

CHAPTER 6: TOWARDS A TYPE SERIES OF MEDIEVAL POTTERY IN SURREY

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Introduction

The publication in this volume of excavated material from several towns in west and central Surrey provides the opportunity for a more general appraisal of medieval pottery in the county to be put forward. The author has been progressing towards a provisional type series of fabrics and wares for several years, largely based upon collections excavated by the Surrey County Archaeological Unit, although much else has been seen from other sites in the county. While pottery from Staines, Chertsey, Reigate, Guildford, Godalming, Dorking and Farnham was being studied, the results of work on the London Thames waterfront became known and were soon followed by a series of papers that describe a dated type series of medieval pottery from the capital (Pearce *et al* 1982; Pearce *et al* 1985; Pearce & Vince 1988; Jenner & Vince 1983; Vince & Jenner 1991). Until those were published it would have been premature to develop a county typology, but a provisional attempt has been made in this comparative study of medieval pottery from the towns of west and central Surrey.

The type series that follows is largely confined to the material from recent excavations in Chertsey, Dorking, Farnham and Godalming, reported in this volume, and in Staines, Reigate and Guildford, since no resources were available for the study of material from earlier excavations, either in those towns or elsewhere in Surrey. For this reason it is provisional and open to extension.

Wares and fabric types

INTRODUCTION

For the purposes of this report a fabric type is represented by sherds that share a similar range and mix of tempering agents, and perhaps some other characteristics, such as colour, and which cannot reasonably be further divided at x20 magnification. Thus, sherds with a tempering suite almost identical to that of a defined fabric type, but which have slightly more or less of a certain size grade of temper, or a grade of grains that is larger or smaller, were always classified as a different fabric type. It was felt necessary to proceed by such fastidious discrimination despite it being evident that, in many instances, this represented an artificial construct. Most of the many fabric types belong to only a few wares or ware-types.

Wares, for the purposes of this report, are represented by sherds of one, or several similar but slightly different, fabric types, which are thought to have been made at a kiln site or single production centre. Ware-types are similar but instead of being from one kiln site or small production centre, they are thought to represent more widespread and inter-regional methods of pottery manufacture. For these, it is not inconceivable that apparently identical fabric types were made by potters working at opposite ends of the county.

The medieval pottery of Surrey includes calcareous-gritted fabrics, coarse and finer shell-tempered types, flint-tempered and sand and flint-tempered fabrics, and variously coloured sandy types. In most towns there is usually a more prevalent standard medieval sandy ware with coarser and finer sub-types. Other groups, most often those of the earlier ceramic traditions, have many inclusion types and are much more variable; so variable that it is often difficult to separate the extremes of their fabric range from those of other ceramic traditions. There is always a problem in differentiating between a ware with shell and some sand, and one that has sand with some shell, for example, and one of the reasons why earlier attempts at devising a type series for Staines were unsuccessful was the difficulty of dividing all of the multiply-gritted sherds in a coherent manner. This could not be done until larger samples had been collected from later excavations. The term 'poly-tempered' seems more apt than 'multiply-gritted', and is used hereafter in a general sense and as the common name of one group of fabrics.

SAXON POTTERY: A NOTE

Since so few sherds of early to mid-Saxon pottery were recovered from the excavations it did not seem appropriate to elaborate on such material from the rest of the county. An important collection of mid to late Saxon coarseware was, however, found at Godalming.

The mid to late Saxon pottery at the Godalming Co-operative site was an unexpected discovery, and of interest on account of the absence of grass/chaff-tempered (GT) sherds in the collection. GTware had certainly been in use in the district during the early stages of the Saxon period, since sherds have been found at a settlement site in Farnham (Oakley *et al* 1939). The grittier fabric types represented at Godalming and Dorking were most probably made after the local demise of the GT tradition. The various chalky, sandy and flint-gritted types are fully described in the site-specific pottery report, and need little further comment here. A few similar sherds were recovered from Godalming Mint Street (eg fig 5.21 no 6), and at Dorking Church Square, but nothing similar has yet been identified elsewhere.

Probably the most important aspect of the Godalming late Saxon wares is the possibility that they represent the precursors of medieval types. The sandier fabrics of SAXQ ware look very similar to Q2B and other variants of the medieval grey/brown sandy ware tradition, except in vessel forms and methods of manufacture (see below); SAXFL fabric closely resembles Saxo-Norman flint-gritted FLQ types (see below).

At Chertsey, a base sherd of a grog and organic-tempered ware (GO) from the London Street site may be Saxon but could be Iron Age (fig 2.19 no 121). No grass/chaff-tempered pottery (GT), a long-lived Saxon ceramic tradition in the middle Thames valley, is amongst the excavated material from the abbey precincts, although a sherd was recently (1996) recovered near Colonel's Lane, at the west end of the town (Hayman in prep), and another was recently found in its southern suburb of *Styvinton* (Jones & Robertson 1998).

A few grog-tempered sherds from the Dorking Church Square site could be Saxon but are more likely to have been Roman, and made during the localized revival of hand-made grog-tempered wares towards the end of that period (fig 3.9 nos 96–98). A sherd of Saxon GT ware was recovered at the same site, however, as were five sherds of a mid to late Saxon ware (CQA) that was much more common at the Godalming Co-operative site. They include a simple and typical rimsherd (fig 3.9 no 105).

MEDIEVAL AND EARLY POST-MEDIEVAL POTTERY

Calcareous grit-tempered wares

Saxo-Norman 'chalky' wares: SNC and SC fabrics

These have chalk or tufa, freshwater shell, quartz sand and other inclusions in various combinations. Most of those found in the towns of west Surrey are dominated by chalk or tufa, but with increasing quantities of quartz sand. SNC1 types are from Godalming, those of SNC2 were identified at Farnham, SNC3 at Staines and Chertsey, SNC6 at Reigate *Cherchefelle* and SNC7 at Guildford, but although some of these fabrics from different towns may represent the same wares, this is uncertain, and there are grounds for supposing that many different wares may be involved. At Staines and Chertsey two other groups of such fabrics, SNC4 and SNC5, represent one, or possibly, two distinctive wares; and in addition there is yet another group dominated by tufa and freshwater shell (SC) that is only found at Staines.

White or grey angular inclusions that are finely textured may be chalk, especially in towns on or close to the North Downs, and the occasional fragment of angular flint would support such an identification.

'Chalky' inclusions in the SNC and SC fabrics of the Thames-side towns, however, could often be positively identified as tufa on account of their morphology. Most grains are sub-rounded and sometimes spherical, and are white or reduced grey like the 'chalk'. Many display a concentric growth structure, and a few broken through the middle display either a core void with a lining of burnt plant material, or part of a hollow tube where root, stem or stalk fragments have vaporized during firing.

Tufa accumulates by a sub-fluvial biogenetic fixing of calcium carbonate, in a similar way to shell. Depth of water, rate of flow, temperature and quantity of dissolved limestone are all

important factors in its deposition, but most important of all is the role of algae. Algal colonies have, in the past, created large pans of tufa along the fringes and floors of rivers with limestone catchments, like the Thames and the Colne; these have, in turn, been eroded, with the debris being incorporated into other downstream fluvial deposits. Some river clays, therefore, contain comminuted tufa, and either these were exploited for the production of SNC4 and SNC5 fabrics at Staines and Chertsey or else the material was deliberately gathered for use as a temper. In the first acknowledgement that such material was present in, at least, one of the 'chalky' wares of the London region, however, the inclusions were incorrectly described as 'calcareous algae' (Vince & Jenner 1991, 70); the algae have long gone, leaving only tufa.

The freshwater shell fragments present in some SNC fabrics and those of SC are usually thin, slightly curving and finely crushed, but a study of the Staines material noted many fragments large enough to be identified. These include gastropods such as *Valvatae piscinalis*, *Bythynia tentaculata*, including some of its *operculae* (oval discs that sealed its shells), and one certain example of *Lymnae palustris*. *Planorbis* and *Pisidium* shells are also present but are too fragmentary for species identification. All of these remain common today in the freshwater streams of southern Britain. Many inclusions have also been noted in SNC fabrics at Farnham, Reigate and Guildford, but usually in smaller quantities. If these are freshwater species then the 'chalk' might be tufa, but they could be land snails or even fossil material.

Six fabric variants are recognized amongst the SNC3 material from Staines and Chertsey. These include one that only contains tufa (SNC3A) and others with increasing quantities of shell or quartz sand (SNC3B–D). There is, however, a seamless gradation to varieties with larger quantities of quartz sand (SNC3E–F). Similar gradings of such fabrics occur at Godalming, Farnham, Guildford and Reigate, but it is uncertain how they relate to the SNC3 types.

The vessel form elements of SNC3 are of Saxo-Norman or earlier types with both hand-made and occasionally wheel-thrown vessels represented, including cooking-pots, bowls and spouted pitchers. Insofar as can be established from the, often few, featured sherds from the other towns of Surrey, they too are of Saxo-Norman forms.

The relatively small quantities of SNC3 at Staines and Chertsey are supplemented by other groups of calcareous poly-tempered fabrics, which increase the total of all such pottery to approximately half that represented in early assemblages. Two of these groups (SNC4 and 5) may be related and, like those of SNC3 contain graded mixtures of tufa, freshwater shell and quartz sand. They are distinguished, however, by being more consistently wheel-thrown, having deliberately reduced surfaces, and by having sharply square-beaded rim edges on cooking-pots. Quartz sand becomes more common in the SNC5 fabrics, but, with SNC4, they probably only represent a single ware. Since none of the SNC fabrics of the other towns of Surrey contain as much freshwater shell as SNC4/5, the ware(s) might be restricted to Staines and Chertsey.

The shell and tufa-tempered fabrics of SC represent a distinctive, hand-made and probably late Saxon ware that has only been found so far in the earliest medieval deposits of Staines. For that reason it is better discussed elsewhere, together with more comprehensive accounts of the Staines SNC types, in a report on excavations in the town between 1969 and 1989 (Jones & Poulton, forthcoming).

A note of caution should be expressed about the sandier fabrics of SNC and SC. The more quartz sand there is in sherds, the more difficult they are to distinguish from those of the poly-tempered sandy fabrics GQ1 and Q1 (see below).

Illustrated examples of Saxo-Norman 'chalky' wares in this volume include:

| | | |
|-----------------------------|-------|-------------------|
| Chertsey London Street | SNC3F | fig 2.16 no 7 |
| | SNC4A | fig 2.17 no 33 |
| Godalming Mint Street | SNC1A | fig 5.16 no 7 |
| | SNC1B | fig 5.16 nos 8–12 |
| Godalming Co-operative Site | SNC1A | fig 5.22 no 75 |
| | SNC1B | fig 5.22 no 76 |
| | SNC1C | fig 5.22 no 79 |

Coarse shell-tempered wares: shelly (S) fabrics

These contain fragments of thick, laminated shell, often large, as their principal tempering medium. The species is probably a type of oyster, and may have been contemporary food debris rather than fossil material (Jones 1986, 70).

The earliest ware (S1) has been identified at Staines and a few sherds have come from Chertsey. In addition to the shell fragments it has sparse quantities of other media such as flint, quartz sand and chaff, and some other rare organic inclusions. Both hand-made and wheel-thrown cooking pots are present in Staines.

Ware S2, which is widespread across Surrey, contains abundant oyster shell inclusions with only a few quartz-sand grains except for some naturally occurring iron minerals. The colour is usually orange/brown or fully reduced to dark grey/black. External surfaces were often wiped when leather-hard, and rims were usually turned or, more rarely, left rough. Earlier vessels were hand-made, but later examples were wheel-thrown. The range of vessels is restricted to storage jars, cooking pots and bowls.

