry makers' marks. The assemblage also includes 97 pipe stem fragments. No stamps were noted on any of the stem fragments, although one fragment has a possible partial moulded impression.

Bowls have been classified using Oswald's general typology (1975). Makers' marks, and their position and orientation, have been recorded. Parallels for marks have been sought in the published corpus for Barnstaple (Grant and Jemmett 1985) and also in records of pipemakers from Exeter and Plymouth.

All of the datable bowls are of 17th-century date; the earliest bowls present are of Oswald's Type 4 (1600–40). Fifteen bowls of Type 4 were recovered from a layer of made ground (601), one from pit 768/771 and a further two bowls of this date were unstratified. The remainder of the datable bowls are of Oswald's Type 5 (1640–60). These bowls were also present in the layer of made ground that produced the Type 4 bowls, and were also found in other post-medieval features across the site, including a group of 28 bowls from pit 672/696/705.

Forty-one of the bowls recovered from the site had incuse makers' marks stamped on the heel. The full range of marks is listed in Table 3. Two marks could be identified as belonging to known pipemakers from Barnstaple; those of Thamsyn Garland (1599–1636) and Anthony Roulstone (1608–73).

A further possible Barnstaple pipemaker's mark is that of John Roulstone, son of Anthony Roulstone. A similar stamp was noted on a fragment of decorated clay which had been fired; this was recovered from a probable kiln dump encountered during construction of the Barnstaple Urban Relief Road (Grant and Jemmett 1985, 532). At the time of the Grant and Jemmett report, no other examples of this stamp had been recorded locally.

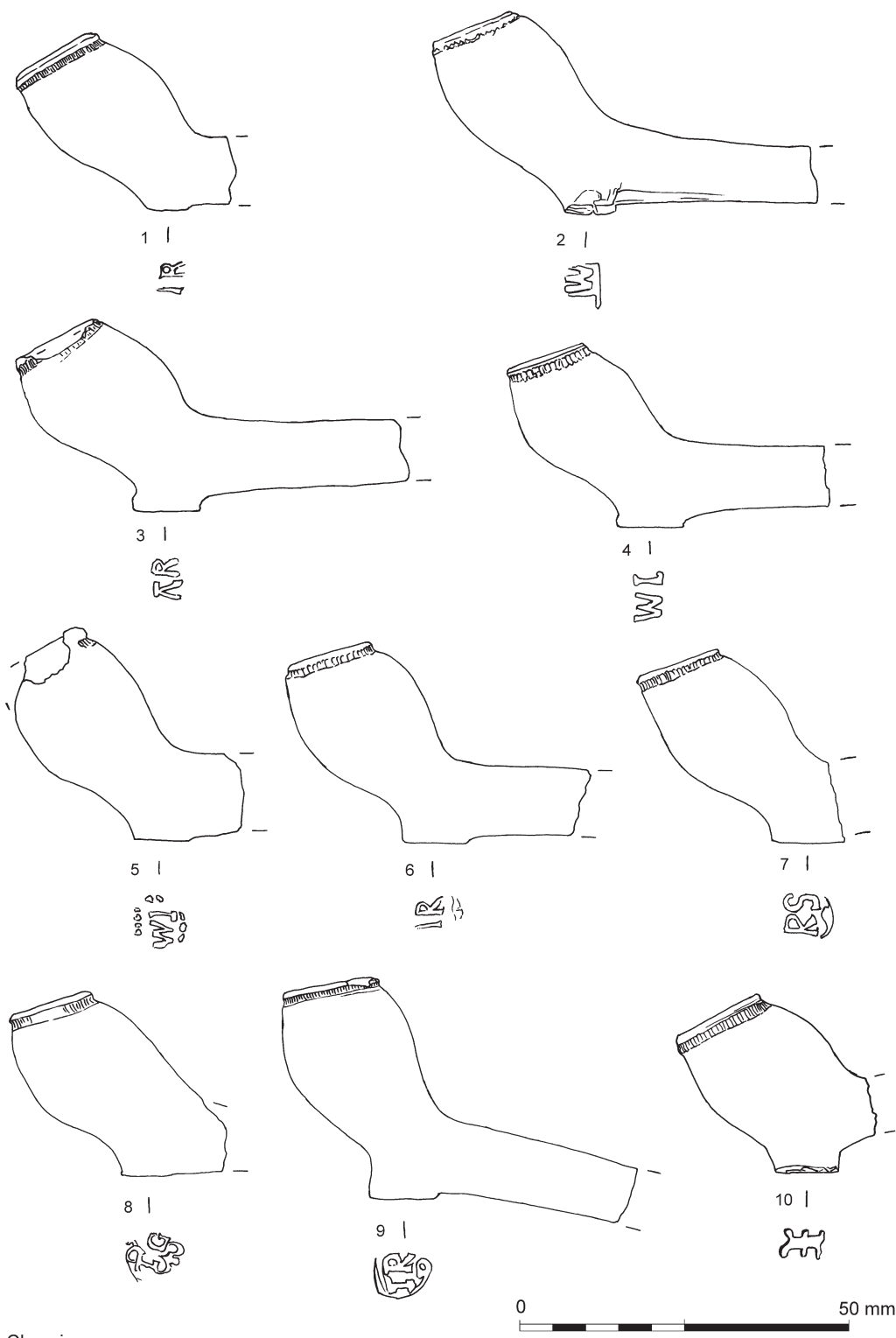
Two bowls were stamped with a W incuse on the heel. This mark is previously known in Barnstaple, an example having been found at Lower Gorwell (Grant and Jemmett 1985, 543, fig. 36), and could be local, but the maker is unknown. Plymouth pipes with a W incuse on the base are also known between c. 1635–65 (Oswald and Barber 1969, fig. 53, no. 6n).

