

**THE POTTERY FROM EXCAVATIONS IN IPSWICH 1974-1990**  
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The major problems with the analysis of the Saxon pottery from Ipswich are the lack of primary deposits and reliable sequences and residuality. An idea of the residuality problem can be seen from the fact that despite over 56,000 sherds of Ipswich ware having been recovered by excavation (excluding the Buttermarket site), only 10,592 of them were in MS contexts. 10,018 were from ELS contexts, but as this period covers the whole of the 9<sup>th</sup> century, it is probable that a large percentage of these are also redeposited, as, of course, is an unknown proportion of the pottery found in Middle Saxon contexts.

The vast majority of the pottery groups recovered appear to have been the result of secondary deposition. It is not unusual for a backfilled feature to contain several thousand sherds of pottery, and yet have no vessels that are even remotely close to being complete. The only exceptions to this appear to be pottery kilns and medieval buildings destroyed by William I in 1086, yet even the latter are not as useful as they may be. A good example of this is the burnt down medieval building, 2022, from the Buttermarket, which appears to have been destroyed with the contents of the cellar undisturbed, but when the pottery was reconstructed, a large proportion of the two storage jars was missing, despite the fact that they were heavily burned and crushed *in situ*. Two smaller crushed vessels were recovered, but the fate of the missing portions of the storage jars is something of a mystery. The cellar fill contained thousands of sherds of other contemporary pottery, and yet it was all unburnt and none of it produced anything remotely close to a reconstructable vessel. This building had no signs of burning at one end of the floor, despite the presence of post stumps and carbonised revetment planking, so presumably some attempt must have been made to salvage (or loot?) some of the contents of the building after the fire was extinguished, during which process part of the smashed pottery was dug out along with the other burnt material. No smaller locally-made vessels could be reconstructed, but a Kugeltopf and a St Neots' ware jar were found which were obviously in the cellar and crushed by falling embers, so it would seem that the upper storey of the building was emptied of most of the useful items before it was put to the torch, which suggests that the owners of the building had some warning before the destruction of their homes. This pattern is repeated with the other burnt down buildings, which in the main produced only storage jars in any reconstructable form. All the buildings from the town appear to have been backfilled with rubbish after they were abandoned, as were the many pits, yet all appears to have been of a secondary nature. Why was this? Presumably, there must have been some sort of middening of rubbish taking place. Whilst there is little direct evidence of this from Ipswich due to the lack of excavatable occupation layers, the evidence from the Middle Saxon site at Brandon in Suffolk has evidence to suggest that this practice was carried out. Find density plots of animal bone and pottery has shown definite concentrations of the materials around the settlement, which must be the result of relatively undisturbed midden (Carr forthcoming). The pottery deposition is of a very similar nature in that few complete vessels are found in features, and most of the assemblages consist of sherds from different vessels, although the rate of recovery and reconstruction across the site is much better due to the relatively low levels of disturbance and redeposition. If middening activity was taking place at Brandon, it seems reasonable to assume that the same activity was taking place in Ipswich as well.

The result of this is that very useful data can be gleaned from the Saxon pottery in terms of typology; there are simply not enough reliable groups to analyse, and those few that there are provide little meaningful information.

Another major problem is that of redeposition. There was intense activity in Ipswich between the 7<sup>th</sup> and 15<sup>th</sup> centuries, with many holes of one sort and another dug and backfilled, with the result that pottery (and other finds, of course) travel quite substantial distances from their original point of deposition. Some idea of this can be gained from figures *aa* and *ab* (British Airways Maps, please) which show how decorated sherds from the same vessels, often joining, can travel quite large distances across a site. The Buttermarket scattered over several hundred square metres, although all vessels have a least one sherd in their point of origin, the kiln. The Foundation Street plan shows a similar pattern. Here two sherds of the same vessel were found on either side of the road, one sherd coming from IAS 4601 and another from IAS 4801. If this is the situation with the easily recognised decorated material, it suggests that the same for the ordinary pottery is intolerable. The waterfront sequence from Bridge Street shows that a similar situation may have existed in the later medieval period, for sherds from the same vessels are found in obviously different layers in the sequence, suggesting that the waterfront revetments were built from layers of rubbish from middens.

There are two types of residuality that must be considered:

1. 'Background' residuality, i.e. that due to earlier material which was lying around on the surface of the ground or in the upper topsoil which would fall into open features or gathered up during rubbish clearing or agricultural activity.
2. 'Redeposition' i.e. earlier stratified material which was disturbed by digging activity at a later period. This is probably the most difficult of the two to quantify, as material could be re-disturbed several times after its initial deposition.

An idea of the amount of residuality within the area of the Saxon town can be seen in the following table:

**Tabulation of all Rimsherds for all main Saxon and Medieval Fabrics**

HM	22	27	31	8	53	14
IW		1562	1701	1076	1293	279
ITW			2039	3837	6504	832
SN				129	417	31
MC					813	363
WMC					11	169
MGZ						92
LCW				7	33	0
IMP	3	25	22	21	99	10
HBT						4

STM				1	6	5
AND				1	2	1
TTW					1	0
SXG			1	0	0	0
<b>TOTALS</b>	25	1614	3794	5080	8232	1800

This table omits the data from IAS 6202 and IAS 5902, as these sites are dealt with separately elsewhere.

Key: HM - Hand -made, IW = Ipswich Ware, ITW = Ipswich Thetford Type Ware, SN = St Neots' Ware, MC = Medieval Coarseware, WMC = Wheel-made Medieval Coarseware, MGZ = Medieval Glazed Wares, LCW = Late Saxon Calcareous Ware, IMP = Saxon Imports, HBT = Hollesley Bay Type Wares, STM = Stamford Ware, AND = Andenne Ware, TTW = Non-Ipswich Thetford Type Wares, SXG = Unprovenanced Saxon Glazed Wars

Expressed as percentages:

	MS	ELS	MLS	EMED	LMED
HM	1.7%	0.85	0.2%	0.6%	0.8%
IW	96.8%	44.8%	21.2%	15.7%	15.5%
ITW		53.7%	75.5%	79.0%	46.2%
SN			2.5%	5.1%	1.7%
MC				9.6%	20.2%
WMC				0.1%	9.4%
MGZ					5.1%
LCW			0.1%	0.4%	0
IMP	1.5%	0.6%	0.4%	1.2%	0.6%
HBT					0.2%
STM			0	0,1%	0.3%
AND			0	0	0
TTW				0	0
SXG		0	0	0	0

Fortunately, it is possible to get some idea of the amount of Saxon 'background' residuality during the medieval period from the sequence of waterfront revetments discovered during the excavations at Bridge Street. There seems little doubt from the ceramic assemblage that these banks were constructed, in the most part, by the dumping of general domestic refuse, after this had first been middened, and thus the Saxon pottery therein should be mainly, if not completely, due to background. When the rimsherds are tabulated in the manner of the above table, the results are as follows:

	MS	ELS	MLS	EMED	LMED	TOTAL
S Ips	1	0	1 (2.1%)	9 (3.5%)	6 (1.1%)	17
G Ips	5	9	3 (6.4%)	5 (1.9%)	2 (0.4%)	24
ITW		17	39 (83.0%)	158 (60.8)	95 (6.9%)	309
Other	0	3	4 (8.5%)	88 (33.8)	460 (81.7)	555

Then, if the totals for Ipswich Ware are combined and compared (N.B. all totals are percentages of the assemblage at that period):

	MS	ELS	MLS	EMED	LMED
All Sites	96.8	44.8	21.2	15.7	15.5
Bridge Street	100.0	31.0	8.5	5.4	1.5

So it would seem that the majority of redeposition is caused by the disturbance of buried material rather than by earlier material lying around on the surface.

One of the problems with this residuality is that it is impossible to eliminate sherds from an assemblage as residual if it is possible that they could be contemporary with the group. One possible avenue was on the grounds of sherd size, it being assumed that as sherds were redeposited, they would become broken into smaller pieces, with the average sherd size decreasing over time, e.g. the average weight of EMed ITW would be lower than that of ELS ITW due to any EMed group containing a higher proportion of redeposited material.

The following table, which is a collation of the figures for the bodysherds (excluding ITW Storage Jars) from School Street, Foundation Street and the Buttermarket show that this is not the case:

		MS	ELS	MLS	EMED	LMED
Ipswich Ware	No	7035	12250	9989	12190	2401
	Wt	136495	219695	171775	229735	46115
	Av	19.40	17.93	18.20	18.85	19.21
ITW	No		34333	66976	116943	15658
	Wt		151234	403470	751570	100500
	Av		4.40	6.02	6.43	6.42

It was primarily the factors discussed above that shaped the form of this pottery report. It is felt that a site by site coverage would prove virtually worthless due to the nature of the material, and that a more worthwhile publication would be achieved by a synthesis of all the data along with fuller coverage of useful pottery groups, i.e. the waterfront sequence from Bridge Street, which gave the typology and dating structure for the

medieval pottery from Ipswich, and the Saxon and medieval kilns from St Helen's Street, Buttermarket and Fore Street.

Some discrepancies arise in the totals in the various tables as in some vessels it was possible to define the rimform but not the diameter, in others it was not obvious what sort of vessel the rim came from, and others where the vessel was recognisable but not the rimform or diameter, so the appropriate boxes were left blank in the archive.

## **The Pottery**

### Early Middle Saxon (c.600-650)

There is very little evidence of occupation in Ipswich before the Middle Saxon period, apart from the Greyfriars Road area of the town, although most of the larger excavations produce a few sherds of redeposited hand-made pottery, and the occasional Romano-British sherd. The main concentration of the material is found around the Greyfriars Road area of the town, where buildings of this period were found.

Exact date of this material is always difficult due to its unchanging nature, but the lack of any stamped hand-made material coupled with the finds of a few sherds of Early Badorf Type wares and (redeposited) Merovingian roller-stamped wares would suggest a start date of around 600 AD.

### **Occurrence of Hand-Made Pottery in Ipswich**

<b>Site</b>	<b>No of Sherds</b>	<b>Wt of Sherds (gm)</b>	<b>Gm per sq m</b>
IAS 3104	154	3525	0.64*****
IAS 3201	7	150	
IAS 3410	1	30	0.46
IAS 4201	10	225	3.57
IAS 4302	1	30	0.60
IAS 4601	66	1285	0.64
IAS 4801	104	1425	0.48
IAS 5202	1	25	0.51
IAS 5203	1504	23685	23.69
IAS 5204	109	1185	
IAS 5502	9	375	0.99
IAS 5701	10	195	0.40
IAS 5801	14	275	2.99
IAS 5901	19	315	0.80
IAS 5902	5	55	0.40
IAS 6202	45	835	8.35
IAS 6904	42	790	7.31
IAS 7404	10	160	0.64

## **Fabrics**

There are three main fabrics:

EF1: 'Sandy' few visible inclusions except for a little to moderate amount of fine rounded quartzite and a little mica. Very similar to Ipswich Ware Sandy fabric, although obviously less well-sorted and less well fired. Usually lacks as smooth a surface as Ipswich Ware.

EF2: Chaff-tempered. As above, although visible sand is very rarely more than scarce. Chaff occlusions to a greater or lesser degree. Surface sometimes smoothed and burnished.

EF3: Calcareous. As EF1, with varying amounts of rounded calcareous inclusions. Usually relatively thin-walled. Very rare.

HV1: IAS 5203, 214, 353, 362. EF2, biconical. Heavily chaff-tempered with light external burnishing. Black fabric with a few exterior browner patches.

