95/14

ARCHAEOLOGICAL EXCAVATION AT HANGMAN'S LANE, STAINFIELD, LINCOLNSHIRE

(APPENDICES)

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ARCHAEOLOGICAL
PROJECT
SERVICES

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AT
HANGMAN'S LANE,
STAINFIELD,
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Work Undertaken For
BRITISH GAS plc

March 1995

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137

List of Appendices

APPENDIX 1

Analysis of the Human Skeletal Material from Stainfield SHR 93, Lincolnshire

ARCUS NO. LB 113

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REPORT BY:

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TABLE OF CONTENTS

LIST OF FIGURES

LIST OF TABLES

1. SUMMARY

1.1 This report presents an osteological analysis of the human skeletal material recovered by Heritage Lincolnshire during their excavations of SHR 93. The remains of at least 19 individuals were recovered from individual or multiple graves, including two new-borns, five infants, one child, one teenager, five young adults, one prime adult, two mature adults and one old adult. Of the adults from grave contexts, four males, five females and one individual of undetermined sex were represented. The commingled pit deposit (365) contributed another 4 adults and one infant. From this deposit, two specimens were complete enough to allow sex assignment -- one male and one female This brings the total minimum number of individuals from this cemetery to 24.

1.2 Demographic analysis of the mortality profile reveals that the cemetery contains a gross excess of young adult males. The older age categories, by contrast, contain exclusively females. This is clearly not a representative sample of a normal sustainable population. With the removal of the "excess" males, the survivorship curve appears credible for a population with a life expectancy at birth of approximately 28 to 30 years. This figure is realistic and not particularly low for an archaeological population. Given the period and context of the site, it is a credible hypothesis that these young adult males may represent a significant non-reproducing proportion of the population, possibly slaves or labourers whose families resided (and were buried) elsewhere. The total lack of older adult males suggests, by contrast, that any residing in the Late Roman settlement were buried elsewhere, perhaps in a "proper" monumental cemetery.

1.3 The poor preservation of the material largely precluded any detailed analysis of pathology. Evidence of iron deficiency anaemia, childhood stress, dental caries, tooth loss and osteoarthritis was recovered, although the sample is too small and fragmentary to draw significant general conclusions. These diseases are "ordinary" constituents of everyday life. Unusually strong wear of the backs of the front upper teeth on several individuals suggests that the teeth were routinely used as tools, possibly for grasping textiles or skins.

2. METHODOLOGY

2.1 The unwashed bone assemblage was received from Heritage Lincolnshire. Because of the large quantity of clay soil accompanying the human bone and the fact that the packaging was of sealed plastic, the sample remained in a wet and acidic environment, which contributed to the already poor preservation. The material was removed from the bags and allowed to dry for a period of several days. As much adhering matrix as possible was then removed in the lab, and the bone was washed over 4 mm mesh in tap water using a soft brush . The soil matrix was also rinsed over 4 mm mesh, which had the effect of wet sieving all the material. The samples were placed on a mesh drying rack and allowed to dry thoroughly before repackaging in plastic bags. The faunal bone and artefacts were removed from the samples and placed by context into separate bags marked "faunal" or "artefact". Most of the faunal bone was then transferred to the ARCUS faunal consultant, for incorporation into the ongoing analysis[1].

2.2 The human bone from grave contexts was inventoried and assessed for age-at-death, biological sex and pathology. Because the sample is very fragmentary and incomplete, only the methods for sex and age-at-death determination involving the bone fragments actually present in the sample could be employed. Unfortunately, some of the more accurate techniques were therefore precluded, whilst other less reliable methods were necessarily employed. The standards employed in determining biological sex of the individual include gross morphological observation of the pelvis and cranium (Steele & Bramblett 1988, Phenice 1969) as well as metric evaluation of the femoral and humeral head diameters (Stewart, 1979). Sex determination was not attempted for the juveniles, as these methods are deemed by most experts to be highly unreliable. Age-at-death determination was made according to the criteria of dental development (Smith 1991), epiphyseal fusion (Ownings & Suchey, 1985), auricular surface morphology (Lovejoy, et. al. 1985), and dental attrition. In the case of the latter, a standard specific to this population was created by utilising the method of Miles (1963). This partly circumvents the cultural specificity of dental wear as a marker of age-at-death.

2.3 The commingled deposit (365) presented additional difficulties. The individuation of the human bone fragments took into account the osseous element and side of the body primarily, where repeated elements were assigned to separate individuals. Age-at-death and biological sex of the bones was also considered, allowing a greater refining of the individuation in instances where there was no repeated osseous element. In addition, because of the small size of the sample, it was possible to further refine the method, taking

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[1] Samples which were not passed to the ARCUS faunal division are listed by context in Appendix 2. Artefacts recovered are also listed. In addition, human bone recovered from samples from 736 and 1220 by the environmental and faunal analyst, respectively, were incorporated into this analysis.

into account bony morphology, with consideration of aspects such as size, shape and enthesiopathies (muscle markings) on the bones.

2.4 The age categories employed in this analysis include the following.

Neonatebirth to 3 months	
Infant 1	> 3 months to 6 years
Infant 2	> 6 years to 12 years
Juvenile	> 12 years to 19 years
Young adult	> 19 years to 30 years
Prime adult	> 30 years to 40 years
Mature adult	>40 years to 60 years
Senile adult	>60+ years

2. RESULTS

2.1 Minimum Number of Individuals

2.1.1 Most of the grave cuts in this cemetery contained the remains of only one individual. In these cases, the context was taken as the unit of analysis. A total of 12 individuals were recovered from single burials. Multiple burials and the charnel pit contributed the other 50% of the people:

Table 1-- **Multiple Burials in SHR 93**

Context	Number of Individuals	Age/Sex	Comments
1250/1251	2	young adult male juvenile male	prone flexed burial, possibly headless
1247-1249	3	infant 1 adult female adult (indet.)	infant supine articulated, adults disarticulated, probably disturbed by intrusive 1247
1220	2	adult male neonate	adult supine male neonate recovered from faunal
365	5	4 adults (indet) infant 1	commingled deposit

2.1.2 In the case of 1250/51, assignment of the skeletal remains to the particular individuals was unproblematic, due to the good preservation and clear contemporaneity of the interments (see figure 1). In contexts 1247, 1248 and 1249 this was more difficult, as the adults had probably been disturbed by the later interment of an infant. Note in figure 2 that the adult remains are clearly disarticulated and not in anatomical position, indicating that the soft tissue had completely decayed by the time the infants interment occurred. In this case it was necessary to separate elements based upon age-at-death and osseous morphology. This was the case as well with the commingled deposit 365, which was entirely deposited with no anatomical relationships preserved, indicating that the remains were completely skeletonised at the point of their secondary deposition.

2.1.3 The minimum number of individuals from the commingled charnel pit was five. An infant approximately 3-5 years was represented by cranial elements, and at least 4 adults were represented by four pairs of tibial midshafts. Pelvic elements present in the sample yielded further information that at

least one adult female and one adult male was represented. Dental attrition on an adult mandible from this context indicated that one of the adults was between 25 and 35 years of age at death.

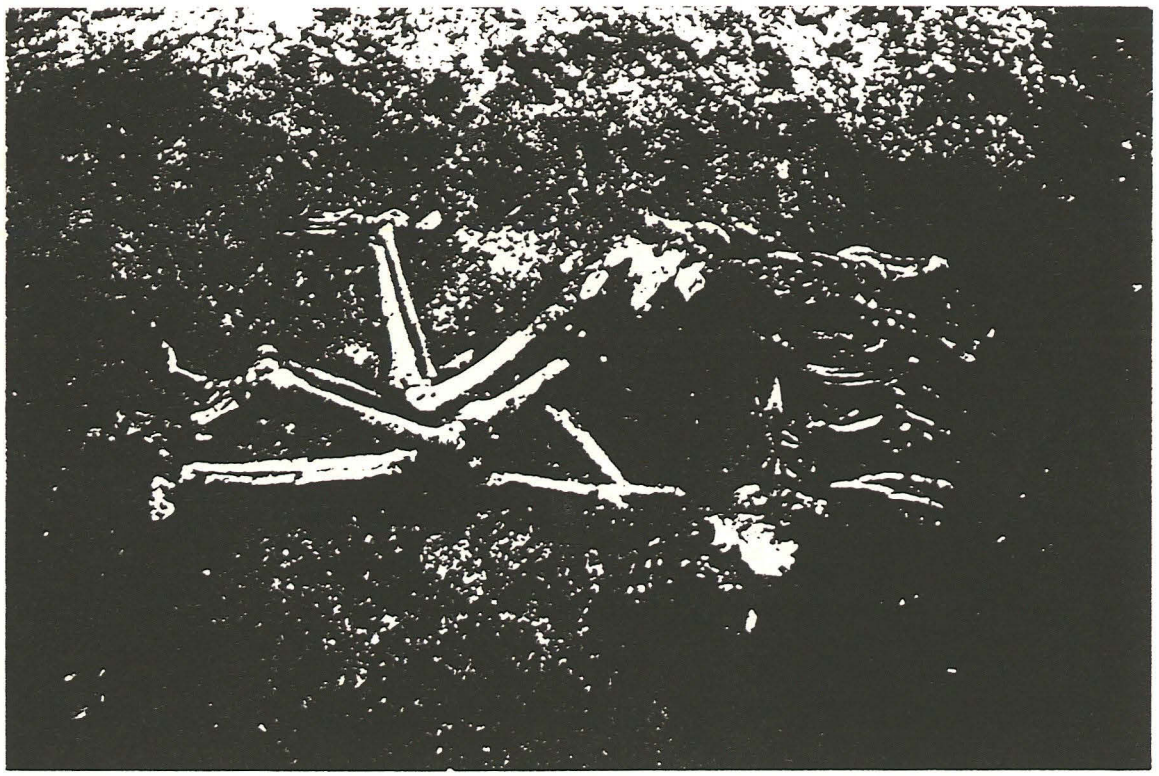


Figure 1 **-- 1250/1251 Double Burial**

Note the flexed and prone posture. It is unclear whether the heads are missing from these individuals perimortem or due to post-depositional damage to the site.

Figure 2 -- **Burial 1247,1248 & 1249**

Note the articulated infant, and the disorganisation of the adult long bones. The arrows indicate parts of the knee joint on several lower limb bones

2.1.4 The total from the single and multiple graves and the charnel pit is 24 people, 9 sub-adults and 15 adults. It is possible that some individuals represented in the charnel pit are "bits" missing from the burials already counted. This would have the effect of artificially inflating the number of adults. However, due to the extremely poor preservation of the most of the grave material, cross checking with the charnel pit was not possible. This difficulty should be borne in mind during demographic analysis.

2.2 Demography

2.2.1 Mortality The table below lists the age-at-death, sex and pathology for each context[2].

Table 2 -- **Demographic parameters for SHR 93**

Context	Age-at-death	Sex	Pathology	Comments
332	Adult	Male		Extremely fragmentary
350	17-25 yrs	Male		
352	40+ yrs	Female	AMTL, severe osteoarthritis	Bevelled anterior wear,
354	20-30 yrs	Male	Hypoplasia at 2 - 2.5 and 5 yrs	
357	2-3 yrs	?		Bevelled anterior wear, bones large for age
365	3-5 yrs 4 Adults (min.)	1 Male 1 Female		
396	4.5 - 6 yrs	?	Hypoplasia 3.5 - 5.5 yrs., caries, hypocalcification	Extremely fragmentary, bevelled anterior wear
445 (+ 444, 333)	30-40	Female	Severe osteoarthritis of hands	Fragmentary, bevelled anterior wear
538	60+	Female	Severe osteoarthritis of hands, knees	Edentulous

[2] Context 358 consisted merely of a fragment of young adult mandible and parietal, which could be from several of the more complete burials. It is not included in the minimum number of individuals.

735 (+ 736)	0 - 3 months	?		
1187	10.7 - 11.1 yrs.	?	Severe cribra orbitalia	Bevelled anterior wear
1218	25 - 25 yrs.	Female		Bevelled anterior wear
1220a	0 - 3 months	?		
1220b	20 - 30 yrs	Male		
1247	4.5 - 6 yrs.	?	Hypoplasia 2-3 yrs	
1248 (+ 1223)	30-50 yrs	Female		Very fragmentary
1249	Adult	?		Very fragmentary
1250 (+333)	22-28 yrs	Male		3 skull fragment found with thorax
1251	17-21 yrs.	Male		

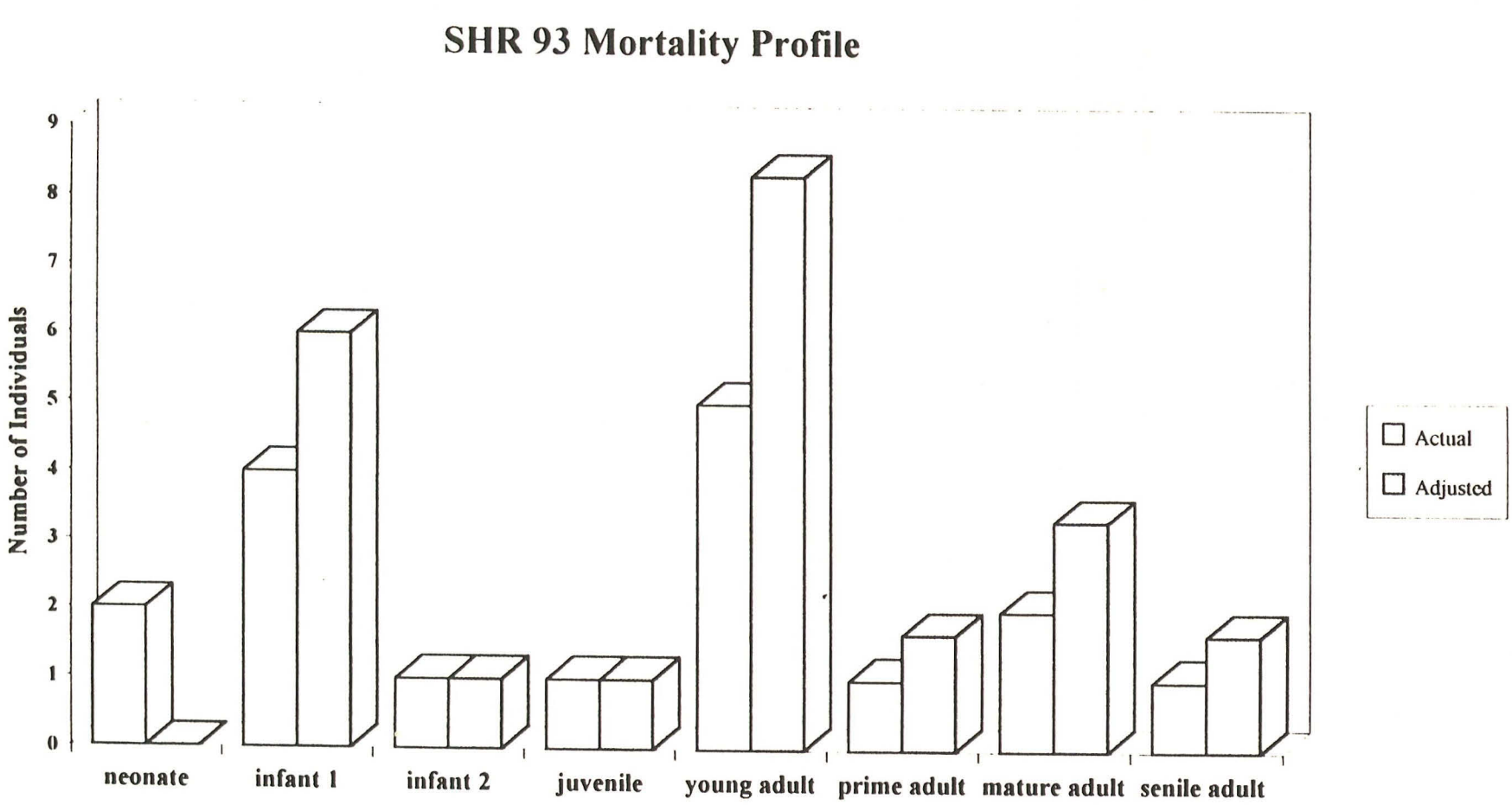


Figure 3 -- SHR 93 Mortality Profile

2.2.2 It is apparent in this sample that there is a large number of male adults which fall into the young adult age category. This runs counter to demographic expectations, as this is a time of life which is normally characterised by low risk of dying. Figure 3 presents the mortality profile for the population.