At Reigate *Cherchefelle* some other rare fabrics were noted, although they might only be variants of S2. One has almost as much chalk as shell (S3) and others have increasing quantities of quartz sand (S4A and B). The original classification of these sherds is shown on table 6.1.

Illustrated examples of coarse shell-tempered ware (S2) in this volume include:

| | |
|-----------------------------|---|
| Chertsey London Street | figs 2.16–2.18 nos 1–6, 17, 21, 22, 26–30, 32, 36, 37, 59, 69, 70 |
| Dorking Church Square | figs 3.9 nos 99–104 |
| Godalming Co-operative site | fig 5.22 no 80 |

Flint-gritted and sand/flint-tempered wares: FLQ, QFL and FQFL fabrics

In the FLQ fabrics crushed flint is the main tempering medium, although most contain at least some quartz sand. They are not common anywhere within the county and their source or sources may lie west or south of the county in some instances, or in the sub-Chiltern zone in the north and north-west that might have supplied Chertsey and Staines (Jones 1992, 84). Since only a few nodules would be needed for household production, however, a local origin ought also to be considered as a possibility. Examples were found in all the towns under discussion except Dorking. The vessels, all cooking-pots, were hand-made.

QFL and FQFL fabrics have as much, or slightly more, quartz-sand grains as crushed flint, and some aspects suggest that they might have belonged to different wares than the FLQ types. None have yet been recognized at Farnham, Godalming or Dorking; two rare fabrics are represented at Reigate *Cherchefelle*; some sherds have been recognized at Guildford, and three fabrics have been identified at Staines.

One of the three dominant wares of 12th century Staines is represented by a standard fabric with average-sized inclusions (QFL1), and a less common finer fabric most often used for jugs, (FQFL1). Most of the jugs have oxidized surfaces, unlike the grey/brown cooking pots and bowls of QFL1, which also has more flint inclusions than the finer fabric. Most vessels were wheel-thrown, and only a few cooking-pots appear to have been hand-made. Some of the latter are roughly combed down the body, which was a characteristic trait of the potters at Rush Green, Denham (Farley & Leach 1988), and probably of other rural production sites in the sub-Chiltern region (Hinton 1973). Few Staines sherds need be from Denham, however, because of some differences in the vessel forms, methods of forming, and the fabrics.

A much less common sand and flint-tempered fabric from Staines is QFL2, which only differs from QFL1/FQFL1 in having some rare freshwater shell inclusions and slightly more chalk.

The two *Cherchefelle* QFL fabrics are broadly similar to those of Staines and Chertsey and, unless they represent other wares, they may be coarse variants of the local grey/brown sandy ware tradition (see below).

TABLE 6.1 A summary of the calcareous grit-tempered wares and their characteristics, and a concordance with previously used identifying codes

| Fabric code | Inclusion type and frequency | | | | | | Where identified | Old codes | Published illustrations in this volume |
|-------------|------------------------------|-------|-------------|-------------|--------|------------|-------------------|---------------------------------|---|
| | CHALK or TUFA | FLINT | QUARTZ SAND | FWATER SAND | OYSTER | other | | | |
| SNC 1A | ○ | ✓ | ✓ | | | | Godalming | | GCS no 75 GMS no 7 |
| " 1B | ○ | △ | △ | | | | " | | GCS no 76 GMS nos 8-12 |
| " 1C | ○ | △ | □ | | | | " | | GCS no 79 |
| SNC 2A | ○ | | ✓ | | | | Farnham | | |
| " 2B | ○ | | ✓ | △ | | | " | | |
| SNC 3A | ○ | ✓ | | | | | Staines, Chertsey | MD2A | |
| " 3B | ○ | ✓ | | ✓ | | | " " | " | |
| " 3C | ○ | ✓ | ✓ | | | | " " | " | |
| " 3D | ○ | | △ | ✓ | | | " " | " | |
| " 3E | ○ | ✓ | △ | ✓ | | | " " | " | |
| " 3F | ○ | ✓ | □ | ✓ | | | " " | " | CLS no 7 |
| SNC 4A | □ | ✓ | □ | △ | | | Staines, Chertsey | MD2B | CLS no 33 |
| " 4B | △ | ✓ | □ | △ | | | " " | " | |
| " 4C | ○ | ✓ | ✓ | △ | | | " " | " | |
| " 4D | △ | ✓ | ○ | △ | | | " " | " | |
| SNC 5A | □ | ✓ | □ | □ | | | Staines, Chertsey | MD4 | |
| " 5B | △ | ✓ | ○ | △ | | | " " | " | |
| SNC 6A | ○ | ✓ | ✓ | ✓ | | IRON STONE | Reigate | C1 | |
| " 6B | ○ | ✓ | △ | ✓ | | | " | CQ | |
| " 6C | ○ | ✓ | □ | ✓ | | | " | TC | |
| SNC 7A | ○ | | △ | ✓ | | | Guildford | | |
| " 7B | ○ | △ | △ | | | | " | | |
| S1 | | ✓ | ✓ | ○ | | ORG CHAFF | Staines, Chertsey | MD1 | |
| S2 | | ✓ | △ | ○ | | | all towns | MD5 at Staines S1 at Reigate | DCS nos 99-104 GCS no 80 CLS nos 1-6, 17, 21, 22, 26-30, 32, 36, 37, 59, 69, 70 |
| S3 | □ | ✓ | △ | ○ | | | Reigate | SC | |
| S4A | ✓ | ✓ | △ | ○ | | | Reigate | SQ | |
| 4B | ✓ | ✓ | ○ | □ | | | " | TS | |

KEY

- frequent
- moderate
- △ sparse
- ✓ rare

Illustrated examples of flint-gritted wares (FLQ) in this volume include:
 Chertsey London Street FLQ1B fig 2.19 no 101
 Godalming Co-operative site FLQ7A fig 5.22 nos 72-74
 FLQ7B fig 5.22 nos 77, 78

There were no featured sherds of the QFL and FQFL types to illustrate.

Poly-tempered sandy fabrics: CQI and QI fabrics

These are tempered with a variety of media in addition to quartz-sand grains of two grades: CQI between c 0.5–2.0mm, and QI c 0.2–0.8mm. The other tempers include flint, chalk, tufa, shell, Upper Greensand, and ironstone. Their precise classification, however, is usually difficult except for some of the better represented fabrics and more recognizable wares.

Many sherds resemble those of the grey/brown sandy ware tradition (see below), which have the same colour variability and two grades of quartz sand. CQI fabrics are like those of CQ2 and QI types resemble those of Q2, except for the other inclusions.

Three CQI and two QI fabrics were discerned at Reigate *Cherchefelle*, but they differ only slightly, and in all other respects they resemble the main series of the local grey/brown sandy ware, of which they are probably variants.

They are more complicated at Staines where four GQI and two QI fabrics have been identified, but, in contrast to *Cherchefelle*, there is less of a direct correspondence with the local grey/brown sandy fabrics, although some, at least, probably represent its coarser variants.

All Staines GQI vessels were hand-made but many of QI fabrics were wheel-thrown. Cooking pots are ubiquitous in GQI/QI fabrics, but there are some bowls and both glazed and unglazed jugs and pitchers. Some jugs had under-glaze incised decoration, and others had an under-glaze white slip.

At least one Staines fabric (GQIi) probably represents a late Saxon ware, since at least three cooking pots were found in association with others of Sl shelly ware and Saxon GT ware in a pit at the Elmsleigh Centre site. The coarse scratching on some of the cooking pots of this fabric is more severe than that of other scratch-marked sherds of GQI fabrics from Staines, and the rim forms are archaic and resemble middle Saxon types (Jones 1982, 203, including fig 5 no 24).

The cooking pots of some other Staines GQI fabrics have diagonal combing down the body, but these need not have been made at Denham since they contain some calcareous material. They must belong to the same tradition as is represented at the Denham production site, and elsewhere in the sub-Chiltern region (Hinton 1973). Another Staines fabric with sparse flint inclusions (QIH) could have been made at Denham, however, and several others are related to the same tradition through the use of diagonal combing, although most are from wheel-thrown vessels whereas production at Denham is assumed to have been wholly hand-made (Farley & Leach 1988, 72).

GQI sherds are associated with other Saxo-Norman or earlier wares when they are securely stratified. QI types are most common in late 12th and early 13th century deposits in Staines, in association with sherds of the grey/brown sandy ware tradition (see below). As with GQI, some of the QI fabrics may represent the end-of-range variants of that tradition.

Sherds of the Staines fabrics described above have been found at nearby Chertsey, but slightly different poly-tempered fabrics in the other towns of Surrey may belong to different wares.

Godalming has a coarse fabric but no QI sherds have yet been identified, and Farnham has at least two coarse fabrics and two more of QI types. All four may be variants of a singleware or else belonged as variants to the 'lost' west Surrey grey/brown sandy ware (see below).

A distinctive fabric with large ironstone fragments from the Folkestone Beds has been identified at Dorking (GQIB), as well as two others of QI types. One of these with sparse chalk (QIB) was also identified at Reigate. All could be related to the local grey/brown sandy wares, as could another three fabrics found at Betchworth.

Illustrated examples of poly-tempered sandy pottery in this volume include:

| | | |
|------------------------|------|------------------------------|
| Chertsey London Street | QIG | fig 2.16 nos 8, 25 |
| | QIH | fig 2.17 no 31 |
| Dorking Church Square | GQIB | fig 3.9 nos 107, 108 |
| | QIB | fig 3.9 nos 110–119, 126–129 |
| Godalming Mint Street | GQIA | fig 5.16 no 18 |

Sand-tempered wares

The grey/brown sandy ware tradition: GQ2, Q2 and FQ2 fabrics

The pottery is tempered with sub-rounded quartz-sand grains and has a variable grey or brown surface colour. There was also a general preference for orange/brown-surfaced vessels at Reigate, Betchworth and elsewhere in the south-east of the county, even for cooking pots (Jones 1986, 79; Williams 1983, 71; Jones 1991–2, 125); whereas further west and north grey surfaces are more apparent except for jugs in finer fabric variants.

Some, and perhaps all, of the earlier vessels were hand-made, whereas most later vessels were wheel-thrown. They share a common repertoire of basic forms and forming techniques, and most site assemblages are dominated by cooking pots, have fewer storage jars, jug and bowls, and rarer skillets, pipkins, frying-pans and fire-covers. Thus the standard range of southern English coarsewares of the high medieval period is represented, although there are also some earlier forms, such as spouted pitchers, and later ones, such as bunghole pitchers and cisterns. Jugs are commonly glazed.

Wherever found in Surrey, it has been possible to distinguish three grades according to the average size of quartz-sand grains: GQ2 fabrics have coarse grains, *c* 0.5–2.0mm; 'standard' Q2 fabrics have smaller grains, *c* 0.2–0.8mm; FQ2 represents the finer sandy fabrics. The tradition probably also includes some of the poly-tempered GQ1 and Q1 fabrics.

Pottery of this sand-tempering tradition is very common in later 12th and 13th century assemblages across Surrey, and it survives till the later medieval period in some parts of the county, such as Godalming.