Eleven pipes were stamped with a WL incuse on the heel. Although there are no known Barnstaple pipemakers with these initials, early 17th-century pipes with this stamp are known from Plymouth (Oswald and Barber 1969, 129, fig. 53; i and j). It is probably coincidental that in 1628, Barnstaple pipemaker Peter Takell was bound to pay his debt to wire-drawer William Lane in 'good tobackopipes' (Grant and Jemmett 1985, 447), and the WL stamp seen here is unlikely to relate to William Lane. It is far more likely to be the same WL stamp seen on the Plymouth pipes. A possible waster, comprising of a bowl fragment stamped with this maker's mark with a stem fragment stuck to it was recovered from pit 672/696/705. Five other bowls from this context also had burnt and overfired areas.

One bowl from was stamped with an incuse bar-shaped symbol. A bowl with a very similar symbol is known from Barnstaple Castle (*ibid.*, fig. 14:100). Grant and Jemmett suggest that this is a local mark, and it has also been noted on later 17th- and early 18th-century pipes from the same site (*ibid.*, fig. 19:158; fig. 21:173). This bowl was highly polished, and showed a much neater finish than the remainder of the bowls from the site.

List of illustrated pipes (Fig. 15)

1. Clay pipe bowl; incuse on heel, initials ?I/R. Unstratified.
2. Clay pipe bowl; incuse on heel, initials A/R. Made ground 601.
3. Clay pipe bowl; incuse on heel, initial W. Made ground 601.
4. Clay pipe bowl; incuse on heel, initials W/L. Made ground 601.
5. Clay pipe bowl; incuse on heel, initials T/M. Made ground 601.
6. Clay pipe bowl; incuse on heel, initials I/R. Context 697, pit 696.
7. Clay pipe bowl; incuse on heel, initials R/S. Context 697, pit 696.
8. Clay pipe bowl; incuse on heel, initials T/G. Context 697, pit 696.
9. Clay pipe bowl; incuse on heel, initials J/R above relief dot. Context 746, pit 745.
10. Clay pipe bowl; incuse on heel, 'bar' symbol. Context 769, pit 768.



Clay pipe

Fig. 15. Clay tobacco pipe.