2.2.3 The actual mortality, presented in figure 3 as white bars, represents the number of skeletally-aged individuals. The adjusted mortality (grey bars) was constructed by distributing the unaged adults (a total of 6 individuals) proportionally across the adult age-at-death categories. Although this assumes that the unaged adults follow the same pattern as the skeletally-aged individuals, this assumption is safer than simply distributing the unaged adults equally. As the proportion of adults to infants is crucial in demographic analysis, it was necessary to adjust the mortality in this manner. It is clear from the mortality profile that there is an excess of an excess of young adults in this cemetery population. A normally-constituted death sample should include peaks in the infant 1 and mature/senile adult age categories. The lowest bars should be in the juvenile and young adult categories.

2.2.4 Sex-specific mortality

Figure 4 presents the sex-specific mortality profile. This profile was constructed only from adults which had been skeletally sexed, and demonstrates the extreme skewing in the sex distribution with reference to the age-at-death categories. 80% of the young adult deaths, a category which is already suspiciously large, are male. Moreover, all the deaths from prime adult onwards are female. This clearly indicates that certain adults (mature males) are selectively excluded from the cemetery, as well as suggesting that the excess of young adult deaths probably is due to an extreme excess of young adult males in the "live" population, males which are not contributing to the infant population by reproducing. The latter replicates the effects of immigration on a mortality profile.

2.2.5. Survivorship

Figure 5 presents the survivorship curve for SHR 93. A stable population (no migration or change in birth rate) has to be assumed for this type of analysis to be comparable to other populations, conditions which are probably not met by this sample. However, examination of survivorship is instructive and reiterates the conclusions from the examination of the mortality profiles. The survivorship curve simply represents the percentage of the sample, in this case 24 individuals, dying in each age category.

For comparison, an 18th century rural French example has been included in the graph. The slopes of the lines are the key aspects to compare, and in this case, the slope of the SHR 93 data in the 20 - 30 year category is wildly in excess of the model data. Again, this is the proportion of young adults is the principle confounding factor.

2.2.5 Modification of the survivorship curve by eliminating the young adult males from the analysis (figure 6) reveals a curve which more plausibly replicates the anticipated shape of the curve. The slope of

Figure 4 -- Sex Specific Mortality

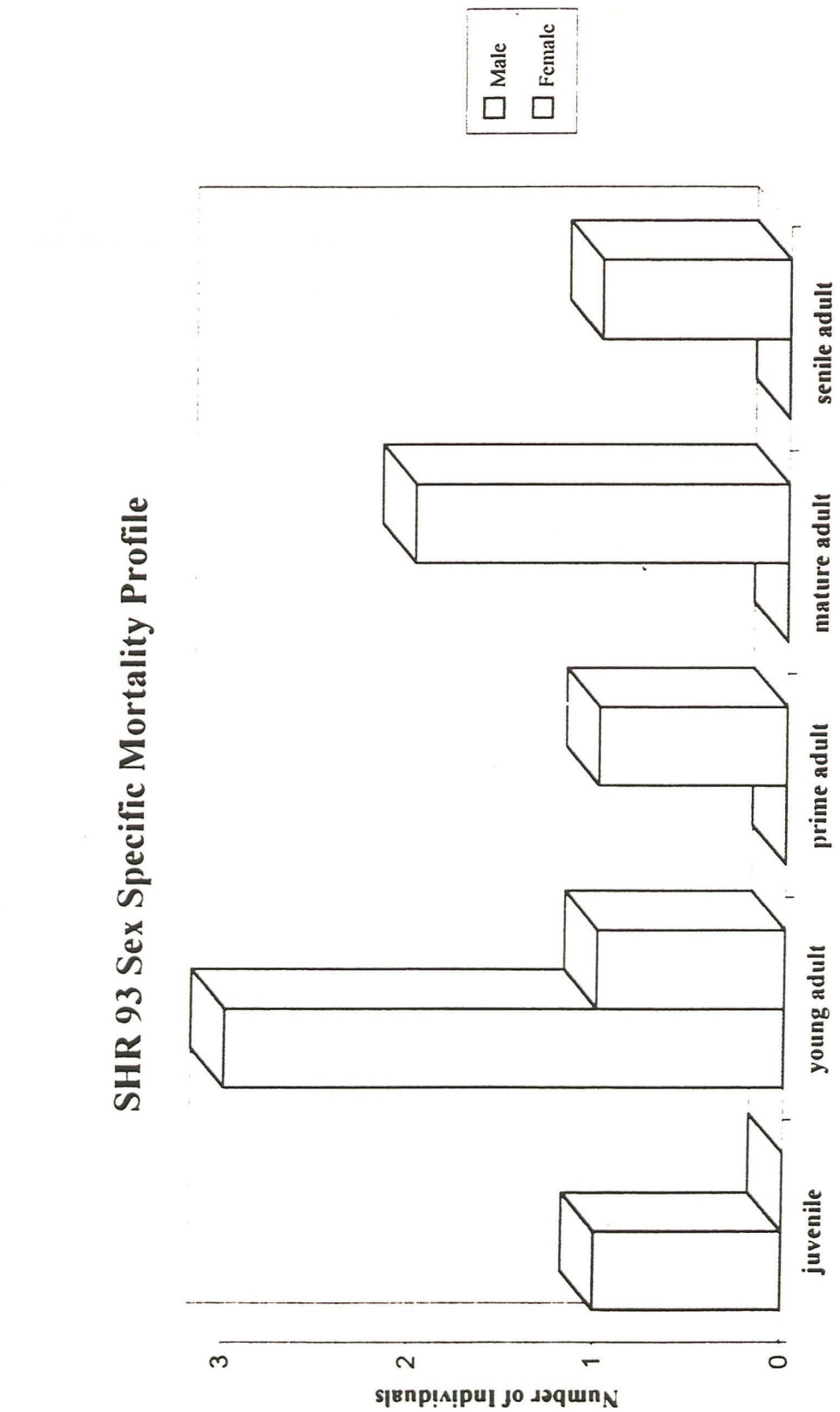
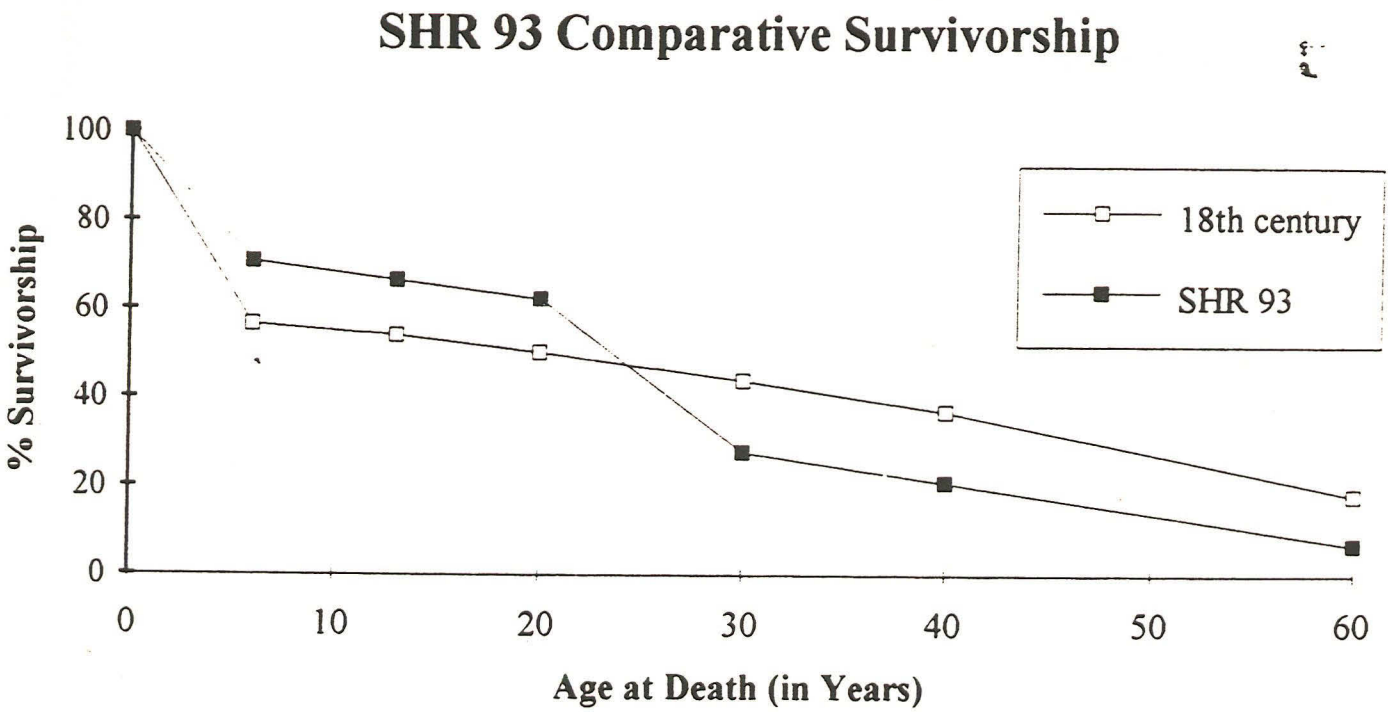
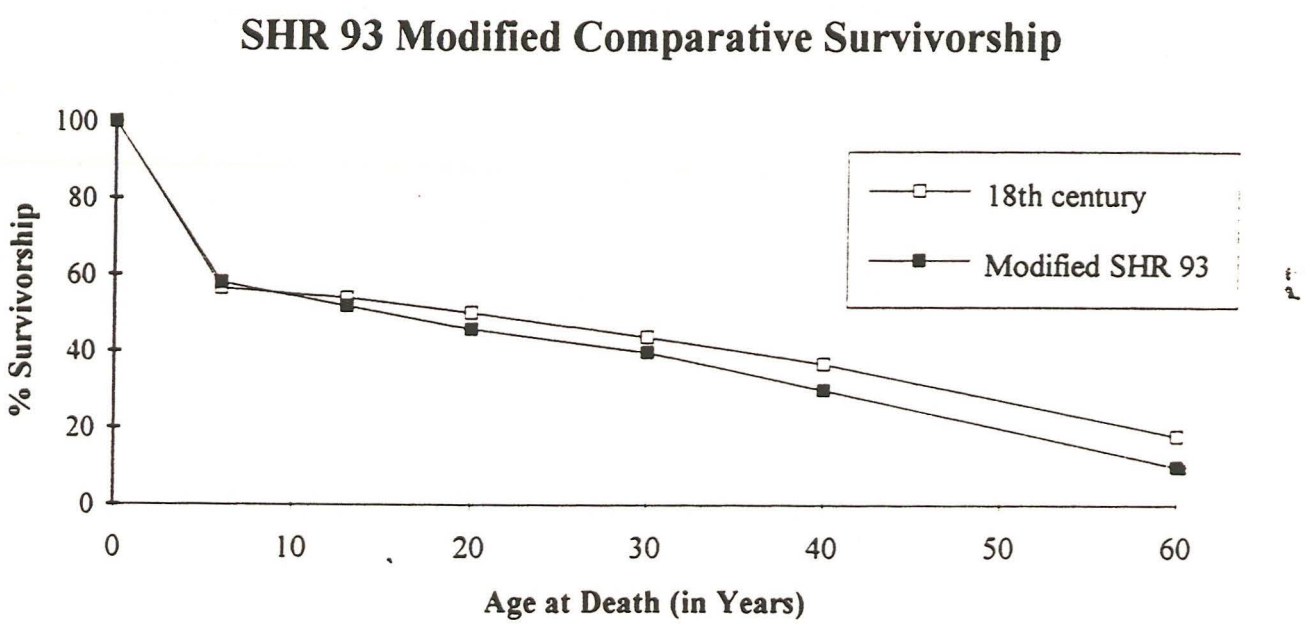


Figure 5 -- **Comparative Survivorship**



the line (keeping in mind that the adult males are missing from the population) probably indicates a life expectancy at birth of between 27 and 30 years. Although this may seem low, it must be kept in mind that life expectancy at birth is a figure largely determined by the level of infant mortality. In this case, the proportion of children under 5 years of age in the cemetery (47% of the sample) is comparable to the model population.

Figure 6



2.4 Pathology

The analysis of pathology on a skeletal sample must take into account the pattern of affected elements, both within the individual and within the population. This means that the absence of a given pathology is as crucial to analysis as its presence. Given the extremely fragmentary nature of the sample, only a few tentative statements can be made about certain pathological manifestations, and nothing can really be said of their prevalence or distribution.