Illustrated examples of grey/brown sandy ware in this volume include:

| | | |
|-----------------------------|------|-------------------------------------|
| Chertsey London Street | GQ2D | fig 2.17 no 38 |
| | Q2G | fig 2.16 no 23; fig 2.17 nos 39–41 |
| | FQ2F | fig 2.16 no 19; fig 2.18 nos 63, 71 |
| | FQ2G | fig 2.16 no 16; fig 2.18 no 88 |
| | FQ2H | fig 2.19 no 112 |
| Dorking Church Square | Q2C | fig 3.9 nos 109, 120–5, 130–4 |
| | FQ2D | fig 3.9 no 141 |
| Farnham Bear Lane | Q2A | fig 4.14 nos 1.8, 10, 14, 17–19 |
| | FQ2A | fig 4.14 no 9 |
| Godalming Co-operative site | GQ2A | fig 5.22 nos 83–85 |
| | Q2B | fig 5.22 nos 86–97, 101 |
| | FQ2B | fig 5.22 nos 98, 99 |
| | FQ2C | fig 5.22 no 100 |
| Godalming Mint Street | GQ2A | fig 5.16 no 17 |
| | FQ2C | fig 5.16 no 19 |
| Godalming Holloway Hill | Q2B | fig 5.9 nos 72–76, 78, 81, 82 |

Limpsfield reduced ware: LQ fabrics

Products of the late 13th to 15th century kilns on Limpsfield Chart in east Surrey (Prendergast 1974; Ketteringham 1989) are characterized by their colour, which is usually mid to dark grey, and by some idiosyncratic forming techniques, such as pin-puncturing on rims and handles and a scalloping of the inner rim edges of bowls.

In regard to their inclusions, however, the fabrics are not dissimilar to those of the other sand-tempered wares in the region, with sub-rounded grains *c* 0.2–0.8mm but with some larger and some smaller. A recent review of Limpsfield ware suggests that it may have developed out of the local grey/brown sandy ware tradition, as the pottery from perhaps the earliest excavated kilns of the industry at Clacket Lane, Titsey, seems to have been a hybrid ware (Jones 1997, 35). The source of clay for the Titsey kilns and those of nearby Moorhouse sandpit had probably been the Gault, but the kilns further south had probably used Wealden clays or a mixture of both.

Illustrated examples in this volume include:
 Dorking Church Square fig 3.9 nos 135–140

Fine grey sandy ware: QS and FGQ fabrics

These are later medieval reduced greyware types found in west Kent and east Surrey and predominantly tempered with sub-rounded quartz-sand grains, *c.* 0.2–0.4mm. Although one fabric (QS) also contains crushed shell probably from a freshwater species and the other one (FGQ) does not it still seems likely that they belonged to the same local ceramic tradition as they share one important forming characteristic. The use of pin-puncturing as a method of ensuring the survival of thick cooking pot rims and jug handles in the kiln, had also been employed for the manufacture of Limpsfield LQ ware, which also belongs to the same regional tradition. FGQ is very similar to later Limpsfield products but is usually finer, and some of its jugs were glazed (Jones 1997, 84), unlike those made at Limpsfield which are all unglazed. There are no illustrated examples in this volume.

Orange sandy ware: OQ and OFQ fabrics

A colour preference for oxidized surfaces amongst the grey/brown sandy fabrics of south-east Surrey has already been noted, but some pottery in that region had been more purposefully fired orange. At Reigate and Betchworth these types have been quantified separately, but their graded fabric types OQ1, OFQ1, OQ2 and OFQ2 directly correspond with the Q1, FQ1, Q2 and FQ2 fabrics of the main sandy ware tradition. It is readily admitted, however, that for some sherds it was difficult to judge to which colour they should be ascribed, which demonstrates their somewhat artificial separation from the main tradition. They encompass the products of a kiln found at Earlswood that include a very distinctive range of highly decorated jugs (Turner 1974), and which, if no better reason was thought valid, justify the separation of the orange fabrics as a distinct class. Unlike the slightly later Limpsfield reduced ware, orange coarsewares and white-slipped green-glazed jugs were in circulation by the second half of the 12th century at Reigate.

Illustrated examples in this volume include:
 Dorking Church Square fig 3.9 nos 142–144

Transitional red (orange) ware: TOQ fabrics

These fabrics represent a development of the east Surrey orange sandy OQ/OFQ types that occurred towards the end of the medieval period and during the early 16th century. They are tempered with quartz sand but in four grades. TOQ1 is sandy (*c.* 0.2–0.8mm), TOQ2 has fewer of the same sized grains, TOQ3 has smaller grains (*c.* 0.2–0.4mm) and TOQ4 has fewer of the same. In addition they are further sub-divided into A types with rare or sparse grog inclusions, B types with moderate quantities, and C types with as much grog as sand. A variety of transitional forms has been published from Hextalls, Bletchingley (Jones 1998, 92–100).

Ironstone sandy ware: IQ fabrics

The very distinctive inclusions of this ware are frequent grains of sub-rounded quartz sand and angular fragments of crushed ferro-cemented sandstone, and it is notable that the sand grains are also coated with the remains of the same sandstone matrix material. The vast majority of this ware was made with 'standard'-sized quartz-sand grains of *c.* 0.4–0.8mm; although a few sherds have a coarser or finer mix, these have not been quantified.

Many sherds are from wheel-thrown vessels, and the ability to make and fire cooking pots, some with walls only 4 or 5mm thick, implies that a good quality clay had been used for their production. A few sherds from Chertsey are from hand-made vessels, however, with thicker walls and rims that more closely resemble late Saxon forms.

The repertoire of vessel types is dominated by cooking pots, but other domestic coarseware types are represented, such as storage jars and bowls; less common are spouted pitchers and spouted bowls. No glazed sherds have been found in any of the collections examined.

The ware is common in late 11th and 12th century assemblages in north-west Surrey, and survives later than in London, where its equivalent 'Early Surrey Ware' (ESUR) is considered to be residual in later 12th century groups (Vince & Jenner 1991, 75).

Illustrated examples in this volume include:

| | | |
|-----------------------------|----------|------------------|
| Chertsey London Street | fig 2.16 | nos 9–15, 18, 24 |
| Godalming Mint Street | fig 5.16 | nos 14–16 |
| Godalming Co-operative site | fig 5.22 | nos 81, 82 |

Whitewares and related types: WW and RWW fabrics and Tudor Green style pottery

These are the fabrics of the wheel-thrown, sand-tempered or sand-free, whiteware pottery made in Surrey and adjoining parts of north-east Hampshire from the 13th to the 18th century. They have a clay body that is distinctive in being able to be fired off-white, but more usually pale buff, pink, orange, yellow or grey.

In London four separate wares have been identified, largely on the basis of similarities of vessel form elements with pottery from the various production sites, (Pearce & Vince 1988, 7; Pearce 1992), but, more realistically for the medieval material, from the average grain sizes of their temper (Pearce & Vince 1988, 187). Two of these wares were supplied to London from the second quarter of the 13th century; of these, Kingston-type ware remained common during the 14th century, whereas Coarse Border ware continued to be traded through the 15th century (Pearce & Vince 1988, 17). Cheam whiteware found a niche in the London market from the mid-14th until the early 16th century (Pearce & Vince 1988, 91), and large scale production of post-medieval 'Border ware' is thought to have begun during the second half of the 16th century, and to have ended during the early 18th century (Pearce 1992, 1).

Few medieval whiteware sherds in Surrey accord with the London types on the basis of similarities of forms or form elements, and body sherds and even most featured sherds can only be classified according to the grading of their sand temper. In this regard Coarse Border ware is coarser than Kingston-type ware, and Cheam whiteware is even finer.

Three factors made it impractical to use either the gradings or the common names of the London types for a classification of whitewares in Surrey. Too many sherds looked as though they ought to be classified somewhere in between the perceived types. Secondly, not all coarseware need have been made in the border district, and some might even have come from Kingston, and some finer fabrics could have been made in the border district before the 15th century. Most important of all, however, is that controlled scientific analyses have failed to demonstrate that it is possible to attribute sherds to their suggested source, or to differentiate correctly the perceived types (Cowell 1988, 187; Jones 1989, 54). This is more fully discussed on pp 233–4.

For the examination of medieval whiteware from Staines a type series based on grain size was established, and later adopted, with little revision, for the study of such pottery from elsewhere in Surrey. It proved to be a quick and easy method of sorting sherds, but although some fabrics are easily distinguished, others seem part of a continuum of grading. Coarse fabrics and fine fabrics are not the problem — the difficulty is with those in between. Irrespective of the validity of the new types, however, the establishment of sources for most whiteware sherds at consumer sites may be an impossible task. A ceramic tradition in which the carting of clay to distant production sites was undertaken might also have blended clays from different sources.

There are three principal grades in the Surrey whiteware type series: WW1–3; and their subtypes are determined by the quantity of quartz-sand grains. Pottery of Tudor Green style is also recognized, but separately, since its distinctive range of vessels was made in most of the main grades. In addition, and to avoid confusion, it was considered necessary to recognize a hybrid class of later medieval red/white types (RWW) that was made in several of the grades.

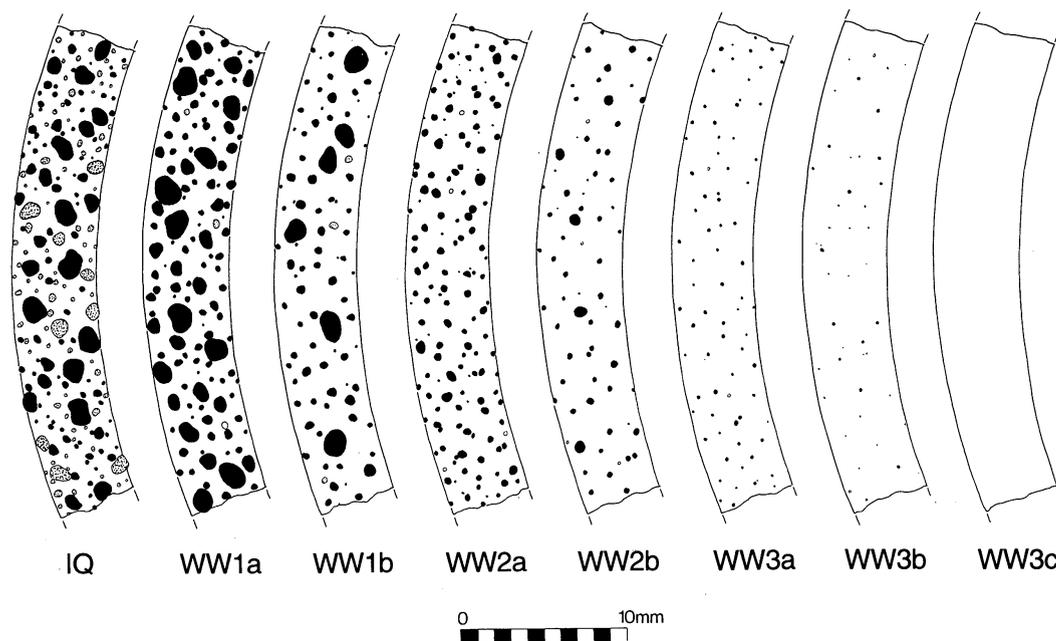


Fig 6.1 Pottery in Surrey: diagrammatic cross-sections of Q1 and whiteware fabric variants

A brief summary of the types follows, but fig 6.1 provides schematic representations of sherd breaks of these, and details of grain sizes. Quartz-sand grains in WW1 and WW2 fabrics not reduced by re-firing are pink, rose, pale brown, opaque or clear; but those of WW3 fabrics are almost always opaque or clear. Rare to sparse iron mineral grains are also present in almost all whiteware sherds, but, most importantly, no iron-rich fragments of sandstone were identified. It is in this regard that Surrey whitewares differ from the pale-fired bodies of the earlier IQ sandy ware of the border region.

WW1 Coarse tempered types (c 0.2–0.8mm but with some grains up to 1.5mm)

Includes two fabrics that represent the most common medieval whitewares in Surrey and London:

WW1A: frequent grains. Most similar to Coarse Border ware.

WW1B: moderate quantities of grains. Closest similarity is to some Kingston-type ware, despite its published descriptions referring to an upper limit of most grains of 0.5mm with occasional larger grains up to 1.0mm (Pearce & Jenner 1988, 9 and 187). Some Coarse Border ware, however, contains sparse quantities of quartz-sand grains (Pearce & Jenner 1988, 187), which may well equate with WW1B. Often better-formed and thinner-walled than WW1A vessels, and usually of later medieval date.

