

8 NEWFARM, by I Suddaby

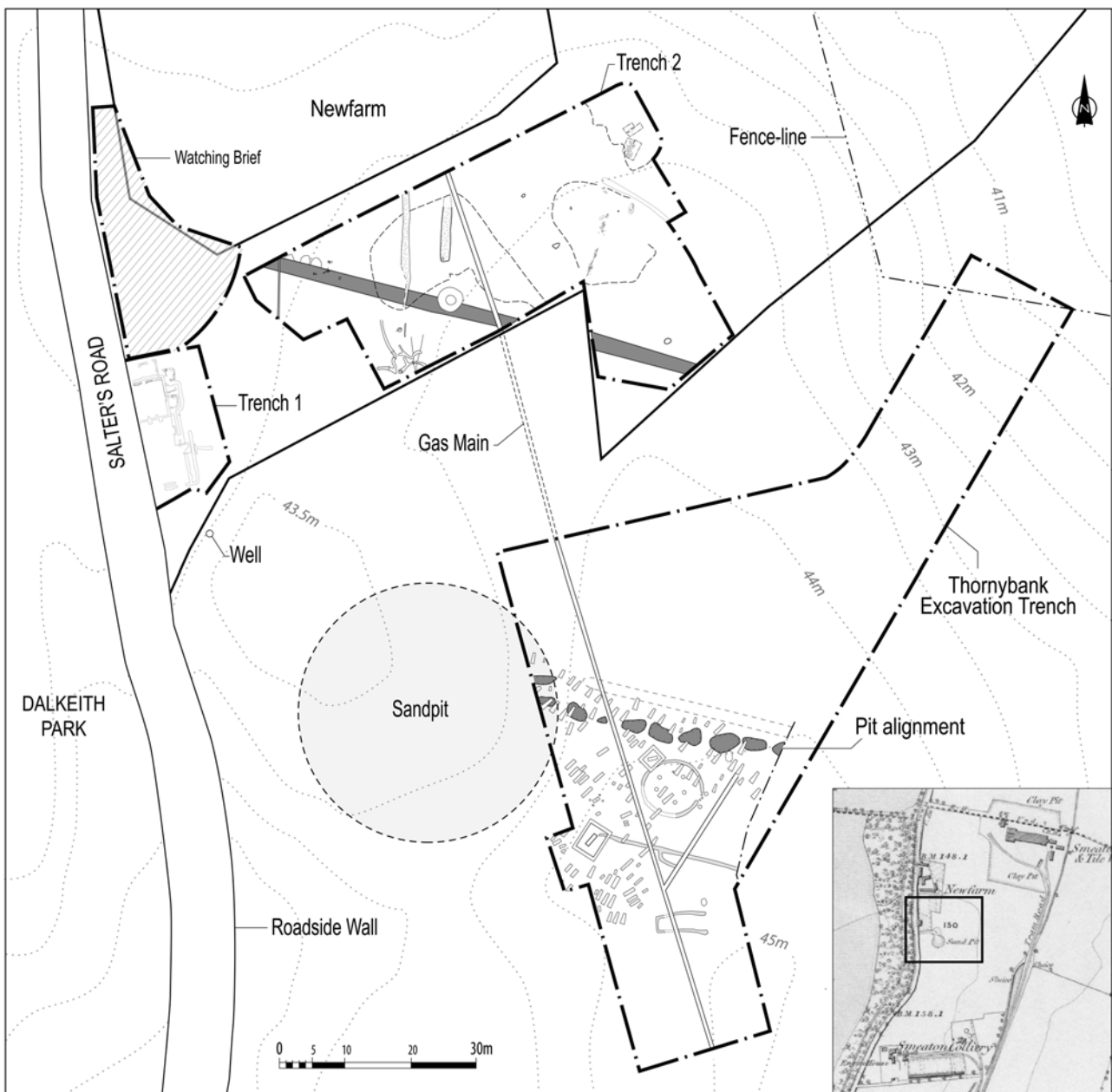
8.1 Introduction

8.1.1 Overview

The Newfarm site lies on the slip-road linking the Dalkeith Northern Bypass to the A6094 Dalkeith to Whitecraig road, known as Salter's Road (illus 2.1, 8.1). Archaeological evaluations of the slip-road were undertaken in 1994 (Strachan & Rees 1995)

and in 2005–06 (Suddaby 2006), the latter including a programme of metal-detecting. The subsequent area excavations comprised two trenches. Trench 1, alongside Salter's Road, revealed a post-medieval building and Trench 2 revealed multi-period features.

To the south of the site, the Thornybank cemetery (Rees 2002) occupied the summit of a low north to south ridge at 40m above OD, and



Illus 8.1 Plan showing the relationship between the 1996 Thornybank excavation and the 2006 excavations at Newfarm



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Illus 8.2 Newfarm aerial photograph and view from the north

the slip-road cuts through this ridge on a north-east to south-west alignment. The River South Esk runs through Dalkeith Park to the west and the Smeaton Burn passes to the east, beyond which the land rises towards Langside. Although sandy around Newfarm, clay appears to the north, where extraction pits associated with the Smeaton brick and tile works are depicted on early maps and were recorded during the 2005 evaluation. Salter's Road forms the boundary between a series of roughly east-west-aligned fields, through which run the slip-road and the designed landscape of Dalkeith Park. The area of the slip-road to the north-east of the excavation has been mined in recent years.

An oblique aerial photograph of the Smeaton brick and tile works includes the Newfarm area (illus 8.2) and clearly shows the pit alignment and the circular shadow of the 19th-century sand-pit between it and Salter's Road. It also shows a second linear feature parallel with the pit alignment, and a number of nearby anomalies, representing possible archaeological features. The clarity of the image is a result of the freely drained sand subsoil present on the ridge.

8.1.2 Previous work

In 1994, a desk-based assessment of the slip-road was followed by evaluation with a coverage of close to 5% (Strachan & Rees 1995). The 1994 evaluation of the slip-road recorded no significant remains but this in part stemmed from the mistaken identification of the material underlying the modern ploughsoil as natural subsoil. It may be that the mis-identification of ridge and furrow under the ploughsoil led to the assumption either that such features were cut into natural subsoil or that an archaeological horizon preventing further machine excavation had been reached.

The 1996 excavations 60m to the south (illus 8.1) at Thornybank long-cist cemetery (NT36NW 5), revealed that ploughsoil overlay a heavily bioturbated yellow-brown sand, which although sealing prehistoric features and cut by Early Christian graves, contained post-medieval artefacts (Rees 2002, 317). Analysis of this deposit revealed that it had no palaeoenvironmental potential and although described as a buried soil in the report, it may be a layer of illuviation or B horizon.

The excavations at Thornybank also revealed prehistoric features. A single pit produced Late Neolithic Impressed Ware and sherds of Grooved Ware were recorded nearby. An undated but possibly Bronze Age rectilinear feature with associated pit, a ring-groove structure and a pit alignment completed this pre-cemetery feature group. The pit alignment was parallel to the linear ditch recorded at Newfarm but, overlain by the cemetery, it was clearly abandoned by the mid 1st millennium AD (Rees 2002, 316).

8.1.3 Strategy and methods

The 2005–06 evaluation investigated 580m² and raised the coverage to around 15%, the increase reflecting modern standards in archaeology. This work revealed several additional sites of archaeological interest including three features incorporating red sandstone similar to those forming the Thornybank cists, a substantial linear ditch, several more ephemeral curvilinear ditches and a pair of parallel cobble-filled ditches.

Proposals for the further investigation of these sites were made by CFA Archaeology and were accepted by Historic Scotland. Trench 1, adjacent to Salter's Road, covered a well-defined post-medieval building, whereas the much larger Trench 2 on the ridge to the east included a linear ditch and a number of isolated stone features, tentatively associated with the long-cist cemetery.

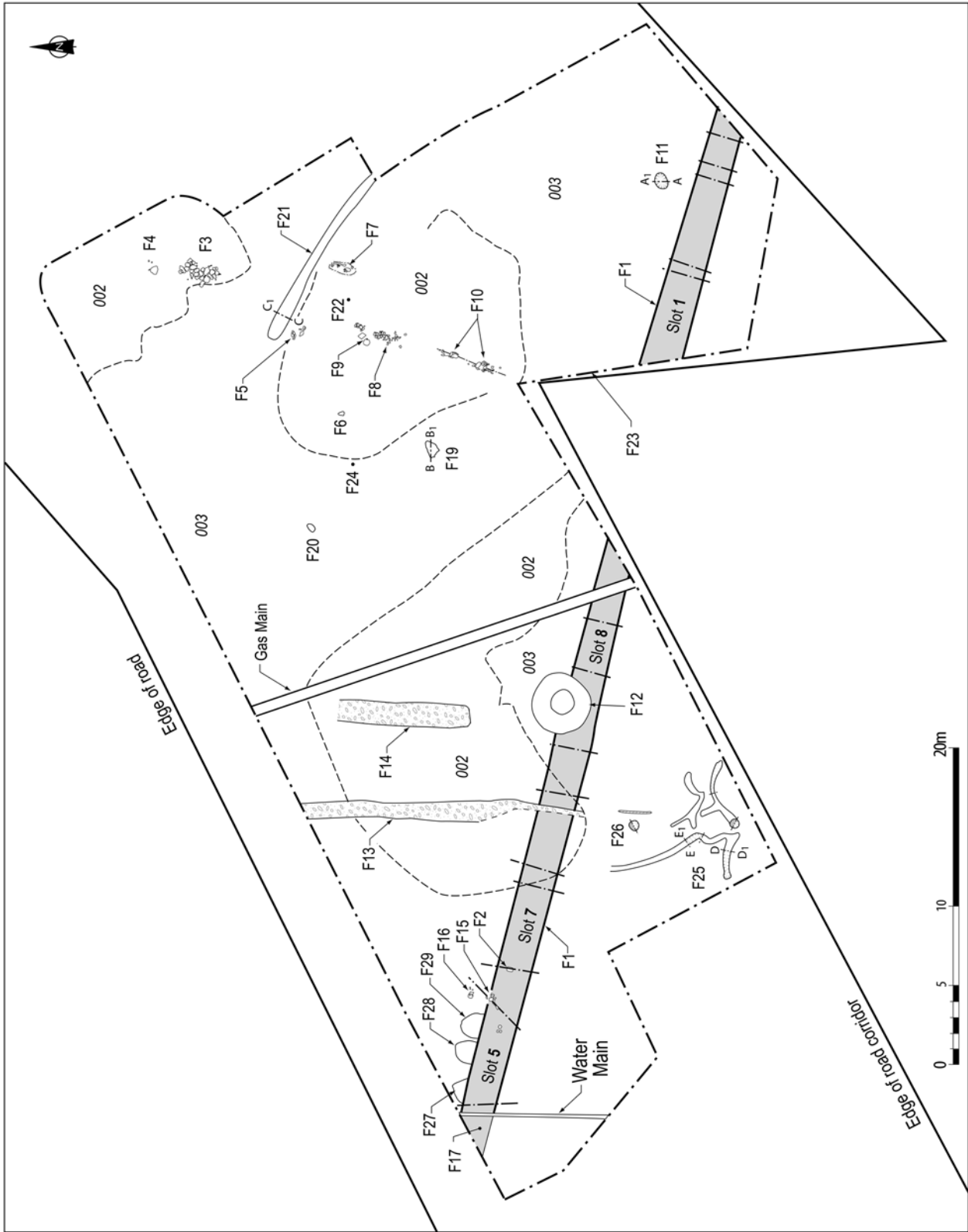
The excavation of the building in Trench 1 aimed to establish its date and function, as well as any association with Newfarm. Within Trench 2, all prehistoric features and the linear ditch were fully excavated, with all artefacts being retained and soil samples taken. Other features were excavated sufficiently to establish their nature.