2.4.1 Osteoarthritis

Osteophytes, lipping and areas of eburnation (bone-on-bone rubbing characteristic of complete cartilage loss) were apparent in the hands of two mature adult females (352 & 538) and one prime adult female (445), particularly in the bones of the thumb. Also affected in these individuals were the knees and hips. Whether the osteoarthritis represents markers of habitual or gendered activity or simply age-related changes is unclear, due to the skewing and poor preservation of the sample.

2.4.2 Enamel Hypoplasia

These dental markers of non-specific stress were present on three individuals, a young adult male (354) and two children of 4 - 6 years of age. The distance from the cemento-enamel junction was measured to the centre of the lesion and this was calculated as a percentage of the tooth crown, based upon the unworn crown height of the tooth. This was compared with Smith (1991) to establish time of occurrence. Two to three years and five years are the times of developmental insult. However, as this is based on only three individuals, this cannot be interpreted as significant. Prevalence cannot be measured, and no sex and age comparisons made, due to the dental wear and general paucity of teeth. Hypo calcification occurring between two and three years of age was also present on individual 396. This could be due to ground water differences, dietary change or illness (see figure 7).

2.4.3 Dental Disease

Again, the paucity of teeth and attrition makes it difficult to do more than list the pathological manifestations. Dental caries occurs in individual 396 as an occlusal lesion. Antemortem loss of the first mandibular right molar (a commonly lost tooth) occurs in 352 and total loss of teeth with advanced healing in individual 538. Calculus or mineralised plaque deposition occurs on most adult teeth in slight to moderate amounts.

2.4.4 Cribra Orbitalia

These characteristic lesions of the orbital vault occur in individual 1187, a 10- 11 year old child (see figure 8). These lesions, distinct from those occurring with scurvy, are probably indicative of iron deficiency anaemia, due to disease, dietary deficiency, gastric distress, inherited anaemia or intestinal parasite infection.

Figure 7 -- Hypocalcification of maxillary incisors in individual 396.

Figure 8 -- Cribra Orbitalia in 1187

2.4.5 Bevelled Dental Wear

One possible indicator of habitual activity can be seen in the bevelled dental attrition found on the backs of the upper teeth on several individuals in this sample, including 352, 357, 396, 445, 1187, and 1218. Figure 9 presents an example of a typically severe manifestation. Due to the lack of correspondingly severe attrition in the occluding mandibular teeth, it is possible that the wear pattern is due to the use of teeth as tools or the habitual sucking on a slightly abrasive material, such as a wooden stick. . Both children and female adults are present in this group. The lack of males may indicate gender-based differences, but could just as easily be a product of the skewed sample constitution.

Figure 9 **-- Bevelled dental wear on individuals 1218 and 352.**

3. DISCUSSION

The most important conclusion from the osteological analysis of SHR 93 is the fact that the cemetery population is not constituted from a "normal" breeding population. The excess of young adult males and the lack of males in older age categories is suggestive of several possibilities. It could be that the cemetery in Area B is a low-status or slave cemetery, located adjacent to the habitation. The higher-status inhabitants would then have been buried elsewhere, perhaps a cemetery with monuments. Area B could also represent the normal cemetery for the inhabitants of adjacent area, with the addition of labourers or workers from the surrounding area. The older adult males would, however, then have to be accounted for by their burial elsewhere. It could also be that Area B constitutes only one (non-representative) portion of a larger cemetery, which remains unexcavated.

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APPENDIX 2

The Animal Bones from Hangman's Lane, Stainfield, Lincolnshire.

PART I - PROCESSING

Brief:

To process bulk soil samples for the recovery of bioarchaeological remains, including animal bone (reported here), plant macrofossils and molluscs.
To examine any such remains.
To report, and assess the value of further work.

Processing Method:

A 2L sub-sample was processed from each of eighty-three bulk samples. Where the total volume of the sample was 3L or less the entire sample was processed. The sub-samples were soaked in hot water and sodium hexametaphosphate to disaggregate the clay matrix. Each sample was then floated out over 1mm. and 300 micron mesh sieves, and the residue wet-sieved through 2 mm. and 1 mm. mesh sieves. The flot and wet-sieve residues were dried overnight in a Gallenkamp OV 330 oven before being sorted for bioarchaeological material. The material in a sample residue was scored using an abundance scale: (D)ominant, (A)bundant, (F)requent, (O)ccasional, (R)are.

Note: Two bulk samples were received which had no identifying number, and thus were not processed. Additionally, two different contexts were given the same sample number, for one of these contexts, there is no record of a sample having been taken.

Processing results:

The animal bone is reported here, the charred plant and mollusc remains are considered in separate reports.

All of the samples except those from contexts 018, 400 and 999 (samples 1, 67, 246), contained some bone: contexts 452 and 743 were rich in bone, contexts 770, 738 and 1186 were medium, all other contexts sampled contained small to very small amounts of bone.

The bone recovered was for the most part in a fragmented to extremely fragmented condition, and a small proportion of the material was burnt, mostly calcined. Very little of the material was potentially identifiable. The identifiable material consisted of cattle, sheep/goat, mollusc, rodent, human and amphibian (very rare), in decreasing order of abundance.

Several contexts merit a brief mention:

Context 452 - the bone from this context was in good condition and consisted of the fragmentary remains of an incomplete cattle skull, plus a sheep/goat tibia.

Context 736 - the 1 mm. flot residue from this grave fill contained several phalanges from a human juvenile.

Context 743 - although this context had a relatively high bone content, none of the material was identifiable, it was all calcined and highly fragmented.

Context 921 - contained several fragments of mussel.

Context 927 - contained several fragments of mussel and one of cockle shell. The presence of shellfish in these two contexts is interesting as no examples occurred in the hand-recovered faunal material except an unstratified fragment of oyster. Shellfish were a popular part of the Roman diet.

Context 1186 - the fill of a grave cut, contained one human incisor.

PART II - ANALYSIS

Analysis Methods

All the material was examined, amounting to 2723 stratified fragments in total. The assemblage was extremely fragmentary in nature, and as a result only 26% of the stratified material was identifiable. Quantification was in the form of minimum numbers of animal units, a modification after Halstead (1985) of Watson's (1979) diagnostic zones approach. This approach attempts to reduce the inflating effects of fragmentary assemblages on relative species counts, and aims to ensure that each bone is not counted more than once. Loose teeth have not been included in the counts for each species: the greater durability of teeth compared to bone means that they survive in greater numbers than complete mandibles, and can give a misleading idea of species representation.

Differentiation of sheep and goat was based on the criteria of Boessneck (1969) and Payne (1985). Ageing was based on Silver (1969) for epiphyseal fusion and tooth eruption, and Payne (1973) and Grant (1982) for tooth wear of sheep and goats, and pigs respectively. The incidence of burning and gnawing was recorded on a presence/absence basis, and butchery marks where present were classified according to Binford (1981).

Standard measurements after von den Driesch (1975) were taken where possible on all adult bones, the number of measurable fragments was not great and the results have not been discussed here, but are available in the archive along with other data not included in the report.

Results

Table 1 shows the representation of species at the site, **Table 2** gives the ageing data, **Table 3** shows the observed frequency of butchery marks within species.

Few remains were recovered from the three Iron Age penannular gullies, and there is little which can be made in the way of useful comment: cattle, sheep/goat, pig and roe deer were present in small quantities, with cattle and sheep/goat being the most frequent. The material from Roman contexts is more abundant and therefore attention is concentrated on those.

Cattle
This was the predominant species in the Romano-British material, comprising 40% of the identifiable bones. Ageing results are imprecise, owing to the large number of fragments where the state of fusion was indeterminate, and the small number of complete mandibles compared to loose teeth. The bone fusion data suggests that most of the cattle remains came from adult animals, 3-4 years old or more. However, the ages derived from tooth eruption suggest that animals were also slaughtered at a younger age, although it must be emphasised that the tooth eruption data gives minimum age estimates. Only three sexable pelves were present, two males and one female.

Sheep and Goat
These comprised a lesser, although still substantial proportion of the assemblage. Most of the bones (26% of the total) were identified as sheep, only a very few could be identified as goat, and the rest were indeterminate. Although sheep and goats formed almost as large a proportion of the assemblage as cattle, the smaller size of the former means that they probably contributed less to the diet of the inhabitants, at least in terms of meat yield. The sheep/goat ageing data suffered from the same problem as the cattle material, with the tooth eruption figures indicating a younger age at death than the fusion figures. The latter indicate, however, that most of the animals (78%) were slaughtered before reaching 3 $^{1}/_{2}$ years. The four sexable pelves were all from ewes.

Table 1. Species Representation

Anatomical Unit	horse	cow	sheep	goat	sheep /goat	roe deer	pig	dog	Species Total
Iron Age	-	10	3	-	4	2	2	-	21
Roman									
skull	-	-	-	-	-	-	-	1	1
horn-core		5	-	-	-	-	-	-	5
maxilla	1	2	1	-	1	-	2	-	7
mandible	1	19	6	-	10	1	4	3	44
atlas	-	1	1	-	-	-	-	-	2
axis	1	3	-	-	-	-	-	-	4
scapula	3	12	5	-	1	-	-	-	21
humerus p	1	5	-	-	-	-	2	-	8
humerus d	4	9	10	2	5	-	4	-	34
radius p	5	11	7	-	3	-	2	1	29
radius d	6	7	9	-	1	-	2	-	25
ulna	3	3	2	-	-	-	-	-	8
m'carp. p	2	7	12	-	3	-	-	1	25
m'carp. d	2	8	10	1	2	-	-	1	24
pelvis	3	7	6	-	-	-	1	-	17
femur p	2	3	4	-	-	-	-	-	9
femur d	4	5	7	-	-	-	2	-	18
tibia p	6	8	6	-	10	-	5	1	36
tibia d	6	10	10	-	3	1	4	1	35
calcaneus	2	14	1	-	-	-	-	-	17
astrag.	1	7	3	-	-	-	2	-	13
naviculo-cuboid	-	2	-	-	-	-	-	-	2

m'tars. p	2	11	10	1	2	-	1	-	27
m'tars. d	4	14	7	-	1	-	-	-	26
m'pod. p	-	1	-	-	-	-	-	-	1
phalanx 1	4	9	3	-	-	-	-	-	16
phalanx 2	1	4	1	-	-	-	-	-	6
phalanx 3	2	3	-	-	-	-	-	-	5
Roman (Other)									
Bird: limb bone									8
Cat: canine									1
Oyster: shell frag.									1
Roman Total	**66**	**190**	**121**	**4**	**42**	**2**	**31**	**9**	**475**
Roman %	**13.9**	**40.0**	**25.5**	**0.8**	**8.8**	**0.4**	**6.5**	**1.9**	
Total	**66**	**200**	**125**	**4**	**46**	**4**	**33**	**9**	**496**

Table 2. Ageing information.

Fusion data (ages in months):

Cattle	**7-10**	**12-18**	**24-36**	**36-48**	**Total**
UF	-	-	2	11	13
F	26	13	18	11	68

Sheep/goat:	**6-10**	**13-16**	**18-28**	**30-42**	**Total**
UF	-	1	2	7	10
F	26	-	6	2	34

Pig:	**12**	**24-30**	**36-42**	**Total**
UF	1	6	1	8
F	1	-	-	1

UF = epiphysis unfused, F = epiphysis fused.

Tooth Eruption data:

	Cattle	**Sheep/Goat**	**Pig**
Deciduous teeth only	2	1	-
M_1 erupted	2	4	-
M_2 erupted	1	4	1
M_3 erupted			1
P_4 erupted	7	7	1

Pig
Pigs were the least common of the main domestic food animals at 7% of the total. The ageing information for pigs is particularly scarce, however the fusion data suggests that most animals did not survive more than 2 $^1/_2$ years. Sexing information is equally scarce and is based on loose canine teeth: two male and one female.

Horse
The remains of horse were relatively common, 14% of the total, and mostly represent mature animals. An unusual feature of the horse material is the presence of butchery marks:

a distal femur with knife marks suggestive of filleting, and the shaft of a tibia similarly marked. Horse meat, although eaten in Iron Age Britain, was not eaten by Romans except in times of need (Luff 1982), and evidence of butchery is correspondingly rare. The presence of butchered bones at this site does not necessarily mean the human inhabitants were eating horse, it is likely that they were fed to dogs, indeed 22% of the horse remains show signs of gnawing.

Roe Deer.
This was rare, represented by two fragments only, and was the only evidence for the exploitation of wild mammals at the site.

Dog
The remains of dog were not frequent, but reveal the presence of two varieties. Although most of the material is fragmentary and impossible to measure, much of it appears to belong to a medium-sized animal. A much smaller animal is also present, represented by a fused tibia and a metacarpal. Using Harcourt's (1974) figures, the length of the tibia gives a shoulder height of 261.55 mm., and falls right at the bottom end of the range for Romano-British dogs. This indicates a lap-dog sized animal: great variability in size and build was a characteristic of the dog population of the Roman period, small animals which were only suitable as pets made their first appearance at this time.

The presence of dogs at the site is shown more by the signs of their activity than by their remains. The incidence of gnawing on horse bones has already been mentioned, the incidence of gnawmarks on the bones of other species is even higher: the average overall is 26%, but the values for each species range from 21% for horse, 27% for cattle, 30% for sheep and goats, to 34% for pig. The relatively high frequency of gnawing may be the result of deliberate feeding of bones to dogs, or from scavenging, or a combination of both. Evidence for the activity of other scavenging animals is also present, though rare, in the occurrence of a fragment of cattle bone which had gnawmarks from rodent teeth.

Bird.
There were eight avian limb bones present, however they were not identified to species.

Other Species.
Cat was represented at the site by an isolated lower canine, and a single fragment of oyster shell (*Ostrea edulis*) was present. These, and all but one of the bird bones, were recovered from grave fills sent to E. Rega for recovery of human skeletal material. With respect to the fragment of oyster, it is worth mentioning that although no other evidence of shellfish occurred in the hand-recovered material, except an unstratified fragment of oyster, some was present in the residue of bulk soil samples processed by ARCUS, reported elsewhere: this consisted of a few fragments of mussel (*Mytilus edulis*) and one of cockle (*Cardium edule*). Shellfish were a popular part of the Roman diet, and efforts were made to transport them to areas distant from the seashore, remains have been found in sites further from the sea than Stainfield. Also present in these residues were a few rodent bones, not identified to species, but approximately mouse-sized. They were not frequent, but show the presence of the animals presumably responsible for the gnawed cattle bone.