WW2 Medium tempered types (c 0.1–0.4mm but with some grains up to 0.6mm)

Some sherds are similar to Kingston-type ware, but others more closely resemble Cheam whiteware, even though the upper limit of grain size is said to be 0.25mm. Includes two fabrics of medieval and transitional date:

WW2A: frequent grains

WW2B: moderate quantities of grains

WW3 Fine types (grain sizes of less than 0.2mm, or none at all)

Most sherds are of post-medieval 'Border ware', but some are of Tudor Green style pottery and a rare few sherds are of other medieval vessels. There are three fabric grades:

WW3A: moderate quantities of grains, *c* 0.05–0.1mm, but with some slightly larger. Includes some Cheam whiteware and vessels of Tudor Green style in addition to 'Border ware'.

WW3B: sparse grains of the same size as WW3A. Mostly of 'Border ware' and Tudor Green style pottery.

WW3C: no visible inclusions at x20 magnification. The finest 'Border ware' and Tudor Green style pottery.

RWW Red/White hybrid types

These are late medieval or early post-medieval types with surfaces similar to whiteware and salmon pink cores or *vice versa*. The sand grade of late medieval and transitional examples is usually similar to WW1B, but there are some finer examples later. Redwares and whitewares are known to have been fired in the same kiln from the beginnings of the redware tradition in the late 15th and early 16th century (Orton 1982), so it ought not be a surprise that hybrid vessels had also been made and marketed. It is inappropriate that they have, until now, been included within rigid schemes of red or whiteware classification. Although uncommon, comparative studies would be undermined if some authors were to classify them as whitewares and others as redwares. Since it is also important to define their distribution, the characterization and quantification of red/whiteware is integral to the Surrey type series.

WWTG Tudor Green style whiteware

Some sherds of WW2 and WW3 fabrics are from vessels, mostly drinking-cups and mugs, with such thin walls and thick green glaze inside and out, that they must first have been biscuit-fired. Wasters of such biscuit-fired pottery have been found at the only known production site of Tudor Green fineware, at Farnborough Hill in north-east Hampshire (Holling 1971); more recently, sherds from similar mugs were recovered during minor excavations at the Museum of Farnham in West Street (Graham & Graham 1997). Tudor Green whiteware is classified according to its fabric type, thus WW3TG, for example.

As can be seen, much of the Surrey series is similar to the London type series. The only issue of contention about WW1A, for example, is not whether it is the same as Coarse Border ware, but whether it should be called as such, since much whiteware of this grade could have been made elsewhere. There is also general agreement that Tudor Green represents a style and not a ware; Border ware remains inviolable, except that three grades have been identified in Surrey. WW1B represents the next most common whiteware in Surrey after WW1A, but since it is largely a later medieval fabric it cannot equate with the other important London fabric, Kingston-type ware. In any case, WW1B only slightly resembles its published description, and if WW2 grade sherds were found in the capital they, instead, might be classified as Kingston-type ware. There is a similar problem with Cheam whiteware, in that although most sherds from the kiln sites would be classified as WW2 in Surrey, these fabrics also include some sherds that would be classed as Kingston-type in London.

Illustrated examples of whiteware and red/whiteware vessels in this volume:

WW1A

| | | |
|------------------------|----------|--------------------------------------|
| Chertsey London Street | fig 2.17 | nos 34, 35, 42–48, 54, 57, 58 |
| | fig 2.18 | nos 72, 76, 77, 79–84, 89–93, 96, 99 |
| | fig 2.19 | nos 103–105, 108, 110, 114, 117, 122 |
| | fig 2.20 | no 142 |
| Dorking Church Square | fig 3.9 | nos 145–151 |

| | | |
|----------------------------------|----------|--|
| Farnham Castle Street/Bear Lane | fig 4.14 | no 13 |
| Godalming Mint Street | fig 5.16 | no 77 |
| Godalming Co-operative site | fig 5.22 | nos 102–104 |
| WW1B | | |
| Chertsey London Street | fig 2.17 | nos 49–53, 55, 56, 60 |
| | fig 2.18 | nos 61, 62, 64, 68, 73–75, 78, 85, 86, 92, 94, 100 |
| | fig 2.19 | nos 102, 106, 107, 109, 111, 115, 118, 119, 123–128, 130 |
| Farnham Castle Street/ Bear Lane | fig 4.14 | nos 15,16 |
| WW2 | | |
| Chertsey London Street | fig 2.18 | nos 87, 95 |
| | fig 2.19 | no 113 |
| Godalming Mint Street | fig 5.7 | no 20 |
| Godalming Co-operative site | fig 5.22 | no 105 |
| WW3 | | |
| Chertsey London Street | fig 2.19 | nos 116, 131, 134 |
| | fig 2.20 | no 161 |
| Dorking Church Square | fig 3.10 | no 181 |
| Godalming Holloway Hill | fig 5.7 | nos 1, 2, 36–44 |
| | fig 5.8 | nos 57, 58, 64, 66, 67, 71 |
| Godalming Co-operative site | fig 5.22 | nos 109, 110 |
| WW3TG | | |
| Chertsey London Street | fig 2.19 | nos 120,132, 113, 144–148 |
| RWW | | |
| Chertsey London Street | fig 2.18 | no 65 |
| Godalming Holloway Hill | fig 5.7 | no 34 |
| | fig 5.8 | no 70 |
| Godalming Co-operative site | fig 5.22 | no 106 |

Transitional redwares: RW fabrics

Some of the excavations at Staines, Chertsey and Godalming have provided useful collections of these coarsewares, and their study has greatly aided our knowledge of the redware tradition in west Surrey during the late 15th and 16th centuries. This complements the newly published data for east Surrey and for the use of redware at such a high status site as Little Pickle, Bletchingley (Jones 1998, 82). The fabrics of the Little Pickle redware are coded differently from the west Surrey types as TOQ fabrics and have been described above after the OQ fabrics that they superseded in east Surrey.

At Staines and Chertsey the same fabrics have been recognized and their classification has been by both the grading of quartz sand and the relative frequency of grog and/or iron minerals. This is essentially the same method that was employed for the Little Pickle collection and it is remarkable how congruent the two fabric series are.

RW1, a rare fabric from Chertsey, has the coarsest sand temper of *c* 0.2–0.8mm; which is the same as the main wares of Q2 and WW1 types. RW1 is dissimilar to those, however, not only by colour, but because it also contains significant quantities of comminuted grog. Grog is not present in the finer sand-tempered RW2 and RW3 fabrics of Staines and Chertsey, of which the finest (RW3C) has grains of below 0.05mm. Grog is abundant in the RW4 types, however, together with sparse sand grains in RW4A (of the same grade as RW2), and as much sand as grog in RW4B. The grog of RW1 and RW4 fabrics is not of crushed pot and probably derives from other burnt clay debris from around the production site(s).

Most vessels in RW2 and RW3 fabrics from Staines and Chertsey are of transitional or post-medieval forms, but almost all those of the grog and sand-tempered RW1 and RW4 types are in

TABLE 6.2. A summary of the flint-gritted and sand/flint-tempered wares and their characteristics, and a concordance with previously used identifying codes

| Fabric code | Inclusion type and frequency | | | | | | Where identified | Old codes | Published illustrations in this volume |
|-------------|------------------------------|-------|-------------|-------------|--------|-------------|--------------------|----------------|--|
| | CHALK or TUFA | FLINT | QUARTZ SAND | FWATER SAND | OYSTER | other | | | |
| FLQ 1A | | ○ | △ | | | | Staines | some MF1 & MGA | |
| 1B | | ○ | □ | | | | Staines / Chertsey | " | CLS no 101 |
| 2 | | ○ | △ | | | sparse GROG | Staines | " | |
| 3 | | ○ | ✓ | ✓ | | | Farnham | | |
| 4 | | ○ | □ | | | | " | | |
| 5 | | ○ | △ | | | | Reigate | FQ1 | |
| 6 | △ | ○ | △ | | | | " | FQ2 | |
| 7A | ✓ | ○ | ✓ | | | | Godalming | | GCS nos 72-74 |
| 7B | △ | ○ | △ | | | | " | | GCS nos 77,78 |
| 8 | △ | ○ | □ | | | | Guildford | | |
| QFL 1 | ✓ | △ | ○ | | | | Staines / Chertsey | MGB & MH types | |
| FQFL1 | ✓ | △ | ○ | | | | " " | " | |
| QFL 2 | △ | △ | ○ | ✓ | | | Staines | " | |
| 3 | | △ | ○ | | | | Reigate | TF1 | |
| 4 | △ | △ | ○ | | | | " | TF2 | |
| 5 | △ | △ | ○ | | | | Guildford | | |

Tudor Brown styles, and they may only have been made for a limited period during the late 15th and early 16th centuries.

At two of the three sites excavated in Godalming few sherds of transitional redware were found, but at Holloway Hill a small but useful assemblage was recovered from deposits associated with a 16th century building that had recently been dismantled. A few sand-tempered Tudor Brown sherds came from layers that were cut by its foundations; in the earliest deposits associated with its use c70% of the pottery is of early 16th century redware that was comprised of Tudor Brown type vessel forms, and large late medieval-type jars, some of which were black-surfaced and had simple white painted schemes.

A few sherds from similar jars to the above, and of Tudor Brown type redware, were found at Dorking Church Square.

Illustrated examples of transitional and later redware vessels in this volume include:

| | | |
|-------------------------|----------|--|
| Chertsey London Street | fig 2.19 | nos 135, 136, 140, 141, 149, 151, 152; |
| | fig 2.20 | nos 154, 155, 159, 160, 162 |
| Dorking Church Square | fig 3.10 | nos 153-180 |
| Godalming Holloway Hill | fig 5.7 | nos 2-17, 20-35; |
| | fig 5.8 | nos 45-52, 55, 56, 59, 60-62, 69, 79, 80 |

TABLE 6.3 A summary of the poly-tempered sandy fabrics and their characteristics, and a concordance with previously used identifying codes

| Fabric code | Inclusion type and frequency | | | | | | Where identified | Oid codes | Published illustrations in this volume |
|-------------|------------------------------|-------|-------------|--------------|--------|-------------------------|---------------------|-----------|--|
| | CHALK or TUFA | FLINT | QUARTZ SAND | FWATER SHELL | OYSTER | other | | | |
| GQ1A | ✓ | ✓ | ○ | | | | Godalming | | GMS no 18 |
| B | | | ○ | | | LARGE IRONSTONE | Dorking | | DCS nos 107, 108 |
| C | ✓ | ✓ | ○ | | | | Reigate, Betchworth | RGFC/GTQ | |
| D | △ | | ○ | | | | " " | RGC | |
| E | | △ | ○ | | | | Reigate | RQF/RGF | |
| F | □ | △ | ○ | △ | | | Staines | MH types | |
| G | ✓ | △ | ○ | | ✓ | | " | " | |
| H | ✓ | □ | ○ | | | | " | " | |
| I | △ | △ | ○ | | | | Staines, Chertsey | " | |
| J | ✓ | △ | ○ | | | occas. MUDSTONE & CHERT | Farnham | | |
| K | △ | △ | ○ | | | " | " | | |
| Q1A | ✓ | △ | ○ | | | | Farnham | | |
| B | △ | | ○ | | | | Reigate, Dorking | RQC | DCS nos 110-119, 126-129 |
| C | ✓ | ✓ | ○ | | | IRON STONE | Betchworth | TQA | |
| D | △ | | ○ | | | | " | TQB | |
| E | | △ | ○ | | | | Reigate | RQF | |
| F | △ | △ | ○ | ✓ | | | Staines | MH types | |
| G | △ | △ | ○ | | | | Staines, Chertsey | " | CLS nos 8, 25 |
| H | | △ | ○ | | | | " " | " | CLS no 31 |
| I | △ | ✓ | ○ | △ | | | Staines | " | |
| J | △ | ✓ | ○ | | | | " | " | |
| K | | | ○ | | | | Chertsey | | |
| L | □ | | ○ | | | | Dorking | | |
| M | △ | △ | ○ | | | occas. MUDSTONE & CHERT | Farnham | | |

Transitional buff wares: BQ fabrics

These have recently been identified at Little Pickle in east Surrey, where two fabrics represent a small proportion of the late 15th and early 16th century assemblages (Jones 1998, 90). The most common type (BQ) is sand-tempered as is the other (BQSPIC), except that it also has sparse inclusions of fossil silicate material.