The methodology employed was approved by Historic Scotland and was standard practice for work in arable land. Ploughsoil was removed using a tracked excavator and stored in bunds. It was apparent that the underlying yellow-brown sand did not itself constitute an archaeological horizon and over most of the slip-road, machine excavation continued until natural subsoil was revealed. Stones were not a component of the yellow-brown sand and where they appeared, the surrounding sand was left in situ. Following the cessation of machine work, the exposed surfaces were cleaned by hand to identify features prior to any excavations.

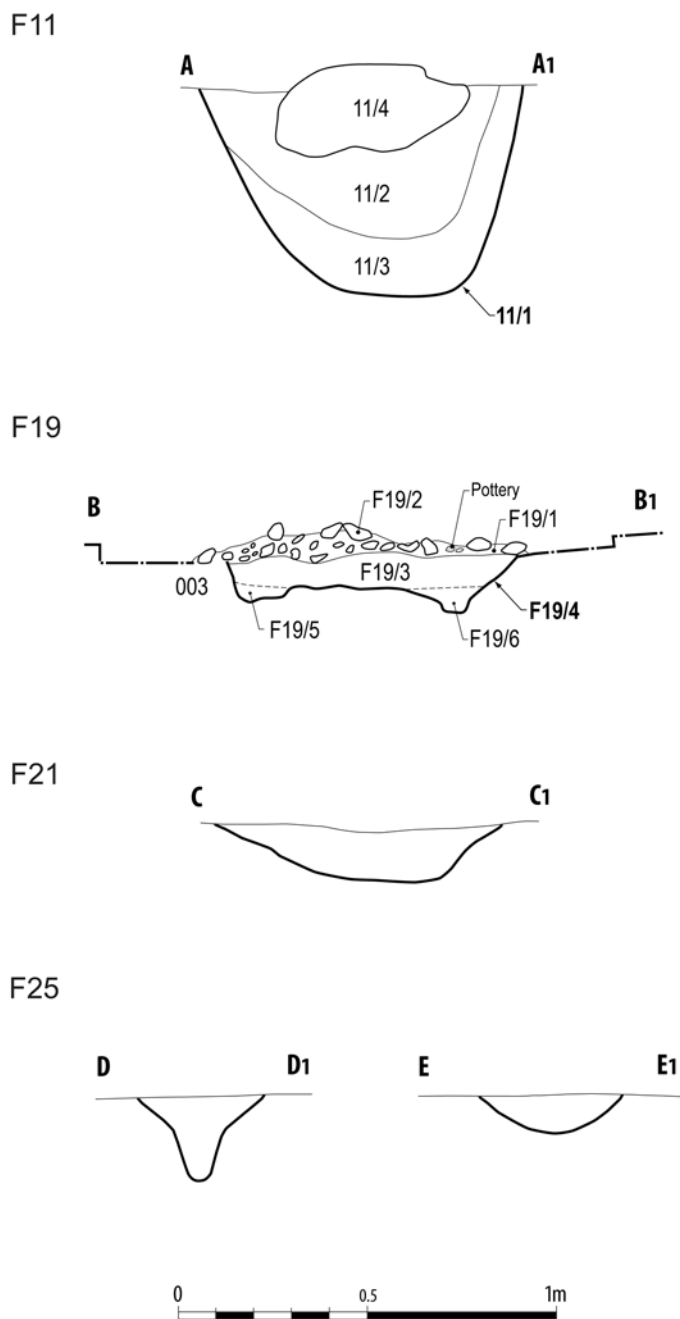
This methodology was entirely successful in preserving features with a stone content but as is often the case on sandy sites, some features only later became visible in plan through differential drying of the exposed surface and, where the layer had been removed by machine, they would appear in section.

The near-black sandy silt ploughsoil (001) had a depth of 0.35m and overlay a light yellow-brown sandy layer (002) with an average depth of 0.15m. Close to Salter's Road, and to the east of the building in Trench 1, a shallow coal-rich deposit (004) lay between layers 001 and 002. The natural subsoil (003) comprised soft yellow sand which, with depth, turned increasingly compact and became laminated with lenses of silt and clay. Compact impermeable clay was seen in the base of one feature (F12) at a depth of 2m.

Once the topsoil and as much as practical of layer 002 were removed, 26 features (F1–F26) were revealed in Trench 2 (illus 8.3). As stones were not naturally present, all were assumed to represent archaeological remains and were allocated feature numbers.



Illus 8.3 Plan of Trench 2 showing features and slot locations in F1



Illus 8.4 Selected sections (F11, F19, F21, F25)

8.2 Early site use

8.2.1 Prehistoric features

Two features, F11 and F19, can be confidently ascribed to the prehistoric period on the basis of the artefacts they contained. Others (F3–F10, F20–F22, F24 and F25) may be prehistoric on the basis of their alignment, morphology and/or finds.

F11 (illus 8.4) was sub-circular, with a width of 0.85m and a depth of 0.6m. It was cut (11/1) into soft sand and contained three fills. Two of these consisted of a brown or yellow-brown sand from

which two undiagnostic pottery sherds and four lithics were recovered. The latter included three that are foreign to the area, one of which was a flake of Arran pitchstone (Ballin below). A large, exfoliating and plough-scored whinstone boulder occupied much of the feature's upper fill.

F19 (illus 8.4) consisted of loose brown sand (19/1) around a deposit of broken, discoloured cobbles (19/2) which contained amongst them a cobble tool and 42 sherds of handmade pottery representing 20 vessels. On excavation this feature was revealed to be a somewhat irregular but sub-circular pit measuring 0.7m by 0.75m with a depth of 0.1m. The cut (19/4) had been affected by animal activity but was filled with a dark brown sand (19/3) which contained part of a perforated stone and a further six pottery sherds representing five additional different vessels (Johnson below). Overlying 19/3 were the broken stones within which was a matrix of brown sand.

F20 and F24 were similar to F19 in that they consisted of cuts containing sand-based primary fills under quantities of broken, probably heat-affected cobbles. A prehistoric pottery sherd was recovered from F20.

F10 lay within the yellow-brown sand and may in excavated retrospect consist of two features but prior to excavation they appeared in the field to be linked. Measuring a slightly curving 5.6m in length and with a maximum width of 0.7m, F10 was characterised by red sandstone orthostats in a circular setting, and patches of compact, mottled sand flecked with discoloured clay. Although no finds were recovered, the presence nearby of occasional pieces of burnt bone and lithics suggest this may have been a disturbed prehistoric cist.

Features F3–F6 and F8–F9 were all either individual large flat stones or areas of paving. Where apparent, these were aligned north-east to south-west, the same as F10. Machine excavation in this area solely removed the ploughsoil and none of these features were truncated.

F21 (illus 8.4) was similar in form to F25 (illus 8.4) and both were invisible prior to the removal of the yellow-brown sand. Both consisted of stretches of curvilinear ditches, strikingly dissimilar from the formality of F1 (see below). F21 was exposed for 12m and extended beyond the excavated area. A width of 0.8m and a depth of 0.1m were recorded. It was filled with mottled brownish yellow sand from which no finds were recovered. F25, in the south-west corner of the trench, took the form of a series of rather incoherent, meandering ditches with profiles ranging from U- to V-shaped. Their sinuous nature suggests these ditches may be multi-phase, notwithstanding that none cut others in the area. They do, however, appear to be cut by the disturbance associated with ditch F1. Two chert lithics were recovered from 25/3. It is conceivable that both F21 and F25 are the remains of ancient burrow systems, perhaps of creatures larger than rabbits.

F22 was allocated to a group of four flint lithics

Table 8.1 Summary of prehistoric pottery assemblage

Context	No. of sherds	Weight (g)	No. of vessels
F11/2	1	4	1
F11/3	1	16	1
F19/1	42	285	15
F19/3	6	149	5
F20/6	1	20	1
002	5	89	4
Unstratified	8	104	7
Totals	64	667	34

and a single pottery sherd which were within the yellow-brown sand, but excavation showed these were not within a cut feature.

8.2.2 Possible early medieval long cist

F7 consisted of a fragmented setting of red sandstone orthostats aligned north-east to south-west. An overall length of 1.2m and a width of 0.5m were recorded. The feature was clearly cut through the yellow-brown sand as it barely extended into the natural sand below. Neither bones nor any apparent body stain were present at the interface between the fill and the sterile natural sand below.

8.2.3 Undated features

F23 was a shallow U-section feature recorded following differential drying in the section at the edge of the trench. F26 was a circular pit with a width of 0.6m and an uneven depth of 0.15m. The light brown mottled fill contained coal flecks, but lenses and lumps of natural shaley coal were recorded within the laminated sands in this area.

8.2.4 Prehistoric pottery, by M Johnson

A small assemblage of pottery comprising 51 sherds and weighing 474g was recovered from just three features, all within Trench 2. These have been catalogued as a maximum of 23 separate vessels, represented by only a few sherds each. The assemblage comprises rim sherds and body sherds, a number of which are decorated.

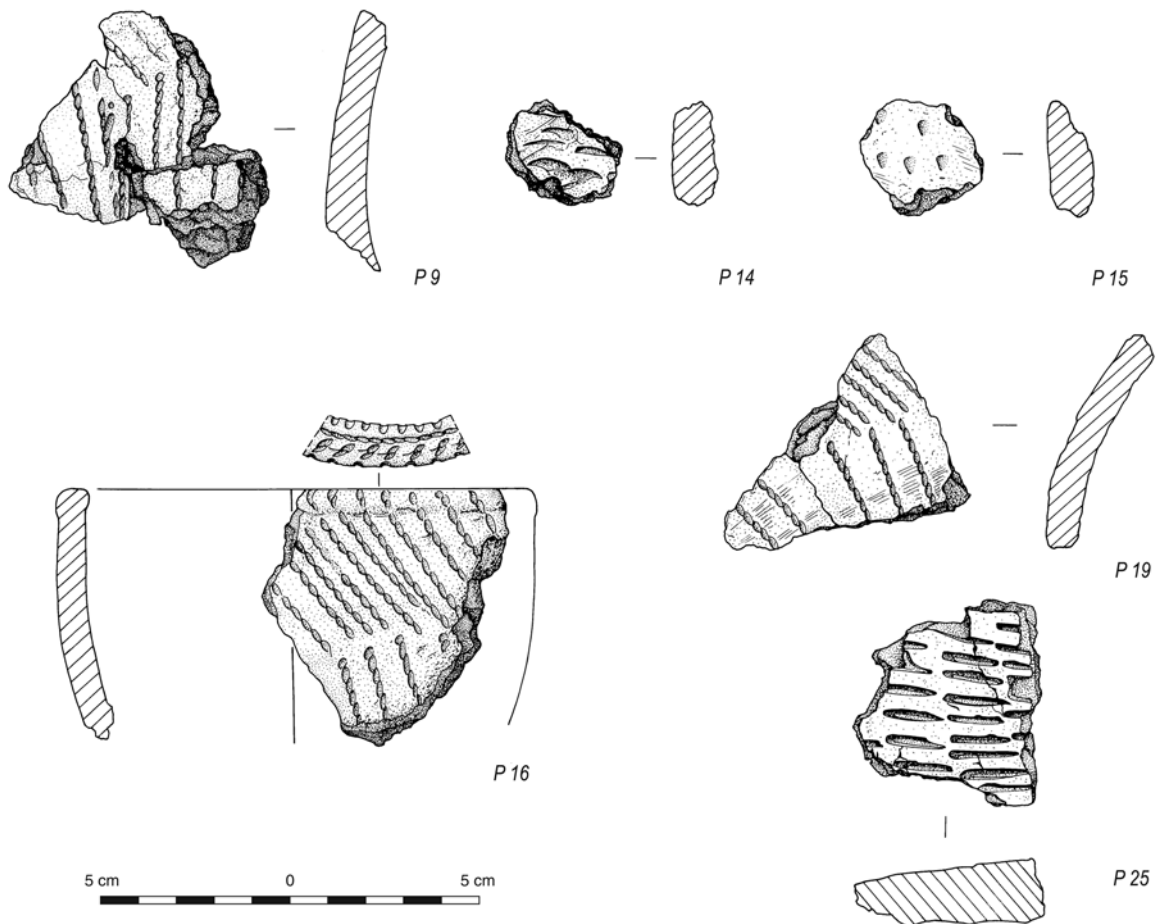
The majority of the sherds were recovered from the fill of F19, a deposit of stones (19/1) with a deposit of dark brown sand sealed beneath this (19/3). A single sherd was found in context F20/6, the stony fill of a pit. Two sherds were recovered from the fills of pit F11. Sherds were also recovered from a layer (002) and from other unstratified locations. The assemblage is summarised in [Table 8.1](#).