HV2: IAS 5203, 545. EF1, baggy. Black fabric with dark brown patches on the exterior. Moderately burnished inside and out.

HV3: IAS 5203 554, 590, 595, 626. EF1, but with a few visible chaff occlusions. Black with browner outer surface.

HV4: IAS 5203 521. EF2. Dark grey with browner surfaces. Sooting on rim and internal body.

HV5: IAS 5203 558. EF2. Globular. Black fabric with burnt reddish-brown outer surface. Interior very heavily sooted and encrusted with a black residue.

HV6: IAS 4801 2710. EF2. Shouldered. Black with reddish-brown patches on the interior and exterior. Patches of sooting on the rim.

HV7: IAS 5203 214. EF2. Baggy. Dark grey fabric with reddish-brown inner surface. Heavily sooted on the outside. A few patches of light burnishing.

HV8: IAS 5203 370, 670. EF2. Lamp? Black fabric, traces of exterior sooting.

HV9: IAS 5203 333. EF3. Black fabric.

HV10: IAS 5203 505. EF3. Black fabric, lightly and evenly burnished.

HV11: IAS 5203 648, 677. EF2. Black fabric, some exterior burnishing. Thick patches of soot on the exterior. Single row of comb stabbing on the shoulder.

HV12: IAS 3104 3573. EF1. Baggy. Dark grey fabric with variegated brown and black outer surface, light and fairly even external burnish except for the base. The only complete pot of the period from the town, also the only example of pottery grave goods. The vessel is similar to the high-necked type which Myres has linked to Early Christian Graves in France, and provides one of the earliest concrete dates for the cemetery, and consequently the foundation of the town.

### **'Transitional' Groups from IAS 5203**

The following table represents the groups which may be most reliably regarded as dating to the transitional period between handmade pottery and Ipswich Ware. There is, of course, the problem of gauging just how reliable the groups are; the handmade fabrics are found redeposited in most features of all periods on the site. Context 125 and those from 253 are from SFBs, but, of course, the Ipswich Ware could be intrusive,

but on the whole the evidence does suggest that Ipswich Ware did follow on from the handmade fabrics sometime in the middle of the 7<sup>th</sup> century, as the evidence from West Stow has suggested. Like West Stow, the Ipswich Ware from these early features contains both fabrics, most rimforms and burnished sherds, but no stamped material.

Context	GT	ST	SI	GI	CT	EB	UP	MB	RB	FB
125	1+1R	4	3	-	-	-	-	1	1	-
214	4+2r	6+2r	1	1	-	-	-	-	-	-
250	1+1R	-	11+1r	28+7r	-	-	-	-	-	5
263(253)	2+1r	-	1	-	1	-	-	-	-	-
385(253)	1	-	6+2r	3	-	-	-	-	-	1
394(253)	3	1+1r	4+2r	1	-	-	-	-	-	4
431(253)	10+1r	1	-	-	-	-	-	-	-	1r
372	5+1r	1	1r	-	1	-	-	-	-	1r
389	5	-	14	3	-	-	1	-	-	1
409	1	1	1r	-	-	-	-	-	-	1
588	15+2r	3	1	-	1	4	1	-	-	-
641	3	2	1r	1	1	1	-	-	-	2
831	5	2	5	-	-	-	-	-	-	-

Key:

GT = Chaff-Tempered; ST = Sand-Tempered; SI = Sandy Ipswich Ware; GI = Gritty Ipswich Ware; CT = Calcareous Temper; EB = Early Badorf Types (early C7th); UP = Unprovenanced Imports; MB = Merovingian Blackwares; RB = Romano-British; FB = Frankish Blackwares; r = rimsherd

## MIDDLE SAXON POTTERY

### Ipswich Ware

#### Manufacture

The manufacture of Ipswich Ware has been the subject of some controversy since the material was first recognised in the 1950s. However, the picture has since become a little clearer with the discovery of the Buttermarket kiln and some small experiments by the author during 'Living History' and educational projects at the West Stow Anglo-Saxon Village in Suffolk. The traditional view is that it was thrown on a 'slow wheel' or turntable, i.e. a wheel that is so simple as not to enable the pottery to throw the pot properly due to a lack of momentum. This explanation, although partially true, is not the complete picture. As anyone who has made pottery will know, the only time during the throwing process when high speed is necessary is during the initial centring and drawing up of the pot; the wheel is slowed down for the shaping of the vessel, otherwise the pot will wobble and fly apart. The answer would seem to be reasonably simple. Ipswich Ware was made on a turn-table, but was not thrown, it was coil-built. The wasters from the Buttermarket kiln all show evidence of having been coil-built, with most of the failures appearing to be due to coil weakness or over-trimming of the bases. Whilst conceding that the Buttermarket pottery is of a somewhat different form

to that of ordinary Ipswich Ware, it is of a comparable, if not better quality, and there is little to suggest that it was made in a radically different manner. It has many of the features which are found on the ordinary material, such as turning marks and sagging, knife-trimmed bases. It usually always assumed that coil-built vessels show their method of construction by the breaking along the coil joins and having a stepped fracture, but I would contest this assertion. During work at West Stow, Sue Holden, Will Wall and myself made several coil-built pots and fired them in clamps. One of these coil-built pots, which was about the size and approximate shape of a small Ipswich Ware jar, was accidentally dropped and broken, and upon examination was found to have no obvious internal evidence of its method of manufacture. The answer would seem to be obvious: if a coil-built vessel is made with suitable care, the coils will be joined together to be virtually as strong as the rest of the body. Having said this, there is a tendency for Ipswich Ware jars to fracture near the base, at the waist and/or at the shoulder/rim join, suggesting that the vessels were constructed of one, two or three coils built up from the base. Examination of the base area of the vessels also brings to light two noticeable features. The first is that the bases were knife trimmed. There has never been any doubt about this; most vessels have knife marks, slight facets and 'drag' marks, where inclusions have been pulled through the still soft clay as the knife cut through it. The second point is the internal structure of the base. Many of the smaller vessels, and some of the larger have a distinctive 'stepped' internal profile, caused by a round impression in the centre of the base which in some cases may have been caused by the potters' fingers, but seems more likely to be the result of a rounded object being pressed into it. It is suggested that this is in fact an impression made by some sort of 'last' onto which the pot was inverted during the knife trimming process, which would make the operation much quicker and leave the distinctive impression on the inside. The pots then appear to have been wiped with a wet cloth or the potters' hands to give a smoother finish.

To summarise: the potter takes a fairly thick slab of clay which is placed on a turn-table. The body of the vessel is then built up using a small number of fairly large, thick coils, during which process the turn-table is rotated as the potter moves around the circumference attaching the coil, and the top coil roughly shaped into a rim. The pottery then rotates the turn-table a little more briskly to 'true up' the rim and then wipes the pot around the outside and makes the characteristic slightly uneven finger grooves. The pot is then cut from the wheel, and once it has dried a little, is inverted onto a last, where the thick heavy base slab is then trimmed to shape, and the finished shape wiped down.

### Vessel Types

	Jars	Bowls	Pitchers	Lamps	Lids
MS	1186	29	19	5	1
	95.6%	2.3%	1.5%	0.4%	
ELS	1003	20	15	-	1
	96.6%	1.9%	1.4%		

This table excludes the material from the Buttermarket.

## Ipswich Ware Jar Rims

From the material excavated, there would seem to be little typological significance in the rimforms, with the most common types being present during all periods and in most large groups. All rim types except the rare ID were present in the C7th group at West Stow, and it would appear from the evidence that the potters used all the different rimforms throughout the life of the industry. It is possible that some potters preferred a certain rimform, as the Buttermarket kiln jars had mainly type III.H rims, although other types were also found. Certainly, different vessels of the same type are known with the same stamp but different rimforms.

Gritty	MS Sandy	MS Gritty	ELS Sandy	ELS
I.A:	218 (33.4)	44 (7.8)	210 (33.3)	16 (7.0)
I.B:	23 ( 3.5)	2 (0.4)	34 (5.4)	2 (0.9)
I.C:	188 (28.8)	181 (32.2.)	159 (25.2)	92 (40.4)
I.D:	16 (2.5)	1 (0.2)	16 (2.5)	2 (0.9)
I.E:	77 (11.8)	64 (11.4)	84 (13.3)	25 (11.0)
II.F:	34 (5.2)	23 (4.1)	28 (4.4)	10 (4.4)
II.G:	26 (4.0)	60 (10.7)	36 (5.7)	15 (6.6)
II.K:	26 (4.0)	144 (25.6)	29 (4.6)	47 (20.6)
III.H:	36 (5.5)	35 (6.4)	27 (4.3)	16 (7.0)
III.I:	3 (0.5)	5 (0.9)	2 (0.3)	3 (1.3)
III.J:	5 (0.8)	2 (0.0)	6 (1.0)	0 (0.0)
Total	652	562	631	228

This table excludes the material from the Buttermarket.

The most striking thing about this table is the apparent lack of variation between the proportion of rim types for the sandy fabric between the MS and ELS period. Only the type I.B change by a noticeable amount, which may simply be due to the fact that they are so few in number in both periods. Similar comments can be made about the overall picture for the gritty fabric, although the variations are a little greater due to a fairly large increase in the proportion of type I.C rims in the ELS. However, the figures for the ELS are bound to be affected by residuality, and so if this and the low population size of the ELS gritty rims is taken into account, it seems reasonable to suggest that there was no significant variation in the proportion of rim types in each fabric from one period to the next.

The low population size of the gritty in the ELS suggests that production of this fabric had dropped quite significantly during this period, although this is possibly more due to changes in clay sources than any artistic preferences. This is yet another problem that can only be solved by further research, as far more scientific examination of the fabric and clay sources is needed.

## Statistical Analysis of Ipswich Ware Jar Rim Diameters

The basic aim of the analysis was to attempt to distinguish any difference in function of large and small diameter Ipswich ware jar forms, by noting overproduction of jars of a certain diameter beyond that of an expected normal distribution, which would show up as a secondary peak or change in gradient.

The only apparent typographical difference between the large vessels ('Storage Jars'), and the smaller vessels (sp-called 'Cooking Pots') is that the larger vessels are sometimes decorated with stamp impressions, whereas this is virtually unknown on the smaller vessels. Incised decoration such as burnishing, wavy lines, etc., occurs on both types of jar. The only possible consistent physical difference between the two forms is size.

A secondary peak does appear at 22cm in the diameter clusters for the MS period, suggesting that the potters were 'overproducing' vessels of this size to allow for the demand there would be for these functionally different vessels. Unfortunately, as can be seen from the ITW kiln at St Helen's Street (see below), rim diameter is not a totally reliable indicator of vessel size, and a relatively small increase in the rim diameter can represent a quite large increase in the volume of the vessel. Vessel form is also important. The pitcher from St Helen's Street has a volume of about twice that of jars of the same rim diameter, and so rim diameter alone can not really be used as a reliable method of vessel classification in this case.