Context	Bowl type	No.	Marks	Identification and comments
Made ground	O4	2	AR on heel (incuse)	Anthony ROULSTONE (1608–73), identified as a pipemaker in Quarter Sessions court record 1631 (Grant and Jemmett 1985, 472)
Made ground	O4	1	TM on heel, above a series of dots (incuse)	Initials stamped the other way up to other pipemakers' initials in the assemblage
Made ground	O4	7	WL on heel (incuse)	Pipes with WL incuse on base known from Plymouth (Oswald and Barber 1969, 129, fig. 53, i and j)
Made ground	O4	2	W on heel (incuse)	Pipe with W heel mark found in garden at Lower Gorwell, Barnstaple (Grant and Jemmett 1985, 543, fig. 36, 8). Stamp could be local, but maker unknown. Plymouth pipes with W incuse mark on the base also known between c. 1635–65 (Oswald and Barber, 1969, fig 53, 6n)
Made ground	O5	3	AR on heel (incuse)	As above
Made ground	O5	3	TM on heel, above a series of dots (incuse)	As above
Made ground	O5	2	WL on heel (incuse)	As above
Made ground	O5	1	W on heel (incuse)	As above
Pit 696	O4	2	TG (incuse)	Thamsyn GARLAND (néé Takell) 1599–1636
Pit 696	O5	5	RS on heel (incuse)	-
Pit 696	O5	2	WL on heel (incuse)	As above; includes waster
Pit 696	O5	1	W on heel (incuse)	As above
Pit 696	O5	1	AR on heel (incuse)	As above
Pit 696	O5	2	IR on heel (incuse)	Possibly John ROULSTONE, identified as pipemaker in 1670. Similar stamp seen on lump of decorated fired clay (Grant and Jemmett 1985, 532). No local pipes with this stamp have yet been found
Pit 745	O5	1	JR (incuse) and relief dot on heel	-
Pit 745	O5	1	TM on heel, above a series of dots (incuse)	-
Pit 756	O5	1	TM on heel, above a series of dots (incuse)	-
Pit 756	O5	1	RS on heel (incuse)	-
Pit 768	O4	1	Bar-shaped symbol on heel (incuse)	Bowl with similar symbol recovered from Barnstaple Castle (Grant and Jemmett, 1985, 505, fig. 14, 100); possibly local
Unstratified	O5	1	_R; first initial not legible (incuse)	-
Unstratified	O5	1	RS (incuse)	-

Table 3. Pipe marks.

Animal bone by L. Higbee

A total of 1289 fragments (or 19.709 kg) of animal bone was recovered from the site. The assemblage includes material of medieval and post-medieval date much of which was recovered by hand and further small quantity from the sieved residues of bulk soil samples. Once conjoins are taken into account the total falls to 965 fragments (Table 4). Gnaw marks were recorded on only 3% of fragments and although bone preservation varies from good to fair it is generally consistent within individual contexts.

Species	Medieval	Post-medieval	Total
Cattle	30	202	232
Sheep/goat	16	175	191
Pig	3	27	30
Horse	1	5	6
Dog	-	5	5
Cat	-	1	1
Fallow deer	1	1	2
Rabbit	-	3	3
Domestic fowl	1	3	4
Goose	1	1	2
Fish	2	9	11
<i>Total identified</i>	55	432	487
<i>Total unidentified</i>	43	435	478
Overall total	98	867	965

Table 4. Number of identified animal bones present (or NISP) by period.

Medieval

Animal bones were recovered from ten features and layers 406, 695 and 784 of medieval date. The assemblage is dominated by bones from livestock species which together account for 89% NISP (Table 4). Cattle bones are particular common, followed by sheep/goat and then pig. Single bones from a horse, fallow deer, domestic fowl and goose were also identified, as were two fish bones. The latter are skull elements from a flatfish (e.g. plaice/flounder). The general character of the animal bones, that is a preponderance of good quality beef and mutton joints, some venison, fowl and fish, is consistent with domestic food refuse. Relatively large amounts of this material were recovered from well 628.

Post-medieval

A relatively large quantity of animal bones was recovered from features of post-medieval date. Most (98%) of this material was recovered from pits, with particularly large concentrations from pits 696, 703, 705 and 722. The assemblage is dominated by bones

from livestock species, in particular cattle (47% NISP; Table 4) and sheep/goat (41%). All three species are represented by a range of different body parts, although there is notable bias in the cattle bone assemblage towards waste elements from primary butchery such as horn cores and foot bones. These elements were usually left attached to hides when they were sold on by the butcher to tanners (see for example Thomas 1981, 162; Serjeantson 1989; Armitage 1990, 84; Cherry 1991, 295; Shaw 1996, 107; Yeomans 2005; 2007, 111; 2008). Evidence for a local tanning trade has previously been recorded in Boutport Street, 65 m to the north of the site. Other, less common species include horse, dog, cat, fallow deer, rabbit, domestic fowl, goose and fish.

Pinner's bones were recovered from pits 722 and 703. One of the pinner's bones had been fashioned from the distal end of a cattle metatarsal and the other from the distal end of horse metacarpal. Before the manufacturing processes was mechanised in the late 18th century, pins were produced by hand (MacGregor 1985, 171). The process was extremely labour intensive and pinner's bones were used to grip the brass wire while it was being filed into a point. The filing action quickly eroded the pinner's bones and replacements were needed on a regular basis. A worked horse metacarpal from pit 722 had been fashioned into a wedge-shape.

Other finds by Lorraine Mephum

Total quantifications of other finds by material type are given in Table 5. Full details of all finds can be found in the archive, and the assessment report contains a summary description of the assemblage. A few objects warrant comment here.