The sherds were sorted into sherd families and catalogued, according to dimensions, fabric, surface

finish, decoration, and morphology in accordance with the guidelines of the Prehistoric Ceramics Research Group (1995). A full catalogue has been prepared for the site archive.

Sherds were found in contexts 19/1 and 19/3 and the majority of the vessels were decorated with incised or impressed motifs. There was no apparent difference between sherds from the two different contexts in terms of either fabric or decoration. The assemblage from this pit comprises sherds of a relatively small size (average sherd weight 9g), which are generally abraded, and has a high number of individual vessels represented (20). Five rims were recorded (P8, P10, P12, P16, P20), all from F19/1, and the forms comprised upright flat-topped rims with slight necks (eg P16), bevelled rims (eg P10) and simple rounded rims (eg P20). Sherds range between 6mm and 20mm in thickness, suggesting that some were substantial vessels. The decoration comprises stabbed motifs (eg P15), incised lines, twisted cord (eg P9, P19), impressed fingernail (eg P14), and deeply incised short lines (eg P25); these can be found in combination with each other and can be found on the body exterior and on the rims. Often the sherds were too small to discern the overall motif. However, it is clear that the assemblage from this pit was decorated in a tradition familiar to the Late Neolithic. The fabrics are generally similar; mostly hard, and fine to coarse with hackly fractures. Stone inclusions were recorded at up to 20mm in size, and are present in low quantities in all of the sherds (up to 10% but usually 1–2%). There is no evidence for organic temper. Several sherds appear to contain grog (P10, P16). The sherds range from orange to brown to grey in colour, indicating a range of firing conditions. This is typical of handmade prehistoric ceramics and is indicative of being fired in a simple clamp kiln or open fire, resulting in a variety of firing temperatures and conditions, both within each individual firing and between firings. Very little is visible in the way of production techniques; several coil joins are present. Surface finishes comprise principally wet smoothing. The condition of the pottery is generally abraded, with some surface loss. Very few of the sherds have any remaining evidence for use in the form of sooting or charred deposits adhering to the surfaces.

Two featureless sherds (P1, P2) were recovered



Illus 8.5 Prehistoric pottery

from the fills of pit F11, and a single, abraded, featureless body sherd (P27) was recovered from context F20/6. The sherds had different fabrics but little further can be said of these vessels.

A small undiagnostic assemblage (P3–6) was recovered from layer 002. Sherds were also recovered from other unstratified locations (P28–34) and include an everted rim decorated with deep diagonal parallel slashes on the exterior neck angle and bevel (P31); an upright rounded rim decorated with whipped cord and incised chevrons (P32); and a flaring rim decorated with crudely incised, roughly horizontal lines (P34). Little further will be said about these sherds except to note that they also belong to Late Neolithic traditions.

The only part of the assemblage which can be used to discuss date and parallels is that from F19; the remaining features produced only undiagnostic body sherds. The character of the assemblage from F19 suggests that it belongs within the Impressed Wares tradition of the later Neolithic, generally dating to the first half of the third millennium BC, though an earlier date cannot be discounted (Cowie 1998). Good parallels for the forms and decorative motifs can be found at a number of other sites in the south of Scotland, for example at Biggar Common, South Lanarkshire (Sheridan 1997), Blairhall Burn, Dumfries &

Galloway (Cowie 1998), and Meldon Bridge, Scottish Borders (Johnson 1999; MacSween 1999). The assemblage does not contain the heavy bevelled rims and cavetto necks seen at Meldon Bridge, but this assemblage is much smaller and more fragmentary.

It has been noted elsewhere (MacSween 1999) that Impressed Ware, where found in context, is generally found in pits, for example at Brackmont Mill, Fife (Longworth et al 1967), where the excavator interpreted the material as not deriving from prosaic rubbish deposition, and Grandtully, Perthshire (Simpson & Coles 1990). At Meldon Bridge (MacSween 1999) some of the pits appeared to have been lined with broken sherds. The purpose of this more structured deposition is unclear but perhaps the pit at Newfarm is another example of this type of activity in the Late Neolithic.

Catalogue of illustrated sherds (illus 8.5)

- P9 F19/1. Body sherd decorated with twisted cord.
- P14 F19/1. Body sherd decorated with fingernail impressions.
- P15 F19/1. Body sherd decorated with impressed stab marks, possibly made with the end of a bird bone.

Table 8.2 The Newfarm lithic assemblage

	Flint	Chert	Quartz	Pitchstone	Total
Chips	3				3
Flakes	15	1	2	1	19
Blades	1				1
Microblades		1			1
Indeterminate pieces	1	2			3
<i>Total debitage</i>	20	4	2	1	27
Bipolar cores	1				1
<i>Total cores</i>	1				1
Chisel-shaped arrowheads	2				2
Backed knives	1				1
Short end-scrapers	1				1
Double-scrapers	1				1
Scraper-edge fragments	1				1
Pieces w edge-retouch	3	1			4
<i>Total tools</i>	10	1			11
Total	30	5	2	1	39

- P16 F19/1. Bowl with flat-topped rim with a slight neck, decorated with impressed cord on the rim and body.
P19 F19/1–F19/3. Body sherd decorated with twisted cord.
P25 F19/3. Body sherd decorated with deeply incised short lines.

8.2.5 Lithics, by T Ballin

In total, the assemblage includes 38 lithic artefacts (Table 8.2). Twelve were found in stratified contexts – F1 (one), F11 (four), F12 (one), F22 (four), and F26 (two) – whereas the remainder are unstratified. Of the latter, three were recovered as part of cleaning around F3, and two from cleaning around F10. A detailed report and catalogue is included in the site archive.

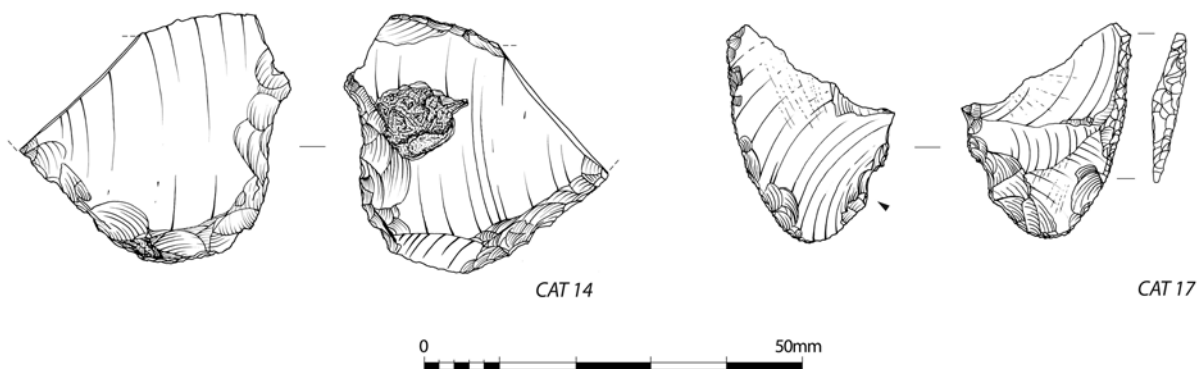
Most of the finds are in flint (80%), supplemented by small numbers of chert, quartz and pitchstone artefacts. The flint is a combination of local pebble flint, probably procured from the nearby shores of the North Sea, and exotic dark-grey chalk flint (four pieces). The chert and quartz were obtained from local sources, whereas the pitchstone was imported from the Isle of Arran in the Firth of Clyde.

The debitage includes three chips, nineteen flakes, one blade, one microblade, and three indeterminate pieces. The blanks were mainly detached by the application of hard percussion (44%) and bipolar technique (37%), supplemented by limited use of soft percussion (13%). The latter may indicate intrusion of older material. Only one core was recovered, namely a small bipolar core. The absence of platform cores may suggest that preventative maintenance took place (Binford 1983, 189), and that these large pieces of lithic waste were ‘tossed’ out of the excavated parts of the Newfarm site.

The tool category comprises eleven pieces, embracing two arrowheads (illus 8.6), one backed knife, three scrapers, four pieces with edge-retouch, and one gunflint. Both arrowheads are chisel-shaped points, and the scrapers include one short end-scrapers, one double-scrapers, and one scraper-edge fragment. Generally, the tools were shaped by the application of relatively plain edge-retouch, but the two chisel-shaped arrowheads and the double-scrapers were modified by a combination of simple edge-retouch and pressure-flaking/semi-invasive retouch. Apart from one blade-based edge-retouched piece, all tools are based on flakes.

It is thought that most of the assemblage was produced by the application of the distinctive Late Neolithic Levallois-like approach (Ballin forthcoming a). With their broad, relatively flat flaking-fronts, Levallois-like cores are particularly suited for the detachment of squat flakes for chisel-shaped arrowheads, whereas slender blades for cutting implements were detached from the cores’ narrow flanks. The flakes from these cores frequently have finely faceted butts. Most probably, the site’s bipolar waste represents the final stage of this approach. The soft percussion blanks are likely to be residual early prehistoric pieces.

Several factors indicate that the Newfarm assemblage is largely Late Neolithic, supplemented by a small number of intrusive Late Mesolithic or Early Neolithic pieces. Diagnostic Late Neolithic elements include the site’s chisel-shaped arrowheads (illus 8.6), technological attributes indicative of the Levallois-like approach (finely faceted platform remnants), and the collection’s raw material composition (dominance of flint, substantial numbers of exotic flint). The chert artefacts are thought to



Illus 8.6 Lithics: chisel-shaped arrowheads

be residual older pieces. This is suggested by the raw material composition of other, mainly Late Mesolithic/Early Neolithic, assemblages from the Dalkeith Northern Bypass project, such as the chert-dominated collection from Smeaton Roman Temporary Camp (Section 7.5.4).

8.2.6 Coarse stone, by A Jackson

Eight stone objects were studied. The assemblage was largely unstratified or from contexts that produced pottery evidence of Late Neolithic/Early Bronze Age date.

A single large but weathered and fragmentary boulder quern was set into the paving (F6) in Trench 2, and was not associated with other finds. Only a small area of the heavily worn grinding surface survives. Saddle and boulder querns of this form are known from sites of Neolithic through to Iron Age date.

Two cobble tools were recovered, namely a hammerstone/pounder from an unstratified (surface) context and a hammerstone/pounder/grinder from F19 (19/2). Such expedient tools are commonly found on Scottish sites of prehistoric and later date and probably served a variety of functions, including preparation of foodstuffs. However, their occurrence in Trench 2 accords well with chronological evidence of LNeo/EBA occupation.

A single fragmentary perforated stone was recovered from F19 (19/3). Broken and discarded in antiquity, this artefact would probably have functioned as a weight of some type and would have been suspended by its perforation on rope. Weights of this form, manufactured from cobbles and unmodified in shape except for the drilling of the perforation, are commonplace on prehistoric and later Scottish sites. Perforated stones of this type have been variously interpreted as loom weights, counterbalances, thatch weights or sinkers (Batey 1987, 79; Clarke & Sharman 1998, 147–49; Henshall 1950, 142).