The results for Ipswich Ware were as follows:

	6	8	10	12	14	16	18	20	22	24	26	28	
MS2	2	7	47	185	199	98	35	22	25	12	15	5	
MS3	1	3	25	97	142	120	50	24	23	13	5	5	
Total	3	10	72	282	341	218	85	46	48	25	20	10	1160

Mean = 14.97cm

Compared with the Buttermarket:

	6	8	10	12	14	16	18	20	22	24	26	28	
MS2	0	6	32	55	44	22	11	1	1	0	2	0	
MS3	0	5	14	27	39	21	9	11	6	2	1	0	
Total	0	11	46	82	83	43	20	12	7	2	3	0	309

Mean = 13.79cm

	6	8	10	12	14	16	18	20	22	24	26	28	
ELS2	1	9	55	153	185	116	47	26	19	15	5	2	
ELS3	0	3	23	69	97	98	58	20	14	8	3	0	
Total	1	12	78	222	282	214	105	46	33	23	8	2	1026

Mean = 14.88cm

For the Buttermarket:

	6	8	10	12	14	16	18	20	22	24	26	28	
ELS2	0	16	43	74	102	45	21	2	7	4	6	1	
ELS3	0	6	27	45	87	41	22	6	5	2	0	0	
Total	0	22	70	109	189	86	43	8	12	6	6	1	552

Mean = 14.01cm

For jars with stamp decoration:

Dia (cm)	12	14	16	18	20	22	24	26	28	30
No vessels	2	4	2	5	13	9	4	1	1	0

Mean = 19.75cm

It would also suggest that there is a broad diameter overlap between Storage Jars and Small Jars, but these figures include burnished vessels and others which are pitchers, but do not have any handles, lugs or spouts attached, thus making them unrecognisable as such. As pitchers appear to have a generally smaller average rim diameter than stamped Storage Jars, this could account for the length of the distribution across the smaller end of the range, and it would seem from the above figures that vessels with a diameter of over 16cm can be classified as Storage Jars, with those of 16cm or below as ordinary Jars, although this can only be regarded as a general guide.

### Discussion

Analysis of Ipswich Ware groups from London 'in the hand' suggests that the majority of the vessels there are of larger average diameter than those in Ipswich (*hopefully, Lyn Blackmore is going to provide the data*). This suggests another reason for their export other than aesthetic reasons, and I would suggest that they were, in fact, a by-product of trading rather than an object of trade, i.e. they were 'bought' for their contents rather than their own inherent value. It is suggested that when merchants transported goods to other centres, they used the large jars for a convenient and cheap container for the goods to be traded as they would have undoubtedly been cheaper and quicker to make than sacks or barrels, and consequently cheaper to buy. The disadvantage would have been their greater weight, but if they were simply carried in small numbers for goods which were only taken in small quantities, this would not have been a problem, and would explain their preponderance in the assemblages outside Ipswich. This can be paralleled in the Rhenish wine trade, for while there are known examples of German wine barrels here, used as well linings, there are also a few Relief Band Amphorae, which held much smaller quantities than barrels, but were still made and exported, presumably for the selling or transporting of smaller volumes of wine, as a market did not probably exist in many places to enable a barrel and its contents to be sold to a single vendor, so it was brought over in barrels with a few jars which could then have been filled and then resold. It could not have been held for long periods in the local pottery as it is too porous, and so small, relatively cheap containers would have to have been provided,

hence the presence of the Relief Band Amphorae. It would not therefore seem unreasonable that Ipswich traders operated in the same way with other goods.

While it is known that Ipswich Ware would not have been very useful for holding liquids, such as wine, for long periods, it would have been perfectly adequately for dry goods or denser liquids, such as honey.

While this is mainly speculation, it does not seem an unreasonable hypothesis, and so if this trade network broke down during the middle 9<sup>th</sup> century due to Viking maritime activity, this could explain the sudden drop in production in the storage vessels during this period, which I am suggesting were manufactured mainly for the export trade, with a relatively small number used here in the town when their proportion of the population is compared with those in other places. Obviously there is more research needed here, but a tabulation of the rim diameters of Ipswich Ware from other major centres could prove very interesting.

### Catalogue of Ipswich Ware Reconstructions

#### Fabric

The fabric of Ipswich Ware is another area where much work is needed, but the overall impression is that there is little significance. The Gritty and Sandy fabrics appear to be in use all through the period, and I would suggest that the selection of this fabric was entirely dependent on the quality of the clay being dug by the potter. Ipswich is on glacial deposits, with fairly thick bands of clay being found in the gravel quite near to the surface, and digging a hole just about anywhere in the town would yield a usable clay. I would suggest that the Gritty fabric is a result of sand being added to the clay to improve its quality rather than being naturally present; stamp decoration is inevitably found on Sandy vessels, which would suggest that the potters were well aware of the presence of sand in the clay before they made the pots and fired them, presumably because they added it themselves, although this question can only be really answered by analysis of the pottery and the clay beds. It is because of this that the definitions of the fabrics is kept fairly broad; the basic structure holds good, but there are many variations within it. It has been decided not to include West's 'Smoothed' Sandy fabric as this relates to a treatment of the vessel rather than the fabric. The intermediate fabric is included here but not in the archive as it represents something of a subjective compromise: the fabric is too gritty to be Sandy, but not gritty enough to be Gritty, although where the dividing line falls is a matter of opinion.

All the fabrics occasionally have large pieces of flint, calcareous or organic material in them, but it would seem that they probably arrived there by accident, rather than design. Certainly the clay used in the experimental work at West Stow acquired many sorts of extraneous material during the weathering process.

Sandy: Few visible inclusions except for a little silver mica.

Gritty: Moderate to heavily tempered with rounded red-brown, dark grey and white quartzite up to 1mm.

BMK Gritty: Buttermarket type Gritty, with finer inclusions up to 0.5mm.

Interm: As Sandy, but with sparse rounded quartzite grains up to 1mm.

### Jar Forms

IJF1: 'Long Rounded'. Rounded body with the widest point of the body within 1cm, of half the height of the body. Height of the vessel is greater than the rim diameter + 1cm.

IJF2: 'Squat Rounded'. As above, but with the height of the vessel less than the rim diameter -1cm.

IJF3: 'Rounded'. As above, but the height of the vessel = the rim diameter +/- 1cm.

IJF4: 'Biconical'. As IJF3, but with a noticeable angle at the widest point of the body.

IJF5: 'Cylindrical'. As IJF3, but the body is a little flattened to give it a slightly barrel-like appearance.

IJF6: 'Shouldered'. As IJF3, but with the widest point of the body over 1cm higher than half the height.

IJF7: 'Baggy'. As IJF3, but with the widest point over 1cm below half the height.

BMK: Buttermarket Type. As above, but with more rounded angles and a more everted and definite rime, very narrow, deep grooving and/or horizontal wiping marks on the outer surface.

### Other Abbreviations:

WG: Horizontal finger-grooving from the neck to the waist.

I.A, I.C etc: Rimform. Variations in the form from one type to another is indicated by a slash.

MS, ELS, etc: Date of the context in which the vessel was discovered. Prefix Ctm for feature with probable later contamination.

S/BF: Horizontal fracture lines at the shoulder and above the base angle.

WF: Horizontal fracture line on or very near the waist.

W/BF: Horizontal fracture line on or very near the waist and just above the base angle.

BF: Horizontal fracture just above the base angle.

### Ipswich Ware Jars

IJ1: IAS 4801 Context 1571. Hard grey Sandy. S/BF, WG. IJF1, I.A/I.C, MS.

IJ2: IAS 4801 Context 1571. Sandy. Soft reddish-brown with darker surfaces. Externally blackened, internally around rim. S/BF, WG, IJF2, I.A, MS.

- IJ3: IAS 4801 Context 2727. Gritty. Purplish-brown with blackened outer surface and inner rim. WF, WG, IJF3, II.K, Emed.
- IJ4: IAS 4801 Context 2907. Sandy. Hard, light grey with a brown inner and variegated dark grey and brown outer surface. Small voids in the outer surface are filled with a white deposit which also spots both surfaces. WF, IJF4, I.C, MS.
- IJ5: IAS 3104 Context 3342. Interm. Grey with darker surfaces and brown lower outer body. WF, WG, IJF3, II.K/III.H, MS.
- IJ6: IAS 4601 Context 114. Gritty. Uniform dark grey. S/BF, WG, IJF3, I.C, MS.
- IJ7: IAS 4601 Context 113. Hard Sandy. Reddish-brown with dark grey outer surface. B/SF, WG, IJF5, I.C, MS (Beonna Sceatta).
- IJ8: IAS 3104 Context 4919. Very hard Gritty. Reddish-brown with a grey core and uniform dark grey surfaces. WF, IJF2, II.G, MS.
- IJ9: IAS 4601 Context 181. BMK Gritty. Brick red with dark grey outer surfaces. S/BF, BMK IJF6, III.H, MS.
- IJ10: IAS 4801 Context 1571. Sandy. Moderately hard, uniform grey. S/BF, WG, IJF3, I.E, MS.
- IJ11: IAS4601 Context 882. Gritty. Reddish-brown with dark grey surfaces. WG, IJF1, II.K, Emed.
- IJ12: IAS 4601 Context 481. Sandy. Very hard, overfired, uniform grey. WF, IJF2, I.A, Ctm MS.
- IJ13: IAS 4601 Context 481. Hard grey Sandy. WF, IJF6, II.F, Ctm MS.
- IJ14: IAS 3104 Context 4049. Gritty. Grey with darker outer surface. WF, WG, IJF3, II.G, MS.
- IJ15: IAS 4801 Context 1571. Sandy. Reddish-brown with darker outer surface, blackened around rim. WF, IJF4, III. H, MS.
- IJ16: IAS 4801 Context 3128. Sandy. Reddish-brown with darker surfaces. S/BF, IJF7, II.G, ELS.
- IJ17: IAS 5203 Context 46. Gritty. Reddish-brown with grey core and dark grey outer surface. W/BF, WG, IJF1, III.H, Emed.
- IJ18: IAS 5203 Context 33. Gritty. Dark grey with reddish patches on the lower outer body. BF, WG, IJF3, III.H, Emed.

- IJ19: IAS 4601 Context 903. Sandy. Reddish-brown with grey surfaces. WF, IJF1, I.A, Emed.
- IJ20: IAS 5502 Context 224. Sandy. Reddish-brown with greyer surfaces. W/BF, IJF3, II.G, ELS.
- IJ21: IAS 4601 Context 112 & 113. Gritty. Uniform grey. WG, IJF1, I.C, MS.
- IJ22: IAS 3104 Context 2938. BMK Gritty. Grey with lighter core. Single shoulder groove. IJF6, III.H, ELS.
- IJ23: IAS 3104 Context 3342. Interm. Reddish-brown with grey core and surfaces. S/BF, WG, IJF7, MS.
- IJ24: IAS 5203 Context 46. Gritty. Grey with darker patches. WG, IJF3, I.C, MS.
- IJ25: IAS 4801 Context 2900. Sandy. Uniform grey. WG. WF, IJF7, III.H, MS.
- IJ26: IAS 4801 Context 1442. Sandy. Reddish-brown with darker surfaces. Patches of external sooting. WF, IJF2, I.A, MS.
- IJ27: IAS 4601 Context 115. Gritty. Grey, many patches of external sooting. WG, IJF7, II.G, MS.
- IJ28: IAS 4810 Context 2900. Sandy. Reddish-brown with heavy sooting on the rim and interior base angle. WG, B/SF, IJF3, I.C, MS.
- IJ29: IAS 4601 Context 357. Gritty. Reddish-brown with dark grey outer surface. WG, IJF3, I.C, MS.
- IJ30: IAS 5203 Context 46. Gritty. Dark grey with a brown inner surface. WF, WG, IJF3, I.C, MS.
- IJ31: IAS 5203 Context 46. Gritty. Uniform dark grey. WG, B/SF. IJF3, I.C/II.K, MS.
- IJ32: IAS 4801 Context 2900. Sandy. Uniform dark grey. WG, WF, IJF3, I.A, MS.
- IJ33: IAS 5203 Context 46, 47, 260 & 310. Gritty. Grey with dark reddish grey surfaces. WG, W/BF, IJF3, I.C, MS.
- IJ34: IAS 4801 Context 2874. Sandy. Grey with lighter patches. WG, IJF3, I.A, LMT.
- IJ35: IAS 4801 Context 1747. Sandy. Uniform dark grey. W/BF, IJF6, II.G, ELS.
- IJ36: IAS 4801 Context 601. Sandy. Grey, sooting around waist. BF, IJF6, I.A