Butchery marks were not very frequent, only 9% of the identified fragments had visible cuts or chopmarks. The horse examples have already been mentioned, and the incidence of cut marks on sheep and pig was very low. The majority of the marks were on the bones of cattle, and most of these were chopmarks as opposed to knife cuts, in a ratio of 2:1. Chopping through bones was a characteristic of Roman British butchery, contrasting with the earlier, native, practice of using a knife to separate bones at the joints.

Table 3. Observed frequency of butchery marks within species.

	Horse	Cattle	Sheep	Pig
Number	2	32	4	1
% of Species	3	17	3	4

There is a very low occurrence of pathologies in the assemblage, the only instance was a cattle naviculo-cuboid with porous bone formation on the distal surface, which may indicate an arthritic condition.

Discussion and Summary

Domestic animals provided the bulk of the diet of the people at Stainfield, far outweighing the contribution of wild resources. The greater the Roman influence at a site (for example urban or military sites), generally the greater the proportion of cattle and pig in the diet. The relatively high proportion of sheep/goat at Stainfield is not typical of Romano-British sites, and is more like the pattern from Iron Age or later 'unromanised' sites. However, cattle would still have provided the bulk of the meat in the diet of the people in the settlement.

The exploitation of cattle and sheep/goat at this site appears to follow the usual Roman pattern of slaughtering sub-adult to adult animals. Therefore it is likely that dairy products were not important in the local economy, and that the animals were kept more for their meat and wool, in the case of sheep/goat, or meat and possibly draught use in the case of cattle. Pigs were slaughtered at a younger age than cattle or sheep/goat, consistent with the fact that pigs are only kept for meat, having no secondary uses, and therefore it is not profitable to keep them beyond a certain point. However, no very young pig bones were recovered, therefore sucking pig may not have been exploited here, although it is possible that such bones did not survive in the relatively hostile depositional environment.

The relatively high proportion of horse in the assemblage is not a common feature in Romano-British sites. If the features south of King Street can be interpreted as animal 'stalls', it may be that the frequency of horse remains is a localised characteristic of the excavated area of the site.

The human and animal inhabitants of the site undoubtedly had a role in the fragmentation of the bone in the assemblage, from butchery to cooking to processing of remains for bone grease etc., to scavenging of the leftovers. The degree of involvement is impossible to assess, a study of the fragmentation patterns is outside the scope of this report. However, post-depositional destruction must have had a role, as suggested by the proportion of loose teeth to mandibles and maxillae: 55:2 for horse, 64:21 for cattle, and 55:18 for sheep and goats. The fragmentation of the bone of mandibles and maxillae (as opposed to other skeletal elements) is less likely to have been the direct result of human activity and more likely to have occurred after discard.

Unfortunately the chronological resolution at Stainfield is not sufficient to allow discussion of possible trends in animal exploitation which would have occurred over the time of occupation at the site. Therefore the information discussed here can only be a broad summary of the whole period.

Recommendations

The process recovered material which was missed by hand excavation of contexts. The amounts recovered were, however, generally very small. Sample 86 (context 452) was of interest but the small sample size means that all the material has already been processed and analysed. None of the other samples merit further processing /analysis.

Adrienne Powell
March 1994

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APPENDIX 3

Analysis of glass from Hangmans Lane, Stainfield, Lincolnshire (SHL93).

Excavations at Stainfield, Lincolnshire, by Heritage Lincolnshire in 1993, were undertaken prior to the construction of a gas pipeline, and consisted of three trenches. The three areas (A, B and C), separated by modern dykes revealed more than 60 glass fragments of which 51 vessel fragments, 3 window fragments, 5 beads and associated fragments, and 1 bangle fragment were identified.

Results

Of these, 44 fragments were thought to be of Roman origin, with one whole and two fragmentary beads from the post-Roman period. The remaining fragments were of a Medieval or later (modern) date and are therefore excluded from the discussion.

Because of the nature of the excavation the assemblage is very small. However, those fragments recovered represent a wide range of periods (including mainly the Romano-British period, from the first to fourth centuries) and cover a wide variety of forms from bottles, cups and jugs to window glass, beads and bangles. Several of the vessels are represented only by body fragments and in these cases the security of the identification is not clear. Within the assemblage there are a few pieces worthy of comment.

The earliest vessels consist of two deep blue body fragments (Sfs 11 and 137), which probably date from the first three-quarters of the first century AD, although these undiagnostic body fragments cannot be more closely dated. Another deep blue body fragment, with opaque white decoration, recovered from the topsoil in Area A, is similar to a polychrome jug found at Carlisle (Cool 1992, 67, vessel number 5), where several fragments of a deep blue glass vessel with opaque white marvered spots were recovered. Although similar fragments (of differing colours) have been found at Manchester and Castleford, West Yorkshire (Cool 1992, 64), few of these types of vessels have been identified in Britain. Those that have been recovered suggest they may have been more common during the Claudio-Neronian period, although they have occasionally been found surviving into the Flavian period in Northern Britain.

Dating from the Flavian/Antonine period, is the rim of a blue-green jug (Sf 26) (Isings 1957, type 52/55). This fragment belongs to a widespread class of jugs of several differing types of body-profiles, but most often with long necks and either bulbous or conical bodies. These types are commonly found on British sites (Harden and Price 1971, 358).

Two opaque turquoise melon beads from Area B were also recovered. According to Guido (1978, 100) these were imported into Britain from Claudian to Antonine times, although they may have been made in at a few sites here in Britain. Their chronological range appears to be almost entirely restricted to the first and second centuries.

Other fragments which span a longer period of circulation (approximately first to the third century AD) include blue-green body fragments (Sfs 7 and 59, which cannot be more closely dated), and also from context 068, five fragments from a blue-green prismatic bottle (which may not have originated from the same vessel). One of these fragments has deliberate reworking on one edge; whether this was grozed for use as window glass, is not known.
An unusual mid-second century carinated cup is represented by several fragments, seven of which can be easily joined to form approximately 25% of the whole vessel (Sf 106). This reconstruction demonstrates a complete profile of the cup (Figure 1). This biconical vessel

has a strong carination in the lower part of the body, and below this, a pronounced thickened ring which constricts to a point where it joins a concave foot. Similar vessels have been recorded from Felmongers in Essex (Price 1987, p.188, and Figures 2.8 and 9), and Castleford, West Yorkshire (H.E.M. Cool, personal communication). Dr Cool notes that on the vessel from Castleford the fragments appear to come from "a beaker with very thick, stepped lower body and separately applied base ring. This appears unparalleled in Britain although similar ones are known in Spain, see for example that from Mulva in the province of Seville (Raddatz 1973, 57 grave 11, Abb. 17.3, Taf. 12.4)" (H.E.M. Cool, The Glass from Castleford, forthcoming).

Also of Flavian/early second century date is a part of a bangle (Sf 144) with a D-shaped section. This particular fragment can be classified as a Kilbride-Jones (1938) Type 2, which has been found to have an almost exclusively British distribution, with the greatest concentration on military and native settlements in Northern England and Lowland Scotland. It can be further classified, based upon decorative design, as a Type 2 (Ci) (Price 1988, 342). Based upon present evidence, the production of these bangles in Northern Britain appears to fall within the late first or early second centuries. However it is possible they may have had a long life, even after the bangles were first broken; fragments have been found in late Roman contexts, and have also been found in Anglian burials (Price 1988, 354).

Glass from the fourth century is represented by a small number of tentatively dated fragments including a fragment of blown window glass (Sf 6), and a colourless body fragment from Context 840. A large rim fragment from a light green beaker or cup appears also to be of mid-forth century date or later (Sf 20). This vessel has a fire-rounded rim, examples of which are less common in this period than vessels with cracked off rims. Similar examples have been recovered at Towcester (Price and Cool 1983, 117 and 121, see vessel no. 40).

One whole and two half black post-Roman beads (Sf 151) which date from the post-Roman to Early Medieval period, were found with a skeleton in Area B, although their direct association with the skeleton is not clear. These beads appear to have been roughly formed, and may possibly be parts of broken segmented beads, as one end of the whole bead shows evidence of a protrusion to which a second bead may have been joined. Alternatively they may be similar to the black cylindrical beads described by Henderson (1986, 213), which he dated to the 10/12th centuries.

Many of the vessel forms are types which are found commonly in Britain, while others have not been recorded widely (Sfns 106 and blue glass from topsoil layers). This may indeed be indicative of a domestic assemblage, however the presence of graves in Area B1 (possibly Roman) may possibly suggest that some of the fragments were intended as grave goods. The recovery of a reconstructable vessel (Sf 106) in this location may support this, although it does not seem to be associated with any skeletal material (a lack of full contextual information here hinders interpretation). From the available information the only grave fills to reveal evidence of glass fragments were Contexts 333 and 1187, which uncovered one undiagnostic colourless body fragment (Sf 143) , and some post-Roman beads (Sf 151) respectively.

In summary, the glass excavated at Stainfield represents both a long period of both Roman occupation, and some limited evidence of post Roman activity. The nature of the excavation (which has uncovered only a very small glass assemblage) and the lack of close dating of the site does not allow any comments to be made concerning the relevance of the glass or contemporaneity of any of the fragments recovered. This makes any interim interpretation both tentative and limited.

Acknowledgements

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Caroline M Jackson
March 1994

Catalogue

Abbreviations:

PH	Present height
RD	Rim diameter
BD	Base diameter
WT	Wall thickness
Dim	Dimensions
Sf	Small find number
Conx.	Context

Romano-British glass

Vessel glass

Deep blue

Sf 11
Body fragment. Horizontal trail.
Dim 22 x 16 mm, WT 1 mm.

Sf 137 Area C, Context 724.
Body fragment. Slight carination.
Dim 17 x 16 mm, WT 1 mm.

From metal detecting top soil Area A.
Body fragment. Evidence of opaque white marvered decoration. Convex fragment.
Dim 10 x 9.5 mm, WT 1.5 mm

Light green

Sf 20 Area B.
Rim fragment of beaker/cup. Slightly everted rim with fire thickened edge. Pronounced carination.
PH 21 mm, RD 70 mm, WT 1 mm.

Colourless

Sf 106 Area B
Approximately 23 fragments, seven of which when joined form the foot, stem, body and rim of a carinated biconical footed cup. Outsplayed rim, edge cracked off and ground smooth. Straight sided upper body expanding out to strong, angled carination . Straight sided shorter lower body, with a thickened ring half way down the lower body. Lower body tapers into a small conical foot with cracked off and ground edges. One narrow wheel cut line on the underside of the rim.
H 90-94 mm, RD 70 mm (approx.), BD 40 mm, WT 1 mm.

Sf 143 Area B , Conx. 333.
Body fragment. Colourless. (Possibly modern??).

Area C Conx. 840
Body fragment. Very bubbly.
Dim 16 x 8 mm, WT <1 mm.

Blue-green

Sf 7 Area A
Body fragment. Evidence of curved rib towards one edge.
Dim 24 x 24 mm, WT 1 mm.

Sf 26 Area B
Rim fragment. Part of cylindrical neck and folded rim of jug. Rim outsplayed.
RD 20 mm, PH 35 mm, WT 4 mm.

Sf 59 Area A Contx. 035
Body fragment. Many bubbles. Convex-curved side.
Dim 35 x 19, WT <1 mm.

Area A Conx. 068
Five body fragments. Many bubbles. Convex sides.
Largest fragment dim 50 x 30, WT 1 mm.

Area C Conx. 840
Eight body fragments. Prismatic bottle. Largest fragment has one edge deliberately reworked.
Largest frag. Dim 29 x 16, WT 3.5 mm

Window glass

Sf 6 Area B
One fragment of blown window glass, light blue, bubbly.
Dim 38 x 17 mm, WT 1 mm.

Other glass artefacts.

Sf 144 Conx. 422
Bangle fragment. Blue-green D-shaped body with 3 cords, outer ones deep blue with a left hand twist of opaque white, centre cord translucent pale green with right hand twist of green. Centre twist not very successful. Smooth outside surface, pock-marked internal surface.
H 7 mm, Width 11 mm.

Sf 149 Area B Conx. 384

Two melon beads. Opaque turquoise blue. Originally transparent/translucent? deep blue, now badly corroded.
Bead 1 - H 7.5 mm Diameter 9.5 m;
Bead 2 - H 12.5 mm Diameter 14.5 mm.

Post-Roman glass

Sf 151 Area B Conx. 1187

One complete and two halves of small black? bead. Whole bead may be part of a segmented or cylindrical bead, broken protrusion at terminal.
H 5 mm, diameter 5 mm.

Also recovered but not discussed are several fragments of modern glass (Medieval or later).

Sf 7	1 light green fragment.
Sf 49	Probably? Post-Medieval green window fragment.
Sf 50	Body fragment. Yellow-green.
Conx 769	Olive green thick body fragment. Modern.
Conx. 734	One colourless fragment of Post-Medieval/Modern wine glass base.
	One colourless fragment of Post-Medieval window.
Conx 840	Two brown body fragments. Modern.
(+)C	Two light-green fragments. Probably post medieval.

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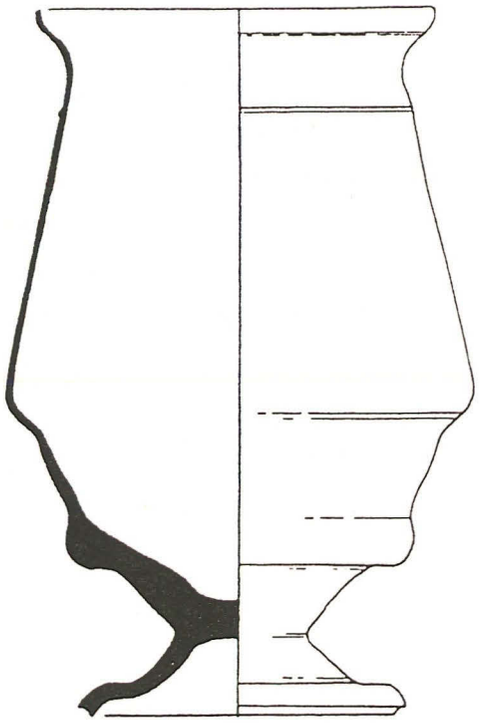

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ARCHAEOLOGICAL RESEARCH & CONSULTANCY AT THE UNIVERSITY OF SHEFFIELD

Reconstruction drawing of fragmented colourless glass carinated biconical footed cup from 2158

PROJECT NAME: Stainfield		
TITLE: Hangman's Lane		
NGR:	SCALE:	
DATE: 3/93	PROJECT NO. 132c	ILL. NO 1
DRAWN:		

APPENDIX 4

THE MACROSCOPIC PLANT REMAINS FROM HANGMAN'S LANE, STAINFIELD, LINCS.