Three small pieces of cannel coal and/or shale were unstratified. Of these, two have clearly been worked and it is possible that all three pieces are wasters. Of the clearly worked finds, one has been

deliberately flaked around the edges at both sides and, at one end, there is a straight edge that was deliberately cut or sawn. The second object is fragmentary, but enough survives to indicate that it was chipped to a circular shape with a central perforation drilled from one face. It is probably a roughout for a perforated disc (or possibly a ring) that was broken during manufacture and consequently discarded. Without recourse to compositional analysis (see for example Hunter et al 1993; Hunter 1998, 47; Sheridan & Davis 2002, 812–25) definitive raw material identification has not been possible. It should be noted however that cannel coal/oil shale deposits are found in a number of locations through the central belt (eg they both occur in Carboniferous deposits on the coast south of Dunbar (Gibson 1922, 51–2; Greig 1971, 83, fig. 14). Although not chronologically sensitive, they could quite possibly date to the Late Neolithic/Early Bronze Age as suggested by the pottery finds from Trench 2. Artefacts manufactured from black lithic materials (and the debris from their manufacture) are recorded from prehistoric (for example, Sheridan & Davis 2002, 812–25; Hunter 1998, 45; Hunter 1999, 333), Early Historic (Craw 1930, 120) and later sites.

Finds from Trench 2, including the shale/cannel coal discards, the quern, the perforated stone and cobble tools, are broadly indicative of prehistoric occupation at the site. In other words, although the coarse stone is not chronologically sensitive, these finds are consistent with pottery evidence of LNeo/EBA activity at the site. Of these, the pieces of cannel coal/oil shale are particularly interesting as they suggest craft-working activity at the site.

The raw materials used in the manufacture of coarse stone objects include sedimentary (eg sandstone), igneous (eg granite and diabase) and metamorphic rocks (eg shale/cannel coal), all of which were locally available.

8.2.7 Palaeobotany, by M Hastie

Seventeen bulk soil samples, ranging in size from 5 to 20 litres, were collected during the excavation and processed using a system of flotation and wet-

sieving. The quantity of finds recovered from the flots was extremely low and consisted only of a small quantity of wood charcoal, occasional carbonised cereal grains and hazelnut shell. The wood charcoal was very abraded and only present as extremely small fragments. Occasional carbonised cereal grain was recovered from four samples taken from deposits in Trench 2 within F10 and F19. The grain was very abraded and identification was limited to species level. The majority of grain was identified as barley (*Hordeum* sp.) with three grains of possible wheat (*Triticum* sp.) being recovered from F10/2. The material comprised small and very abraded fragments which were not considered suitable for providing a reliable radiocarbon date.

8.2.8 Discussion of the prehistoric and other features

Interpretation of this site is hampered by agricultural truncation, a lack of in situ organic deposits suitable for radiocarbon dating, few stratified finds and by the detrimental effects of soil processes which have translocated both finds and environmental evidence. Below the ploughsoil, the deposits are the same as at Thornybank, where they were found to have no archaeological or interpretative potential due to the presence of post-medieval finds in a layer cut by Early Christian graves. Once this layer was removed, prehistoric features were revealed. This is important, but it is not clear from the Thornybank report whether the dug graves were similarly hidden and that it was only the stone linings of the cists that suggested they were cut through this deposit. It appears likely that, although the exact interpretation of this layer has not been ascertained through depositional analysis, it is in fact an illuviated soil or B horizon.

Prehistoric finds were recovered from pits F11, F19, F20 and F25, of which the first two were visible under the ploughsoil due to their stone content. They were also recovered rarely as residual finds in more modern deposits and from the B horizon. These artefacts provide an insight into the nature of the prehistoric activity on the site.

The importance of the site in prehistory may best be illustrated by the lithics, where the tool ratio, notwithstanding the under-representation of chips and debitage, is firstly abnormally high, and secondly includes an unusually large proportion of imported raw materials. These include material from either Yorkshire or East Anglia and from Arran. The pitchstone in F11 is a further addition to the corpus of such artefacts from eastern Scotland. The presence of lithics in the overlying layer contrasts with the situation at Thornybank where, in spite of the removal by hand of extensive areas of this layer and the recovery from it of a number of coins and nails (Rees 2002, 317), no lithics were recorded.

An isolated pit at Thornybank contained Late Neolithic Impressed Ware but had none of the appar-

ently heated stones present in F19 at Newfarm. Pits of this period occur elsewhere in the Dalkeith area (eg Henshall 1966). The small quantities of numerous, different Impressed Ware vessels in F19 recalls pits excavated as far afield as Angus (White & Richardson forthcoming) and East Anglia (Garrow 2006). Impressed Ware dates to the second half of the third millennium BC (Johnson above). F20 may be prehistoric on the basis of morphological comparisons with pit F19, which again recalls both East Anglia and Angus, where spatially or morphologically related pits contained very variable quantities of pottery, inviting speculation over the ideas behind such deliberate structured deposition.

F19 is spatially associated with both the possible cist F10 and the paved areas but neither can be dated or associated by stratigraphy. All that can be said about the patches of paving is that, if linked, an area of around 20m by 10m was paved. The inclusion of a boulder quern in the paving may support a prehistoric date but it could have been discovered and reused at any date.

The solitary possible long-cist (F7) is reminiscent in its alignment and use of red sandstone of those at Thornybank, but a greater antiquity is suggested by its spatial association with the above features and the Thornybank excavation did appear to have defined the northern extent of that cemetery.

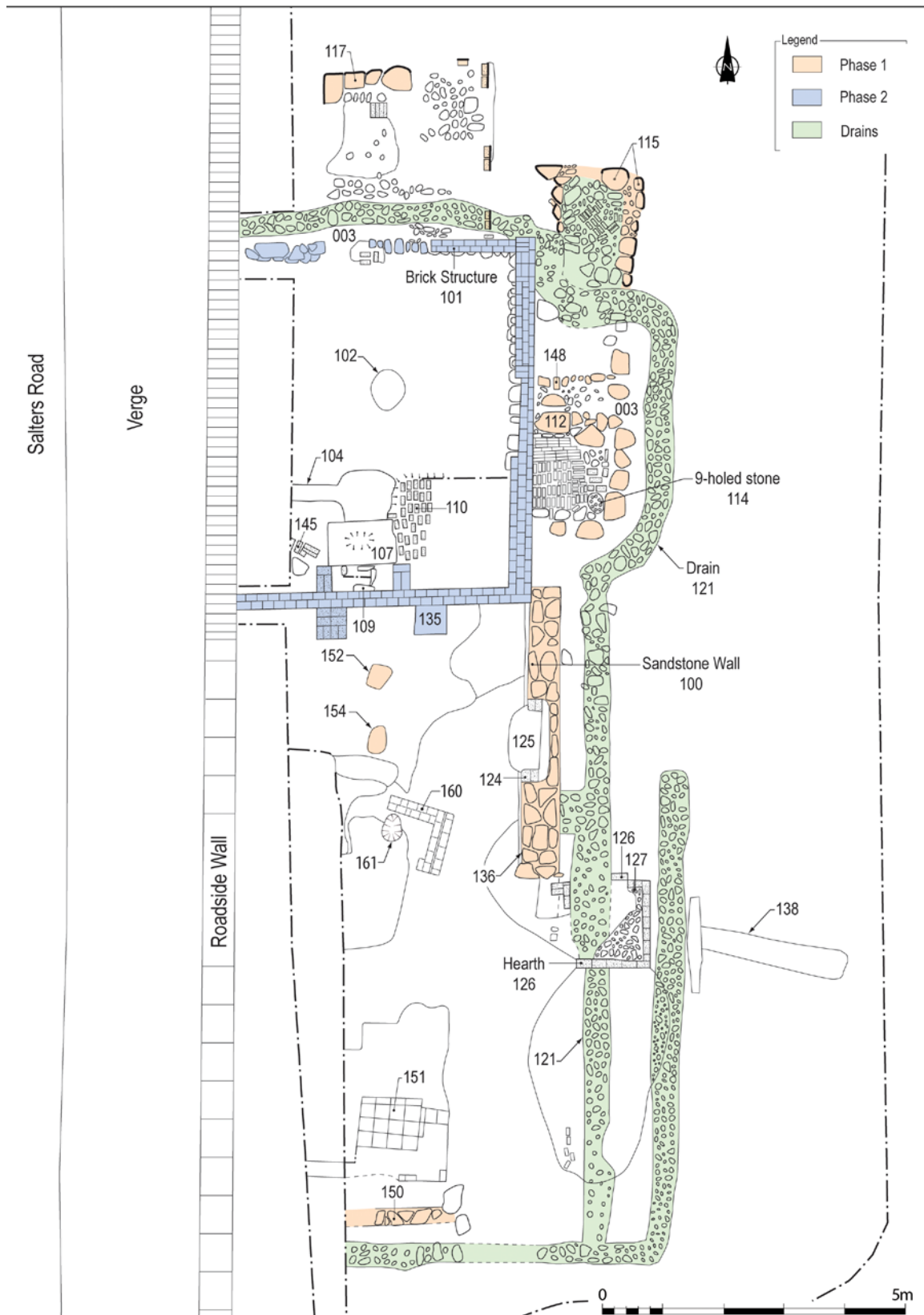
8.3 The post-medieval site

8.3.1 The post-medieval structure

Trench 1 was excavated parallel with, and immediately to the east of the mortared sandstone wall that runs along the eastern side of Salter's Road (illus 8.1), and exposed a post-medieval structure (illus 8.7). The sandstone wall now continues south to the point where, on the first edition map, the track from the sand-pit met Salter's Road (illus 8.1). However, the map appears to show a break in the solid line of the wall coinciding with the building.

The building was formed from several types of building material (illus 8.8, partially exposed from the south), with mortared and unmortared sandstone and brick alongside drains filled with small cobbles. It is interpreted as having two main phases.

Phase 1 comprised two short stretches of mortared sandstone wall (contexts 100 and 150). Although these remains were vestigial, a length of around 10m survived, and a width of 6m may be suggested on the assumptions that the roadside wall approximates to the position of the building's western wall and that two internal pits (152, 154) occupied the centre of the structure. The assumed northern edge of this Phase 1 structure was marked by a change in the construction of the roadside wall, with a capping of large flat slabs giving way to much smaller flat slabs to the north. Cobble-filled drains (121) skirted around the perimeter of the structure. Finds which may provide a construction date in the late 18th



Illus 8.7 Plan of Trench 1 showing phasing and selected contexts mentioned in the text

century comprised abraded glass shards, which were recovered from the Phase 1 wall's foundation slot (136).