- IJ37: IAS 5502 Context 447. Sandy. Reddish-brown with grey core and surfaces. B/SF, IJF6, I.A, MS.
- IJ38: IAS 3201 Context 383. Sandy. Mottled light and dark grey with a reddish brown core. WG, WB/SF, IJF3, MS.
- IJ39: IAS 3201 Context 383. Sandy. Red with grey surfaces. Thick brown, black and white residue on the inner surfaces. WG, IJF6, III.H, MS.
- IJ40: IAS 4801 Context 1571. Sandy. Uniform grey. WG, IJF3, III.H, MS.
- IJ41: IAS4801 Context 1571. Sandy. Uniform grey. WG, WF, IJF3, I.A, MS.
- IJ42: IAS 4801 Context 1571. Sandy. Uniform grey. WG, S/BF, IJF3, III.H, MS.
- IJ43: IAS 4801 Context 1571. Sandy. Uniform grey. WG, WF, IJF3, I.A, MS.
- IJ44: IAS 5202 Context 10. Gritty. Reddish-brown with dark grey surfaces. WG, S/F, IJF3, II.K, U/S.
- IJ45: IAS 5204 Context 136. Sandy. Reddish-brown with dark grey surfaces. WG, WF, IJF3, I.A, MS \*\*\*\*\*
- IJ46:
- IJ47: IAS 5502 Context 511. Sandy. Grey with darker surfaces. WG, WF, IJF3, III.H.
- IJ48: IAS 3601 Context 3. Sandy. Uniform grey. IJF4, I.A, U/S.
- IJ49: IAS 8804 Context 58. Sandy. Uniform grey. B/SF, IJF3, I.A, U/S.
- IJ50: IAS 5203 Context 696. Sandy. Dark grey with blackened outer surface. WG, W/BF, IJF3, I.C, Emed.
- IJ51: IAS 4601 Context 192. Sandy. Uniform grey. WG, W/BF, IJF3, I.A, MS.
- IJ52: IAS 4601 Context 192. Sandy. Very dark grey. The base angle and pad show clear internal coil joins. WG, IJF4, I.A, MS.
- IJ53: IAS 5203 Context 608. Gritty. Dark grey with a patch of reddening on the lower exterior. WG., WF, IJF6, II.G, U/S.
- IJ54: IAS 4601 Context 481. Sandy. Uniform grey. WG, S/BF, IJF3, I.C, ELS?
- IJ55: IAS 4601 Context 113. Sandy. Very hard grey. WG, IJF6, I.C, MS.
- IJ56: IAS 4601 Context 113. Interm. Dark Grey with large orange area. WG, W/BF, IJF5, MS.

IJ57: IAS 5203 Context 352. Gritty. Orange with browner surfaces. WG, W/BF, IJF3, II.K, MS.

Table 00: Date vs Vessel Form for Ipswich Ware Jars

IJF	MS	ELS	Redep
1	3	0	2
2	4	0	0
3	18	2	7
4	3	0	1
5	2	0	0
6	5	2	2
7	3	1	0

There would appear to be little typological significance to the vessel forms, other than to say that IJF3 is by far the commonest type, although this is a fairly small population and may not be significant.

### Ipswich Ware Bowls

#### Vessel Forms

IBF1: 'Shallow'. Height around  $\frac{1}{4}$  of rim diameter. Internal base angle  $> 120$  degrees.

IBF2: 'Medium'. Height around  $\frac{1}{3}$  of rim diameter. Internal base angle = 90 to 120 degrees.

IBF3: 'Deep'. Height around  $\frac{1}{2}$  of rim diameter.

#### Catalogue

IB1: IAS 5203 Context 122. Gritty. Very dark grey with reddened base and lower body. BF, IBF1, II.K, EMed.

IB2: IAS 4601 Context 192. Gritty. Very hard, grey with orange core. IBF2, I.C, MS.

IB3: IAS 4601 Context 861. Gritty. Reddish brown with dark grey surfaces. IBF2, II.K, MLS.

IB4: IAS 4601 Context 903. Gritty. Reddish brown with grey surfaces. IBF1, I.C, EMed.

IB5: IAS 4801 Context 491. Gritty. Reddish brown with grey core and surfaces. IBF1, II..K, EMed.

IB6: IAS 4601 Context 832. Gritty. Reddish brown, grey core and surfaces. IBF1, I.A, MLS.

- IB7: IAS 4601 Context 481. Sandy. Dark grey with a browner outer surface. IBF2, I.A.
- IB8: IAS 7402 Context 90. Gritty. Reddish brown with dark grey surfaces. IBF2, I.A.
- IB9: IAS 4801 Context 500. Gritty. Orange-brown with grey core and surfaces. IBF3, II.K.
- IB10: IAS 4601 Context 1653. Gritty. Dark grey-brown with very dark grey outer surface. IBF2, I.C.
- IB11: IAS 5203 Context 46. Gritty. Dark grey with blackened outer surface. IBF2, I.E.

### Pitchers

Fabrics and forms as Jars.

- IP1: IAS 3201 Context 372. Sandy. Orange with greyer surfaces, dark grey patch. IJF7, I.A, MS.
- IP2: IAS 5502 Context 552. Sandy. Uniform grey with patch of external sooting. Very heavy internal sooting and fairly thick brown residue. WG, IJF5, I.A.

### Ipswich Ware Lids

Fabric as standard. Very similar in form to the bowls, but the 'bases' are quite different, being very narrow, almost pedestal like, to form the 'knob' on the top of the lid.

- ID1: IAS 4801 Context 819. Sandy. Uniform grey. II.K.
- ID2: IAS 5203 Context 731. Gritty. Grey with browner surfaces. I.C.

### Dated Middle Saxon Groups

These groups contained datable imported pottery or coins, but it must be stressed yet again that there is every likelihood of them being redeposited, and they merely provide a *terminus post quem* for the features.

Site	Context	HM	GI	SI	Dating
1) IAS 4601	113	-	123	155	Beonna Sceatta <i>c.</i> 750
2) "	357	1	42	18	Sceatta <i>c.</i> 750-65
3) "	472	5	49	26	Badorf Ware Late C8-C9
4) "	642	-	65	28	Rhenish Ware C8
5) "	648	1	103	150	Badorf Ware Late C7-Early C8
6) IAS 5502	300	-	11	61	Badorf Ware Late C8-C9
7) "	447	-	8	98	Badorf Ware Late C8-C9
8) IAS 5701	17	-	3	11	Sceatta <i>c.</i> 725-750
9) IAS 6904	51	-	-	5	Sceatta <i>c.</i> 725
10) IAS 0802	7	-	1	11	Coenwulf, 796-822, common up to the 840s

There is little which can be said about these, other than the fact that Sandy appears to be generally commoner than Gritty in the possible C7 groups and vice-versa in the C8, but it seems likely that there is no typological significance in the fabric, and that both the main types were in use at the same time in varying proportions, and it was probably the clay quality rather than the potters which determined the fabric. Certainly, at West Stow, both fabrics were in use during the C7, with Gritty just the larger group, which contradicts the figures above.

The last coin on the list, however, is very significant in that it gives by far the latest date for an Ipswich Ware group, and suggests that ITW had not come into being by the 2<sup>nd</sup> quarter of the C9, although caution must be exercised due to the small size of the group.

## **Late Saxon Pottery**

### Ipswich Thetford-Type Ware

#### Dating

Like Ipswich Ware, ITW also has its own problems with dating. There is little doubt about the beginning and end of the use of the material, but otherwise there appears to have been little obvious typological development. That it was a C9 innovation there is no doubt. It is found in features sealed by the town defences (built in the late C9-early C10), and is found in association with Badorf-type Wares in various features, but until the Imported pottery has been fully examined, there is little more that can be said than it was probably a mid C9 innovation, in that an Ipswich Ware group datable to the 2<sup>nd</sup> quarter of the C9 contained none, although, as stated before, it is a very small group and should be treated with some degree of caution.

In the discussion below, an end date of the late C11 is postulated, but this is only for Storage Jars; there is no concrete evidence of the more mundane vessels carrying on this late.

## Vessel Types

	Jars	Bowls	Pitchers	S Jars	Lamps	Lids	Cruc	Bott
ELS	1839 91.2%	62 3.1%	56 2.8%	31 1.5%	12 0.6%	1	14 0.7%	2
MLS	3400 90.9%	98 2.6%	89 2.4%	114 3.0%	25 0.7%	1	4	8
EMED	6295 89.0%	117 1.7%	174 2.5%	336 4.8%	104 1.5%	9	19 0.3%	18 0.3%

## Thetford Ware Storage Jars

### Catalogue

Forms:

TSF1: Shouldered. Simply an oversized shouldered jar with applied strips and a (usually) sagging base.

TSF2: 'Amphora'. Long, slightly tapering cylindrical body with sagging base.

Fabrics: As jars.

Strip arrangement. Although the thumb-impressed applied strips were more functional than decorative, there appears to have been different traditions in the way they were arranged on the body. They are slightly different to other Thetford Wares in that the strips are 'squared off' after thumbing by the pottery running a finger down the length of the side of the strips, whereas other Thetford-type industries tend to leave the strips with a rounded profile and rounded thumb impressions. All vessels have an applied strip around the neck carination and others running down the handles from the top of the rim.

TSA1: Vertical strips running down the body from the neck collar and handle terminals.

TSA2: Vertical strips running vertically down the body from the handles, with two others running at 45 degrees from the handle terminals, crossing over about halfway down the body and terminating around the bottom of the next vertical strip. See Figure bb.

TS1: IAS 4801. TF1, TSA1, TSF1. Fairly uniform grey fabric, 10 vertical applied strips. Vessel found buried up to its neck in the floor of a cellared building. Heavy incrustation of iron panning on the lower exterior body. Interior has faint rings of white, brown and grey residue which suggest the evaporation of liquid.

TS2: IAS 4801 Context 2445. TF1, TSA2, TSF2. Heavily burnt vessel found shattered in burnt down cellared building. Fragments of many others were present, but it was not possible to reconstruct others due to the building having been partly destroyed by a friary column base. Black and reddish brown variegated fabric. 12 applied strips, four strap handles arranged symmetrically around the rim.

TS3: IAS 3104 Building 2140. TF1, TSA2, TSF2. Very heavily burned vessel found shattered in cellar of burned down building. The vessel is both blackened and reddened, with the surface flaking off on the inside. Many sherds have been warped by the intense heat, others vitrified, giving the impression that the vessel burst during the fire rather than due to debris falling on it. Four handles arranged symmetrically around the rim.

TS4: IAS 3104 Building 2022. TF1, TSA2, TSF2. Heavily burnt vessel found shattered in cellar of a burnt down cellared building. Oxidised and blackened, with much flaking off of the surface and many thin flakes 'blown off' during the fire. Four handles arranged symmetrically around the rim.

TS5: IAS 5203 Context 268 & 270. TF1, TSF1, TSA1. Soft reddish brown fabric with grey surfaces. Eight vertical applied strips, but no neck collar. Top of rim is decorated with thumb impressions. Three strap handles and a short tubular spout arranged symmetrically around the rim. White residue on lower inner body.