Ceramic building material

A few pieces of ceramic building material were identified as medieval, with varying degrees of confidence. These include two fragments of decorated floor tile, although in neither case can the motif be discerned. A few fragments of roof tile are more tentatively dated as medieval; these include a glazed ridge tile from layer 784. The remaining roof tiles are post-medieval and, as for the pottery, occur in gravel-tempered and gravel-free fabrics. Many fragments are glazed and some of these are certainly from ridge tiles (examples from pits 703 and 722, the latter a waster with glaze runs over broken edges).

Other ceramics

One fragment from pit 703 is in a fine fabric with a powdery feel and an open texture, probably from burnt-out organic material. It is of even thickness with a slight curvature; the most likely identification is as a fragment of brass- or bronze-founding mould, for a vessel or possibly a small bell.

A gravel-tempered fragment from pit 722 (context 723), with one acute, rounded angle, could be an item of kiln furniture (Fig. 16), but no direct parallel has been found.

Stone

This category includes both portable objects and building material (roofing slate). The former comprise a small possible whetstone (from pit 696), and a slab-like piece from an object with one rounded corner, and one (probably of several) shallow, regular, circular depression, possibly from a mould of some kind (pit 768).

Glass

A small polychrome glass bead (diameter 5mm) was recovered from pit 696 (context 697) (Fig. 17). This is made from a short section of drawn-out hollow cane in a translucent greenish glass, coated with six further layers of white, translucent greenish, red and blue glass, and given a star-like cross-section by pressing in a 12-pointed corrugated mould; the ends have then been ground to create a globular bead. It is of a type known as 'chevron' or

Material type	Number	Weight (g)
Ceramic building material	57	5386
Other ceramic	2	379
Stone	10	686
Flint	1	4
Glass	11	690
Slag	163	13,248
Metalwork	26	-
<i>Copper alloy</i>	7	-
<i>Lead</i>	2	-
<i>Iron</i>	17	-
Worked bone	3	-
Shell	187	2364

Table 5. Other finds quantities by material type

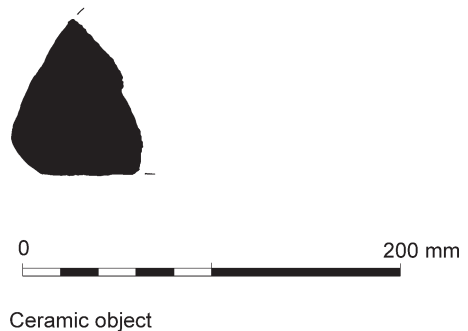


Fig. 16. ‘Corner’ from ceramic object in gravel-tempered fabric, context 723, pit 722.

‘rosetta’ beads, dating to the 16th and 17th centuries, which were a Venetian speciality. A large number of these beads have been found in Plymouth (Charleston 1986, 39–40; fig. 14, nos 173–6). Venetian beads have recently been found at an isolated farmstead on the Steart peninsula in Somerset (Higbee and Mephram 2017, 48–50).

Metalwork

The only identifiable copper alloy objects comprise a thimble and a pin (both from made ground). The pin is of Romano-British type, with a series of grooves below a roughly spherical head (Crummy 1983, fig. 30); this item can be added to a series of isolated findspots of Romano-British finds within the town. The thimble is of stamped manufacture from sheet metal, with hand-made indentations, and is of probable 16th or 17th-century date.

All four of the lead objects are fragments of window came, while the iron objects consist largely of nails, with one bolt, and a hinge pivot. The iron objects are not in themselves datable, but are assumed, on the basis of associated pottery, to be post-medieval in date.

Slag by Phil Andrews

The iron smithing slag (13.248 kg) varies in nature and density, and may not all derive from the same period of ironworking activity. Most of it was recovered from post-medieval features, but a small quantity came from well 628 of late medieval/post-medieval date. Most of the material is in reasonably fresh condition, amorphous and fairly vesicular (some almost clinker-like, in beam slot 612 and pits 718 and 728), but there are occasional denser pieces (from pits 614 and 747), that from 614 comprising a single, relatively abraded lump weighing 815 g. Fragments of smithing hearth bottoms (SHBs), the hemispherical or bun-shaped accumulations that formed in the base of smithing hearths, were found in pits 633, 703, 718, 722 and 730. That from 722 comprises a single, notably large and complete example weighing 1.4 kg and measuring 180 x 140 x 80 mm. All or virtually all of the iron



Fig. 17. Polychrome Venetian-style glass bead, context 697, pit 696.

smithing slag came from post-medieval contexts, with more than 1 kg from pits 633, 703 and 718, and just over 2 kg from 722. Most of the clinker (3.5 kg) came from post-medieval pit 767. At least some of the smithing slag could be residual medieval material but, overall, this debris appears to reflect post-medieval iron working, perhaps in the 16th–17th century, and possibly in the property(s) in which it was found, although no hammerscale was recovered from the environmental samples.