Seven samples were analysed from the Iron Age/Roman site at Hangman's Lane, Stainfield, Lincs. following the recommendations of an earlier assessment. Three cereal types were identified: spelt wheat, bread/club wheat and six-row hulled barley (it is also possible that emmer wheat was present). Spelt chaff fragments dominated six of the samples A comparatively wide variety of wild taxa were recovered which are typical of 'weeds' found accompanying ancient charred grain assemblages from Roman/Iron Age England. The ecological preferences of the weed species indicate that growing conditions were good - both ecologically and tentatively, in terms of crop management. The composition of six of the samples are consistent with crop cleaning residues. One context, interpreted as a pit, appeared to contain a cleaned crop.

Background

Following an assessment of 83 samples, seven samples (from contexts 64, 604, 635, 636, 842, 916, and 1114) were recommended for fuller examination of the carbonised plant remains (Palmer 1993). (Sample 734 was originally recommended for further examination in the initial assessment, but was found to contain very few plant remains.) The site is defined as a 'Romano-British' settlement with Iron Age features and also includes a cemetery. The samples derive from a range of contexts: pits, ditch fills, one drain fill, and one occupation layer. The latter three contexts types were all located in area C - the area of the trench where the Roman road and associated building are located.

Methods

Extraction

The carbonised plant remains were extracted from the samples using manual water flotation (processing was carried out by A. Powell and T. Roper). All the sampled sediment from each of the seven contexts was processed (between 2 to 8 litres of sediment - see Table 1). The samples were initially soaked in water with sodium hexametaphosphate to aid the disaggregation of the sediment. Following this, a portion

of each sample was placed in a large bucket and warm water added. The water and sediment were stirred thoroughly. The water with the plant remains (both floating and in suspension) were poured through 1 mm and 300m sieves, thereby trapping the plant remains. More water was added to the remaining sediment and the process repeated until no more plant remains could be seen to rise to the surface of the water. The remaining sediment (residue) was washed on a 1 mm sieve and the plant remains (the flots) and residue air-dried.

The flots from contexts 635, 636, 842, 916, and 1114 were subsampled (see Table 1). The flots were divided using a riffle box. The 1 mm flot was sorted by eye and the 300m flot sorted using a low power binocular microscope. All fruits, seeds and recognisable parts of the cereal plant were picked out of the flots.

Identification

The fruits, seeds and cereal fragments recovered from the samples were identified under the microscope using up to x60 magnification. The plant remains were identified as far as possible using the seed reference collection held in the Department of Archaeology and Prehistory at Sheffield University. Reference was also made to Beijerinck (1947), M. Jones (1984) and, for the grasses, C. Hubbard (1984). The cereal chaff and grain were identified using criteria summarised by van der Veen (1992) and specific points will be discussed further below. The suffix type has been added to the cereal grain identifications to indicate the overlap in grain morphology that makes the identification of charred grains less certain. Grasses which could not be identified to species were divided by size into two groups: seeds less than or greater than 2 mm. Unidentifiable legume seeds have also been categorised by size into three groups. Members of the genus *Carex* (sedges) were classified into two groups: biconvex and trigonous seeds.

The nomenclature followed in this report for the wild taxa is that of Clapham, Tutin and Warburg (1962), except for *Tripleurospermum* which follows Kay (1969). The nomenclature for the cereals follows Miller (1987). The general term 'seed' is used throughout to refer to seeds, fruits and false fruits.

Counting

Whole seeds were scored as one but, for fragmented seeds, the following procedure was adopted. For the cereals and grasses, only grains with their embryo ends were counted.

Seeds from the Chenopodiaceae family often split into three components: two halves of the seed coat and the inner cotelydon. The inner cotelydon can only be identified to type and each cotelydon was scored as one. Unidentifiable fragments of Chenopodiaceae seed coat were not scored. Full halves of the seed coat which could be identified, however, were each counted as half and added to the number of whole seeds. For the chaff, each internode and glume base was counted as one and each spikelet fork as two (consisting as it does of two glume bases). The presence of awns was noted (as awns can break into many pieces counting is not generally appropriate).

The results, therefore, represent the minimum numbers of identifiable seeds/fragments of the cereal plant.

The Results

The results are presented in Table 1. The composition of most of the samples was very similar. Numerically, the whole assemblage was dominated by glume wheat chaff fragments (glume bases and spikelet forks) and specifically, spelt glumes. Although a small number of the glume bases possessed some characteristics typical of emmer, only spelt wheat could be securely identified. Bread/club wheat was, however, positively identified. Six-row hulled barley was also represented, although only as a minor component. Comparatively low number of 'wild' taxa were present, but they represented a comparatively wide variety of species.

Preservation of the carbonised plant remains was generally quite good, although due to distortion, only one third to one half or the cereal grains recovered from each of the contexts could be identified beyond the 'cerealia indeterminate' category. The cereal grains recovered from context 64 were genrerally less well preserved and notably encrusted and permeated with sediment.

The Economic Taxa

The Cereals

The samples were dominated by glume wheat chaff fragments. Most of the glumes bases and spikelet forks which could be identified to species were determined as *Triticum spelta* (spelt). They possessed the characteristic broad base, slightly prominent keel, poorly marked dorsal nerve, and strong venation which are typical of spelt. In almost every

sample a small number of glumes possessed characteristics of both *T. spelta* and *T. dicoccum* (emmer) - either possessing, for example, a more prominent keel and dorsal nerve or less well defined venation. It is significant, however, that no glume base could be securely identified as emmer. The spikelet fork from context 635 tentatively identified as *T. monococcum/T. dicoccum*, (einkorn/emmer) was longitudinally split so that the dorsal nerve and part of the internode were missing - damage which also renders this identification less than certain. Consequently, the presence of glume wheats other than *T. spelta* is not proven. Indeed, given the high numbers of spelt chaff present, it is possible that the intermediate glumes could be spelt and represent one extreme end of the natural variation encountered within that species.

Table 1. The Carbonised Plant Remains from Hangman's Lane, Stainfield, Lincs..

Context No.		**64**	**604**	**635**	**636**	**842**	**916**	**1114**
Sample No.		5	252	235	234	223	240	77
Taxa								
RANUNCULACEAE								
Ranunculus sp.	buttercup					1		
CARYOPHYLLACEAE							1	
Silene cf. *vulgaris*	bladder campion						1	
Caryophyllaceae indet.			1					
CHENOPODIACEAE								
Chenopodium album L.	fat hen		1	6			2	1
Chenopodium sp(p).			1				7	3
Atriplex sp(p).	orache		2	1	1			9
Chenopodium/Atriplex spp.			8	11	2			
LEGUMINOSAE								
Trifolium sp.	clover, trefoil		1					
Vicia cf. *hirsuta*	hairy tare	1	1	2				
Vicia cf. *tetrasperma*	smooth tare	1				1		
Vicia faba L.	horse bean				1			
Lathyrus cf. *nissola*	grass vetchling	2						
Legume 1-2 mm		15	11	7	1	7	2	1
Legume 2-4 mm		27						
Legume > 4mm			1					
UMBELLIFERAE								

Daucus carota L.	wild carrot		1					
POLYGONACEAE								
Polygonum aviculare agg.	knotgrass					1		
Polygonum persicaria L.	red shank				1			
Polygonum sp.						1		
Rumex acetosella agg.	sheep's sorrel							1
Rumex sp(p.)	docks	2	16	32	15	3	3	4
Polygonaceae indet.				2			1	
SCROPHULARIACEAE								
Odontites verna (Bell.) Dum.	red bartsia				1			
LABIATAE								
Labiatae indet.							1	
PLANTAGINACEAE								
Plantago lanceolata L.	ribwort		1					
RUBIACEAE								
Galium aparine L.	goosegrass, cleavers	1						

Table 1. (cont.) The Carbonised Plant Remains from Hangman's Lane, Stainfield, Lincs.

Context No.		**64**	**604**	**635**	**636**	**842**	**916**	**1114**
Sample No.	5	252	235	234	223	240	77	
Taxa								
COMPOSITAE								
Anthemis cotula L.	stinking mayweed		6	3	1			
Tripleurospermum inodorum (L.) Schultz Bip.	scentless mayweed			2	1			
CYPERACEAE								
Carex spp. (biconvex)	sedge					1		
Carex spp. (trigonous)	sedge						1	
GRAMINEAE								
Avena sp. grain	oat		4	1	1	2		
Avena awn		+	+	+	+	+	+	+
Bromus mollis/secalinus	brome	1	31	10	6	32	9	6
Bromus sp.			1					
Triticum monococcum/ dicoccum spikelet fork	wheat			1				
Triticum cf. dicoccum type grain		1		1		1		
Triticum dicoccum/spelta spikelet fork/glume base			6	25	3	2	3	5
Triticum spelta L. spikelet fork/glume base		24	718	735	194	232	104	118
Triticum spelta type grain		6	19	21	3	10		
Triticum spelta spikelet fork and internode							1	

Triticum aestivum(/compactum) rachis internodes		1	3	1			
Triticum aestivum (/compactum) type grain	7	10	9	3	4		
Triticum glume base/spikelet fork	34	818	1207	607	330	209	285
Triticum tough rachis internode		91	100	29	17	16	25
Triticum internode		6		3		1	
Triticum spelta/aestivum type grain	48	120	81	27	37	9	12
Triticum sprouted grain					1		
Hordeum 6-row rachis internode barley		8	3	1		7	4

Table 1. (cont.) The Carbonised Plant Remains from Hangman's Lane, Stainfield, Lincs.

Context No.	**64**	**604**	**635**	**636**	**842**	**916**	**1114**
Sample No.	5	252	235	234	223	240	77
Taxa							
Hordeum rachis internode			2	1		2	
Hordeum vulgare L. straight grain		1			3		
Hordeum vulgare L. twisted grain						2	2
Hordeum hulled grain	1	4	4	2		7	1
Cerealia basal rachis internode		1					
Cerealia indet. grain	103	117	63	36	48	17	19
Cerealia detached coleoptile	10	2	2				
Gramineae < 2 mm		8	6	1	1		

Gramineae > 2 mm		2	14	6	8	19	4	4
Indet. nut fragment							1	
Indet. tuber/rhizome							5	
Indet. specimens	9	1	1		3	4		
Total number of specimens		285	2040	2345	943	737	407	496
Context No.		**64**	**604**	**635**	**636**	**842**	**916**	**1114**
Sample No.		5	252	235	234	223	240	77
Volume of soil processed (litres)		2	2	6	8	6	2	6
Percentage of 1mm floated fraction sorted		100	100	25	100	25	100	100
Percentage of 300m floated fraction sorted		100	100	13	100	25	50	50
Concentration of carbonised remains (specimens/litre)		143	1019	390	118	123	203	83

The free-threshing wheat *T. aestivum*(/*compactum*) (bread/club wheat) was represented by internode fragments and grains. It is highly probable that the tough rachis internodes also represent bread/club wheat. Although the numbers of bread/club wheat chaff fragments are significantly lower than those for spelt, it should be noted that free-threshing cereals leave fewer archaeological traces - only one internode for approximately every three grains (glume wheats such as emmer and spelt, however, have approximately one glume base for every grain - cf. van der Veen 1992). Additionally, free-threshing cereal rachis fragments are more prone to loss through charring than glume wheat chaff (Boardman and Jones 1990). Therefore, the importance of bread/club wheat is likely to be under-represented. The evidence for the cultivation of bread/club wheat is, therefore, good.

Most of the grains were identified to *T. spelta* and/or *T. aestivum*(/*compactum*) type. Only three grains possessed evidence of the the prominent dorsal ridge which is more

typical of emmer and, once again, it is not improbable that these grains represent one end of the variation in morphology that is encountered within a population of spelt.

Barley was recovered from all seven contexts. Well preserved internodes of *Hordeum vulgare* L. (hulled six-row barley) were recovered from contexts 614, 635, 636, 916 and 1114 . Low frequencies of barley grains were also noted (including twisted and straight grains).

Avena sp(p). (oat) grains were recovered from contexts 604, 635, and 842 and fragments of oat awn from all the contexts. It is not possible to determine whether these remains represent the cultivated oat, *A. sativa* L., or the wild oat, *A. fatua* L. (which grows commonly as an arable weed) as no floret bases (which would allow for precise identification) were recovered.

Other 'Economic' Taxa

A single specimen *Vicia faba* L. (horse bean) was recovered from context 636.

A single *Daucus carota* L. (wild carrot) seed was recovered from context 604. Although it is possible that this species was cultivated or collected, *D. carota* is also often found as an arable weed and is most likely to be a weed in this context, i.e. found accompanying cereal remains.

The most abundant 'wild' grass taxa recovered was *Bromus mollis/secalinus*. Although this commonly grows as an arable weed, it is known to have been used as a famine crop in recent history (M. Jones 1981).

The Economic Taxa in Relation to their Archaeological Period

The dominance of spelt wheat in the samples from Stainfield is entirely consistent with other archaeobotanical assemblages from the Iron Age and Roman periods in Britain. For the Roman period in particular, spelt is the most commonly recovered wheat species (M. Jones 1981). Emmer wheat, the presence of which can not be discounted at Stainfield, is more prevalent in the earlier prehistoric periods, but is not uncommon at this stage (M. Charles pers. comm.). Although bread/club wheat is present in Britain in small quantities from the Neolithic onwards, it is not thought to have become a crop in its own right until the late Roman and Anglo-Saxon periods (M. Jones 1981, 1982). The presence of

bread/club wheat in significant quantities perhaps reflects a later Roman date for the contexts.

Hulled six-row barley and horse bean are both well known from Iron Age and Roman period sites in Britain.

Ecological Preferences of the 'Economic' Taxa

Spelt is generally considered to be a comparatively hardy wheat (in comparison with emmer, for example) and is noted for its tolerance for cold, wind, diseases and pests. It is also fairly adaptable and will grow on both heavy and dry lighter soils (Jones 1981). Bread/club wheat is also comparatively tolerant of frost (it is winter hardy) and damp heavy soils. The increased importance of both spelt and bread wheat in the late Iron Age and Roman periods has been linked with the expansion of agriculture in those periods onto 'marginal' types of soil (e.g. heavy clays) (M. Jones 1981; 1982). Bread/wheat has certain advantages over glume wheats. It is high-yielding and, as a free-threshing cereal, is easier to clean and also to transport (although there can be greater losses of grain when the sheaves are taken the short distance to the threshing ground) and has different baking qualities. It does, on the other hand, have disadvantages because it is generally a poor competitor with weeds, more prone to predation, and needs a greater soil fertility than other wheat species (Jones 1981; van der Veen 1992). The reasons for the adoption of bread/club wheat in the later Roman and Anglo-Saxon periods are consequently complex and not purely linked to its ecological advantages.