### Discussion

Vessels TS3 and TS4 are important as they represent some of the very few vessels which can be dated with complete confidence from the whole of Ipswich. It is historical fact that Ipswich was burned by Olaf Trygvasson in 991/2 and the Normans in 1085, and it seems that the series of burned cellared buildings at the Buttermarket must date from one of the these two events. It is impossible to say which from the domestic pottery, but building 2022 not only contained the complete ITW storage jar and fragments of several others, but also a complete St Neots Ware jar, a Frisian Kugeltopf and a virtually complete Flemish Greyware storage jar, all of which were obviously damaged by fire, unlike the dumps of pottery found in the layers sealing the destruction levels. All this burnt pottery must have been in the building at the time of its destruction, and the presence of the Flemish vessel places the assemblage to around the middle of the 11<sup>th</sup> century. This vessel proves that this assemblage, and presumably the assemblage from the nearby building 2140, must have been burnt in 1085, which is the latest secure date we have for both St Neots Ware and ITW storage jars from the town.

It is curious that no ITW jars (or any other types of vessels) were recovered from the buildings, which raises some interesting possibilities. The general finds from the building, except for the pottery and carbonised organic material from the cellar, were quite disappointing, which would suggest that the building was thoroughly emptied of all useful material before burning, whether by looters or the inhabitants. It would, however, seem unlikely that pottery would rate very importantly on the list of priorities of either looters or refugees, and would suggest that there were no ITW used by the last inhabitants of the building, except for the Storage Jars, which would have a much longer life-span than the ordinary jars, and could conceivably last for several decades. There is not doubt that jars were in use, as is shown by the Kugeltopf and the St Neots Ware vessel, and the overall impression is that ITW was not in general use by the year 1085. Both buildings were backfilled with material containing a large quantity of ITW, but the sherds were generally quite small and it was not possible to even remotely reconstruct any vessels, which suggest that this material was of a very much secondary nature.

## Description

The key factor with ITW Storage Jars is that they are physically quite different from ordinary jars in that they were not only of much greater volume, but were almost invariably decorated with thumb-applied strips, which was probably more for strengthening the vessel walls rather than decorative effect, and often, but not always had four strap handles on the rim. Examination of the vessels suggest that they were manufactured in sections, with the rim and shoulders thrown on the wheel, and then joined to the body and a sagging base applied. It is unclear as to whether or not the lower parts of the vessel were wheel-thrown, or were coil-built and trimmed up on the wheel, as the inside of the vessels rarely show turning marks except for the rim and shoulders, with the rest of the inside of the body exhibiting extensive vertical smoothing marks. These lower parts often have very thick walls, some as thick as 1cm. At the time of writing, only five near-complete examples have been found in Ipswich, although nearly 300 stratified rims have been recovered, along with numerous body sherds. The first, figure 00, was found buried up to the rim in the floor of a cellared building at School Street (IAS 4801), probably for storing milk or some other material which needed to be kept cool. It is a standard 'Cooking Pot' form except that it has applied strip decoration and a sagging base. The example from Greyfriars Road (IAS 5203), figure 00, is very similar, except that it also has handles and a spout, which obviously indicates that they were used for holding (at least temporarily) liquids as well as dry goods. The third, which also came from School Street, has handles, strip decoration and a sagging base, but is a completely different form, a long, slender cylinder more like an amphora than a jar. It is almost impossible to be sure of these forms without the vessel being largely complete, and so it would seem that the decisive parameters for the definition of the vessels is the presence of applied strip decoration, and less usefully, a sagging base.

## Analysis

The rim diameter of the storage jars was not in proportion to their volume, having relatively small diameters for their volume which coincided with the upper part of the range for the 'cooking pots', and so it was hoped that an analysis of the 'clustering' of rim diameters of the two vessel types would show two peaks when the two were tabulated together, to be used as a theoretical model for a similar analysis of Ipswich Ware. However, the storage jars of this type were not manufactured in relatively large quantities until some time in the 10<sup>th</sup> century, and so by reproducing the rim diameter groupings graphically, it was hoped that the groups with storage jars would show a different curve to those without, which would also aid the testing of the hypothesis. Graph I (figure 00) shows the curves for ITW of the ELS, MLS and EMED vessels, and apart from the obvious fact that there are far more MLS and EMED vessels, it can be seen that there is a small but significant difference between the curves for the ELS and the other periods, i.e. a secondary peak around the 22cm area in the form of change of gradient.

Interestingly, there are some 'cooking pots' with diameters as great or greater than those of some storage jars, but produced without the handles or the strengthening applied strips, which demonstrates that they must have had a smaller volume as they would not have been capable of bearing the weight or have been as movable as the storage jars.

The rim diameters of the storage jars were as follows:

Diameter	6	8	10	12	14	16	18	20	22	24	26	28	Total
ELS	0	0	0	1	1	5	6	5	6	5	1	1	* 31
MLS	0	0	1	3	9	13	18	26	18	13	9	3	*114
EMED	0	0	2	6	15	43	64	66	62	47	24	7	*336

For 'Cooking Pots':

Diameter	6	8	10	12	14	16	18	20	22	24	26	28	Total
ELS	8	45	221	526	598	282	94	34	18	2	6	5	*1839
MLS	3	42	246	834	1243	664	217	81	43	11	11	5	*3400
EMED	25	165	688	1744	1953	991	393	146	78	45	21	10	*6295

It can be seen from this how the ration of Storage Jars to 'Cooking Pots' in the assemblage increases with time. In the ELS they represent 1.66%, in the MLS 3.24%, and in the EMED, 5.07%.

The two totals combined:

Diameter	6	8	10	12	14	16	18	20	22	24	26	28	Total
ELS	8	45	221	527	599	287	100	39	24	7	7	6	*1870
MLS	3	42	247	837	1252	677	235	107	61	24	20	9	*3514
EMED	25	165	690	1750	1968	1034	457	212	140	92	45	17	*6631

#### ITW Decoration

	Wavy Line	Rouletted	Grooved	Applied	Plain	Total
ELS	13	6	1344 (2.9%)	401 (0.9%)	44320 (96.2%)	46084
MLS	42	33	5566 (6.9%)	1132 (1.4%)	73451 (91.6%)	80224
EMED	176	77	8915 (5.6%)	2216 (1.4%)	148504 (92.9%)	159888

It is interesting to note that the ratio of applied strip decorated bodysherds is virtually identical to the ratio of applied strip decorated rims for each period. The ratio of rims for the ELS: MLS: EMED is approximately 3:11:33, whilst that for the body sherds is approximately 4:11:22. There is a small increase in the proportion of applied strip decorated sherds from the ELS to the MLS, and none from the MLS to the EMED. These results are quite at odds with the rim statistics, which show a steady increase in applied strip decorated vessels as part of the jars assemblage through time. This discrepancy may be due to the fact that bodysherds from other vessels, such as pitchers, and bowls would be counted in the plain bodysherds, but not so with the rims.

Applied Strip Decorated Rims as part of the Jar assemblage:

ELS	1.9%
MLS	3.6%
EMED	5.6%

### Catalogue of Reconstructed ITW Jars

#### Fabrics

TF1: Fairly hard, uniform sandy fabric with few visible inclusions.

TF2: As above, but moderately to heavily tempered with fine sand up to 0.5mm.

#### Jar Forms

TJF1: Shouldered. As IJF6.

TJF2: Rounded. As IJF3.

TJF3: Biconical As IJF4.

#### Other Abbreviations

CG: A few finger grooves just below the neck carination of the vessel.

WG: As Ipswich Ware.

#### ITW Jars

TJ1: IAS 3201 Context 116. TF1. Very dark grey. Vessel appears to have been heated quite strongly as flakes have 'blown' off the outer surface. CG, TJF1, MLS.

TJ2: IAS 3104 Context 2556. TF1. Dark grey fabric with variegated reddish-brown and grey outer surface. Base pad shows evidence of knife trimming. CG, TJF2. Emed?

TJ3: IAS 0802 Context 115. TF1. Reddish-brown with grey outer surface, reddish patches on the lower body. Some sooting around the waist. WG, TJF2, MLS.

TJ4: IAS 3201 Context 91. TF1. Uniform grey with heavy external sooting WG, TJF2, MLS.

TJ5: IAS 3201 Context 4576. TF1. Hard, grey with paler core, some external sooting. WG, TJF1, MLS.

TJ6: IAS 4601 Context 701. TF1. Grey. TJF3, ELS.

TJ7: IAS 4801 Context 2717. TF1. Reddish brown with grey surfaces. Outer surface flaking. CG, TJF3, ELS.

TJ8: IAS 5203 Context 24. TF1. Reddish brown with dark grey surfaces. WG, TJF3, ELS?

TJ9: IAS 4801 Context 2910. TF2. Very hard. Grey. Incised wavy line on the shoulder. CG, TFJ3, ELS.

TJ10: IAS 3104 Context 900. TF1. Hard and grey. TJF1, MLS.

TJ11: IAS 3104 Context 3656. TF1. Reddish brown. WG, TJF3, Emed/Ctm, MLS.

TJ12: IAS 4302 Context 47. TF1. Grey. White deposit and sooting on the exterior. WG, TJF1.

TJ13: IAS 4601 Context 527. TF1. Reddish brown with greayer surfaces. Patches of sooting around shoulders. WG, TJF1, MLS.

TJ14: IAS 5203 Context 718. TF1. Uniform grey. TJF1.

TJ15: IAS 4601 Context 600. TF1. Reddish brown with grey core and surfaces. Fairly heavy exterior sooting. TJF1.

TJ16: IAS 4601 Context 784. TF1. Reddish brown with dark grey surfaces. TJF2, MLS.

TJ17: IAS 4601 Context 600. TF1. Reddish brown with dark grey surfaces. CG, TJF1, MLS.

TJ18: IAS 3601 Context 33. TJF1. Uniform grey. CG, TF1, MLS.

TJ19: IAS 5203 Context 719. TJF1. Grey with a lighter core. TJF1, ?

TJ20: IAS 4801 Context 1951. TJF1. Light grey with darker surfaces. WG, TJF1, ELS.

TJ21: IAS 4801 Context 380. TJF1. Reddish brown with grey surfaces. WG, TJF1, ELS.

TJ22: IAS 4801 Context 267. TJF1. Reddish brown with grey surfaces. CG, TJF1, MLS.

TJ23: IAS 5203 Context 719. Light grey with darker core and surfaces. CG, TJF1, ?

TJ24: IAS 4801 Context 701. TJF1. Uniform grey with patch of internal sooting. Very unusual incised grooving. TJF1. Emed.

Table 00: Date vs Vessel for ITW Jars

	ELS	MLS	EMED
TJF			
1	1	8	1
2	0	3	1
3	4	1	0

### ITW Bowls

Fabric as jars.

TB1: IAS 6202 Context 553. TF1. Reddish brown with grey core and surfaces. Emed.

TB2: Reddish brown with grey core and surfaces.

### ITW Pitchers

The inherent problems of the ITW industry is nowhere more apparent than when examining the Pitcher typology. It seems likely that there was typographical development of the vessels, but complete examples are so few that it is difficult to make any concrete statements. There is a complete ELS vessel (figure 00) from Bridge Street (IAS 6202) which is simply a wide mouthed jar which has been pierced for the attachment of a splayed short tubular spout and has an opposed rudimentary strap handle, whereas the few near complete vessels from EMED features from Greyfriars Road (figure 00) are more barrel shaped and slender, but with simpler, turned and tapering tubular spout. The EMED example from the Buttermarket (IAS 3104) is different again, with a rounded body, a narrow rim and a simple pulled lip. It does not have a handle, and it seems likely that all the vessels with pulled lips lacked these, and are technically true pitchers, or a modified jar, although they will be considered in this analysis to see if any conclusion can be reached.