ENVIRONMENTAL EVIDENCE

Charred plant remains by John A. Giorgi

During the excavations four environmental bulk soil samples were collected from four post-medieval pits (692, 696, 698 and 705) for the recovery of charred plant remains for information on economic/human activities at the site. The samples, with volumes from 5 to 38 litres, were processed for charred plant remains by standard flotation methods, the flots retained on a 0.5 mm mesh and the residue on a 1 mm mesh.

The processed samples produced very large flots, ranging in size from 100 to 3500 ml. All four flots produced identifiable charred plant remains with the assessment recommending the analysis of the evidence in sample 12 from pit 698 for information on diet and local agricultural practices (Wessex Archaeology 2015). The charred plant remains from this sample were sorted, identified and quantified using a binocular microscope (with a magnification of up to x40) together with modern and charred reference material and reference manuals (Cappers *et al.* 2006; Jacomet 2006).

The charred plant remains from the pit are shown in Table 6, the sample producing a modest sized assemblage with variable preservation of remains, consisting of cereal debris (both grains and chaff) and other plants, largely wild plant/weed seeds. Nomenclature and taxonomic order for the wild plants follows Stace (2005), also used for ecological data together with Hanf (1983) and Wilson *et al.* (2003), while nomenclature follows Zohary and Hopf (2000) for the cereals.

Cereals were represented in the sample by small numbers of *Triticum aestivum/turgidum* (free-threshing wheat) and *Avena* (oat) grains plus single records for *Secale cereale* (rye) and *Hordeum vulgare* (barley). A relatively large amount of free-threshing wheat rachis fragments showed the presence of hexaploid *Triticum aestivum* (bread wheat). A few oat floret bases were also recovered although it was not possible to establish if these were from *Avena sativa* (common oat) or *Avena strigosa* (bristle oat). Occasional free-threshing wheat, barley and oat grains were also present in the other three sampled pits at the site (Wyles 2015).

	Feature	698
	Context	702
	Sample	12
	Vol sample (l)	38
	Vol flot (ml)	100
Cereal grains		
<i>Triticum aestivum/turgidum</i>	free-threshing wheat	2
<i>Triticum</i> spp.	wheat	2
<i>Secale cereale</i> L.	rye	1
<i>Hordeum vulgare</i> L.	barley	1
<i>Avena</i> spp.	oat	4
cf. <i>Avena</i> spp.	?oat	5
Cerealia	indet. cereal (estimate)	10
Cereal chaff		
<i>Triticum aestivum</i> type	hexaploid wheat rachis	28
<i>Triticum</i> spp.	free-threshing wheat rachis	20
<i>Triticum</i> spp.	wheat rachis	6
<i>Avena sativa/strigosa</i>	common/bristle oat floret base	3
Other plant/weed seeds		
<i>Pteridium aquilinum</i> (L.) Kuhn	bracken pinnules	4
cf. <i>Ranunculus</i> sp.	?buttercup	1
<i>Corylus avellana</i> L.	hazel nut shell fragments	1
<i>Atriplex</i> spp.	orache	1
<i>Rumex</i> spp.	dock	4
<i>Pisum sativum</i> L.	pea	1
<i>Vicia/Lathyrus</i> sp.	vetch/tare/vetchling	1
<i>Anthemis cotula</i> L.	stinking chamomile	2
<i>Carex</i> spp.	sedge	2
<i>Avena/Bromus</i> spp.	oat/brome	2
Poaceae indet.	grasses (large seeds)	2
Poaceae indet.	grasses (small seeds)	2
Poaceae indet.	grass/cereal culm nodes (large)	11
indeterminate	indet. stem ribbed fragments (thin)	28
indeterminate	thorn fragments	3
indeterminate	wood charcoal	++++
	Total	147

Key: Item frequency: + =1-10; ++ = 11-50; +++ = 51-150; ++++=151-250; +++++ = 250+ items

Table 6. Charred plant remains from post-medieval pit 698

Discussion

There is archaeobotanical evidence, albeit limited, for the presence of all four cereals, free-threshing (bread) wheat, barley, rye and oats, from other post-medieval deposits in southern England (Greig 1991, 328; Giorgi 1997, 202), including free-threshing wheat, barley and oats from excavations at Cabot Circus, Bristol (Giorgi 2009). It was not possible

to establish if the oat grains were from common or bristle oat although both species were widely cultivated in the West Country during the medieval period (Campbell 2006, 226) and were identified in earlier medieval deposits from excavations at Black Cross, Newquay, where they may have been grown together as a *maslin* (Carruthers 2015).