Barley is a very adaptable cereal, it can be cultivated on heavy and light soils and is tolerant of drought and saline conditions. In Britain, it is only restricted in areas of poor drainage and in acid soils with a pH less than 6.

The Carbonised Wild Taxa

The composition of the samples is very similar to 'weeds' found accompanying ancient cereal remains from Roman sites across England (e.g. van der Veen 1992 for northern England). *Bromus mollis/secalinus* (brome), *Rumex* spp. (docks) and small legumes (see below) were the most common 'wild' taxa. *Avena* sp. grains were recovered from four contexts and *Anthemis cotula* (stinking mayweed) and *Tripleurospermum inodorum* (scentless mayweed) from three and two contexts respectively. *Chenopodium album* (fat hen) and *Atriplex* spp (orache) were present in four contexts. There were single occurrences of *Ranunculus* sp. (buttercup), *Trifolium* sp. (clover, trefoil), *Daucus carota* (wild carrot), *Polygonum aviculare* (knotgrass), *P. persicaria* (red shank), *Rumex acetosella* (sheep's sorrel), *Odontites verna* (red bartsia), *Plantago lanceolata* (ribwort), and *Galium aparine* (goosegrass). Two *Carex* (sedges) species were also represented.

In addition to the above, three legume species were tentatively identified to species: *Lathyrus* cf. *nissola* (grass vetchling), *Vicia* cf. *tetrasperma* (smooth tare), and *Vicia* cf *hirsuta* (hairy tare). It is likely that the seeds in the category 'legume 1-2mm' also belong to these species, but they did not possess a hilum - the main feature that usually facilitates more precise identification (Gunn 1968; 1970). One seed of *Silene* cf. *vulgaris* (bladder campion) was also tentatively identified in context 916. All four species can be found today in arable fields.

The habitats and ecological preferences of the carbonised wild taxa identified to species are considered below.

The Ecology of the Carbonised Wild Taxa

The individual ecological preferences of the wild taxa recovered from Stainfield were examined using the summary data collected by Ellenberg for central European species (1950: 1979). Unfortunately, no such summary exists for the British flora, but Ellenberg's information has been successfully used in the study British charred seed assemblages (e.g. van der Veen 1992). Ellenberg summarised the behaviour of species in relation to their climatic and edaphic preferences by reference to a scale of 'indicator' values. In this report, only Ellenberg's indicator values for the edaphic preferences of species are used. There are three factors under consideration: soils moisture, soil pH and the availability of nitrogen in the soil. The indicator values range from 1 to 9 (except in the case of moisture where the scale is extended to include aquatic plants). For pH, '1' is the indicator value for plants preferring very acid conditions whereas, at the other end of the scale, '9' denotes a strong preference is for neutral or basic soils. In terms of moisture, '1' represents the very driest conditions and '11' represents aquatic species. Finally, plants found on soils which are very poor in nitrogen have an indicator value of '1' whereas '9' represents plants preferring very nitrogen rich situations. The values for the taxa identified to species at Stainfield are shown in Table 2.

Table 2. Ellenberg's Indicator Values for Taxa Recovered from Stainfield.
(For explanation of numbers see text and Ellenberg 1979; x = species indifferent.)

	Moisture	Acidity	Nitrogen
Ellenberg Indicator Values	**F**	**R**	**N**
Chenopodium album L.	4	x	7
Atriplex spp.	5	7	7
Daucus carota L.	4	x	4
Polygonum aviculare agg.	x	x	x
Polygonum persicaria L.	3	x	7
Rumex acetosella agg.	5	1	2
Odontites verna (Bell.) Dum.	5	x	x
Plantago lanceolata L.	x	x	x

Galium aparine L.	x	6	9
Anthemis cotula L.	7	4	x
Tripleurospermum inodorum Schultz Bip.	x	6	6
Bromus mollis/secalinus	x	x	x

Most of the taxa identified to species prefer comparatively drier to fresh soils. The main exception is *Anthemis cotula* (stinking mayweed) which has a preference for wet soils such as heavy clays and clay loams. It is a typical component of late Iron Age and Roman plant assemblages (cf. M. Jones 1981; 1984; van der Veen 1992) and its appearance, dating from the late Iron Age onwards, is thought to reflect an expansion in the cultivation of clay soils (M. Jones 1981).

Most of the identified species prefer weakly acid to pH neutral soils. *A. cotula* is one again the exception along with *Rumex acetosella* (sheep's sorrel) which prefers very acidic conditions.

Galium aparine (goosegrass), *Polygonum persicaria* (red shank), *Chenopodium album* (fat hen), and *Atriplex* spp. (oraches) all prefer soils which are rich in mineral nitrogen. The presence of these species and bread/club wheat possibly indicates the cultivation of comparatively fertile soils or that manuring was practiced. *R. acetosella* and *D. carota*, however, prefer less 'favourable' conditions.

The majority of the weeds identified to species prefer comparatively good soils - not wet, pH neutral and comparatively fertile. Furthermore, the most common taxa are included in this group. There are, however, three types which prefer wetter, more acidic and less fertile conditions and may indicate the cultivation of poorer soils. *A. cotula* and *Carex* spp. (sedges) are both indicative of wetter environments and *Rumex acetosella* is a strong indicator of acidity. Their inclusion in the assemblage may, however, be the result of localised variabililty in growing conditions, or 'chance' inclusion, rather than the more extensive cultivation of poorer soils. It is probably significant that these species are comparatively rare - *Rumex acetosella*, for example, is represented by a single specimen. Finally, it should be stressed that Ellenberg's indicator values reflect preference rather than tolerance and it is, consequently, possible find plants growing in conditions which are suboptimal to their physiological requirements.

Most of the wild taxa are commonly found in arable fields. *Rumex acetosella*, however, is today normally found growing on moorland but its occurrence in archaeobotanical

assemblages is quite common (van der Veen 1992). The inclusion of *Carex* species in archaeobotanical assemblges and absence in contemporary fields has been linked to improved drainage conditions (Jones 1984, 1988a and 1988b).

Crop Management

Examination of the germination times of wild taxa found occurring alongside ancient charred cereal assemblages can indicate whether the crop was autumn or spring sown. Table 3 lists the life form (annual/perennial) and the preferred time of germination for the wild taxa identified to species recovered from Stainfield.

No taxa identified to species solely germinate in the autumn (*Lathyrus nissola* - which was not securely identified - does germinate in the autumn). A number of species can germinate in both the autumn and the spring. The apparent absence of taxa which solely germinate in the autumn indicates, however, that spring sowing is more likely. If this were the case, it is contrary to the assumption that spelt, in particular, was autumn sown (cf. M. Jones 1981). In addition, it has recently been noted that spring and autumn sown varieties of spelt do exist (and have successfully been cultivated at Butser, Hampshire) (van der Veen 1992). The material from Stainfield would seem, tentatively, to add weight to the suggestion that spelt wheat was not always winter sown.

Table 3. Preferred time of germination for the wild taxa according to the Ciba-Geigy Weed Tables (Häfliger and Brun-Hool 1968-1977; van der Veen 1992).

	Annual			Perennial
	Spring	**Both**	**Autumn**	
Chenopodium album	*			
Atriplex spp.	*			
Daucus carota	*			
Polygonum aviculare	*			
P. persicaria	*			
Rumex acetosella				*
Rumex spp.				*
Odontites verna		*		
Plantago lanceolata				*
Galium aparine		*		
Anthemis cotula	*			
Tripleurospermum inodorum			*	
Bromus mollis/secalinus	*			
Carex spp.				*

It has been noted that the high nitrogen preferences of some of the wild taxa may suggest that manuring was practised. Bread/club wheat may also reflect fertile growing conditions. M. Jones has suggested that bread/club wheat was favoured when it was possible and desirable to invest the greater amounts of fertiliser and time (e.g. for weeding) that are necessary to obtain the high yield potential of bread wheat (1981, 107).

Crop Processing

Extensive work on the processing required to clean a crop has been conducted by Hillman (1981, 1984) and G. Jones (1984). They recognised, by comparison with modern traditional crop processing activities, that each stage in the crop processing sequence has a characteristic grain, straw, chaff, and weed seed composition. For example, winnowing removes light chaff fragments and weed seeds and coarse sieving removes large weeds and straw nodes. Since this pioneering work, it has frequently been noted that archaeobotanical assemblages are similar in composition to the latter stages of crop processing and specifically, the by-products from fine sieving. The cleaned product is also recovered, although generally less frequently.

In order to assess the stage/s of the crop processing sequence to which the samples from Stainfield correspond, ratios were calculated of the major sample constituents (grains, cereal chaff parts and weed seeds). Ratios were calculated for the number of glume bases

to glume wheat grains, the number of free-threshing (tough) rachis internodes to grains, and weed seeds to grains. In the case of the glume wheat emmer and spelt, the ratio of glume bases to grains is generally 1:1 (although it can be 1.5:1 for spelt - M. Charles pers. comm.) whereas for the free-threshing cereals (six-row barley and bread/club wheat), the ratio of internodes to grains is 3:1 (van der Veen 1992). If the ratio of chaff to grains is equal to 1:1 or 3:1, then it is likely that the remains represent whole unprocessed cereal heads/spikelets. If the ratios of chaff to grains is greater then the remains probably represent a by-product of cleaning whereas if there are more grains then the samples are likely to represent a cleaned product. For the ratio of weed seeds to cereal grains, more weeds than grain is taken to indicate the presence of a cleaning residue. Problems were encountered whilst calculating these ratios because most of the wheat grains had not been differentiated to species type. As a consequence, the cereal grain to chaff ratios were calculated using, for the glume wheats and free-threshing cereals, all the indeterminate grains (*Triticum spelta/aestivum* type and Cerealia indet.) plus the grains which had been identified to type (glume wheat or free-threshing cereal). The ratios, therefore, represent the minimum numbers of chaff fragments in comparison with the maximum numbers of grains. This biases the results in favour of identifying a cleaned product. The ratios are listed in Table 4.1-4.3 below.

Table 4.1 Ratio of glume bases to grains.

Context No.	Glume Bases:Grains (whole spikelet1:1)
64	2.8:1
604	6:1
635	11.9:1
636	12.2:1
842	5.8:1
916	12.2:1
1114	13:1

Table 4.2 Ratio of rachis internodes to grains.

Context No.	Grains:Rachis Internodes (whole spikelet3:1)
64	164:0
604	2.5:1
635	1.5:1
636	2.1:1
842	5.5:1
916	1.4:1
1114	1.2:1

Table 4.3 Ratio of weeds to grains.

Context No.	Weed Seeds:Cereal Grains
64	0.4:1
604	0.4:1
635	0.5:1
636	0.5:1
842	0.5:1
916	1:1
1114	0.8:1

From the chaff:grain ratios, the remains recovered from context 604, 635, 636, 842, 916 and 1114 appear to represent cleaning residues, although there is some context 842 is slightly ambiguous. If the indeterminate grains in context 842 all represent a free-threshing cereal, then it could be that this sample represents a cleaned product or unprocessed crop. Given the high number to glume bases associated with this sample, however, it is perhaps more likely that the remains once again represent a cleaning residue. The remains from sample 64, on the other hand, are more consistent with a cleaned product. Contrary to the chaff:grain ratios, the weed seed to grain ratios appear to indicate that almost all the contexts represent a cleaned product. The overwhelming presence of chaff in most of the samples, however, would appear to contradict this. It is possible that the cultivated areas were not heavily weed infested and/or that weeding was practiced (see above).

The Archaeological Context of the Carbonised Plant Remains

The types of contexts (according to the excavators' criteria) from which the plant remains were retrieved are listed in Table 5.

Table 5. Context Types and the Carbonised Plant Remains

Context	Area	Context Type
64	A	pit fill
604	C	ditch fill
635	C	ditch fill
636	C	ditch fill
842	C	drain fill
916	C	occupation layer
1114	B	pit

Five of the samples with archaebotanical remains were recovered from features in area C. It is in this area that the Roman road and associated buildings are located. It was noted above that the plant remains from these contexts (604, 635, 636, 842, and 916) seem to represent the by-products of crop processing, that is 'waste', and the recovery of these remains probably reflects dumping or accidental disposal of this material. The highest concentration of carbonised plant remians were recovered from contexts 635 and 636 (Table 1). It is interesting that the only contexts defined as 'pits' which yielded carbonised plant remains were located outside area C. The composition of the remains from context 64 (area A) indicate that this pit contained the carbonised remains of a cleaned crop. It would be interesting, therefore, to look at the other artefacts/ecofacts recovered from this feature to assess whether the pit was used for storage. The second pit (context 1114), however, appears to contain cleaning residues rather than a cleaned crop.

Conclusions

From the 83 samples collected for analysis from Hangman's Lane, Stainfield, only seven yielded sufficient remains for further analysis (a factor partially influenced by small sample size).

The dominant cereal in the fully analysed samples was spelt wheat. Bread/club wheat was also present in significant quantities and six-row barley as a minor component. Although some of the chaff fragments possessed characteristics similar to emmer wheat, no secure identifications could be made. Relatively low numbers of wild taxa were recovered, but they represented a comparatively wide variety of species. The ecological preferences of the wild taxa indicate fairly good growing conditions (although a few rare species were present which indicate less favourable soils). There is some indication that the crops were well managed (fertilised and weeded) and that they were spring sown, but the low number of samples involved in the analysis makes these suggestions tentative. The composition of the samples indicates that most of the plant remains represent residues from crop cleaning. One sample, associated with a pit, appeared to be the remains of a cleaned crop.

From the carbonised plant remains, it is tentatively suggested that the site at Hangman's Lane, in part at least, appears to have been a 'good farm'.

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Appendix 5

Hangman's Lane Stainfield (SHR93) : Roman Pottery Assessment

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CLAU, 14th November 1994

Introduction

It has been noted (Jones 1993) that the site at Stainfield is a Roman Roadside Settlement. Two recent publications have focused on this type of site (Smith 1987 & Burnham and Wacher 1990). Jones (*ibid.*) states that although this type of settlement exists in great number in Britain, few have been investigated to any large extent, especially those like Stainfield which were never defended. There are therefore many questions which need to be asked about their origins, layout and function, some of which can be answered by the large pottery assemblage from Stainfield.