Within the Phase 1 structure, features included

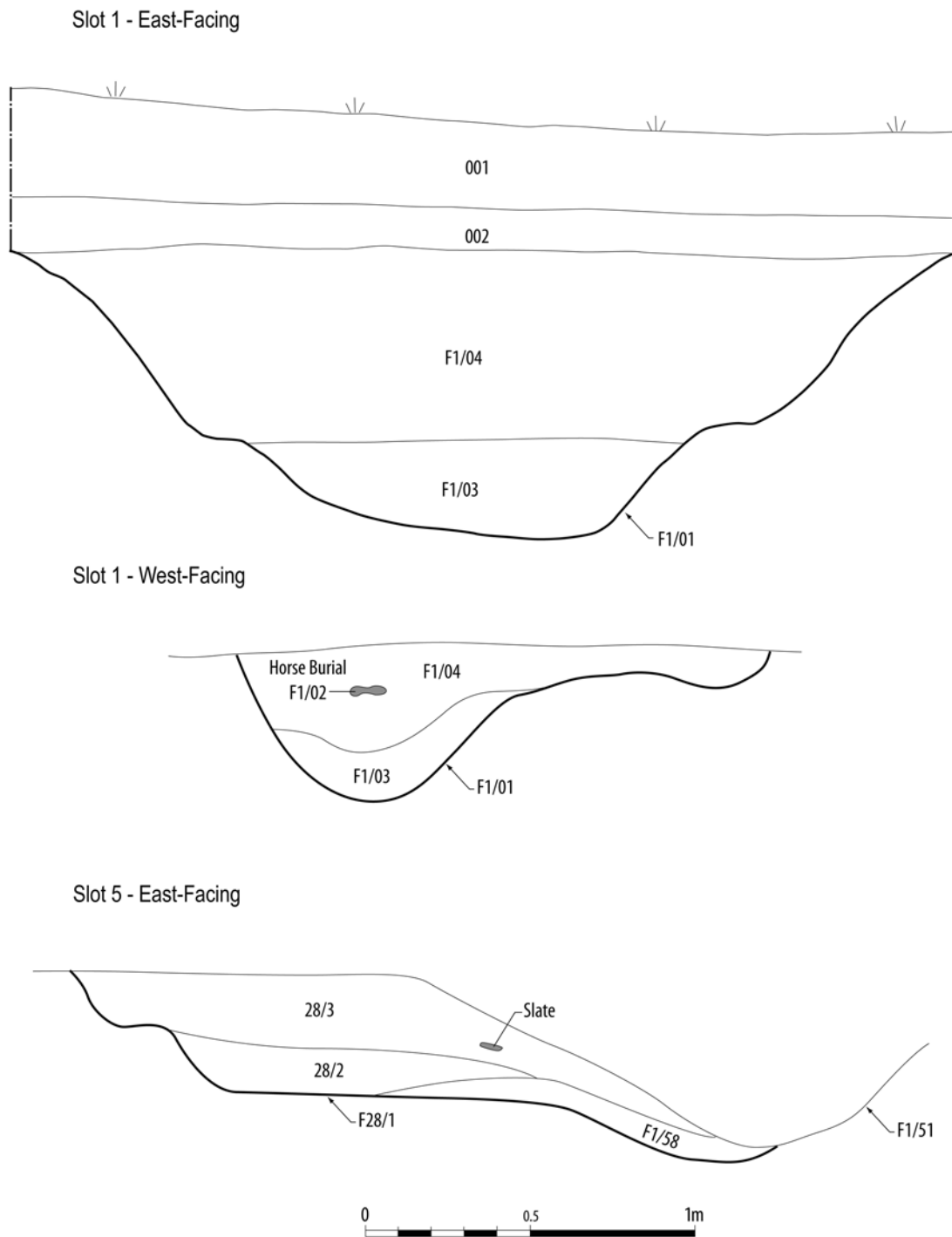
the internal pits (152, 154) which may once have contained the concrete-filled bases of metal roof supports, an L-shaped brick structure (160) associated with a pit (161), and a paved area formed



Illus 8.8 The post-medieval building from the south



Illus 8.9 The nine-holed stone in situ



Illus 8.10 F1 east- and west-facing sections at slot 1 and east-facing section at slot 5

from square quarry tiles (151), all truncated and of unknown purpose.

Wall 100 had been modified on its eastern side by the insertion of an opening (125) with a brick edging (124) and by the construction of a brick and cement hearth (126) containing intensely reddened broken bricks (127). This overlay the drain 121 and may be associated with a shallow slot outside the building (138), which contained 19th-century pottery, glass and clay pipe stems.

Three or four square or sub-rectangular paved

features (112, 115, 117 and perhaps 148) to the north, each measuring 2–3m in length, have also been assigned to Phase 1. These had an outer border of sandstone blocks, in three cases surrounding an interior containing edge-set re-used unfrogged bricks. A deposit of lime mortar or render was present within 117 and this may have been used either for mixing or recycling this material. A sandstone block (114, [illus 8.9, Section 8.3.9](#)) with nine crudely gouged pits in its smooth surface was incorporated within the southernmost feature (112).



Illus 8.11 The horse burial in F1

In Phase 2, a more coherent brick-walled structure with a stone foundation (101) was added to the north of the Phase 1 sandstone building. This measured 5.5m north/south and at least 5m east/west. The suggestion that brick wall 101 was later than Phase 1 wall 100 rests on the fact that 101 appears to cut drain 121.

A narrowing of the wall on the eastern side may mark the site of a window and the southern wall featured buttresses on both sides which probably supported a chimney. A small extension trench over the southern part of wall 101 up to the roadside wall demonstrated that the brick wall ran through the roadside wall.

The building contained a stone-built hearth (109), filled with ashes and a few iron nails (108), which was located between two brick abutments in wall 101. This hearth lay adjacent to a very large sandstone slab (107) with a depression worn through use in the centre. To the west a diagonal brick alignment (145) ran into the baulk, and to the east lay the remains of a brick surface (110).

Within the structure, but possibly earlier than the other features, was a shallow pit (102) which contained no finds. North of the hearthstone, and below the level of the brick surface, was a second pit and channel (104), which contained two sherds of

a late 18th-century Staffordshire white stoneware vessel, as well as a pantile fragment and three iron hooks or latches.

The few datable finds directly associated with the structures indicate an 18th- to 20th-century date for the use of the structure as a whole. Of most significance for providing an 18th-century date for the original construction were the pottery from pit 104 and the glass from the construction trench for Phase 1 wall 100. Phasing and interpretation of the building will be discussed further below.

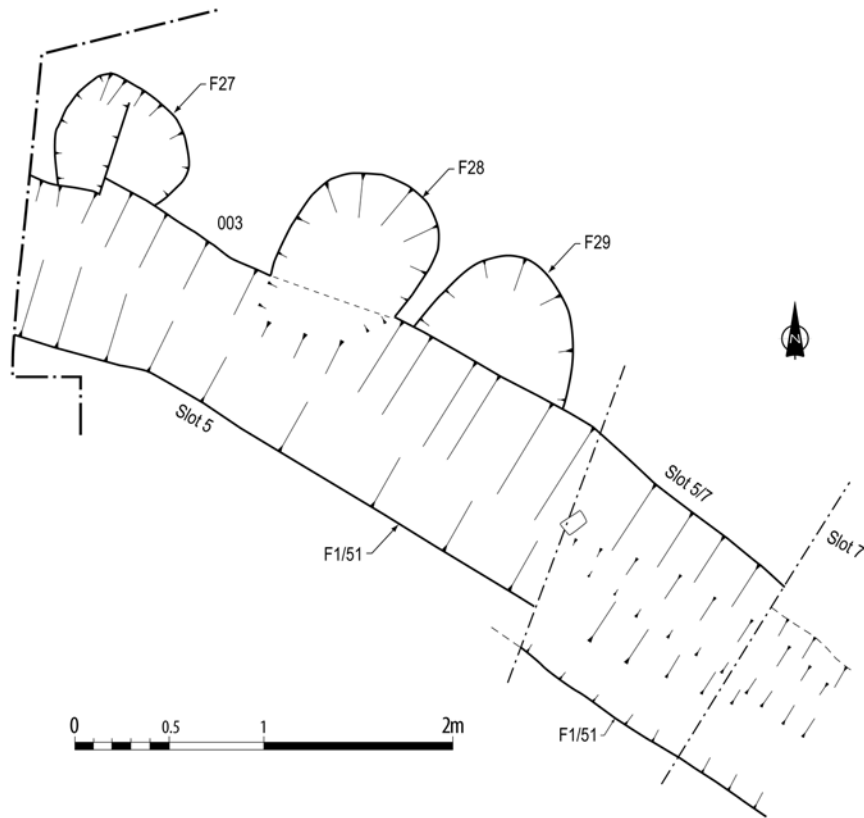
8.3.2 Other post-medieval features

The most visible and substantial feature within Trench 2 was a linear ditch (F1). This was aligned ESE–WNW and ran from Salter’s Road, obliquely across the slight ridge towards the Smeaton Burn, at 90 degrees to the natural contours. This feature ran parallel to, and 55m north of the Thornybank pit alignment.

The ditch was cut through the yellow-brown sand but its edges were not clearly defined. Only faintly visible initially, the increased silt content induced differential drying that aided excavation. The ditch was initially sectioned in a series of slots (*illus 8.3, 8.10*), then fully excavated within the confines of the excavated area. The feature had a surface width of 2–2.5m, and depth from the top of the yellow-brown sand of up to 1m, becoming increasingly truncated towards Salter’s Road, where a width of 0.5m and a depth of only 0.2m were recorded. Although some layering was recorded in the ditch, all fills consisted of a friable, light yellowish-brown slightly silty sand, almost devoid of stones. Within them, quantities of late/post-medieval pottery, glass, metalwork, ceramic building material (CBM) and a single lithic were found. Diagnostic pieces range in date between the 15th and 17th centuries. An unusual find was a gun-stone, dating between the early 15th and the mid 17th centuries, which was recovered from near the base of the ditch in Slot 8. A series of discrete bone deposits was a feature of the ditch excavation. The most complete of these was located mid-way up the fill sequence in the baulk at the east end of Slot 1 (*illus 8.11*), where part of a horse was identified. A second deposit of horse bones was recovered from Slot 7 next to a red sandstone block (F2, *illus 8.3*). All appear to represent dumping of partial or complete carcasses within the partially infilled ditch.

Three features (F27–F29, *illus 8.12*), of similar width but of variable depth and morphology, were present in the northern face of the ditch. In the case of the central (*illus 8.10*, slot 5) and eastern features, these appeared to pre-date the excavation of the ditch. The western feature’s relationship was ambiguous. Post-medieval finds were recovered, similar in date to those in the ditch. The interpretation of these features is obscure.

The ditch was cut by a large circular feature (F12, *illus 8.3*) with a width of 3.9m and a depth



Illus 8.12 F1, Plan of ditch slot 5 showing intercutting features in the northern edge

of 1.2m. Upper fills of creamy sand and brown silty sand overlay a brown sandy silt (12/4) which may represent decayed wood, and this overlay sandy primary fills. Finds included a dressed sandstone block with mortar adhering, iron items including a nail, residual late medieval pottery and other ceramics including moulded field drain tiles dating to the late 18th and 19th centuries. This feature is interpreted as a well or sump. There was no trace of a lining which may have been present to retain the soft natural sand through which it was cut. The base coincided with the level at which the underlying compact silts and clays were reached.

Overlying the ditch in Slot 2 was a linear ditch (F13), and a second parallel ditch (F14) was recorded 5m to the east. The intersection between F13 and ditch F1 suggests that although F1 was infilled prior to the excavation of F13, it must have been visible, as F13 terminates at this point. The fills of both F13 and F14 were brown sand into which was incorporated large quantities of building stone, bricks and metalwork. Both features appear to coincide (*illus 8.1* – 1854 map extract) with a land boundary around Newfarm which is shown in 1854, but why they should be separated by 5m is uncertain. Most easily interpreted as robbed out wall-lines, there were nevertheless no structural remains present in either to confirm this.

Other post-medieval features include F15–F17 (*illus 8.3*), all of which were located at the western

side of the excavation trench. F15 was a deposit of stones in the surface of ditch F1 that had no apparent function, whilst F16 and F17 were, on the basis of their morphology, both post-holes containing coal-flecked sandy fills which could not be associated with other features in the trench.

8.3.3 Historical evidence, by F Oliver with I Suddaby

The name of Newfarm exists to this day though it has not functioned as an independent farming entity for some 200 years. The earliest recorded reference to the farm of Newfarm was found to be in 1749 among tacks of the Buccleuch Estates (GD 224/379/10). These records indicate progressive consolidation of the farm into larger units. The latest reference in the estate papers to the farm of ‘Newfarm’ occurs in 1791 (GD224/731/1). While Newfarm as an entity continued to appear in maps as well as the census enumerator schedules and the valuation rolls, this referred to the small group of houses. Maps in the 19th century, both those drawn up by the estate and by the Ordnance Survey, refer to Smeaton Farm only, which seems to have been formed out of the pre-existing farms of Wester and Easter Smeaton as well as Newfarm.