Examples of a similar buff-coloured late medieval or early post-medieval sandy ware have been found in the west of the county; these may be connected by a common tradition of ceramic

manufacture, or else are only fortuitously comparable. They represent a significant proportion of the transitional material from the Godalming Co-operative and Mint Street sites, but rather less was recovered from the 16th and early 17th century deposits of Holloway Hill. Both at Little Pickle and Godalming, these wares were rarely glazed.

Illustrated examples in this volume include:

| | | |
|-----------------------------|----------|--------------|
| Godalming Holloway Hill | fig 5.8 | nos 63, 68 |
| Godalming Co-operative site | fig 5.22 | nos 107, 108 |

Herts/Middlesex reduced wares: HMQ fabrics

These reduced grey sandy fabrics represent up to 10% or more of early 13th century assemblages at Staines; a few sherds have also been identified at Chertsey, but not at other towns in west and central Surrey. Most discovered production sites of the ware lie upstream of Staines in the Colne Valley catchment area (Turner-Rugg 1993), although the nearest kiln is at Pinner (Shepherd 1977). The Denham kilns (Farley & Leach 1988) and the manufactories of 'M40 ware' (Hinton 1973) probably represent only a western aspect of this broadly sub-Chiltern reduced sandy ware tradition.

Other jug wares: RQ and FQW fabrics

At Staines between 3% and 4% of late 12th and 13th century assemblages is of red sandy jug wares that are unlikely to have been from Mill Green (Pearce *et al* 1982), and at both Staines and Chertsey approximately the same proportion is of fine sandy, or inclusion-free, buff jug wares. Similar sherds are found at Farnham and Godalming, but they are best represented in the collections from recent excavations at Guildford Palace which are soon to be studied in detail (Jones, in prep(a)).

IMPORTS

Few sherds in the collections published in this volume are from imported vessels, and most are from late 16th and 17th century stoneware mugs. They include some transitional period Raeren and Siegburg sherds and others of 16th century Cologne-type ware from Chertsey London Street; a few sherds of these and later types were found at Godalming and Dorking. Other imports may be present amongst the few tin-glazed sherds from most sites, and Dutch pottery could be represented amongst the early post-medieval redwares of Chertsey London Street.

For the early medieval period the only distantly-traded pottery in this volume is represented by a few sherds of Andenne or Stamford-type glazed whiteware. One sherd is from Dorking Church Square (fig 3.9 no 106), and two more are from Chertsey London Street, including one from an early to mid 12th century beamslot fill. Such pottery was just as rare at Reigate *Cherchefelle*, where only three sherds were recovered from the late 11th and early 12th century deposits (Jones 1986, 67).

A recent excavation of a late Saxon site at Duncroft, Staines (Robertson 1997), has confirmed the identification of St Neots ware within the town. Sherds from the High Street area were thought to be of St Neots ware, except that there was little to distinguish them from a common late Roman type of shelly ware that might have reached the Roman town from the south Midlands. At Duncroft it has been found in association with sherds of Thetford ware, the local Sl shelly ware, various coarse grit-tempered fabrics and grass/chaff-tempered pottery.

Discussion

The longest sequence of usefully seriated pottery from any town in Surrey outside Southwark, is from Staines, a market town of Middlesex until 1974, which was linked to Surrey by a bridge over the Thames for most of the medieval period. Staines is important for the understanding of

medieval pottery in the region west of London because of its position at a major crossing point of the Thames.

The first paper on medieval pottery from the town (Jones & Shanks 1976) largely followed the classification of Northolt, then the most coherent type series of Middlesex material, including that of London (Hurst 1961). A later attempt (Jones 1982) at establishing a type series of early medieval pottery from the town is, with hindsight, a rather premature and ill-thought out scheme. Later excavations in Staines provided larger samples of pottery from well-stratified sequences of deposits, which made it necessary to create a new all-inclusive type series, and this was achieved in a programme of work through 1987 which included the re-classification of pottery from all earlier excavations in the town. Publication of this work was delayed until funding became available for a review of those and other excavations undertaken prior to 1989. This was undertaken recently (1996–7) and the results should become available in the near future (Jones & Poulton forthcoming).

Because it was the first to be developed, the Staines type series formed the basis for later work on medieval pottery in Surrey. At Chertsey it was used to catalogue the material from the London Street site (chapter 2 of this volume). Chertsey is only 4.5km from Staines and only minor points of difference were found in the pottery from the two towns.

Excavations in Reigate during the 1970s and 1980s provided several pottery sequences from the medieval town that have been processed but not yet published (Jones in Williams, in prep), although Saxo-Norman material from the earlier settled area in *Cherchefelle* has been published in detail (Jones 1986). That assemblage was examined with the benefit of experience gained at Staines and Chertsey, but the published report includes a site type series of pottery fabrics that were then not thought likely to be directly comparable with pottery found so far distant within the county. As a result changes have since become necessary in the coding of fabrics first identified at *Cherchefelle*, so that they accord better with an all-embracing county typology.

There have been excavations in almost all the other medieval towns of Surrey, but most have been small-scale, and few attempts have been made at drawing conclusions about changes in the supply and use of ceramics. This is especially so for Dorking, where little medieval pottery had previously been recovered, and the Church Square collection adds little to the overall total.

Guildford was probably the most important medieval town within the county outside Southwark. During his time as curator of Guildford Museum, Felix Holling discovered and published some late Saxon pottery (1964) and subsequently attempted to establish a sequence of medieval types from chance discoveries (1969a). There has been no large area excavation within the town, although two have been conducted just outside the medieval borough limits, at the Dominican Friary (Poulton & Woods 1984), and, more recently, at the royal palace within the castle precincts (Poulton 1990, 1992, 1992/3, 1995). Preliminary work on the palace assemblage has indicated that, in addition to the unique collection of mid-13th to mid-14th century pottery, there is enough pre-palace material to elucidate the general sequence of late Saxon and Saxo-Norman pottery of the town.

Farnham is important for the study of medieval pottery for two reasons. It lies in the south-west of the county half-way between London and Winchester on an important trading route, and its pottery may reflect influences from both regions. The other reason is that the medieval town served as the hub of a pottery industry involved in distant marketing from at least as early as the 11th century and on to well beyond the end of the medieval period. The work of the County Unit (SCAU) in the town has, as yet, only been small-scale (chapter 4 of this volume), although the collections from two old excavations were examined to establish a relative sequence of fabric types.

Godalming lies downstream from Farnham on the river Wey. Little was previously known of the pottery of this medieval town, but examination of the assemblages of the three sites excavated by the County Unit has established a relative sequence of pottery even longer than that for Farnham, since it also includes an important collection of mid to late Saxon material.

Many of the fabrics of the provisional Surrey type series are comparable with others identified in neighbouring counties; in some instances they are considered to be identical in the sense of

belonging to the same ware, whereas others are thought similar because they are from a more widespread tradition of ceramic manufacture. Since these are only interpretations of how the multitude of fabrics, wares and common potting practices are perceived to have functioned across the county, it would be as well to review these connections in approximate chronological order.

'CHALKY' FABRICS AND WARES

Fabrics with 'chalky' grains and shell fragments, and with vessel forms and methods of manufacture of late Saxon or Saxo-Norman styles have been found at sites across Surrey. In London, the ware that most easily accords with these SNC types is EMCH (Early Medieval Chalky ware), which contains frequent tufa grains and some sparse shell, quartz sand, and flint inclusions; this had been popular in the City during the second half of the 11th century (Vince & Jenner 1991, 70). Another type found in London that may belong to this tradition is EMSS (Early Medieval Sandy/Shell ware) which contains quartz sand, bivalve shell fragments and some tufa. Sherds of EMSS are found in late pre-Conquest assemblages in the City, but are most common in deposits of the second half of the 11th century. The ware continued in regular use during the early part of the 12th century (Vince & Jenner 1991, 62). There are no other 'chalky' fabrics or wares of the London type series that are similar to those from the towns of Surrey. In the absence of any independently-dated assemblages of Saxo-Norman ware in Surrey, the evidence of the London sequence has been used to assess the probable dating of such pottery. In the capital they had been in use before the Conquest, but are most common during the late 11th and early 12th centuries. The same may be true for similar wares in Surrey.

A comparable ware was dominant in deposits that pre-date the Chapter House of St Albans Abbey, which are considered by their excavator, Martin Biddle, to have belonged to the first half of the 12th century (Vince & Jenner 1991, 70). Examination of sherds from these deposits by the author, at x20 magnification, showed that the most commonly included material is comminuted tufa accompanied by freshwater shell fragments, including occasional complete *testes* of *Planorbis*. The pottery may have been made from fluvial or lacustrine clay from the Ver valley, or else from the more extensive flood plain of the river Colne into which the stream feeds 5km south of the city. The ware has been compared to EMCH from London (Vince & Jenner 1991, 70).

The Colne meets the Thames at Staines, which lies 38km from St Albans, and 28km west from London (c. 60km by river). The revival of town life on the small island of Staines, that had once been the focus of a Roman 'small town' seems to have begun during the 11th century, if ceramic analogies with London are valid; a diverse range of chalky and shelly fabrics is represented in excavated assemblages. One is a distinctive, hand-made, shell and tufa-tempered fabric, SC, found in some of the earliest medieval deposits of Staines (Jones, forthcoming), but not elsewhere within the region. It represents a previously unidentified late Saxon ware. Less certain is the number of wares that are represented amongst the fourteen other fabric types that have tufa, fluvial shell and quartz sand as their principal tempering agents. There are at least three wares, and there may be more, but because of the close similarities of some fabrics it is not possible to be certain.

One such group of Staines fabrics is the SNC3 types that are similar to EMCH and other wares in the region that have a predominance of superficially 'chalky' grains. The 'chalk' of many of these is actually tufa. SNC3 fabrics have been identified at other sites in the Thames flood plain of north-west Surrey, such as Chertsey, Shepperton Green and Egham; although the tempers of SNC1, 2 and 7 fabrics of Farnham, Godalming and Guildford look very similar, some, and perhaps all, of their calcareous inclusions may be of chalk or even Upper Greensand, given the geographical locations of those towns (fig 6.1). Although one or more sources of these 'chalky' wares could have been in the Middle Thames Valley (Vince & Jenner 1991, 70), SNC1 and SNC2 types may represent the outlying distribution of a chalk-tempered ceramic tradition that was more common in adjoining parts of Hampshire during the Saxo-Norman period. This does not exclude the possibility, however, that some sherds of the Godalming/Farnham/Guildford-types may lie unrecognized within the SNC material of Staines and Chertsey, or amongst EMCH material in

the City. In London and Staines they are contemporary with IQ sandy ware which represents a significant proportion of most late 11th and early 12th century assemblages, and which was almost certainly made in the Farnham district. It is conceivable that other coarse ware types might also have been traded along the London to Winchester corridor (Jones 1992, 84). Another source of 'chalky' wares may be represented by the SNC6 material from Reigate in the south-east of the county, unless this had been from pots that had been distantly marketed. Only a small proportion of the pottery from *Cherchefelle* is of these fabrics, and in a similar range of variants as the other SNC types.