Preliminary observations indicate that the early pottery from Areas A and B (particularly A) differ markedly from that from Area C. The pottery as a whole is very important for the understanding of the local and regional distribution of wares, especially that from the late Iron Age and Conquest period; in particular the fact that there appears to be a continuum within the pottery production into the second century. The later pottery is also important for comparison with the distribution of products of the Nene Valley and related industries, especially the precursors to the main second century production. The material from Hangman's Lane is of significant importance because of the unique range of new fabrics and forms that are emerging, and also because there is little or no comparative material published from this area. The format for this report conforms with that of MAP2 and is listed below (see points 1 - 4).

1.
Factual Data (Map2 A4.1)

1.1(i) Quantity of material (Map2 A4.1.1(i))

The excavation produced a very large assemblage of Late Iron Age and Roman pottery (24 large boxes - the equivalent of 48 CLAU boxes) comprised of 7455 sherds in total with an additional quantity of unstratified miscellaneous body sherds, mainly grey and shell-tempered wares, weighing 16.5 kilogrammes.

1.1(ii) The provenance of the material (Map2 A4.1.1(ii))

Excavation of the area resulted in a site with complex archaeology which was divided into three areas (A, B, and C). There is evidence of Iron Age activity suggested by three penannular gulleys. The Roman archaeology is comprised of a series of drainage and boundary ditches and rubbish pits together with several prominent features including the Roman road - King Street, structures and a cemetery. Examination of the condition of the pottery (Appendix 1) indicated that many of the deposits contained pottery of mixed dates, which demonstrates the complexity of the archaeology. This is further emphasised by the numerous sherd joins throughout the stratigraphy (see Appendix 2). As this report is an assessment the discussion of the provenance of the pottery is confined to a preliminary

investigation of the main areas (A, B, C & unstratified layers). A detailed study of the stratigraphic relationships between the pottery and the site is recommended to be undertaken at a later level (see below - Point 2: Statement of Potential). Table 1 (below) details the distribution of the pottery by area, showing that Area C produced the largest assemblage, followed by Area B.

TABLE 1: SHR93 LATE IRON AGE AND ROMAN POTTERY - Distribution by area based on number of sherds

Area	No shs	Percent
A	796	10.68%
B	1898	25.46%
C	2942	39.46%
Unstrat+	259	3.47%
Unstrat A	152	2.04%
Unstrat B	541	7.26%
Unstrat C	788	10.57%
Unstrat MT	11	0.15%
Unstrat X	68	0.91%
TOTAL	7455	100.00%

Dating

The pottery date of the site ranges from the Late Iron Age to the late - very late 4th century, but with some diversity in the different areas. Within the stratified contexts there are six Roman coins, five samian stamps, a Parisian ware stamp, and one amphora stamp which, after specialist identification, may help to refine the dating of the ceramics.

Area A

Table 2 (below) demonstrates that the date range is limited in this area from the Late Iron Age to the mid 3rd century or later, with no definite 4th-century occupation. The main emphasis lies in the mid to late 2nd to the early to mid 3rd century, or possibly later. In comparison with Areas B & C, there is a slightly higher percentage of Late Iron Age to mid 1st-century pottery, although it forms a small amount of the total assemblage. There is a moderate amount of 1st and later 1st to 2nd-century pottery and a relatively large quantity of 2nd, particularly early to mid 2nd-century wares. Overall, there appears to be a continuum in the ceramic wares, the details of which will become more apparent with further research.

TABLE 2: SHR93 LATE IRON AGE AND ROMAN POTTERY - Area A dating based on the percentage of the number of sherds

No shs	Percent	Date
53	6.66%	LIA-M1
9	1.13%	1+
7	0.88%	L1-2
50	6.28%	1-E2

9	1.13%	1-2
3	0.38%	1-2?
78	9.80%	
3	0.38%	2
19	2.39%	2?
11	1.38%	2+
26	3.27%	EM2
87	10.93%	EM2?
14	1.76%	ML2
160	20.11%	
10	1.26%	M2-E3
2	0.25%	M2-3
203	25.50%	ML2-3
19	2.39%	2-3
234	29.40%	
18	2.26%	3
199	25.00%	EM3+
53	6.66%	M3+
270	33.92%	
1	0.12%	RO?
796	100.00%	TOTAL

Area B

Occupation in Area B continued from the Late Iron Age through to the early to mid 4th century. Table 3 (below) shows that although Late Iron pottery is present the quantity is small in comparison with the Roman material. In contrast to Area A, the main period of occupation lay within the 1st and 2nd, centuries, in particular the early to mid 2nd. There is a moderate assemblage of later 2nd to 3rd-century pottery which continues into the later 3rd to the early to mid 4th century. A few sherds of post-Roman material are also present.

TABLE 3: SHR93 LATE IRON AGE AND ROMAN POTTERY - Area B dating based on the percentage of the number of sherds

No shs	Percent	Date
14	0.74%	LIA/M1?
7	0.37%	LIA-M1
3	0.16%	LIA-M1?
33	1.74%	
11	0.58%	M1?
6	0.32%	ML1
26	1.37%	ML1+
9	0.47%	1
13	0.68%	1+
65	3.42%	
7	0.37%	M1-2
54	2.84%	ML1-E2
106	5.58%	ML1-E2?

44	2.32%	L1-E2?
24	1.26%	L1-EM2?
43	2.26%	L1-M2?
30	1.58%	L1-2
28	1.48%	1-E2
72	3.79%	1-2
18	0.95%	1-2+
3	0.16%	1-2?
5	0.26%	1-4
434	22.85%	
2	0.10%	2
7	0.37%	2?
45	2.37%	2+
36	1.90%	E2
12	0.63%	E2?
301	15.86%	E2+
10	5.80%	EM2?
6	0.32%	M2+
11	0.58%	M2+?
3	0.16%	ML2
43	2.26%	ML2+
576	30.35%	
88	4.64%	L2-3
32	1.68%	L2E3
2	0.10%	2-3
122	6.42%	
7	0.37%	M3+
139	7.32%	ML3+
11	0.58%	ML3?
9	0.47%	L3+
54	2.84%	3
4	0.21%	3?
10	0.53%	3+
234	12.32%	
52	2.74%	L3E4
156	8.22%	L3-4
16	0.84%	L3-4/POSTRO
224	11.80%	
172	9.06%	EM4
31	1.63%	RO
7	0.37%	RO?
1898	100.00%	TOTAL

Area C

Although the pottery indicates occupation of this area from the Late Iron Age to the very late 4th century, together with evidence for post Roman activity, there is a later emphasis within the pottery assemblage as a whole. Table 4 (below) shows that in contrast to Areas A and

B there is evidence for very little early Roman occupation. Area C is comparable with Area B in that the main emphasis lies within the early to mid 2nd century, but the quantity is much higher in Area C. There is a moderate amount of 3rd-century material but there is a sharp rise in the amount of pottery dating from the early to mid 4th century suggesting a shift in the occupation of the site. Late to very late 4th-century pottery is present, but only in a very small quantity.

TABLE 4: SHR93 LATE IRON AGE AND ROMAN POTTERY - Area C dating based on the percentage of the number of sherds

No shs	Percent	Date
8	0.27%	IA/RO
16	0.54%	LIA
48	1.63%	LIA-M1
7	0.24%	LIA?-M1
79	2.68%	
2	0.07%	ML1
58	1.97%	L1
8	0.27%	1
5	0.17%	1?
73	2.48%	
37	1.26%	L1E2?
9	0.30%	L1-2
4	0.14%	L1-2?
35	1.19%	1-E2
117	3.98%	1-2
29	0.98%	1-2?
3	0.10%	1-3
234	7.95%	
64	2.18%	E2
129	4.38%	E2+
536	18.22%	EM2
77	2.62%	M2?
45	1.53%	M2+
13	0.44%	ML2
121	4.11%	ML2+
136	4.62%	2
8	0.27%	2?
78	2.65%	2+
1207	41.02%	
28	0.95%	M2-E3
25	0.85%	M2-3
10	0.34%	L2-E3
31	1.05%	L2-3
1	0.03%	2-3?
95	3.22%	
82	2.79%	EM3
25	0.85%	M3?
62	2.11%	M3+

4	0.14%	M3+/POSTRO
97	3.30%	ML3
44	1.50%	ML3+
22	0.75%	3
10	0.34%,3+	
3	0.10%	3/POSTRO
39	1.32%	3+/POSTRO
388	13.20%	
56	1.90%	M3-4
52	1.77%	L3-4
21	0.71%	L3-4/POSTRO
5	0.17%	3-4
134	4.55%	
561	19.07%	EM4
9	0.30%	EM4?
7	0.24%	L-VL4
22	0.75%	4
599	20.36%	
126	4.28%	RO
7	0.24%	RO?
2942	100.00%	TOTAL

Unstratified Pottery

The dating emphasis of the unstratified pottery indicated by Table 5 (below) lies within the early to mid 4th century together with evidence of post Roman occupation; but, as would be expected from such material, there is a very high percentage of residual early pottery. A small amount of 1st and 2nd-century material is present within the unstratified pottery from Area C and the unphased contexts.

TABLE 5: SHR93 LATE IRON AGE AND ROMAN POTTERY - Unstratified pottery dating based on the percentage of the number of sherds

Area/context	No shs	Date
+TT2	7	3+
+	252	EM4/POSTRO
+A	152	EM4/POSTRO
+B	428	EM4
B1	113	EM4
+C	700	EM4
C1	13	2
C2	18	1-2
C4	57	EM4
MT10	11	E2+
50	8	1-2
79	6	2
307	7	3
721	6	3+

906	8	L1-2
909	12	M2?
956	11	M2
1181/1182	10	2?

1.1(iii) The range and variety of material (Map2 A4.1.1(iii))

At least thirteen new fabrics have been identified within the Stainfield assemblage which form a significant proportion of the total pottery. A brief summary of these fabrics appears in Appendix 3. Some can be paralleled within material from the Nene Valley area but further analysis is required in order to source the wares more precisely. Each of these fabrics produced a range of vessel types, some of which are unique for this area, over 300 vessels in total (see Appendix 4). In view of the large number of unusual vessel types discussion of individual forms will not be undertaken for this assessment report, but will form the body of the future publication. The following discussion will concentrate on the function of the pottery from each Area, which has been arrived at by assigning a particular function to the fabric and form of each identifiable vessel - an extended version of the format established by Greene (Greene K. 1993).

a(i) Fabrics Area A

Table 6 (below) illustrates the range of fabrics from Area A. Imported wares (*) form a very small percentage, nevertheless the presence of these fabrics are indicative of some status. The majority consist of samian from Central Gaul (SAMCG) of mid to late 2nd-century date, with a smaller proportion from South Gaul (SAMSG) dating to the 1st century. There is a single sherd which might be from the early 2nd-century kilns at Les Martres de Veyre (SAMLM). A small amount of Dressel 20 amphorae from Southern Spain (DR20) make up the rest of the imported assemblage. A sherd of colour-coated ware may be from Cologne (KOLN), but the identification is less certain.

Wares which travelled some distance are limited to a single sherd of BB1 from Dorset. Products which can be assigned a definite source consist of a small amount of colour-coated wares (NVCC) and, to a slightly larger extent, grey wares (NVGW) from the Nene Valley kilns. Pottery containing similar inclusions to that of the Nene Valley products, but with matt grey surfaces and grey cores (NVGY), have been noted in the Peterborough area and are thought to be precursors to the mainstream Nene Valley production. Although initially separated, a further group of grey wares (SLGY) which contain similar inclusions but also occasional larger more rounded quartz could probably be amalgamated into one broad fabric group. This group would fit within fabric group A3 which Lindsay Rollo uses for material from the Nene Valley area. These two groups form the second largest group of fabrics. Other fabrics which are present in a small proportion and which may also be part of the Nene Valley repertoire include a cream ware (SLCR) with similar quartz inclusions to that of NVGY, two sherds of rough-cast colour-coated ware (RC), and a slightly larger amount of wares in a fine grey ware fabric (SLGFIN).

In marked contrast to both Areas B & C, by far the largest single fabric group consists of wares that are handmade in a native tradition with grog-tempering and/or shell-tempering that

has decayed (SLGR). Similar fabrics have been identified in the Nene Valley area (pers.comm. Lindsay Rollo) but they are rare. Wheelmade vessels also in a grog-tempered fabric form the third largest fabric group (GRWM). These two wares may well be related as although the latter are wheelmade the style is of native tradition. Clearly the use of the wheel suggests a refinement of the technology and was probably a result of Romanisation. It is likely that the wheelmade product was a later development of the handmade wares, and both may have been locally produced. Further analysis of the fabrics and refinement of the typology would help to identify a source for these wares.

Unsourced wares that occur in very small amounts consist of: cream (CR) and fine grey wares (GFIN); light grey wares (GRLT); oxidised (OX) and pink (PINK wares; and miscellaneous wheel made grey wares (GREY). The only evidence from Area A for mortaria is a single sherd of an unsourced example. Unlike Areas B & C obvious shell-tempered pottery is absent.

TABLE 6: SHR93 LATE IRON AGE AND ROMAN POTTERY - Area A Fabrics as a percentage of the number of sherds

No shs	Percent	Fabric
1	0.12%	BB1
4	0.50%	CR
9	1.13%	DR20*
1	0.12%	GFIN
36	4.52%	GREY
2	0.25%	GRLT
96	12.06%	GRWM
27	3.39%	GRWM?
1	0.12%	KOLN?*
1	0.12%	MORT
28	3.52%	NVCC
57	7.16%	NVGW
2	0.25%	NVGW?
142	17.84%	NVGY
1	0.12%	NVGY?
11	1.38%	OX
11	1.38%	PINK
2	0.25%	RC
13	1.63%	SAMCG*
1	0.12%	SAMCG?*
1	0.12%	SAMLM?*
5	0.63%	SAMSG*
12	1.51%	SLCR
1	0.12%	SLCR?
33	4.14%	SLGFIN
2	0.25%	SLGFIN?
207	26.00%	SLGR
17	2.14%	SLGR?
65	8.16%	SLGY
7	0.88%	SLGY?

796	100.00%	TOTAL

a (ii) Fabrics Area B

Imported wares, as indicated by Table 7 (* - below), appear to form a higher percentage of the total assemblage within Area B than in Area A but this is due to the presence of a single Dressel 20 amphora from context group 2218 (246 sherds). Even so, there are clearly more of this type of amphora from Area B than in Area A. There are also two sherds of possible amphorae, one of which may be a Gauloise 4, from Southern Gaul. Unlike Area A, there is a higher amount of South Gaulish samian in Area B than Central Gaulish examples and also a securely identified sherd from Les Martres de Veyre. A possible sherd of Pompeian red ware (PRW) completes the imported assemblage.