The four cereals may have been used for bread, cakes and pastry and in pottage, with a preference and increasing demand for white wheaten bread by all classes during the post-medieval period, partly because of its easier digestibility (Wilson 1988, 260–61); barley and oats may have also been used for brewing beer as well as for fodder.

Other food remains included a single record for *Pisum sativum* (pea), which has occasionally been found in other post-medieval deposits in southern England (Greig 1991, 328) and may have been used in coarse breads and in pease pottage (Wilson 1988, 216). A few other legume seeds including *Vicia/Lathyrus* (vetch/tare/vetchling) were also present in the post-medieval pits and could also be from cultivated pulses. A fragment of *Corylus avellana* (hazel) nut shell, also recorded in two of the other pits, and a *Prunus spinosa* (sloe/blackthorn) fruit stone, may represent the residues of wild foods gathered from outside the town or from hedgerow/scrub vegetation close-by.

Crop-processing debris in the sample included a relatively large amount of cereal chaff (rachis fragments), possibly cereal straw (culm node fragments) and a small number of potential arable weed seeds; this debris suggests that the cereals may have been cultivated locally, possibly on the fine silty and clay river terrace deposits of the Taw, and imported onto the site where the cleaning of the cereals was carried out. The weed seeds included *Anthemis cotula* (stinking chamomile) which may indicate the use of clay soils for growing the cereals. A few *Carex* (sedge) seeds may point to the cultivation of damper areas of ground nearer the river or may represent the residues of plants gathered and initially used as flooring/roofing materials.

The crop-processing by-products may represent the residues of tinder/fuel used for industrial activities and/or in domestic hearths close-by although cereal straw may have also been used as fodder (along with cereal chaff) and for stabling/flooring and thatching, long rye straw being particularly good for this purpose. Bracken (*Pteridium aquilinum*), represented in the sample by a few pinnule fragments, may have been collected from woodland, heath and moorland in the vicinity of the town and also used for bedding and/or fuel.

DISCUSSION

Although the Saxon cemetery, and the coin and documentary evidence indicate a significant late Saxon settlement in Barnstaple, there was no evidence of this date from this site, and suggested evidence from other sites is far from conclusive. Excavations at Paiges Lane, 140 m south-west of the site, identified gullies and stakeholes that may represent early property boundaries within the Saxon burh (North Devon Council 2009, 14), and comparable evidence was recorded at Bull Court Lane, off Boutport Street, 80 m north-east of the site (Markuson 1980). Across the road, at 4–6 Joy Street, multiple phases of occupation layers, and timber slots and postholes of suggested late Saxon/early medieval date, were found along with a cobbled street surface (Miles 1973). Securely identifying features of this date is hampered by the dearth of Saxo-Norman pottery in the area, although the hand-made coarsewares being made around the Blackdown Hills on the borders of Somerset and Devon was common in late Saxon Exeter and Totnes, and probably also in use in Barnstaple (Allan 1984, 11; Allan and Langman forthcoming). Pottery was certainly found in the cemetery, but whether it was in more general use before the 12th century, when the evidence suggests it was widespread across the county, remains unclear.

Joy Street, which may have its origins in the street system of the late Saxon *burh*, was previously called Eastgate Street, running from the supposed position of the destroyed east

gate in the medieval town wall. The town ditch, some 10 m outside the wall, may also have been dug in the late Saxon period although its shallow nature suggests it was primarily a boundary ditch, rather than defensive. The line of the medieval town's eastern defences, as marked by the course of Boutport Street, is reflected in the line of Green Lane, which originally ran from the north end of High Street to Joy Street, with its line continued to the south by Anchor Lane. The narrow frontages of the two properties at 22 and 23 Joy Street to the immediate west of Green Lane, probably reflect the extents of the original medieval burgage plots, as noted also along High Street (Timms 1987), although these are first depicted cartographically in Wood's 1843 map of the town.

The original frontages of 22 and 23 Joy Street may also be reflected in the presence of an east-west medieval ditch (402/619) to the immediate north of the street, and a series of pits and other features extending 15 m back from it. The material from the medieval contexts appears to be largely domestic in character, comprising mainly pottery and animal bone, although a small quantity of slag was recovered from well 628, of possible late medieval date. However, this feature had a single fill and it was not established from what level the slag was recovered. Given the more frequent occurrence of slag in post-medieval features, and it is at least possible that the material was intrusive.