No feature or phase assemblage so far found in any of the Surrey towns has these 'chalky' types as a significant proportion. At Farnham, Godalming and Guildford this may be due to the lack of discovered large feature or phase assemblages of Saxo-Norman date, since it is suspected that the chalk-tempered tradition could have been as strong in south-west Surrey as in neighbouring parts of Hampshire. At Staines and Chertsey, however, some early medieval deposits contain up to 50% of 'chalky/shelly' fabrics because SN3 types are supplemented by those of SNC4 and 5, which probably represents a deliberately black-surfaced and wheel-thrown ware. Since none of the SNC fabrics of Farnham, Godalming or Guildford contain as much fluvial shell, SNC4/5 may not be represented in those towns. LOGR greyware, which is found in early to mid 12th century assemblages in London, is very similar, but the majority of such vessels from the City are illustrated as being hand-made, and any distinctive surface coloration is not noted (Vince & Jenner 1991, 76). Black-surfaced SNC4/5 ware is, therefore, well-represented at Staines, but not apparently in London, even if LOGR were a hand-made variant of it. The stimulus for its development might have been the growth in importance of Windsor Castle and town during the late 11th and early 12th century.

In summary the late Saxon and Saxo-Norman calcareous grit-tempered wares of Surrey are part of a ceramic tradition that remains difficult to separate into wares. There is a variety of fabric types in which the same tempers of tufa, chalk, freshwater shell and quartz sand were used in combination, but which shared a common repertoire of basic vessel forms.

SHELLY WARES

The tradition of coarse shell-tempering in the district began before the Conquest. In London there is Late Saxon Shelly Ware LSS (Vince & Jenner, 1991, 49), and in Staines and Chertsey the same or a related ware (S1). The crushed shell of LSS has been identified as *Gryphaea*, indicating a Jurassic source area (Vince & Jenner 1991, 50), and the ware was suggested to have been the same as Oxford B ware which also contains Jurassic fossil material (Mellor 1994, 37). The author has previously expressed doubts about the identification of *Gryphaea* in LSS, and about whether LSS is the same as Oxford B ware (Jones 1992, 80). Staines S1 ware closely resembles LSS in most aspects of fabric, form and forming techniques, but John Cooper of the British Museum (Natural History) identified the shell in a sample of S1 sherds as being oyster. In the only sealed context assemblage from the town in which it was probably contemporary (pit F2 of the Elmsleigh Centre site) it is accompanied by sherds of coarse sand and flint-tempered GQ1 fabrics that are probably late Saxon (see below), and sherds of grass/chaff-tempered (GT) pottery that need not be residual (Jones & Poulton, forthcoming). S1 ware is also represented by a few sherds re-deposited in later contexts at Chertsey, but neither this, nor LSS, have, as yet, been identified in any of the other medieval towns of Surrey.

The most common and most widely distributed coarse shell-tempered pottery in Surrey, is that of S2, but it remains unclear whether this was a ware made in one district or whether it was a ceramic tradition with several source areas.

In London, the tradition is represented by Early Medieval Shelly Ware (EMSH) which had been in regular, but never very common, use from the late 11th to the mid 12th century (Vince & Jenner 1991, 63-4). The shell in EMSH is thought to be fossil on the grounds that the same, or a similar ware, is the most common pottery type from early medieval sites in north-west Kent

where the Woolwich Beds contain much fossil oyster. Although these beds could have been the source for the early London and north-west Kent material, it does not explain why wheel-thrown vessels of the same ceramic tradition are widely distributed across Surrey, since the Woolwich Beds disappear west of Greenwich. Unless these had all been made in north-west Kent, an unlikely prospect since the later wheel-thrown types did not even reach London (Vince & Jenner 1991, 64), then there must have been other production centres in Surrey. It remains to be proven that the shell of EMSH and the north Kent material is of fossil material, however, since it could just as easily have been contemporary food debris.

Some S2 sherds from Staines are from deposits that could possibly belong to the second half of the 11th century; at Chertsey, the lowest levels in a sounding by a wall of the abbey precinct contained a relatively high proportion of S2 sherds and may pre-date the major rebuilding that was begun in 1110 (Jones 1988, 75). In both Staines and Chertsey, however, S2 ware was more common later, but only formed a minor part of 12th and early 13th century assemblages in which the principal wares are sand-tempered.

At *Cherchefelle*, S2 is the predominant ware in later 11th century assemblages, but declined through the 12th century because of an increasing use of sandy wares. All early S2 vessels were hand-made, but some rims had been trued-up on a turntable. In the adjacent town of Reigate, founded in the mid 12th century, S2 ware represents a small proportion of the pottery of the early settlement phase, but was almost wholly replaced by sandy wares by the early 13th century.

Three other coarse shell-tempered fabrics amongst the pottery from *Cherchefelle* (S3, S4A and S4B) are much less common than S2. They decline through the sequence in a similar manner, and may only be minor variants of S2 since other examples with rare quartz sand and chalk fragments have been found elsewhere in Surrey, such as at Chertsey and Staines (S5).

Wheel-thrown S2 ware cooking pots, storage jars and bowls continued to be used until the second half of the 13th century, except in the east such as at London and Reigate. Late examples are known from many sites in Surrey (Jones 1986, 73–6), and at Guildford, the ware represents a reasonable proportion of most mid to late 13th century assemblages with early whiteware (see below). In sherd scatters of occupation and possible pottery production sites along Crockery Lane, East Clandon, 7km east of Guildford, it is present with grey/brown sandy ware and white-ware sherds but in a smaller proportion (Jones 1987–8). Smaller quantities of S2 ware compared with those of sandy wares are also evident at Church Square, Dorking and in a collection of mostly 13th and 14th century pottery from the eroding river bank of the Mole near Thorncroft Manor, outside Leatherhead. In the south-west of the county, it is present as a minority ware in the Farnham and Godalming collections, as also in an assemblage from the moated platform of Cranleigh Rectory, near to the parish church.

No deposits have been found in Surrey, except at *Cherchefelle*, in which S2 is the most common ware, although, with the exception of Staines, and possibly Godalming, deposits of such early date as *Cherchefelle* have not yet been properly investigated. The proportion of developed S2 ware through the 12th and early 13th centuries in the towns of west Surrey remains fairly consistent, and remarkable for that reason, especially as residuality is unlikely to be a factor. It seems more likely that there remained a niche market for cooking pots and storage jars of shelly ware, despite the dominance of sandy wares. Did foodstuffs keep better or cook better in them? Or did some people just think that they did?

FLINT AND SAND/FLINT-TEMPERED WARES

The collection of sherds of these FLQ and QFL types from the other towns of Surrey provides only a little more insight than an earlier review of them relating to similar fabrics from Reigate *Cherchefelle* (Jones 1986, 78).

Coarse flint-tempered fabrics are present at Farnham, Guildford, Godalming, Reigate and Staines, and an earlier notion that the source of such wares could have been from south or west of Staines (Jones 1982, 205) seems to be supported by the relative frequency of such pottery at Farnham and Godalming. The pre-Conquest pottery from Godalming includes a coarse

flint-gritted fabric (SAXFL) that is so similar to FLQ7 that it might indicate that local production of such types had begun in the Godalming/Farnham area and far earlier than previously assumed. FLQ fabrics are uncommon elsewhere in Surrey, and the rare sherds at Reigate could represent small-scale local production.

FLQ types seem not to be represented in London, as its closest equivalent, Early Medieval Flinty Ware (EMFL), contains as much quartz sand as flint (Vince & Jenner 1991, 69). In Surrey such material would be classified as QFL fabric. It now seems unlikely that an FLQ type in Surrey came from a source to the north or west, since all such early medieval flint-gritted wares discovered so far in the sub-Chiltern region are QFL types predominantly tempered with quartz sand.

Of two QFL fabrics found in Staines, the most common one (QFL1) has not been identified elsewhere in Surrey except at Chertsey, and it is uncertain whether it is represented in London. It is similar to EMFC which is most common in 11th century deposits of the City but never represents more than 2% of any one assemblage, whereas QFL1 represents one of three dominant wares in Staines assemblages of the 12th century. In addition, some of the forms and decoration of QFL jugs from Staines are similar to those of early London ware types (Pearce *et al* 1985). If found in the City they might even be classified as the coarser London Ware type LCOAR, except that the Staines jugs contain no freshwater shell inclusions (Pearce *et al* 1985, 83). The other QFL sand and flint-tempered fabric from Staines, however, does contain rare shell as well as chalk, and this QFL2 type could be the same as LCOAR. However, it is not very common in Staines.

POLY-TEMPERED SANDY WARES

Only at Staines and Reigate have sufficiently large samples been examined in order to untangle the complexities of the many poly-tempered variants. Some, like those of Reigate, and perhaps Farnham and Dorking, probably represent end-of-range variants of the local grey/brown sandy ware tradition. Others, such as at Staines and Chertsey, may also have belonged to the same tradition, but are accompanied by sherds of very similar fabrics that are more likely to have belonged to different wares. Some sherds from cooking pots that were combed down the body, for example, may be of Denham ware since the technique had been used there (Farley & Leach 1988). Sherds from white-slipped jugs in the less coarse Q1 fabrics are also similar to others in the region such as London Ware, and especially to its poly-tempered variant, LCOAR, which is found in early 12th century deposits in the City (Pearce *et al* 1985).

The list of fabric variants of the poly-tempered types may grow as other collections are examined, and until it becomes much clearer as to how they relate to the main sand-tempered traditions of the region, and to other wares.

THE GREY/BROWN SANDY WARE TRADITION

The most common pottery in late 12th and early 13th century deposits across Surrey is represented by this ceramic tradition, which reflects the general development of such sandy wares in several parts of southern England during the late 11th or early 12th centuries. It appears to have persisted, in at least some parts of the county, into the later medieval period. The general colour difference across the county, with a predominance of grey surfaces in the north and west, and brown surfaces in the south-east, suggests more than one production area; and the identification of cooking pot forms peculiar to Reigate and Betchworth, and to Dorking, could indicate that there had been many.

Two points of difference are observed between the cooking pots of the ware from Reigate and Betchworth and those from the rest of the county. Many from the town and nearby village have rims that are strongly everted, and have a finger-impressed bevel on the inner rim edge (Jones 1991–2, M114). This distinctive type has not, as yet, been identified at any of the other towns mentioned in this report. Some of these, and other cooking pots, are also diagonally combed down the body, unlike others from the county. At Dorking another distinctive style of rim edge

has been identified amongst the cooking pots, which suggests a different source to that which supplied Reigate, only 8.5km to the east.

The Farnham and Godalming samples are too small to determine whether they came from separate sources, but it is suspected there was only one, and that it was in the Farnham district. Guildford has large quantities of the ware in late 12th and 13th century assemblages, and shares the use of random scratch marking on cooking pot bodies and bases with Farnham. Approximately 40% of the pottery from Crockery Lane, East Clandon, near Guildford is also of this ware.

In north-west Surrey at Staines and Chertsey, the tradition is as well-represented as in other parts of the county, but it may not have been locally made. Such pottery from both towns most closely resembles the fabric variants of Farnham and Godalming, including the predominance of grey surfaces. The source of the best potting clay in north Surrey is the narrow outcrop of Reading Beds that follows the dip-slope of the North Downs ridge (although the Wealden clays available to the potters of the Reigate and Limpsfield districts could be of similar quality). Most if not all vessels of this ware from Staines and Chertsey probably came from production sites that used the Reading Beds of central and western Surrey, which is where most potters are documented during the late 13th and 14th centuries, such as at East Clandon and Farnham (Jones, in prep (b)).