Besides the agricultural potential of the land, the mineral resources of this area had long been appre-

ciated. In the case of Newfarm, a tack for a period of five years beginning in 1763 articulates in great detail the proprietor's rights to 'set down shafts, sinks and coal pits and set up Ginns and other engines within any part of the ground of the haill respective lands during the space of this present tack and to make ways, roads and passages to and from the said sinks, shafts and coall pitts'.

By the middle of the 19th century, Newfarm consisted essentially of a group of houses occupied by a mixture of agricultural labourers, brick and tile workers and coal miners. The remains in question, therefore, were most likely part of the industrial development, which was promoted in this area by the Duke of Buccleuch in the 19th century, and are likely to have been directly linked to the nearby 'manufactory' known as 'Smeaton brick and tile works'. The brick and tile works (see [Section 10](#)) was a 19th-century enterprise which lasted some 40 years.

The excavated structure by Salter's Road at Newfarm does not appear to have been of great antiquity or of great longevity. The archaeological evidence suggests a late 18th- or early 19th-century construction and it first appears in two maps: the First Ordnance Survey of 1854 and an estate plan of 1860. In neither is the structure identified other than simply being part of the small 'Newfarm' complex of buildings or 'steading' as it is described in the estate plan (RHP9598; [OS first edition, Edinburghshire, sheet VII, 1854, illus 8.1](#)). A search of both estate papers and valuation rolls failed to discover any specific reference to the structure.

A map by John Lawrie dated 1766 appears to depict a roughly east-west-aligned field boundary crossing the slip-road corridor. Although parallel to other, still extant field boundaries running east from Salter's Road up to and beyond the Smeaton Burn, this feature was abandoned by the time of the OS first edition map ([1854](#)).

The Ordnance Survey of 1854 provides the following description of 'Newfarm': 'a number of irregularly built cottages with small gardens attached situated on the east side of the road leading from Inveresk to Dalkeith. They are chiefly occupied by labourers, employed in the neighbouring works, Proprietor: His Grace the Duke of Buccleuch' (RH4/23). The first edition map ([Edinburghshire, sheet VII, 1854](#)) shows a roofed building adjacent to Salter's Road and around 75m to the south of Newfarm. This structure lies within the Newfarm boundary and just to the north of the access track leading from Salter's Road to the sand-pit where, in around 1839, graves were reported as having been found. It remains unchanged on the 1898 second edition and on the 1904 third edition. On the 1926 'popular' edition, the structure is not shown and local memory (Somerville. pers comm) indicates it was invisible by the mid 1940s.

Apart from the brick and tile managers, the people inhabiting Newfarm between 1841 and 1901 were primarily drawn from the surrounding area. They

were predominantly manual workers employed in farming, the tile works, and in nearby collieries. While there was a handful of skilled tradesmen, almost half the male workforce was listed under the category of labourer. As regards specific industries, agriculture was the strongest thread running throughout this period, accounting for 24 of the 102 recorded male occupations, and seven of the fifteen female occupations. Other significant industries were the brick and tile works with fifteen of the total male occupations, coal mining with twelve, and the railway with four. Mirroring the lifespan of the brick and tile works, the population of Newfarm increased from fifty-five inhabitants in 1841 to a high of seventy in 1861, thereafter declining until only eight individuals remained in 1901. Of these, five had an occupation listed; one was a laundry man and the others (two men and two women) worked in agriculture.

Although not mentioned by Heather Holmes in her review of 19th- to 20th-century itinerant agricultural workers in the Lothians ([Holmes 2000](#)), Newfarm continued to be occupied by agricultural workers, many Irish, continuing the Achill workers tradition of employment in the potato trade. Finally, changing accommodation standards for such workers led to its sale, in 1976, to its present owners (G McClung, pers comm).

A full report forms part of the site archive.

8.3.4 Post-medieval and modern pottery, by S Anderson

A total of 228 sherds of pottery weighing 2,471g was collected from 27 contexts. [Table 8.3](#) shows the quantification by fabric. The 228 sherds represent a minimum of 202 vessels.

Quantification was carried out using sherd count, weight and estimated vessel equivalent (eve). Form terminology follows MPRG ([1998](#)). Recording uses a system of letters for fabric codes together with number codes for ease of sorting in database format.

A small quantity of pre-industrial post-medieval pottery was recovered, including red-firing earthenwares with lead and iron glazes (GRE, IGBW) which are probably non-local, fragments of tin-glazed earthenware (TGE), and the typical green-glazed Scottish post-medieval reduced/oxidised wares (SPMR/O). The GRE included one small sherd with orange glaze on both surfaces (F1/802), and five sherds of a thin-walled mug of probable 17th-century date (F1/04). A small fragment of a blackware vessel was found during cleaning. Six sherds of a decorated TGE plate were also recovered from ditch F1 (F1/10); it shows a rustic scene and is likely to be an Anglo-Netherlands product of 18th-century date. Sherds of Scottish post-medieval ware were found in layer 002, ditch F1 and as unstratified finds. One everted rimsherd was from a handled jar or pipkin, and there was a jug sherd with a cordon at the base of

Table 8.3 Post-medieval pottery quantification by fabric.
(NB Percentages are for period groups, except those in italics, which are for the whole assemblage.)

Description	Fabric	Code	No	% No	Wt/g	% Wt	eve
Iron glazed blackwares	IGBW	6.11	1	4.0	1	0.3	
Glazed red earthenware	GRE	6.12	6	24.0	9	2.3	0.10
Tin glazed earthenware	TGE	6.30	6	24.0	35	8.8	0.05
Scottish post-medieval reduced/oxidised ware	SPMR/O	6.50	3	12.0	115	29.0	
Scottish post-medieval reduced ware	SPMR	6.52	9	36.0	237	59.7	
<i>Total post-medieval (15th–18th c.)</i>			25	11.0	397	16.1	0.15
Staffordshire white salt-glazed stonewares	SWSW	8.41	4	2.0	39	1.9	0.23
Creamware	CRW	8.10	21	10.4	107	5.2	0.08
Refined white earthenwares	REFW	8.03	93	46.3	452	21.9	1.18
Industrial slipware	INDS	8.02	3	1.5	16	0.8	0.08
‘Yellow ware’ (buff industrial slipwares)	YELW	8.13	1	0.5	2	0.1	
Refined red earthenwares	REFR	8.04	18	9.0	452	21.9	
Late slipped redware	LSRW	8.51	34	16.9	412	19.9	0.43
Late glazed red earthenware	LGRE	8.50	1	0.5	8	0.4	
Late blackware	LBW	8.52	4	2.0	74	3.6	
Late post-medieval earthenwares	LPME	8.01	7	3.5	195	9.4	0.11
Porcelain	PORC	8.30	6	3.0	94	4.5	0.17
Red stonewares	RDSW	8.42	2	1.0	64	3.1	
Black stonewares and basaltes	BLSW	8.43	1	0.5	7	0.3	
British stoneware	BRSW	8.20	6	3.0	146	7.1	0.28
<i>Total modern (L.18th–20th c.)</i>			201	88.2	2068	83.7	2.56
Unidentified	UNID	0.001	2	0.9	6	0.2	
Total			228		2471		2.71

the neck; all other sherds in this ware were undiagnostic body and base sherds. Their presence in the ditch may indicate that they were in use towards the end of their date range.

Most of the assemblage consisted of industrially-produced ceramics with a broad date range of late 18th- to early 20th-century, although most probably belong to the 19th century. The main exception is the white salt-glazed stonewares (two cups and a bowl), which are of early to late 18th-century date. Also relatively early were the creamwares, which included plates and bowls, a few of which were decorated with green shell-edging, hand-painting or simple banding.

Refined whitewares (including pearlwares) were the most common type and identifiable vessels included cups, mugs, tankards, plates, bowls, dishes and preserve jars. They were decorated using a variety of techniques, including transfer-printing, sponging, lustre, relief-moulding, over-glaze enamelling and hand-painting. All decorated sherds were different and there was no evidence of any ‘sets’ in the group. ‘Industrial slipwares’ and the related ‘yellow wares’ (buff earthenwares with yellow glaze and slip bands) were represented by

only one vessel each, the former a bowl and the latter undiagnostic.

The redwares were represented by several types. Refined redwares consisted largely of dark brown-glazed sherds, some of which were probably teapots. Four unstratified sherds of a single vessel with a handle were limed internally and may have been from a chamber pot. Slipped redwares, mainly bowls with plain white slip or slip decoration internally, were relatively common. One of these was very similar to the waster sherds found recently at Prestongrange (Haggarty 2009a). One redware sherd with orange glaze internally was probably a late version of post-medieval GRE. There were four sherds of a single blackware vessel, similar to Jackfield Ware. Seven unglazed post-medieval redware (LPME) sherds were probably plantpots.

Six sherds of porcelain or ‘bone china’ included a probable Chinese porcelain hand-painted cup with enamelled blue, red and green decoration, a saucer with a gold band on the rim, a slip-moulded pedestal base from a vase or similar, an undecorated body sherd, the arm of a figurine, and a small hand which may be from a doll.

English stonewares included both decorative table-

Table 8.4 Pottery from stratified contexts

Context	Description	Fabrics	No.	Spotdate
106	Fill of feature 104	SWSW	2	18th c.
108	Fill of hearth 109	LSRW	1	L.18th–19th c.
139	Fill of linear cut 138	SWSW, REFW	4	L.18th–19th c.
9203	Fill of land drain 9205	LSRW, REFW	3	L.18th–20th c.
9219	Fill of Phase 2 structure	LSRW, REFW	2	L.18th–20th c.
<i>Total Trench 1</i>			<i>12</i>	
002	Layer	SPMR, REFW, LPME, UNID	10	L.18th–20th c.
F1/04	Secondary fill of ditch F1	GRE	5	17th c.
F1/10	Top fill of F1 in slot 2	TGE, CRW, REFW	8	L.18th c.
F1/302	Fill of F1 in slot 3	SPMR, REFW	2	L.18th–19th c.
F1/50	Upper ditch fill in slot 5	SPMR	1	15th–18th c.
F1/701	Sole fill of F1 in slot 7	SPMR/O, REFR, REFW	5	L.18th–19th c.
F1/802	Sole fill of F1 in slot 8	GRE	1	17th–18th c.
7907	Fill of linear ditch (=F13)	REFR	1	L.18th–19th c.
8903	Fill of ditch (=F1)	REFW	1	L.18th–19th c.
F2	Animal burial	REFW, LPME	2	L.18th–19th c.
F11/2	Fill of pit F11/1	BLSW	1	L.18th–19th c.
F12/1	Secondary fill of possible well	REFW	2	L.18th–19th c.
F12/2	Primary fill of possible well	SPMR, REFW	3	L.18th–19th c.
F16/2	Fill of post-hole F16/1	REFR, REFW	2	L.18th–19th c.
6603	Fill of irregular mottled feature 6604	SPMR, YELW	2	L.18th–19th c.
8905	Fill of irregular feature 8904	LSRW, REFW	2	L.18th–19th c.
<i>Total Trench 2</i>			<i>48</i>	

wares in red and black stonewares, and utilitarian storage vessels. The red stonewares consisted of a dry-bodied footring base with moulded decoration, and a brown-glazed base with lathe-turned incised decoration which had the appearance of basket-weave. The black stoneware sherd was a fragment of a teapot spout with moulded decoration. Other stonewares were fragments of brown-glazed bottles and clear-glazed jars.