It seems very likely that the vessels with applied strip decoration were in fact spouted Storage Jars.

An almost complete vessel was found and reconstructed from the Greyfriars Road excavation, and was found to have a rim diameter well within the range for those of undecorated pitchers, although had the usual extremely large body that storage jars normally possess, as well as three handles and applied strip decoration. The few complete pitchers that are known do not have these strips, and probably had no need of them as their bodies were very similar in size to those of the ordinary 'cooking pots' of the tradition. Also, the vessels with applied strip decoration are virtually unknown in the ELS, which is also true of storage jars, and thus the two facts would seem to be inexorably linked. Add to this the fact that there are no applied strip vessels with pulled lips, which are inefficient for pouring large volumes of liquid with speed and efficiency, and the case would seem to be complete. Consequently, it seems safe to dismiss (for the purposes of this analysis) all rims with spout, handles and applied strip decoration as

being from spouted storage jars, a vessel very different functionally from the vessel being examined here.

Removal of these vessels gives the following table:

	ELS	MLS	EMED	TOTAL
Lips	8	9	7	24
Bridge	5	9	18	32
Tubular	10	9	13	32
TOTAL	23	27	38	88

of which little can be said except that Bridge spouts appeared to become commoner during the medieval period. All the vessels had simple strap handles, although the length does seem to vary in that the Bridge Street vessel had a short wide handle whereas the Greyfriars Road vessel had one noticeably longer and narrower. All the spout types were obviously used in all periods, although whether this was for functional or aesthetic reasons, it is impossible to say, and any pattern will probably only emerge if and when a larger population of the vessels becomes available for study.

The rim diameter clusters were as follows:

Total	8	10	12	14	16	18	20	22	24	26	28	
ELS	1	1	5	11	3	9	1	2	1	0	1	35
MLS	1	0	9	10	19	7	4	5	3	1	0	59
EMED	0	4	5	11	21	18	13	13	3	1	1	90

which would suggest that the average rim diameter increases through the late Saxon period, although it is difficult to draw any meaningful conclusions from such a small population.

### Catalogue of Reconstructed Vessels

Fabric and forms as Jars.

Abbreviations:

STS: Short Tubular Spout

SH: Finger-Grooved Strap Handle

Others as Jars.

TP1: IAS 6202 Context 399 and 402. TF1. Light grey with uniform darker surfaces. CG, TJF1, although unusually wide rim. Very broad. SH, STS, Ctm, ELS.

## ITW Lamps

Fabrics as Jars.

## Vessel Forms

TLF1: Turned stem and hollow pedestal base, rounded cup.

TLF2: Flattened stub base, rounded cup.

TLF3: Conical cup, socket 'base'.

TLF4: Rounded cup with slight carination and everted rim, pinched wedge base.

TLF5: Turned stem and solid pedestal base, rounded cup.

## Catalogue of Vessels

TL1: IAS 3104 Context 3110. TF2. Variegated reddish brown and dark grey outer surface, light internal sooting. TLF1, Emed.

TL2: IAS 3104 Context 2386. TF1. Uniform blue grey with lighter core. Some sooting on the inner surface. TLF5, Emed.

TL3: IAS 3104 Context 4736. TF2. As TL1. Internal and external sooting. TLF2, Emed.

TL4: IAS 3104 Context 4576. TF2. As TL1. Some external sooting. TLF3, MLS.

TL5: IAS 3104 Context 3117. TF2. Reddish brown with grey surfaces. Very heavily burnt and sooted around the rim. TLF4, Ctm, MLS.

TL6: IAS 5203 Context 782. TF1. Reddish brown with dark grey surfaces. Patches of sooting on the rim. TLF1.

TL7: IAS 3104 Context 1930 & 2171. TF1. Uniform dark grey. Made in two sections with the cup 'plugged' into the hollow stem. TLF1.

## ITW Lids

Fabrics as Jars.

TD1: IAS 4801 Context 2854. TF1. Dark grey with reddish brown surfaces. ELS.

## St Neots Ware

St Neots Ware is the commonest Late Saxon pottery found in Ipswich after ITW. The exact date of its first arrival is debatable, but it was certainly present by the end of the 9<sup>th</sup> century, as pits containing the material were found sealed by the Viking Age defences at School Street. The large lugged 'hanging pot' is presumably an early type, and fits within Denhams' T1 (4) sub-type, dated 800-950 and classified as a suggested developed Maxey Group III Ware, so it seems probable that the material was present in the 9<sup>th</sup> century. It seems a little odd that such an obviously inferior pottery as St Neots

Ware should be present in such a noticeable quantity in the town, and it is perhaps (like Ipswich Ware to a degree) that the pottery was a container for substances which was traded to Ipswich from places outside the ITW catchment but within that of St Neots Ware (e.g. Bedfordshire, Cambridgeshire, Northamptonshire, etc).

The majority of the vessels appear to be simple cooking pots and bowls with flattened rims, but a few 'hanging pots' and fragments of storage jars with applied strips are also known, although these are extremely rare finds in Ipswich.

Vessel Types

	Jars	Bowls	Pitchers	Lamps	Storage Jars
MLS	119	14	1	-	-
EMED	381	41	-	1	1

Jars

SNJ1: IAS 3104 Context 2509. Building 2022. Very friable variegated orange brown and dark purplish brown fabric with a dark grey core, heavily tempered with very finely crushed shell. Heavily burnt.

SNJ2: IAS 5203 Context 300. Pink-brown fabric with grey core. Blackened outer surface. Heavily tempered with fine, medium and large fragments of crushed shell.

SNJ3: IAS 4801 Context 3080. Relatively hard fabric otherwise as SNJ2.

Bowls

SNB1: IAS 3104 Context 3250. Fabric as SNJ1. Vessel is blackened on all surfaces. Much of the outer surface and patches of the base have flaked off.

Other Thetford-Types

Some Thetford Thetford-Type Wares are found in Ipswich, presumably as secondary trade items, but all consist of a few isolated sherds except for the rim from a very large Thetford Thetford-Type Ware storage vessel found at School Street. (THIS HAS BEEN DRAWN. INSERT)

Oddities: Saxon Glazed Wares.

Late Saxon Calc

Vessel Types

	Jars	Bowls	Pitchers
ELS	3	0	0
MLS	5	2	0
EMED	29	4	0

### Coin Dated MLS Groups

The dates given refer to the probable circulation range, not the reign of the person depicted on it.

	Site	Context	IW	ITW	SN	SW	LCW	Dating
	IAS 3104	362	18	56	-	-	-	Alfred 1d c. 890-920
1	IAS 4801	263	-	217	1	-	-	Edmund Mem c.890-900
2	IAS 3104	317	83	1016	1	-	-	Charles the Bald c.867-905
	IAS 4801	258	32	64	2	-	-	
3	IAS 3104	31	95	130	1	-	1	Alfred 1/2d c. 890-905
		81	16	412	13	-	-	
4	IAS 3104	501	66	152	1	-	-	Edmund Mem c. 905-920
		559	14	452	4	-	-	
	IAS 4601	511	216	239	3	-	-	
		713	35	208	17	1	-	
	IAS 4801	285	34	2911	52	-	-	
5	IAS 4601	477	504	2315	68	4	-	Eadred
	IAS 4801	2113	6	307	9	-	-	c.946-973

The proportion of St Neots Ware does show a more or less steady increase with time in these coin dated groups. The figures are:

Period 1	890-900:	0.25%
Period 2	867-905:	0.5%
Period 3	890-905:	2.1%
Period 4	905-920:	1.7%
Period 5	946-973:	2.3%

Which allowing for the inherent errors in a group which represents such a small proportion of the assemblage at this time, would suggest that St Neots Ware does not start arriving in Ipswich until around 900, despite the fact that the industry is thought to have started around 800. I would suggest that this is due to secondary trade rather than the quality of the pottery, which was vastly inferior to ITW. The lack of any St Neots Ware in the group from IAS 3104 Context 362 shows the dangers of having to define pottery groups by the presence and absence of certain wares. If the above figures are accurate, a group of this size should contain one sherd of SN, but it does not, and if it were not for the presence of the coin, the group would have been defined as ELS, which it obviously is not, and this of course has implications for other small groups of IW and ITW defined as ELS, which, of course could be later.

### Medieval Pottery

With the exception of the vessel catalogues, all the medieval pottery is dealt with in Section AA, 'The Waterfront Sequence from Bridge Street (IAS 6202).

## Medieval Coarseware

### Fabrics

MF1: Sandy. Heavily tempered with sand c. 0.5mm, with a little mica and some larger flint and/or quartz fragments.

MF2: As above with a scarce to moderate amount of calcareous inclusions up to 1mm.

MF3: As MF2, but with larger calcareous inclusions up to 4mm and sparse sand.

MF4: Very similar to Thetford type fabric TF1, but slightly coarser with much more sand. 'Late Medieval'.

### Jar Forms

MJF1: Pronounced shoulders and a slightly conical lower body.

MJF2: Much less pronounced shoulder and nearly vertical sides.

MJF3: Sub-biconical, very angular shoulder.

MJF4: Rounded.

MJF5: Squat rounded. Defining parameters as Ipswich Ware.

### Catalogue

MJ1: IAS 3104 Context U/S. MF1. Dark grey with browner exterior MJF1.

MJ2: IAS 3104 Context 2268. MF1. Dark grey with brown inner surface. Heavily sooted on the outer surface and on the inner base angle. MJF1.

MJ3: IAS 5203 Context 271. MF2. Grey with reddish brown surfaces, blackened on the outer. MJF2.

MJ4: IAS 3104 Context 2268. MF3. Grey with orange surfaces. Blackened on the outer. MJF2.

MJ5: IAS 3104 Context 2907. MF3. Grey with orange brown inner surface. Heavily blackened on the outside and on the interior above the base angle. MJF3.

MJ6: IAS 3104 Context 2246. MJ1. Light grey with orange surfaces, blackened on the outer surface. MJF1.

MJ7: IAS 3201 Context 286. MF4. Light grey with darker surfaces. MJF4.

MJ8: IAS 3104 Context 4632. MF1. Dark grey with orange patches. Base vitrified, distorted and cracked. Waster? MJF3.

MJ9: IAS 3104 Context 438. MF1. Dark grey with browner outer surface. MJF3.

MJ10: IAS 3104 Context 4587. MF3. Grey with brown surfaces. MJF1.

MJ11: IAS3104 Context 2189. MF1. Grey with orange surfaces. Most of the exterior sooted. MJF1.

MJ12: IAS4801 Context 2456. MF2. Grey with darker inner surfaces. MJF4.

MJ14: IAS 3104 Context 50. MF4. Uniform grey with sooted exterior. MJF5.

MJ15: IAS 3410 Context 35. MF4 Pale grey with browner surfaces. Very heavy sooting on the lower exterior. MJF4.

MJ16: IAS 5203 Context 122. MF2. Dark brown with grey core, heavy exterior sooting. Black and white residues on inner surface of the base. MJF1.

### Curfews

Curfews, or fire covers, were probably an item which would have been found in every medieval household, and yet only two of them have been recognised from excavations in Ipswich. The reason for this is probably their method of manufacture, for they appear to have been made as large bowls with the bases pressed out to form a dome and then pierced and a chimney attached. Because of this, they are impossible to recognise unless the dome is attached, as they appear no different to bowl rims.