Only one proven manufacturing site of these wares has been discovered in the county, however, although some related fabrics were made in the Limpsfield area (see Pottery production sites, below). The site is at Ashted and lies over London Clay, but Reading Beds have recently been discovered by the author as an outcrop on the top of the nearby common. It seems only to have been a small-scale concern, since no evidence of any larger production area has been forthcoming in the 40 years since the kiln was partly excavated (Frere 1941). Ashted probably supplied some of the pottery of the nearby medieval town of Leatherhead.

Although most sandy greyware fabrics from Staines probably belong to the grey/brown tradition, one differs markedly from the others (FQ2F), and was probably made in Berkshire. The fabric has a dense array of fine quartz-sand grains that are always clear, opaque or milky; the sherds are hard-fired and ring when struck. There are similar fabrics from a group of kilns found at Camley Gardens in Maidenhead (Pike 1965), and it is possible that the Staines FQ2F sherds came from that source. A few sherds have also been found in Chertsey, but not at any of the other towns of Surrey.

IRONSTONE SANDY WARE

IQ Ironstone sandyware was the first medieval ware made in the Farnham area on an industrial scale to meet the requirements of the London market, the towns of west Surrey and adjacent parts of Hampshire. The evidence from London suggests that distant marketing of the ware had begun before the Conquest (Vince & Jenner 1991, 73). A source in the border region of Surrey, Hampshire and Berkshire was suggested on account of the inclusions of the fabric, and because, 'the only settlement of which sherds of ESUR form the majority of those seen is Aldershot' (Vince & Jenner 1991, 44). Aldershot (Hampshire) is separated from Surrey by the river Blackwater at Runfold and Tongham.

'Early Surrey Ware' has not been thought appropriate as a common name since it is only one of several early medieval wares in the county, and might not even have been made there. The name adopted very early in the study of medieval pottery from Staines is retained instead, since it draws attention to its main distinguishing characteristic.

The remarkable degree of potting skill demonstrated by many IQ vessels from the towns of west Surrey is not commented upon in the description of ESUR from London. Illustrated vessels of ESUR are shown as having been hand-made (Vince & Jenner 1991, figs 2.58, 2.59). If this is so, then the supply to the City may represent a variant of the ware, since many vessels of IQ ware from west Surrey were wheel-thrown. A few sherds from Chertsey, however, are from hand-made vessels with thicker walls, and rim forms that more closely resemble late Saxon forms. Some of the ESUR sherds that have been found in London deposits pre-date the Conquest, so it is possible

that the few hand-made sherds from Chertsey were from vessels made during the final decades of the Saxon period.

As well as at Staines and Chertsey, IQ ware is present in the collections from Dorking, Guildford, Farnham and Godalming. In the earliest deposits in which it was found at Staines and Chertsey, it is accompanied by S2 and SNC shelly and calcareous-tempered fabrics, and by other gritty fabrics, but by very few examples of the grey/brown sandy ware tradition. During the 12th century, however, there was an increase of the standard medieval sandy ware, and a sharp decline of calcareous and poly-tempered types, but both the shelly S2 tradition and the early sand-tempered tradition persisted beyond the end of the century.

Because of some pale firing, and the ferruginous sand of the temper, ESUR is thought to have been made with Reading Beds clay and a temper derived from the Lower Greensand (Vince & Jenner 1991, 44). Lilac and pale grey/off-white clays found just above the pebble-bed base of the Reading Beds fire white or near-white. The temper most probably derives from the Folkestone Beds of the Lower Greensand series.

The County Unit recently excavated a straggle of medieval settlements in Tongham on the opposite side of the river Blackwater from Aldershot (Hampshire), where ESUR has been noted as being common (Vince & Jenner 1991, 44). In deposits most likely to have belonged to the 12th century, IQ also represents the majority ware at these sites, which lie along the north side of a road along the foot of the Hog's Back between Tongham village and Runfold hamlet. Immediately west of the settlements lies the Runfold fault, which bisects the chalk ridge of the North Downs and juxtaposes the sands and sandstones of Folkestone Beds with the Reading Beds clays, creating the only place in the region where both the clay and temper of IQ ware are found together. Tongham has a documented history of tile production from the 13th to the 16th century (Brooks & Graham 1983), but thus far no references to medieval potters in the area have been found. IQ was made earlier, however, and the lack of references is hardly surprising, given the virtual absence of documents before the late 12th century. It is possible that some of the recently excavated occupation sites may have belonged to clay-diggers for tiles, but some clay from Tongham was described as being 'potters clay' in the 16th century (Holling 1969b, 19).

There might have been a gap of almost a hundred years before the Farnham district again supplied significant quantities of sandy coarseware to London, since whiteware vessels of Coarse Border ware type are not generally found in City deposits until c1250 (Pearce & Vince, 1988, 13). It is odd, however, that although IQ/ESUR and Coarse Border whiteware reached London in significant quantity, the principal sandy ware of Farnham during the earliest period of its market and borough, and also of Staines and Chertsey, has not as yet been identified in the City. Most grey or brown sand-tempered pottery in London during the century before c1250 may well have been of local origin, but some might have been of Farnham-type grey/brown sandy ware. There may, therefore, not have been a complete hiatus in the supply of border sandy wares to the capital.

IQ ware continued to be supplied to the towns of west Surrey for a longer period than to London, and there might, therefore, have been a period of two or three generations when there was less need to use the pale-firing seams of the Reading Beds for the production of pottery in the Farnham area. The greater thickness of the formation, however, is of 'cat's brain' clays (a quarryman's term for its buff, grey and red/brown mottling). This is just as suitable for potting as the basal pale-firing seams and had probably been used for the production of the local variant of grey/brown sandy ware even before the decline of IQ ware.

WHITEWARES AND RELATED TYPES

Much has already been said of these in relation to the type series (p 220). The publication of the London *corpus* crystallized certain ideas about Surrey whiteware types but a clearer basis for their classification was necessary, because of the failure to prove their distinct identity. Neutron activation analyses and petrological studies have demonstrated that it is not possible to attribute all sherds of whiteware to their suggested source, or to differentiate correctly the perceived types (Cowell 1988,

187; Jones 1989, 54). Some conclusions were that 'there are many examples of sherds from Kingston-type ware production sites with coarser inclusions than normal and some which have a much finer texture, akin to that found in Cheam whiteware' (Cowell 1988, 187); samples of Bankside, Kingston, Cheam 14th century and Cheam 15th century waster sherds 'were incompletely separated except for the 15th century whiteware'; 'only 35% of the Bankside, Kingston and 14th century Cheam material were correctly classified, which is marginally better than chance' (Cowell 1988, 184); and 'it has been found impossible using either discriminate analysis or cluster analysis to distinguish between most of the groups of kiln products except those of 15th century Cheam' (Cowell 1988, 186).

In addition to these negative results, it should also be stressed that it is not known that coarse whiteware had never been made at Kingston, or that less coarse fabrics had not been made in the border district. Very few kilns have been sampled, even at the known production sites. Yet in addition to Kingston, Cheam and the border district, there were probably other production centres of whiteware in the county — perhaps at Clandon and possibly also at Frimley, Egham, Chobham, Dorking and Staines, where potters, or their relatives are recorded by name in 14th century documents (Jones, in prep (b)). Whiteware was the overwhelmingly dominant fabric type throughout west Surrey at that time.

The only excavated waster material at Kingston is of later 14th and 15th century date (Hinton 1980; Nelson 1981), and there is, as yet no evidence that the pottery documented as having been supplied to the royal household from Kingston in the mid-13th century was whiteware (Hinton 1989, 382), or that Kingston-type vessels recovered from City excavations were made at Kingston. The recovery of Kingston-type wasters at Bankside opposite the City suggests otherwise (Dennis & Hinton 1983), although the full implications of this discovery were not addressed in the City *corpus* (Pearce & Vince 1988). It has previously been observed that the Bankside material closely resembled Cheam-type material (Orton 1982, 85).

TRANSITIONAL REDWARES

Significant collections of late 15th and 16th century redwares from Staines, Chertsey, Godalming and Little Pickle, Bletchingley have been classified, but such work is provisional as a more comprehensive analysis is currently being undertaken of all such material from the London region (Beverly Nenk, pers comm).

Potters in Cheam, Kingston, the Hampshire/Surrey border area, and perhaps elsewhere in the region produced red-bodied pottery alongside whiteware from c1480 (Orton 1982, 82). Early redware vessels were made in medieval and transitional forms accompanied by others of Tudor Brown fabric and form types with stylistic traits borrowed from Dutch and German red coarsewares. Such pottery was also imported from those areas (Jennings 1981, 134), and continental potters are also known to have settled in the London area during the 16th century. It has been suggested, however, that many of the new styles may already have been copied by the recently-emerged indigenous redware industry before the arrival of significant quantities of imports or their potters. (Orton 1982, 83).

One of the more important production centres of 16th century redware in the region was at Woolwich, east of London (Pryor & Blockley 1978), but there had also been a rapid growth of Border ware production west of London, in the Blackwater Valley region between Surrey and Hampshire, of redwares and whitewares for distant marketing down to the early 18th century (Pearce 1992, 6 and 102). The huge increase in demand for pottery during the post-medieval period was largely met by these, and other more local, production centres of red/brown coarsewares, but little is known of them. It is ironic that less is known of the last two centuries of redware production than of its first, especially since it represents the end of the vernacular ceramic tradition in southern Britain.

In the Staines collection from excavations undertaken up until 1989, all extant redware sherds were examined and classified, although much post-medieval material has been discarded without

record. The general lack of post-medieval material occurs because most higher deposits and 'overburden' had been removed by machine.

The most useful stratigraphic sequence of later medieval and early post-medieval deposits from Staines was excavated at the County Sports site (Jones & Poulton, forthcoming), in which redwares of transitional style are first present in the late 15th century assemblages of phase 15, whereas red/brown pottery, mostly of Tudor Brown styles become overwhelmingly predominant in the mid-16th century assemblages of phase 17. Later 16th and 17th century assemblages from the town have a more equal mix of white and red Border ware, and the County Sports sequence seems to support an old theory that there had been a temporary hiatus of whiteware during at least part of the 16th century (Moorhouse 1971a). At Chertsey London Street a smaller decline of whiteware is also apparent. Transitional redwares are first present in assemblages in which over 80% of the pottery is of whiteware. In slightly later groups probably dating to the middle or second half of the 16th century, however, redwares of Tudor Brown and Border redware or similar types are overwhelmingly dominant, and Border-type whiteware accounts for only 20%.

The continuum of sand grading through RW2 and RW3 fabrics of Staines and Chertsey might indicate a single source area, and the Surrey/Hampshire border district readily springs to mind (Pearce 1992). Other wares may be represented, however, including some made closer to Chertsey, as mid-17th century redware and whiteware waster sherds have been found at Addlestone, 2km south-east of the town (David Barker, pers comm), and Kingston or Cheam-type redwares may also be represented amongst the earliest sherds.