Amongst the refined whitewares recovered during cleaning there was a footring base fragment of a biscuit-fired flatware. Two other sherds, from topsoil and layer 002, may also have been biscuit-fired, although one of these could also be an unidentified import. The presence of at least one waster could be taken to indicate that a kiln was located somewhere nearby, but the wide variety of types represented in this assemblage, together with its dispersal largely in the topsoil, suggests that some of the pottery may have been imported to the site along with other rubbish or composted waste for manuring.

Pottery recovered from topsoil, surface, cleaning, spoil and as unstratified finds amounted to 168 sherds (1,809g), or 74% of the assemblage by count.

Table 8.4 shows the quantities and fabrics of pottery collected from stratified contexts.

Only nine sherds were directly associated with the structures in Trench 1. Two of these, including one from feature 104, were of 18th-century date, which potentially indicates a construction date of this period for Phase 2 or, more likely, the underlying Phase 1 feature.

Most of the stratified sherds were recovered from sections of ditch F1. The fills of this ditch contained some of the earliest pottery to have been found on the site suggesting that it may have been dug as early as the 17th century, presumably being filled in the late 18th or early 19th century. The upper fill of the ditch was cut by animal burial F2 and well/sump F12, both of which contained 19th-century pottery, and the ditch had been cut through pit F29 which contained a 17th-century clay pipe stem (see below). Other small features (F11, 6604, 8904) also produced pottery of later 18th- to 19th-century date.

The very wide variety of pottery types, which also contains apparent wasters, is similar to another large middened group found at Jack's Houses, Kirkliston, where it was suggested that the material was brought onto the site specifically to add to the

Table 8.5 CBM by fabric and form.

Key to forms: CP – chimney pot; RT – plain roof tile; PAN – pantile; LB – late brick; FT – floor tile; DP – drainpipe; FD – field drain; UN – unidentified.

Fabric description	Code	CP	RT	PAN	LB	?FT	DP	FD	UN
Fine sandy, few other inclusions	fs			19		1		1	
Fine sandy with clay pellets	fscp				10			2	1
Fine sandy with ferrous inclusions	fsfe		1	1	4	8			
Fine sandy with grog	fsg		1		2	1			
Fine sandy with grog and ferrous inclusions	fsgfe				5	1			
Fine sandy micaceous	fsm			1					
Medium sandy, few other inclusions	ms			2			2		
Medium sandy with ferrous inclusions	msfe		1	1					
Compressed shale, machine-made	comp	1							2

soil and break it up (Haggarty 2009b). Whilst the soil at Newfarm is not clayey and would not benefit from such treatment, it nevertheless provides one example of the use of ‘nightsoil’ in the region at this period.

In summary, the earliest post-prehistoric pottery from this site consisted of green-glazed Scottish post-medieval reduced wares, which were produced for at least three centuries. They are most likely to be contemporary with the small quantity of 17th-century finds from the site, and would therefore pre-date the construction of the buildings fronting Salter’s Road. The buildings produced a small quantity of 18th-century material, which, if used in the structures, may indicate the date for their earliest occupation. The 19th-century pottery, which was recovered largely from the upper levels of the site to the east of the buildings, although apparently contemporary with occupation, is likely to have been brought to the site with organic waste for manuring. This is based on the very wide range of pottery types and the large number of vessels represented by only single sherds. Some exotic material, such as the tin-glazed earthenware and the glazed red earthenwares, was present here in the 17th/18th centuries, but it is not possible to link this directly with the Salter’s Road cottages.

8.3.5 Ceramic building material (CBM) and mortar, by S Anderson

Sixty-eight fragments of CBM were recovered, some as samples from the brick walls within the structures. The assemblage was quantified (count and weight) by fabric and form. Fabrics were identified on the basis of macroscopic appearance and main inclusions. Table 8.5 provides a summary of fabrics and forms present in the assemblage.

Roofing material was represented by 28 fragments. One of these was a compressed, shale-yellow chimney pot fragment with heavy sooting on the inner surface. Three fragments of plain peg tile were

present, one with a circular peg hole; two of these were overfired and poorly made. Most of the roof tile consisted of pantile, generally in fine fabrics which were probably machine-made and 19th-century or later in date.

Twenty-one fragments of handmade red brick were recovered. Fragments in fabric ‘fscp’ (see Table 8.5) were generally soft and heavily abraded, whilst those in the ferrous and grog-tempered fabrics were well-fired, dense and hard. Of the fragments for which at least one dimension was measurable, most were in the range 215–233 × 103–117 × 60–72mm (8½–9 × 4¼–4¾ × 2½–3”). Bricks of this size were generally produced in the 17th–19th centuries. One smaller brick was heavily overfired and cracked; it measured 100 × 55mm, but was probably a waster. An unusually large brick with a cant corner was collected from boundary ditch F13; this measured >323 × 170 × 72mm. Bricks sampled from Phase 2 wall 101 and Phase 1 surface 113 (within the stone-setting 112) were 60mm thick and likely to be slightly earlier than the larger, thicker bricks associated with hearth 126 (a later addition to the Phase 1 structure).

Ten fragments, representing three objects, were recorded as floor tile as they were the same size as post-medieval unglazed quarry tiles (225–237mm wide/long). However, they were unusually thick (52–70mm) and closer to bricks in appearance. They may be ‘stop end’ bricks, which are sometimes used at the end of a wall as a capping terminal, but it seems likely that they were used or re-used as paving within the Phase 1 structure, as one was recovered from a surface (151). One small fragment (unstratified) had a knife-trimmed edge and was likely to be a true floor tile.

Two fragments of drainpipe were recovered. Both were in medium sandy fabrics, one with a reduced core. Three fragments of possible moulded or slip-cast field drains were recovered from F12 and as an unstratified find; the latter provided a half-section and showed that these objects were U-shaped with a

Table 8.6 Glass fragments from stratified contexts

Feature	Context	Description
Fill of cut for wall 100	137	Two green body shards of bottle, weathered surfaces. 18th c.?
Fill of linear feature 138	139	One green body shard of bottle. 19th c.?
Ditch F1	F1/02	Two shards, body and base, of one bottle, weathered, green. 18th c.
	F1/03	Bottle base fragment, deep kick, weathered, green. 18th c.
	F1/40	Six bottle body fragments, green, weathered. 18th c.
	F1/50	Twelve shards, mainly one bottle, string ring, rim diameter 30mm, weathered surfaces. 18th c.
	F1/53	One green body shard of bottle. 19th c.
	F1/302	Seven shards of ?one bottle, string ring, rim diameter 27mm, weathered surfaces, green. 18th c.
	F1/701	Two weathered green body shards of bottle. 18th c.?
	F1/10	Two weathered green body shards of bottle. 18th c.?
	F1/10	One brown bottle body shard, slightly weathered. 19th c.
	F1/10	One uncoloured, corrugated ?neck of jar, moulded. 19th/20th c.
	7909	One bottle base with dome-shaped kick, weathered. 18th c.
Well F12	F12/1	One thin uncoloured ?wineglass bowl fragment. Undated.
Ditch 5705	5706	One small green body shard of bottle. 19th/20th c.
Cut 8904	8905	One bottle base, deep kick, heavily weathered and abraded. 18th c.
	8905	One green body/base angle frag of squat wine bottle. 18th c.

flange running along the centre of the side, and with an opening at the base.

Two fragments of a large unidentified compressed shale or stoneware dark brown salt-glazed 'tile' with an integral bowl or basin-like feature on one surface were collected from F16. This is probably a ceramic vessel for use in an industrial process. A small abraded fragment in fabric 'fscp' was also unidentified.

Fragments of lime mortar were recovered during cleaning and as samples from some of the wall foundations of Phases 1 and 2. Fragments from Phase 1 walls 100 and 150 contained moderate sand and calcareous fragments. A spread of mortar within 117 was sampled, but contained no obvious aggregates. None of this material is intrinsically datable and the pieces were all undiagnostic in terms of form and function.

8.3.6 Clay pipes, by S Anderson

Twenty-nine fragments of clay pipe (five bowls, twenty-two stems, two partial bowl/stem) were collected from the two trenches. Bore diameters were measured where possible, and compared with a sample from Edinburgh (Lawson 1976). In that group, bores of larger diameter (>2.5mm) tended to be of early date (17th/18th century), with narrow bores generally belonging to the 19th century. On this basis three pieces could be assigned to the 17th century, three to the 17th/18th century, two to the 18th/19th century, and seventeen to the 19th

century. One of the latter (Trench 1 cleaning) was also datable by its maker's mark, a stem mark for Thomas White of Edinburgh (1829–67). Four other fragments had complete or partial marks. A fragment of bowl with an oval containing a letter 'T' could be a 'T W' pipe (also from Trench 1 cleaning). Trench 2 spoil produced a fragment of bowl with 'R D' in a cartouche. From 002 (near F13/14) was another bowl with a poorly formed mark which appears to be 'J B' in a cartouche. A stem from 002 near F8 had a partial stem mark 'JEFFR . . . / . . . SELL'.

A piece from fill 139 of linear feature 138 in Trench 1 appeared to have a shallow sprig of leaves on the small piece of remaining bowl, but all other bowl fragments were plain. Two stem fragments were glazed yellowish-brown, suggesting that they were close to the mouthpiece.

The majority of fragments were collected during cleaning and from layer 002. A few came from stratified contexts. Two stems of ?18th- and 19th-century date came from linear feature 138. In Trench 2, ditch F1 produced a stem of 17th-century date, with a second in the earlier pit F28, animal burial F2 was associated with a 19th-century glazed stem fragment, and well F12 contained 19th-century stems in its primary fill, with a redeposited 17th/18th-century stem in a secondary fill.

8.3.7 Glass, by S Anderson

The 74 fragments of glass consisted largely of green bottle fragments, although fragments of jars, other

vessels and window glass were also recovered. A few fragments, including a machine-made brown beer bottle base and a white screw-top jar, were of 20th-century date, but the majority of objects belonged to the 18th/19th centuries, including several squat wine bottles with deep kicks at the base and string rings at the rim. One moulded cut-glass style bottle fragment had a British Registration Diamond on the base, which allowed it to be dated to 2 November 1852. A cobalt blue glass bottle base had moulded maker's mark, 'Y/G/Co' in a hexagon, probably made by York Glass Co, who were makers of chemists' bottles in the 19th century. Most fragments were unstratified or collected during cleaning. Fragments collected from stratified contexts are shown in [Table 8.6](#); most were from ditch F1.

8.3.8 Metalwork, by S Anderson

A total of 105 metal objects were recovered from the two trenches, but 78 of these came from topsoil, cleaning contexts, or were unstratified metal-detecting finds. The finds have been catalogued in full and a list is available in the archive.

Four contexts in Trench 1 produced metal finds. Pit 104 contained three iron hooks or latches. Hearth fill 108 contained five burnt nails with coal ash deposits adhering to the corrosion products. A small unidentified ferrous lump was recovered from the cut for wall 100 (fill 137). A large looped spike was found in linear feature fill 141.

In Trench 2, most iron objects in stratified contexts came from fills of ditch F1. These included a staple, three nails, a square buckle, a small rotary key and an unidentified object. A spade or fork handle came from F13. From well fill F12/2 there were one nail and one heavily corroded, unidentified flat object. Four nails were recovered from F2, the large sandstone block and associated animal remains in the top of F1. Single nail fragments were also collected from pit fill F29, post-hole fill F16/2 and 5712 (evaluation).

The majority of metal-detected finds were non-ferrous. They included three aluminium cow tags, at least fifteen iron nails, two small domed furniture studs, a ?bolt, two coins (George III Irish halfpenny; Victoria farthing), a square buckle, thirteen buttons, a wire pin, a spoon bowl, nine lead melt fragments, a copper alloy sheet offcut, various fittings of uncertain function, a brass finial, a lid, a suspension ring, two lead musket balls, a thimble, a toy wagon wheel and a large lead sack seal. All were likely to be of 19th-/20th-century date.