However, despite the presence of medieval features there were no clear structural remains of medieval or post-medieval date surviving on the site, unlike at 4-6 Joy Street where the earlier timber buildings were replaced by two medieval properties on stone foundations fronting onto the street (Miles 1973); these were rebuilt and realigned in the 16th and 17th centuries, with the eastern house entirely rebuilt in the 19th century. Sill beams and slots for timber buildings, perhaps dating to the 13th century, were also uncovered at 27-28 Joy street, sealed by a metallised surface (North Devon District Council Rescue Archaeology Unit 1986). One L-shaped building lasted until 18th century. Pits containing possible early medieval pottery, and wells at the back of the tenements produced two 14th-century jugs.

All traces of early building at 22-23 Joy Street may have been destroyed by later (post-medieval and modern) phases of construction. The presence of post-medieval pit 614 at the south-east corner suggests that the street frontage was not built up during the whole of the post-medieval period; it may be significant that pit 614 lies to the east of the ditch 402/619. Most of the post-medieval pits were in the northern half of the site, in the area shown in the 1830 as open ground to the rear of the buildings. These pits and other features contained both domestic and industrial waste, with slag being recovered from across the site; also found was a fragment of a brass- or bronze-founding mould, possibly for a small bell, while the pinners' bones indicate at least small-scale craft activity. The presence of cattle and sheep horn cores and foot bones suggests primary butchery waste, and as these elements, still attached to the hide, were usually sold on to tanners they could indicate tanning. The plant remains point to the local cultivation of cereals, and their processing on site, the processing waste possibly used as tinder/fuel for domestic hearths and industrial activity.

All the surviving walls and foundations appear to be of 19th-century or later date (modern), although the use of distinctive water-rounded stones in the foundations flanking the passage from Green Lane, and in a feature of uncertain function lying on the boundary between 22 and 23 Joy Street, might indicate an earlier date. Similar rounded stones, some possibly derived from the raised beach at Saunton, west of the town, were found in the town wall robber cut and the town ditch, excavated in Bull Court Lane, possibly representing material thrown back after the better stones of the foundations had been robbed (Markuson 1980, 71-72). A section of the wall exposed in 1930 showed it resting on a foundation of rounded stones (*ibid.* 79). As early as the 13th century the town wall was reduced in height, and during the later medieval period appears to have been subject to piecemeal robbing for building materials (North Devon Council 2009, 15). It had almost disappeared by the 16th century, the antiquary John Leland noting in 1543-45 that it was almost *clene faullen*.

The use of large rounded stones for the initial courses of wall foundations was noted in building 2 at Bull Court Lane, of possible late 16th–17th-century date (Markuson 1980, 77), and 127 Boutport Street (*ibid.* 81). It is quite likely that the defences remained a continuing source of ever-poorer quality building stone. It is unclear why at 22 Joy Street such stones were used only in the passage foundations, but it is possible that this feature, although first shown only on the 1889 OS map, indicates much earlier access from Green Lane to the rear of the Joy Street properties. The suggested cobbled access passage (with its covered drain) on the western side of 23 Joy Street appears to have been blocked by 1889, although similar passages to the rear yards are shown on the 1889 at the two adjoining properties to the west (24 and 25 Joy Street).

The 1830 map shows the property boundary along the west side of Green Lane to the rear of 22 Joy Street, although it is unclear whether that was marked by a wall. However, by 1843 the buildings at 22 and 23 had been extended to the rear. Many of the excavated walls conform closely to those shown on the OS map of 1889, but they also reveal a process of continuing development of the site, particularly to the rear of the properties, including the possible widening of the structures at the rear of number 22.

It is evident from documentary evidence that the post-medieval (and possibly medieval) metalworking on the site continued during the 19th century. The 1841 census shows that 22 Joy Street was owned/occupied by Samuel King, a blacksmith and farrier. He and his family (wife and eight children) probably occupied the house on the Joy Street frontage, with the low range to the rear serving as the blacksmith's shop. A plaque on the north wall of 3 Green Lane, which states 'THIS WALL WAS BUILT BY T. KING IN 1837' suggests that King may have expanded his business into the adjoining property to the north, possibly enclosing what is shown on the 1843 map as an open yard. The Devonshire Directory of 1856 lists the occupants of 22 Joy Street as King and Son, general furnishing ironmongers, tin plate workers and plumbers. The 1843 map shows 23 Joy Street as owned or occupied by Gould, whom the Morris and Co.'s 1870 directory lists as John Gould, auctioneer, and agent for Garton and Russell's ales, and Miss Phœbe Ann Gould, pawnbroker. White's 1878 directory lists the occupants as 'Gould & Sanders auctioneers, estate agts. & brewer's agts'.