MCC1: IAS 3104 Context 834. MF4. Light brown, blackened on and around the chimney, moderate internal sooting. Feature in which vessel was found contained some sherds of London Glazed Ware and Scarborough I Ware, so probably Late 12<sup>th</sup>/Early 13<sup>th</sup> century?

MCC2: IAS 3104 Context 2263. MF3. Dark brown with a blackened interior. The feature in which this vessel was found contained only a few sherds of medieval coarseware and no glazed wares except for Andenne type. This coupled with its overall appearance and 'rim form' would suggest a date of the second half of the 11<sup>th</sup>/Early 12<sup>th</sup> century.

### ?Islamic Pottery

One of the major ceramic surprises from the excavations in Ipswich was the find of two virtually complete (but broken) glazed bowls from an otherwise very ordinary rubbish pit on the Foundation Street site. Fairly extensive enquiries have been made into the origin of the vessels, but so far no real evidence of their origin is forthcoming. A few sherds of the material were discovered at the Beverley Minster excavation, and a sherd was found (presumably redeposited) in a Late 13<sup>th</sup> century well at Trondheim in Norway, but these appear to be the only finds of the material at the time of going to press. The only real clue to their area of origin would seem to be the decoration, which basically consists of two superimposed five-pointed stars with the footring

forming a central hub, although they are slightly different to each other. The use of stars suggests that they may be Islamic in origin, but there is no hard evidence for this, although the feature in which they were found does date to the end of the 11<sup>th</sup>/Early 12<sup>th</sup> century, which is about the time of the first crusade, and the vessels could have found their way to Ipswich as a consequence of this.

The vessels are virtually identical except for the decoration. They both have a pale orange-pink fabric with no visible inclusions and a thick, glossy orange glaze, which has run during firing and formed thick, black globules on the rims and footings. The inside of the body of both has a 'wiped' appearance, which the glaze has given an appearance like that of wood grain.

#### Incised Decoration:

IVB1: Vessel complete except for piece of the rim. Consists of two superimposed 5-pointed stars which are placed so that each point is between two points of the other. Other lines have been added inside the 'upper' star to form diamonds, which have been filled with annular stamps.

IVB2: Complete except for a piece of the base inside the footing. Two superimposed 5-pointed stars, although the lower is much larger than the upper. The larger of the stars has each triangular point divided lengthways, with only half of the diamond shapes filled with annular stamps, which were made by the same die as used on the other vessel.

#### The Medieval Waterfront Sequence from Bridge Street (IAS 6202)

The waterfront revetments from this site, at the time of writing, represent the major ceramic sequence from the excavations in the town which is relatively uncontaminated by redeposition of earlier material. There seems little doubt from the pottery that these revetments were constructed from domestic refuse middens rather than by excavation due to the very low degree of redeposition of Ipswich Ware, which on average constitutes about 20% of the rimsherds found in Early Medieval features, but at Bridge Street constitutes only 5% at the most of any post Middle Saxon context (see section 00).

It was hoped that the large number of timbers from the revetments would provide dendrochronology dates for the sequence, but the only one which proved useful was that from the final phase of activity, giving a date of c.1303 for the latest revetment.

There were also two phases of Saxon revetments, which unfortunately proved to be of limited use in ceramic terms, but on the whole the sequence was able to provide both a solid medieval pottery typology and an approximate date for Ipswich Glazed Ware.

#### Phasing

From the pottery, it was possible to divide the sequence up into six phases of activity, as follows:

I. Early Middle Saxon (?c. 600):

Context 447. 2 handmade sherds and a sherd of heavily abraded RB greyware.

II Middle Saxon (?c. 7<sup>th</sup>-8<sup>th</sup> century):

Context 446, 403, 414, ? 401. Dating relies mainly on a sherd from a 'Frankish' black-burnished conical bowl, 2 other sherds of which appear in 459 and 559. Possibly 7<sup>th</sup> century, but more likely 8<sup>th</sup>. 401 contained a sherd from a stamped biconical bowl of a type more commonly found in the Central Rhineland, Wiesbaden, Mainz and Belgium, and dated to the Early 7<sup>th</sup> century. This is presumably redeposited. It is probable that 445 and 487 date from this period, and were contaminated by a medieval ditch which was later discovered inside the section at this point, but they have been discounted for the purpose of this analysis because of this doubt.

III Early Late Saxon (Mid-Late 9<sup>th</sup> century):

Context 402. The pottery consists entirely of Ipswich Ware, LCW, ITW and Badorf-type Ware. The LCW is probably an intrusion from 399.

IV Early Medieval (11<sup>th</sup> century):

Context 226, 249-251, 255, 383, 399. Medieval coarseware and earlier fabrics only.

V Late Medieval (12<sup>th</sup>/13<sup>th</sup> century):

Context 65, 123, 132, 145, 168, 176, 177, 192, 247, 248. Medieval glazed wares, wheel-made coarsewares.

VI Post 13<sup>th</sup> Century (dendro date):

Context 47, 53, 57, 58 173. Saintonge Monochrome, medieval glazed wares.

The most crucial part of the sequence in terms of the medieval pottery are the contexts 226 to 173. Examination of the fabric graph (Figure 00) would suggest that this period consists of a series of separate dumps made over a period of time, with the proportion of each fabric type present increasing and decreasing as expected. This appears to be the case to a limited extent in the EMed period, which appears to consist of three separate phases of dumping activity over the whole of the 11<sup>th</sup> century, although the presence of joining Stamford Ware sherds from phases 2 and 3 suggests that these came from the same midden, possibly a communal one. Unfortunately, it was found that this was not the case with LMed pottery. Much of the glazed material, especially the London Wares, have joining sherds from the same vessel scattered through the sequence in different contexts, indicating that many of the dumps were contemporary, and also came from some form of communal midden. For example, sherds from London Ware No 4 were found in contexts 176, 177 and 192, No 9 from 168, 176 and 192 and No 38 from 132

and 168. Many other examples can be seen in the glazed ware catalogue (Section 00). The midden theory also is enhanced by the fact that despite the much larger average EMed rimsherd size, no full profiles were reconstructable, the only reconstructable medieval vessel being an unglazed late pitcher, sherds of which were scattered throughout many of the LMed contexts.

To try and express the degree to which sherds from the same vessels were scattered through the late medieval phase, it is worth comparing the Harris Matrix to a matrix constructed from joining sherds:

Stratigraphic Matrix	Ceramic Matrix
<u>248</u>	
1	226 - 248
<u>226</u>	
1	
<u>247</u>	
1	247 -153 - 192
<u>192</u>	
1	
177	
1	
<u>176</u>	
1	
<u>168</u> - 145	
1	
132	
1	
123	
1	53 - 168
<u>65</u>	
1	44 57 - 65 - 176
173	
1	
<u>53</u>	
1	
58	
1	
<u>57</u>	

which would seem to reinforce the argument that the material from the dumping came from a common source. Other examples away from the main sequence are given in the glazed ware catalogues.

## The Pottery

### Phase 1

A total of 45 handmade sherds occurred on the site, 22 of which were chaff-tempered, the rest sandy. All were redeposited except for two extremely heavily encrusted sandy sherds from 447, the natural river gravel representing the very bottom of the sequence. These were found with a sherd of RB greyware, and have to be considered contemporary with the EMS activity at the Greyfriars Road site, which was only 25m inland from Bridge Street, and presumably represents the waterfront levels from that period. It is worthy of note that many of the EMS features at Greyfriars Road often had a sherd or two of RB pottery in them, suggesting that the area may have been under agriculture at some time in the Roman period.

The layer above this, 446, contained no local pottery, but did produce three sherds of Frankish Blackware, one of which was abraded and had lost most of its outer surface. The presence of these sherds suggest that these handmade groups are at the latest 7<sup>th</sup> century in date, and quite possibly earlier. This date is also supported by the early imports found in association with handmade material from IAS 5203 (Greyfriars Road), and the presence of RB sherds is another characteristic of these early groups.

In all, five rimsherds were recovered, only one of which was large enough to merit illustration (Figure 00). It is from a baggy 'cooking pot' with a simple everted rim. The fabric is black and friable with a little medium sand temper and many chaff impressions. The outer surface is roughly burnished, the only chaff tempered vessel from the site to be so treated.

### Phase II

Relatively few Ipswich Ware rimsherds were found in the sequence, the largest group being 403, which contained six rimsherds. Both the Gritty and Sandy fabrics and most of the commoner rimforms were present, adding further weight to the argument that there is no topographical significance in the fabric or rimtypes of Ipswich Ware in the MS period.

The pottery from the MS levels was as follows:

414: One Sandy Ipswich Ware bodysherd and one sherd of Sandy hand-made, further suggesting an overlap between the hand-mades and Ipswich Ware.

403: 23 sherds of Ipswich Ware and five sherds of burnished Frankish Blackware, the Ipswich Ware being as follows:

- 2 plain and one burnished Sandy body sherds
- 10 plain and two grooved Gritty body sherds
- 2 Gritty sagging base sherds
- 6 rim sherds, as follows:

- Figure 00.1: Rim sherd from a Gritty jar, type IA rim, shoulder grooving.  
 Figure 00.2: Gritty bowl, complete except for the base. Rim closest to type II.K.  
 Figure 00.3: Rim sherd from a Gritty ?storage jar, type I.C rim. Incised cordon around the neck carination.  
 Figure 00.4: Rim sherd from a Gritty ?storage jar, type III.I rim. Very faint incised cordon around the neck carination.  
 Figure 00.5: Rim sherd from small jar, Sandy fabric, type I.C rim (not illustrated). Very small sherd from a Gritty jar, type II.G rim.

The presence of the Frankish Blackware suggests that this group is also 7<sup>th</sup> century, and once again indicates that the full range of Ipswich Ware rim and fabric types were made virtually from the start of the industry.

Apart from 25 grooved, 3 burnished and 1 stamped sherd, only one sherd was found with incised decoration (Figure 00.6). It has a hard grey sandy fabric and is decorated with an incised combed zig-zag between bands of horizontal combing, and probably comes from a highly decorated bottle similar to the type which were found in such quantity at the Butter Market excavation (IAS 3104). This was unfortunately redeposited in context 380, which is EMED.

### Phase III

The assemblage from this context contained a sherd of Badorf-type Ware which gives an approximate date of sometime in mid 9<sup>th</sup> century.

Ipswich Wares:

All the rim sherds from this period were in the Gritty fabric, a fact rather at odds with the Ipswich Ware from this period from the rest of the town, where the ratio of Sandy to Gritty is 2:1.

This is presumably merely a freak due to the small size of the assemblage, which has only 9 rims and a total of 1.04kg of body sherds, in which the ratio of Gritty to Sandy is nearly 2:1.

The types are as follows:

I.C : 2      II.G : 3      II.K : 2      III.H : 1

ITW:

Four rim sherds were found in context 402, three from jars and one from a pitcher with a short tubular spout. The portion of the rim which contained the handle was missing. This and the three jar rims are shown in Figure 00.1-4.

### Phase IV

ITW:

156 rims were present in this phase, 140 being from jars, 2 bowls, 8 pitchers and 7 storage jars. Three of the storage jars had short tubular spouts. No lamp rims were present, although fragments of the bases and stems of four examples were. Apart from shoulder grooving and applied strips, only five decorated ITW sherds were found on the whole site. These were as follows:

3 sherds with incised wavy lines

1 sherd with grooving and fingernail impressions (Figure 00.7)

1 sherd with grooving and diamond rouletting (Figure 00.6)

A unique upright loop handle was found in a redeposited context (Figure 00.8)

The most important ITW vessel recovered from the site was the handled pitcher from context 399. It is unfortunate that this context is one of the very few from that site that is not completely reliable, due to difficulties encountered with identifying the interface between this and context 383.