8.3.9 Coarse stone, by A Jackson

The large nine-holed object (114) which was found set within the brick and stone feature 112 is a fascinating piece. Roughly oval in plan, it has been crudely shaped at sides and base but more carefully

chiselled on one face to create a single flat surface within which nine shallow circular depressions of roughly equal size and depth have been carved using a metal chisel and/or pick. The depressions have a rough symmetry in their arrangement forming an oval (like the stone) and there is a central depression ([illus 8.9](#)).

The object is of uncertain function but two very different uses present themselves. The first is that the stone is a crude cresset lamp and that the depressions formed small open wells for oil, each with an individual wick. Square cresset lamps with multiple shallow depressions and wicks are known from medieval contexts; however, none take the same form as that from Newfarm. There is also no evidence of burning and blackening. If this artefact originally functioned as a lamp it is likely that it was simply reused as floor material. Although it is quite possible that the stone was reused in this way an alternate interpretation of function can be found that uses the context of recovery.

The second possible function is that this unusual stone was used as part of a game, possibly the marble game, 'Nine Holes'. Popular in the 19th century, there is more than one form of this game recorded in the literature ([Gomme 1894](#), 413). One version involves making nine holes in the ground (eight symmetrically arranged around a central hole), which are used as a target for marbles, although it should be noted that these are often set out in a square formation. Similar games were played using buttons or coins and the location of the target holes (the stone) set into a floor against a wall resembles descriptions of these games. There are no references to stones with nine carved holes being used in the literature; however, this object's context of recovery lends additional credence to this or a similar interpretation. It follows that, rather than being a reused stone, it could well be contemporary with the 19th-century date of the surrounding structures and recovered from its primary context of use.

A number of constructional stones were recovered. These include roofing slates (only one intact), a fragment of a sandstone tile and a coping or plinth/cill stone. All are likely to have come from a relatively modern (?19th-century) context. The one example of an intact roofing slate has been deliberately cut at a diagonal from the upper left to lower right. This is consistent with it having been cut into a roof valley, eg around a dormer window. A nail hole for fixing the slate to roof battens survives intact and is worn. The assemblage also includes a fragmentary sandstone roofing tile; inferior to slate, this tile possibly predates the other roofing slates. The coping or plinth/cill stone was recovered from primary deposit (12/6) in the possible sump F12. It is crudely formed – chiselled rather than sawn – with one bevelled edge. Its underside is rough. Some mortar adheres to the bevelled face, indicating that this stone was reused. The stone will

have been used in construction of late medieval or later post-medieval/modern date.

8.3.10 Gun-stone, by D H Caldwell

The find consists of a well-rounded, complete stone ball, worked from igneous rock, probably a gabbro (P Davidson, pers comm), and can be dated to the early 15th to mid 17th centuries. It measures 76mm (3 inches) in diameter. It was recovered from the fill of ditch F1 (1/802).

The most likely explanation is that this is a gun-stone. Pieces of shot made of stone were fired from wrought iron, breech-loading guns since they were not strong enough to take the larger charges necessary for propelling metal shot. Such guns were in use throughout the 15th and 16th centuries. Similar gun-stones may also have been fired from the 'leather guns', light pieces of field artillery used by the Scottish army in the campaigns of 1650 and 1651 (Stevenson & Caldwell 1977). There are no outcrops of gabbro in the vicinity of Newfarm and so this is not a locally resourced material.

A yellowish stain on the surface of the ball was subjected to XRF analysis, but proved to be largely composed of iron.

8.3.11 Gunflint, by T Ballin

A gunflint was recovered during site cleaning. Gunflints are usually subdivided into spall gunflints and blade gunflints. The former are based on flake-like blanks, and they are generally dated to the period before c 1800, whereas blade gunflints are based on blade segments, and they are dated to the period after c 1800. The Newfarm example is a blade gunflint, it is most likely to post-date the year 1800. It was made in first-class English flint, and it is likely to have been produced at the Brandon gunflint workshops in East Anglia (Skertchley 1879).

8.3.12 Animal bone, by J Thoms

A total of 563 fragments were retrieved, the majority of which (416) derived from F1, the large ditch. Trench 1 produced only one fragment, of unidentifiable bird bone, which may have been deposited through natural processes. The lack of bone from Trench 1 suggests that soil conditions may not have been suitable for bone preservation.

The majority of identifiable fragments (41) in F1 derived from horse (*Equus caballus* L.) with only three bones from cattle (*Bos taurus* L.) and five from sheep (*Ovis aries* L.) or goat (*Capra hircus* L.). There are at least two horses present in the assemblage, as indicated by duplication of certain elements, including two complete left calcanea; two complete right metacarpals; complete acetabula

from two right and two left pelves and two complete right tibiae.

A large quantity (144) of ribs and vertebrae from a large mammal (cow-/horse-sized) were retrieved from F1. Seven of the vertebrae had been fused together in life. This is a common phenomenon in horses, where the repeated pressure induced on the spine by riding the horse can cause extra bone growth and fusing of the vertebrae. Another example of pathology was noted in several vertebrae that displayed signs of extra bone growth. This indicates a fully mature, or even elderly animal, again suggesting the vertebrae derive from horse, rather than cattle (which are generally killed for meat before reaching the stage of full skeletal maturity). Two further sets of articulating bones from F1 were the left and right astragalus, calcaneus, metatarsals III and IV; and all three phalanges of a horse. The right tibia was present also. These bones comprise the lower hind legs of the horse. From the size of the two metatarsals the horse appears to have been a small animal, a pony of around 11½ hands high (1.18m). The presence of two sets of articulated bones indicates that at least one of the horses had been placed in the ditch as a complete carcass.

F2 contained 50 fragments of dog and horse, in association with 19th-century pottery. The four dog bones may have come from a single individual. A mandible, containing two permanent teeth in wear, indicates that it was a mature animal (over one year old). The other dog bones present were parts of the foreleg of a mature animal (over fifteen months of age). The horse bones comprised a femur and tibia from a mature animal (over 42 months), and there were additional large mammal bones which may be horse. Other dog and horse bones were retrieved during cleaning, possibly the same as those in F2, suggesting that it was a disturbed or plough-truncated burial. One other species was represented in F2, by a complete maxillary premolar of cattle. This was in better condition than the other bone fragments in this context and is likely to represent an intrusive find.

Other features (F10, F11, F12, F16, F19) and finds from evaluation trench 57 included fragments of indeterminate bone, some of which had been burnt.

The animal remains from Trench 2 are unusual in that most of them derive from animal burials. Most archaeological assemblages of animal bone consist of waste material from domestic or industrial food production processes. Horses and dogs are generally under-represented in the archaeological record, their role in human society not usually being involved in provision of food. Consequently their carcasses tend to be dumped whole, either in purpose-built grave pits or in pre-existing cuttings, such as the ditch (F1) in Trench 2. The bones from such burials will not normally carry any butchery marks, nor any signs of burning. The apparent occurrence of dog and horse burials together may

represent a deliberate or accidental placing of the animals, but the disturbed nature of the soils in the area means there is insufficient stratigraphic evidence present to determine whether they were buried at the same time.

8.3.13 Shell, by S Anderson

Thirty-eight fragments of shell were recovered from Trench 2. With the exception of one common land snail shell (*Helix aspersa*) collected during cleaning, all fragments were of edible marine molluscs (oyster, scallop and mussel). Most fragments came from layer 002 and probably relate to post-medieval occupation of the site. One small piece of oyster came from F16/2, also of post-medieval date.

8.3.14 Discussion: post-medieval land use and occupation, by I Suddaby and S Anderson

The building by Salter's Road was severely truncated, with no substantial floor surfaces being preserved inside. Two phases have been suggested based on the constructional methods and intercutting of some features, but it is likely that the Phase 2 brick structure was an addition to the Phase 1 stone building, or a replacement for an earlier part of that building. The southern half of Phase 1 certainly appears to have undergone minor alterations, with the addition of brick features which may be of later date than Phase 2.

The remaining fragment of east wall in Phase 1 contained a narrowed area with brick jambs which may represent either a window or a door, and a similar narrowing in the east wall of Phase 2 may also indicate an opening. To the south, a narrowing of the drain could indicate the position of an access. However, in keeping with similar structures in the region, the main door may have been located on the road side of the structure.

Late 18th-century finds were recovered from sealed contexts associated with both the stone and brick phases of the building, and it is likely that it was originally constructed around this date. Internal features like the brick and quarry tile surfaces and the hearth would have been common in the 19th century, and may be later insertions. The rectangular area delineated by brick buttresses and the hearthstone was the perfect size (c 1 × 0.5m) to house a small kitchen range of the period, and the buttressing to the south of this wall probably represents the base of an associated chimney.

External features consisted primarily of the stone and brick surfaces which may represent small bordered yards, of the type which can be seen in many contemporary photographs of small 19th-century cottages. One contained mortar/render and may have been used to recycle this material, suggesting that these areas were functional too. A second incorporated the stone with its nine crude gouge marks.

This remains an enigma as one suggested use, for a marble-related game, might have been difficult in view of the uneven brickwork forming the adjacent surface.

The overall finds assemblage from Trench 1 is sparse, but comprises items which would have been readily available to a household of the period. Much more of the post-medieval assemblage came from the upper layers of the site and from features in Trench 2. Whilst much of this material may have originated in the buildings or from the households at Newfarm itself, some of it may have reached the site through manuring or the movement of night soil from urban areas.

Structures of this type are rarely reported in the archaeological literature, so the Newfarm excavation is not easily paralleled. However, a strikingly similar structure which included analogous discontinuous mortared sandstone walls, square features with a drystone sandstone border enclosing edge-set brick interiors and the extensive re-use of industrial bricks and tiles, was recently recorded at Old Coalburn, near New Cumnock, Ayrshire (NMRS: NS51SE 37, Suddaby 2007). That site also lay in close proximity to landowner-led coal-mining and quarrying activities.

Whilst excavated evidence is not easy to find, this basic form of small, single-storeyed worker's cottage survives as standing buildings in most parts of lowland Scotland. The typical stone-built structure, often with brick extensions, is also the subject of many late 19th-century photographs which provide evidence for living conditions, external and internal features, roofing and fenestration. The archaeological evidence from this site has provided limited evidence for the construction techniques, plan and layout of such a cottage, as well as providing some information on the material culture available to its occupants.

The other features of post-medieval date at Newfarm comprised several pits and post-holes of uncertain function, some deposits of animal bones, and a large boundary ditch. The latter was on the same alignment as narrow parallel fields shown on early 19th-century maps to the east of Salter's Road. Probably excavated in the 17th century or later, abandonment by the mid 19th century is evidenced by the finds and by the fact that field boundaries shown on the first edition map of 1854 overlie it. Notwithstanding the unreliable nature of the stratigraphy, the recovery of 17th-century pipe stems in both a pit cut by the ditch, and the ditch itself may further refine the dating, as may the gun-stone which, if 17th-century, may be associated with General Monk's occupancy of Dalkeith House between 1654 and 1659 whilst commanding Cromwell's army in Scotland.

By 1854, Newfarm had been enclosed by an irregular field boundary within which small plots are visible. This reorganisation may have anticipated the Inclosure Act of 1857 and developed from the landowner-led industrialisation of the area, with

the Duke of Buccleuch exploiting the local resources of coal, clay, sand and stone. The building in Trench 1 alongside Salter's Road may be a manifestation of this process, probably simply representing the remains of a cottage occupied by workers in one of

these industries or employed as agricultural labour. It may have been linked to Smeaton brick and tile works, as, for a period, was the rest of Newfarm, but there were other Buccleuch Estate industries nearby.