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APPENDIX

Summary of medieval and post-medieval pits and other discrete features (excluding those observed only in section)

Feature	Width (m)	Depth (m)	Fills	Med. pot no.	Med. pot wgt (g)	P-med. pot no.	P-med. pot wgt (g)	CBM wgt (g)	Clay pipe wgt (g)	Slag wgt (g)	Bone wgt (g)	Shell wgt (g)	Stone wgt (g)	Other
Medieval														
610	0.25	0.1	611	1	5	-	-	-	-	-	-	-	-	-
617	1.0 x 1.8	0.1	618	3	14	-	-	-	-	-	7	-	-	-
628	1.1	1.8	629	142	2847	52	591	73	-	231	729	-	60	-
630	1.8 x 2.0	0.6	631	4	59	1	3	-	-	-	214	-	-	-
638	1.6	0.2	639	15	168	1	20	-	-	-	33	-	-	-
641	0.3	0.25	642	3	26	1	17	-	-	-	4	-	-	-
670/683	1.6	>1.0	671/687	3	75	6	111	-	-	-	143	15	-	-
			686	-	-	-	-	-	-	-	65	38	-	Iron
			685	-	-	2	23	-	-	-	-	-	-	-
			684	6	68	-	-	-	-	-	1	-	-	-
716	>0.5	>0.14	717	1	8	-	-	22	-	-	-26	-	-	-
Post-medieval														
305/712	1.6	0.7	307/713	-	-	26	559	-	-	-	353	32	-	-
			306	-	-	8	265	-	-	124	258	7	-	-
614	3.2 x 3.8	0.8	615	6	-	27	1193	-	-	-	473	325	-	Wood
633	1.6	>0.5	635	5	34	34	633	367	-	1181	1406	72	-	-
			634	6	44	40	900	226	-	1344	768	115	-	-
643	>2.8 x >3.3	0.9	627	-	-	1	12	-	-	-	63	-	-	Iron nail
657/703	>1.4 x >2.2	0.5	658/704	24	201	100	2867	1113	-	1251	869	113	-	Iron, other ceramic, pinner's bone
672/696/705	>3.0	>1.0	673/697/706	8	83	247	8464	530	553	-	3739	150	189	Iron, mortar

692	?	>1.0	694	-	-	-	-	-	-	192	105	-	-	Part of ? coin
698	1.0	0.55	693	-	-	-	-	-	-	-	-	-	-	Plant remains
			702	-	-	8	103	-	-	-	5	-	-	
			701	-	-	-	-	-	-	-	-	-	-	
			700	-	-	-	-	-	-	-	-	-	-	
			699	-	-	-	-	-	-	-	-	-	-	
708	>1.2	0.9	709	-	-	2	458	-	-	-	-	-	-	
710	>0.4	0.35	711	-	-	2	36	-	-	-	2	15	-	
714	>2.0	0.4	724	-	-	-	-	-	-	-	-	-	-	
			715	6	62	3	19	172	-	-	64	32	-	Iron
			725	3	16	-	-	-	-	-	-	3	-	
718/720	2.0 x 3.0	0.4	719/721	4	54	69	1892	163	-	1468	2252	34	-	
722	1.5	0.3	723	4	27	136	3873	1190	-	2054	2245	97	-	Iron, other ceramic, pinner's bone
728/750	2.2	1.0	729/752	6	74	88	2256	134	5	438	797	176	-	Iron
			751	-	-	-	-	-	-	-	-	-	-	
745	1.8	0.9	746	2	44	32	800	-	74	-	189	-	-	Copper alloy
747	>2.0	>0.9	748	2	33	28	814	-	-	349	362	-	-	
756	3.0	0.8	759	1	20	5	141	-	-	-	274	80	-	
			758	-	-	11	322	-	-	-	113	-	-	
			757	-	-	9	250	-	4	-	23	28	-	
767	0.5 x 2.0	0.2	766	-	-	1	14	562	-	3504	-	-	-	
768/771	>0.6 x 2.1	>0.6	769/772	-	-	32	704	23	52	-	448	-	178	
785	>0.4 x >0.4	0.2	786	3	81	19	235	35	-	20	123	13	-	Lead
<i>Modern</i>														
664	2.0	0.7	665	-	-	2	100	-	-	-	32	-	-	

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