Another useful sample of transitional redware is from Little Pickle in the south-east of the county (Jones 1998, 92). There, a local tradition of orange/brown pottery had existed in the area from the late 12th century onwards (see orange sandy fabrics, p 219), but coarser medieval pottery can usually be distinguished from that of the early post-medieval period. There are some difficulties, however, in differentiating sherds of the finer medieval orange fabrics from those of later types in assemblages, and from sites that belong to the transitional and early post-medieval period. The importance of Little Pickle is that it had been such a site, with no later occupation. A 14th century hall house was re-modelled in the late 15th century into a grand courtyard complex of buildings that was abandoned between 1550 and 1559 and levelled soon after. The ceramic assemblage, therefore, is of considerable importance for the region. Despite Little Pickle and Chertsey being 38km apart, there is a remarkably similar mixture of redware fabrics, with some sandy to less sandy types, and others with significant quantities of grog inclusions. Those of the former probably include Kingston, Cheam or similar types, but Border redware is less likely to be included. Some vessels from Little Pickle may have been imports, perhaps especially those with distinctive pulled feet that are typical of continental production centres (Jennings 1981, fig 59). These, however, could have been made by foreign potters working in England, or may be good copies made by indigenous potters (Jones 1998, fig 4.6 no 163, fig 4.7 no 172). One common vessel type from Little Pickle made, almost exclusively, of heavily grogged fabric like some others from Chertsey, is the typical Tudor Brown pancheon with horizontal handles and moulded wall-sided rim (Jones 1988, fig 4.6 nos 145-60).

The collections of redware from excavations in the other towns of west and central Surrey are generally too small to invite speculation, except for the Holloway Hill site in Godalming which provided a small but useful assemblage of transitional to 17th century redwares.

TRANSITIONAL BUFFWARES

Buff sandy coarseware has been recognized as a distinctive and separate ceramic tradition alongside the late medieval and early post-medieval redwares and whitewares of Surrey. Different buff wares have been described from opposite ends of the county at Godalming and Little Pickle, and two of the aims for future work should be to establish their distribution and to determine whether there are other variants elsewhere.

IMPORTS

The near-total absence of imported pottery amongst the high-medieval material from the excavations under review seems to be characteristic of most assemblages in west and central Surrey. There are very few imported vessels even amongst the recently excavated assemblages from Henry III's palace at Guildford, for example. It is possible that any long-distance trading of pottery to Surrey, even to sites of high status, would have been considered superfluous in view of the prolific and highly skilled potters of the Farnham district and perhaps elsewhere within the county.

POTTERY PRODUCTION SITES (fig 6.2)

A summary of current knowledge and ideas about pottery production in Surrey should first state that although several centres have been identified, none made pottery before the 13th century and documentary references to potters are not made before the middle of that century. The absence of records is not confined to Surrey, however, since there is a general lack of surviving documentation before the late 12th century; the absence of earlier medieval kilns or waster heaps is also no cause for special comment. Few such production sites have been found anywhere in Britain.

Most discovered kilns and waster heaps in Surrey have been of whiteware, redware or Limpsfield reduced ware, but there are three that made variants of grey/brown sandy ware, and three that produced orange sandy ware.

Whiteware production sites have been discovered in two widely separated areas: the border district of west Surrey and north-east Hampshire (Holling 1971), and the Hogsmill river district. In the latter, one group of kilns lay close to a tributary source of the river at Cheam (Orton 1982) and the others were at its confluence with the Thames at Kingston (Hinton 1980; Nelson 1981). The clay source (Reading Beds) was at Cheam so it had to be carried to Kingston, but, curiously, pottery production is not known at Cheam until a hundred years after it is documented in Kingston. Wasters of whiteware have also been recovered at Bankside (Richardson 1983) which could imply another Thames-side production site like Kingston that required the carting of clay.

Kilns in the border district have been excavated within the borough of Farnham (Cole 1982) and at the rural site of Farnborough Hill (Holling 1971). However, several sherd scatters of kiln debris in Ash, first collated by Holling and supplemented by more recent fieldwork by SCAU and the author, suggest a rural community of medieval potters. Such tangible evidence for production in the border region, however, fails to match the huge scale of whiteware production. If all Coarse Border ware is from the county border, then millions of vessels were made there, since it represents almost all 15th century pottery in west and northern Surrey, as well as in London, and a significant proportion of earlier date. Fieldwork in the last twenty years has identified few more sites, and although this partly reflects the abandonment of the plough in large parts of the area, a great deal of development has taken place which would have been expected to reveal more. The true state of medieval whiteware production in the county, however, is probably more complex than the discovered archaeological evidence would suggest, as some documents of the period indicate. Most *potter* and *crocker* personal names in west and central Surrey during the century before the Black Death, when coarse whiteware was ubiquitous in the district, resided at East Clandon, a small detached estate belonging to Chertsey Abbey, that straddled the Reading Beds east of Guildford. Other references to such names in the late 13th and early 14th century cartularies of the abbey show them occurring at Frimley, Chobham and Egham, where the product of any industry is very likely to have been whiteware.

Late medieval redware was also made at both Kingston and Cheam, but Red Border ware (Orton and Pearce 1984, 35–6) had probably been an early post-medieval development, although it too was made alongside whitewares of Border type at Farnborough Hill and in Ash (Pearce 1992, 2).

At the east end of the county close to another border, that of Kent, the waster heaps and kilns of another cluster of production sites have been discovered (Prendergast 1974, Ketteringham 1989, Hayman 1997). Most lie on the edge of a common on the Lower Greensand called the High

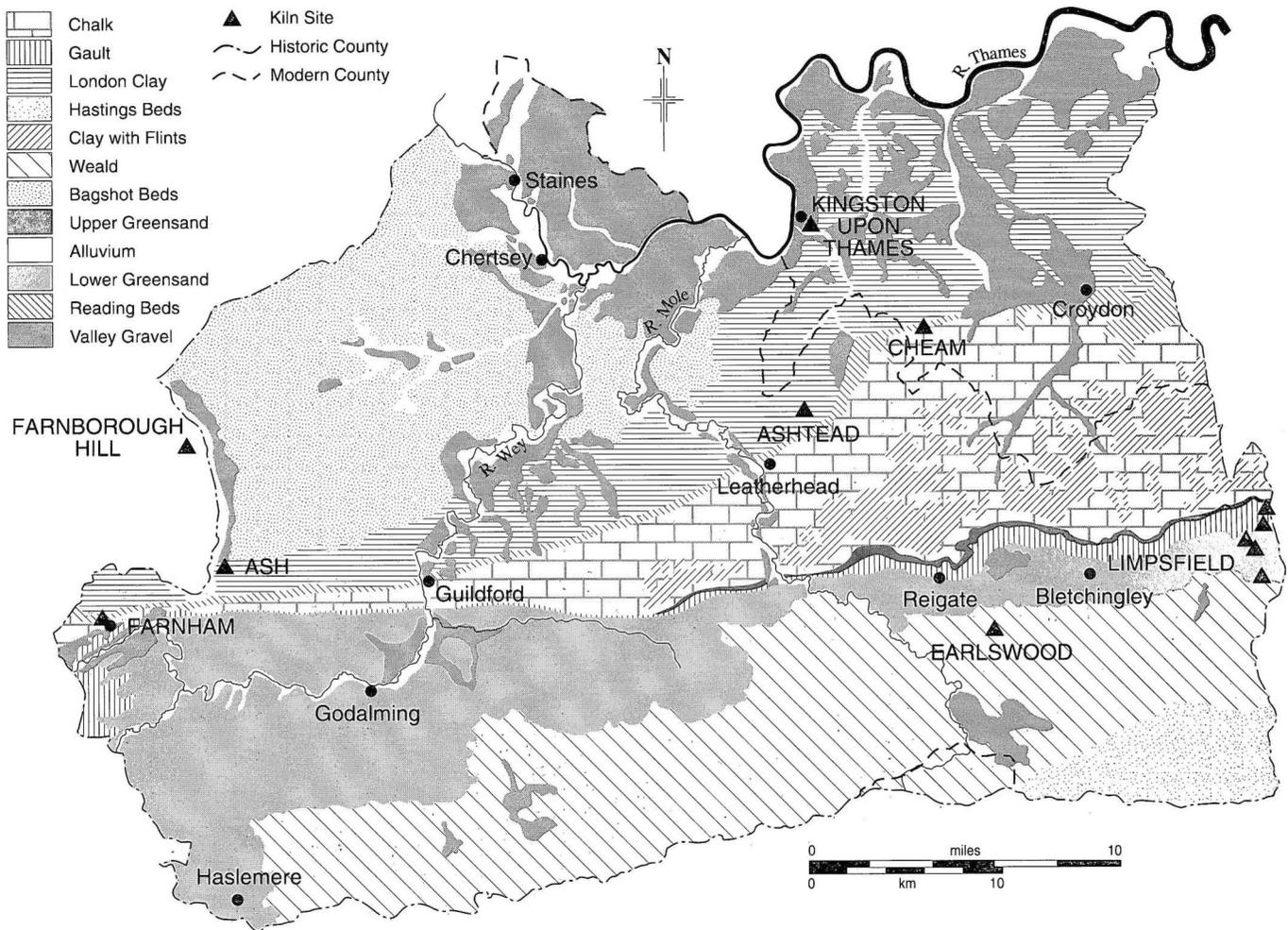


Fig 6.2 Pottery in Surrey: location of known medieval production sites.

Chart, and could have used Wealden clays from below the scarp to the south, but northern outliers are on the Gault Clay which had probably been used instead. Vessels were not glazed by the Limpsfield potters, although it is curious that the potters themselves used glazed pottery made elsewhere, even at the production sites (Jones 1997, 67).

Considering the absence of glazed vessels, it is surprising that Limpsfield reduced ware (see p 218) was distributed so widely in east Surrey. It is common at Reigate 17km distant, and only dies out at Dorking another 9km further west in central Surrey.

Perhaps the earliest production sites of the Limpsfield complex were the two found in Titsey on the Gault (Hayman 1997). Although some reduced ware, which was coarser than that from other kilns, had been made at both sites, the colour of the very many orange/brown sherds may also have been intended. These are obviously wasters, but their colour need not represent accidents of under-firing or oxidisation. Instead, they very closely resemble sherds of the local grey/brown sandy ware tradition and its east Surrey orange sandy variant. In any case, it is hard to imagine how else the wasters of a kiln site that made such wares would appear, other than in the form found at the Titsey sites. At these early kilns, therefore, it is likely that reduced wares, grey/brown wares and orange wares were made together, although that statement implies an intention that need never have existed. Considering the rudimentary nature of the kilns, it is highly likely that any pot of whatever colour that survived firing was marketable.

Thus, although the second paragraph of this summary apparently claimed much, it is readily admitted that two of the three grey/brown sandy ware production sites and two of the three that made Orange sandy ware, were the Titsey kilns.

The third production site of Orange sandy ware is at Earlswood near Reigate, and south from the Greensand scarp in Wealden clays (Turner 1974). Thirteenth century coarsewares were made there, but the special products were very distinctive jugs with complex incised decoration, white slipping and green glaze. These are common in south-east Surrey, and at Reigate burnt sherds of similar jugs came from deposits associated with a hearth that has been archaeomagnetically dated to the late 12th century (Poulton 1986). Many more kiln sites of these finer and coarser orange wares await discovery.

The third of the discovered kilns that made pottery of the grey/brown sandy ware tradition was at Ashted, and had probably been in operation during the late 13th century (Frere 1941). The site is buried within suburbia and no opportunities have arisen to test whether it had been solitary or part of a complex of kilns. It could have used Reading Beds clays from the top of Ashted common, and probably supplied the nearby town of Leatherhead. It is uncertain whether its products had a wider circulation.

Few kiln sites have been excavated in recent years, although notable amongst them have been the two at Titsey, and yet more that produced whiteware at Eden Street, Kingston (Stephenson & Miller 1996). Fieldwork by the author has discovered scatters at Clandon, Ash and elsewhere in west Surrey that probably relate to pottery production, and two more probable kilns at Limpsfield. Of as great a potential interest are the gleanings of *potter* and *crocker* personal names from the published transcriptions of the pipe rolls of the bishop of Winchester's Farnham estate, and of the cartularies of Chertsey Abbey (Jones, in prep(b)). These have indicated where other production sites must be sought in north-west Surrey.