Context 399 contains only Saxon pottery except for a single fairly large Intermediate Coarseware base sherd, and there is no sure way of telling whether this is stratified or intrusive. Consequently this context has to be treated as EMED, although the form of the pitcher, which is very similar to the rim sherd from 402, suggests otherwise, and it seems highly likely that this is in fact a contaminated ELS level.

The pitcher is the only complete example extant in Ipswich, and is of a very simple design, having been thrown as a wide-mouthed jar, and then pierced to accommodate the short tubular spout. The opposed strap handle is very wide and thin, and appears to be very perfunctory. See Figure 00.5

#### Late Saxon Calcareous Ware (LCW)

One of the most surprising ceramic finds from the excavation was the near complete LCW jar from contexts 383, 399 and 402 (Figure 00). Many sherds of this material have been found in excavations, but no vessels remotely as complete as this. Many of the finds of this type of material have been from MLS features, with some from possible ELS contexts, although the form of this vessel leaves no doubt that this is from the early medieval period. It is a classic EMED vessel form, with an everted rim, rounded shoulders and sagging base. The fabric is very coarse and friable, varying in colour from brown to dark grey, and heavily tempered with large pieces of chalk, flint and fossil shell up to 4mm (calling the material 'Calcareous' whilst there are siliceous minerals present in the temper, is, of course, a misnomer, and it is thus simply for the sake of brevity).

Whilst it is possible that this material comes from a source outside Ipswich, it seems more likely that the material simply represents some sort of small scale domestic pottery production during the later part of the Saxon period.

#### St Neots Ware

Only three St Neots Ware rims were found in the whole of the EMED sequence, two from jars and one from a bowl. Other than noting their presence, it is impossible to make any meaningful comments.

### Medieval Coarseware

As already stated, this material constitutes the vast majority of the pottery from the site, and it has been possible to construct a basic typography from this.

The Early Medieval coarseware rims can be divided into three broad typological phases:

- Phase 1: Context 255. Only two rim sherds, but both are simple and everted.
- Phase 2: Contexts 248-251. Predominantly everted rims with triangular beads, with a few simple everted profiles. Some forms have a rudimentary internal lid seat.
- Phase 3: Contexts 226 and 247. Some triangular and everted profiles, but also both rudimentary and developed hammerheads, as well as rudimentary hooked and also squared profiles. 247 appears to be a transitional context containing a few wheel-thrown and London Glazed Ware sherds.

Precise dating is somewhat difficult, but is probably in the order of:

- Phase 1: Early 11<sup>th</sup> century  
Phase 2: Mid-Late 11<sup>th</sup> century  
Phase 3: Early 12<sup>th</sup> century

The last date being suggested by the London Glazed Ware, which started production around the beginning of the 12<sup>th</sup> century.

### Stamford Ware

As is the case in the rest of the town, Stamford Ware only occurred in Medieval contexts, and it must be therefore deduced that the material was not being imported here until that period.

A total of 77 sherds were recovered from the site, all of which were plain glazed body sherds except for 4 rim sherds, a base sherd and two sherds from the terminal of a handle. The only rim sherds in the sequence were as follows:

1. Contexts 226, 248. Two sherds from the rim of a jug. The sherd from 226 is probably redeposited. Pale grey fabric with buff-grey surfaces. Moderately abraded with patches of glaze varying in colour from greenish brown to pale yellow. Everted rim with a neck flange, most of which is missing.

2. Context 247. Probably redeposited. Dark orange pink fabric with splashes of mottled yellow and orange glaze. Rim form as 1, although the walls are thinner.

#### Andenne Ware

Five sherds, two of which come from the main sequence, and all of which appear to be redeposited. The sherds from the sequence were as follows:

1. Context 249. Body sherd, smooth, moderately hard orange pink fabric with a few flecks of silver mica. Somewhat unusual mottled orange and brown glossy glaze. A sherd which appears to be from the same vessel occurred in Context 74.
2. Context 145. Fragment of a strap handle from a jug. Slightly abraded and stained fabric which appears to be orange with a grey core and small red inclusions. Glaze has been stained dark grey due to the chemical action of the waterlogged deposits in which it was found, although a small area of yellow orange glaze has been preserved on the inner surface.

#### Phase V

This phase sees the full introduction of wheel-thrown medieval coarsewares and a large range of glazed material from both England and the Continent.

#### Coarseware

This period sees a large drop in the proportion of coarseware in the assemblage, although the material does appear to have been manufactured until at least the Early 13th century, although it is difficult to be certain of this. The wheel-made fabrics are smooth and sandy, and are quite similar to ITW, although they tend to have either a light grey core or surfaces, or in some cases, both. The rim forms are much more complex, with fully developed hooks, hammerheads, flattened rectangular and complex examples encompassing several different geometric forms. It is assumed that they are mainly from the 13<sup>th</sup> century, as this appears to be the date of the majority of the Glazed Wares (see below).

As already mentioned, the only full profile of a medieval vessel obtained was the reconstruction of a virtually complete pitcher (see Figure 00), which appears to be of the Hollesley Bay tradition, although it was not manufactured there, the fabric being quite different.

The vessel was broken into many fragments which were found in contexts 28, 42, 51, 83 and 105, but was found to be complete except for a few small body sherds, the majority of the handle and a tiny fragment of the rim. It was wheel-thrown, with a very hard light grey sandy fabric with few visible inclusions except for very sparse grains of quartz up to 4mm. The rim is flattened with an internal bead and a simple pulled lip, with a thin thumb-grooved strap handle with the outer surface heavily stabbed and a faint cordon

on the neck carination. There was no trace whatsoever of glaze anywhere on the vessel. The estimate volume was around 2 gallons.

### London Glazed Ware

LGW is probably the most accurately datable of all the English medieval fabrics, with the river frontages on the Thames providing a solid sequence of dates for all the decoration and form types, in some cases enabling the material to be dated to within 30 years. The majority of the material from this phase of the sequence is from the 13<sup>th</sup> century, but there are also examples from the latter half of the century, and so it does not seem unreasonable to give a date of around 1275 to this phase of the sequence. Several examples also date from the 12<sup>th</sup> century, and demonstrate fairly clearly that the material was coming into Ipswich throughout the life of the industry, and until the advent of Ipswich Glazed Ware, it was by far the commonest glazed pottery to be found in the town, with over 300 sherds from this site alone. With the exception of the Aquamanile fragments, all the sherds appear to have been from jugs, with none of the Lard Pans or Cauldrons or other of the early Transitional vessels which were found in the city from a relatively early date.

In the following catalogue, the London Corpus numbers come from Pearce, Vine and Jenners 'A Dated Type Series of London Medieval Pottery, part 2: London Type Ware', and are given in brackets at the end of each description. The context numbers are given at the beginning in the cases of sherds from the same vessels found in different contexts. All fabrics are standard unless otherwise mentioned..

#### The Pottery (Figures 00 & 00)

1. Context 53, 168. Two legs from a green-glazed aquamanile, each found in a different context. The vessel was probably a representation of a ram. No exact parallel in the Corpus, but datable to 1240-1300.
2. Five sherds from an Early Rounded Jug. Decoration consists of three converging longitudinal applied strips, possibly meeting at a handle terminal, and rows of applied scales, the whole covered in a dark green glaze. Late 12<sup>th</sup> century (no 31).
3. Context 43, 44, 57, 88, 176. Eight sherds from a jug in the Imitation North French or Highly Decorated Style. Alternate lines of thick white slip and applied scales, covered with a clear glaze which is yellow on the slip and green on the body clay. No direct parallels, but probably Mid 13<sup>th</sup> century.
4. Three sherds from a Rouen-style Baluster Jug. The vessel is decorated with a lattice of slip stripes, the vertical being red and the horizontal yellow. A small impressed pellet was applied at each junction of the stripes and slipped yellow. Splashes of green glaze which appear yellow on the body clay, but otherwise accentuates the colour of the slip. Early 13<sup>th</sup> century (no 85).

5. Three sherds from an Early Rounded Jug. Virtually identical to 2, except the vessel lacks the applied strips and the inner surface is orange-brown. Late 12<sup>th</sup> century (no 28).
6. Four sherds from a Squat/Rounded Jug. Slip decoration consists of vertical stripes of brown slip with diagonal dashes of light greenish yellow along their length, overall a clear glaze. Late 13<sup>th</sup> century (similar to no 163).
7. Six heavily abraded sherds from a North French style jug. Decorated with brown-slipped vertical applied strips of body clay, the body being slipped white. All covered with a clear green glaze. ?Mid 13<sup>th</sup> century.
8. Rim sherd from a Squat/Rounded jug. The inside of the rim is covered with a thick cream slip, whilst the outer surface of the neck has five broad cordons of the same, and is covered with a clear glaze which appears green on the body clay. Similar to No 164. Late 13<sup>th</sup>/14<sup>th</sup> century.
9. Heavily abraded sherd from a Rouen-type Baluster jug. Red-slipped surface, with a thick band of white slip flanked by dots of the same, the whole covered in a clear glaze. Nos 52-54, c.1210.
10. Sherd from a jug of uncertain type. Very hard fabric. Outer surface is decorated with rows of applied scales, all covered with a lustrous greenish-orange glaze with a slightly metallic finish. No 28 or 262. Late 12<sup>th</sup> or mid 13<sup>th</sup> century.
11. As 10, although with a much greener glaze.
12. Sherd from a Rouen-style Baluster jug, with two narrow lines of thick white slip at the side of a broad vertical band of red slip. No 78. Early 13<sup>th</sup> century.
13. Sherd from a North French style Baluster jug, with the outer surface covered in white slip, over which have been applied thin longitudinal strips of body clay, the whole being covered in an uneven bright green glaze. Early 13<sup>th</sup> century (101-104).
14. Sherd from the neck of a grooved Early Squat jug, green glaze over a white slip. Mid 12<sup>th</sup> century.
15. Heavily abraded rim sherd from a ?Flared Baluster jug. Profile is rounded, with a slightly flattened top. Both sides of the rim are covered with a thick white slip, with the outer surface possessing a badly decomposed green glaze. Mid 13<sup>th</sup> century (118).
16. Heavily stained stamped sherd. A few patches of the glaze which are not discoloured are orange, the stamp appears to part of one of a 13<sup>th</sup> century type (Lond. Pl 12, Figure a).

17. Sherd from an Imitation Rouen Ware Baluster jug. Surface appears to be decorated with a lattice pattern and a series of dots in white slip, with the rest of the body covered in a red brown slip. Clear glaze. Sherd is heavily abraded. Early 13<sup>th</sup> century (71).
18. As 17, except there is no red slip, giving the glaze a green appearance on the body clay.
19. Sherd from a Highly Decorated Baluster jug. The outer surface is slipped white and incised with a graffito consisting of a double curved line. Green glaze. Mid 13<sup>th</sup> century (116).
20. Sherd from the upper shoulder of an Imitation North French-style jug, with three longitudinal applied strips, the whole covered with a glossy green glaze. ?Early 13<sup>th</sup> century.
21. Two shoulder sherds from a Squat/Rounded jug, painted with wide horizontal strips of white slip and covered in a clear glaze which is greenish yellow on the slip and green on the body clay. Late 13<sup>th</sup> century (stylistically similar to 164).
22. Sherd from an Imitation Rouen-style Baluster jug, with a wide, thick and lightly combed stripe in white slip flanked