In common with Area A, wares from Area B which travelled some distance are confined to two sherds of BB1 and a possible sherd of Verulamium region white ware (VRW). Similar to Area A, the principle sourced ware from Area B consists of products from the Nene Valley, but the incidence of Nene Valley colour-coated ware is higher in Area B, and the presence of NVGY & SLGY is considerably reduced - perhaps reflecting the earlier emphasis of these fabrics. These wares include NVGW; SLCR; SLGFIN; and a single sherd of possible Nene Valley mortaria. The incidence of mortaria is slightly higher in Area B and includes a possible Mancetter Hartshill example (MOMH).

The largest single group of wares from Area B consists of unsourced, but probably local, wheelmade grey wares (GREY). This is in marked contrast to Area A and is probably a reflection of the dating. Grog and/or shell-tempered pottery both hand and wheel made (SLGR & GRWM respectively) are present in Area B but form a significantly smaller proportion of the total assemblage than in Area A. Area B also differs markedly from Area A by the relatively high presence of obvious shell-tempered wares, which were probably locally made. These include variants of a single fabric with fine, medium and coarse shell-tempering (SLSH). Similar fabrics have been noted on other Fen Edge sites. Clay beds have been identified with all three types of shell in them, therefore it seems that the shell is occurring naturally in the clay and is not necessarily added (pers. comm. L. Rollo). Other shell-tempered products include miscellaneous shelly wares (SHEL), two sherds of probable South Midlands shell-tempered ware (SMSH), and a small group of grog and shell-tempered pottery. The latter also occurs in the Nene Valley area but is rare (pers. comm. L. Rollo).

The remainder of the total assemblage is made up by a small group of unsourced wares, cream, fine grey and oxidised wares.

TABLE 7: SHR93 LATE IRON AGE AND ROMAN POTTERY - Area B Fabrics as a percentage of the number of sherds

No shs	Percent	Fabric
1	0.05%	AMPH?*
1	0.05%	BB1
1	0.05%	BB1?
31	1.63%	CR
1	0.05%	CR?

299	15.75%	DR20*
1	0.05%	GAU4?
3	0.16%	GFIN
280	14.75%	GREY
3	0.16%	GREY?
1	0.05%	GROG
2	0.10%	GROG?
15	0.79%	GRSH
1	0.05%	GRSH?
117	6.16%	GRWM
16	0.84%	GRWM?
2	0.10%	MOMH?
1	0.05%	MONV?
2	0.10%	MORT
2	0.10%	MORT?
121	6.38%	NVCC
5	0.26%	NVCC?
42	2.21%	NVGW
2	0.10%	NVGW?
142	7.48%	NVGY
10	0.53%	NVGY?
48	2.53%	OX
3	0.16%	OX?
1	0.05%	PRW?*
14	0.74%	SAMCG*
1	0.05%	SAMCG?*
1	0.05%	SAMLM*
21	1.11%	SAMSG*
4	0.21%	SAMSG?*
44	2.32%	SHEL
2	0.10%	SHEL?
51	2.69%	SLCR
7	0.37%	SLCR?
91	4.79%	SLGFIN
16	0.84%	SLGFIN?
130	6.85%	SLGR
24	1.26%	SLGR?
84	4.42%	SLGY
22	1.16%	SLGY?
88	4.64%	SLSH
49	2.58%	SLSHC
91	4.79%	SLSHF
1	0.05%	SLSHF?
1	0.05%	SMSH
1	0.05%	SMSH?
1	0.05%	VRW?
1898	100.00%	TOTAL

a (iii) Fabrics Area C

Although there are some similarities between Area C & B the overall composition of the Area C assemblage has a later emphasis. In terms of quantity Area C produced the largest group. Although there are, in some cases, substantially more sherds of certain wares than in either Area A or B, the percentages may appear smaller when considered as a proportion of the total assemblage from Area C. Table 8 (below) shows that imported wares (*) continue to form only a small proportion of the total assemblage, but with some clear differences to that from both Areas A & B. Dressel 20 amphorae form the only imported amphorae type and samian from South Gaul is less well represented than that from Central Gaul. Unlike either Areas A or B, Area C produced the only East Gaulish samian from the site. Although only represented by a few sherds it reflects the later bias of the Area. Other imported wares consist of a small proportion of possible Cologne colour-coated ware and the presence for the first time on the site of Moselle Keramik from the Rhineland.

In common with Areas A & B BB1 continues to be the only evidence for wider trade within Britain and Nene Valley products the largest group of sourced wares. All the fabrics assigned to this area of production from the previous areas are present, however in Area C Nene Valley grey wares (NVGW) are almost as common as the colour-coated wares and Nene Valley grey colour-coated wares (NVGCC) are represented for the first time. Area C produced the largest quantity of mortaria, mainly Nene Valley products but also probable Mancetter Hartshill examples. Other fabrics that appear for the first time include a few sherds of Parchment and Parisian type wares (PARC & PART respectively); the latter may have a source in the Market Rasen area but similar fabrics are known in the Nene Valley. Both these wares are generally ascribed a late Roman date and may be a reflection of the later emphasis of Area C.

Unsourced grey wares (GREY) form by far the largest single group.
The incidence of these fabrics rises considerably in Area C when compared with the other Areas. There appears to be a progression from Area A, where they are only present in a small quantity through to Area B where they also form the largest single group. This is clearly a dating factor, which will become more apparent when the pottery is analysed with the site phasing. Several subgroups emerge within the grey wares, one of the most distinctive being a well made group of dark grey surfaced wares with a very gritty fabric, which is most common in Area C. There appears to be a *service set* from Area C in this fabric consisting of a flask, Dragendorff 27 type cups and several shallow bowls of differing diameters similar to Dragendorff 35/36 forms.

The shell-tempered wares noted in Area B are also present in a large number within Area C, and form the second largest single group. In common with Area B where the grog and/or shell tempered wares noted in Area A were rare, in Area C they consist of a mere 23 sherds. The remaining assemblage is composed of a few miscellaneous colour-coated, cream, light grey and oxidised wares.

TABLE 8: SHR93 LATE IRON AGE AND ROMAN POTTERY - Area C Fabrics as a percentage of the number of sherds

No shs	Percent	Fabric
1	0.03%	BB1

1	0.03%	BB1?
1	0.03%	CC
1	0.03%	CC?
17	0.58%	CR
50	1.70%	DR20*
38	1.29%	GFIN
845	28.73%	GREY
57	1.94%	GREY?
9	0.31%	GRLT?
1	0.03%	GROG
4	0.14%	GRWM?
5	0.17%	KOLN?*
2	0.07%	MOMH?
10	0.34%	MONV
4	0.14%	MOSL*
156	5.30%	NVCC
8	0.27%	NVCC?
8	0.27%	NVGCC
2	0.07%	NVGCC?
167	5.68%	NVGW
2	0.07%	NVGW?
213	7.24%	NVGY
107	3.64%	NVGY?
89	3.03%	OX
8	0.27%	OX?
5	0.17%	OXWS
2	0.07%	PARC
1	0.03%	PART
1	0.03%	PART?
6	0.20%	PINK
21	0.71%	SAMCG*
17	0.58%	SAMCG?*
2	0.07%	SAMEG*
1	0.03%	SAMEG?*
3	0.10%	SAMLM?*
16	0.54%	SAMSG*
1	0.03%	SAMSG?*
297	10.10%	SHEL
21	0.71%	SHEL?
15	0.51%	SLCR
8	0.27%	SLCR?
61	2.07%	SLGFIN
23	0.78%	SLGFIN?
18	0.61%	SLGR?
85	2.89%	SLGY
72	2.45%	SLGY?
120	4.08%	SLSH
1	0.03%	SLSH?
182	6.19%	SLSHC

131	4.45%	SLSHF
22	0.75%	SLSHF?
3	0.10%	SMSH?
2942	100.00%	TOTAL

a (iv) Fabrics Unstratified

Appendix 5, which lists the unstratified fabrics by area, shows that the composition of the unstratified pottery is very similar to that from the stratified layers. The exceptions being the first presence of a possible Haltern 70 amphora and London type wares from Area C, and Koan amphora together with sherds of mortaria from a Gaulish source (MOGA) from Area B. When viewed as a total assemblage (Table 9 & 10 - below), as would be expected, grey wares form the largest single group, but there is a much higher percentage of Nene Valley colour-coated ware within the unstratified material when compared with the stratified assemblages. This is also the case with both cream and oxidised wares and there is also a greater variety within the mortaria group. Samian is also much more abundant within the unstratified material with Central Gaulish sources being the most common followed by South Gaulish examples, and a few sherds from East Gaul. The presence of shell-tempered wares is much higher within the unstratified assemblage but broadly comparable with the stratified material and the presence of grog and/or shell-tempered pottery fits with the stratified assemblages from Area B & C but is much lower than in Area A.

TABLE 9: SHR93 LATE IRON AGE AND ROMAN POTTERY - Unstratified Fabrics as a percentage of the number of sherds

No shs	Percent	Fabric
1	0.05%	BB1
1	0.05%	CC
1	0.05%	CC?
98	5.39%	CR
2	0.11%	CR?
51	2.80%	DR20*
2	0.11%	GFIN
546	30.02%	GREY
8	0.44%	GREY?
5	0.27%	GROG
69	3.79%	GRSH
8	0.44%	GRWM
5	0.27%	GRWM?
2	0.11%	H70?*
1	0.05%	KOAN*
2	0.11%	KOAN?*
1	0.05%	LOND
4	0.22%	LOND?
3	0.16%	MOGA*
4	0.22%	MOMH
1	0.05%	MOMH?
5	0.27%	MONV

7	0.38%	MORT
3	0.16%	MORT?
293	16.11%	NVCC
11	0.60%	NVCC?
16	0.88%	NVGCC
54	2.97%	NVGW
3	0.16%	NVGW?
47	2.58%	NVGY
6	0.33%	NVGY?
135	7.42%	OX
13	0.71%	OX?
3	0.16%	OXWS
4	0.22%	PARC
4	0.22%	PART
1	0.05%	PART?
12	0.66%	PINK
1	0.05%	RC
85	4.67%	SAMCG*
1	0.05%	SAMCG?*
3	0.16%	SAMEG?*
42	2.31%	SAMSG*
17	0.93%	SAMSG?*
23	1.26%	SHEL
8	0.44%	SLCR
2	0.11%	SLCR?
6	0.33%	SLGFIN
22	1.21%	SLGR
6	0.33%	SLGR?
20	1.10%	SLGY
25	1.37%	SLGY?
99	5.44%	SLSH
13	0.71%	SLSHC
1	0.05%	SLSHC?
13	0.71%	SLSHFz
1819	100.00%	TOTAL

TABLE 10: SHR93 LATE IRON AGE AND ROMAN POTTERY - Unstratified Fabrics as a percentage of the weight in grammes

Grammes	Percent	Area	Fabric
1380	8.32%	+	GREY
348	2.10%	+A	GREY
4667	28.16%	+B	GREY
2163	13.05%	+B	SHEL
5156	31.10%	+C	GREY
2862	17.26%	+C	SHEL
16576	100.00%	TOTAL	

b (i) Function Area A

Examination of the overall activities that occurred in Area A (Table 11 -below) suggests that the principle use of the pottery was related to cooking and storage. There is a moderate amount of table to kitchen wares but very few table wares. Amphorae and liquid holders are minimal and there is an absence of mortaria. The high amount of drinking vessels appears to be anomalous, given the components of the overall assemblage. Examination of the individual forms shows that the unusually high percentage is due to the fragmentary nature of four individual vessels. When this is taken into consideration the nature of the overall function would fit well with that of a rural native settlement. Most of the pottery is in native tradition, and although there is a small amount of table ware, the absence of Romanised forms such as mortaria and the rarity of flagon types and amphorae, emphasises the rural nature of this area of the site.

TABLE 11: SHR93 LATE IRON AGE AND ROMAN POTTERY - Function of Area A Forms as a percentage of the number of sherds

No shs	Percent	Function
313	39.32%	-
9	1.13%	Amphorae
9	1.13%	Liquid Holders
104	13.06%	Drinking
208	26.13%	Kitchen
94	11.81%	Storage
45	5.65%	Table to Kitchen
14	1.76%	Table Wares
796	100.00%	TOTAL

b (ii) Function Area B

Table 12 (below) illustrates the functional attributes for the pottery from Area B and suggests a different use for this part of the site when compared with Area A. Kitchen and, in particular, storage vessels are much less frequent. Table to kitchen wares are much the same but there is a slight increase in the amount of fine table wares. Liquid holders are also more highly represented and, although only in a small quantity, mortaria are present. Drinking vessels appear to be relatively abundant, but at least 2% of this total is made up by grave goods, in the form of beakers, from context groups 2120 & 2125.

The overall ratio is distorted by the high presence of amphorae, mainly one vessel from a pit fill, context group 2218, nevertheless the presence of these wares together with the higher percentage of table wares and Romanised forms such as flagons and mortaria suggests that the inhabitants of Area B were able to
afford such goods and were clearly more Romanised than those from Area A. This is also borne out by the reduction in the amount of native tradition pottery and the rise in more Romanised forms. Although this is also an indication of the broad dating of the area, it is clear from the above that Area B was of a higher status than that of Area A, more akin to a small Roman town than a rural settlement. The presence of the cemetery which continued the Roman practice of burying grave goods with the bodies also attests to the status of the

site.

TABLE 12: SHR93 LATE IRON AGE AND ROMAN POTTERY - Function of Area B Forms as a percentage of the number of sherds

No shs	Percent	Function
891	46.92%	-
299	15.76%	Amphorae
95	5.01%	Liquid Holders
203	10.70%	Drinking
224	11.81%	Kitchen
53	2.79%	Storage
91	4.80%	Table to Kitchen
42	2.21%	Table Ware
1898	100.00%	TOTAL

b (iii) Function Area C

In comparison with Areas A & B, the functional aspect of the pottery from Area C appears to conform more closely with assemblages from Roman towns in general, with kitchen wares forming the largest group, and with a good representation of the other functional aspects including a relatively high percentage of table wares. The small amount of amphorae from Area C is the only group which would appear anomalous within an assemblage from a substantial Roman town as a higher percentage would be expected from such an assemblage. The later bias of Area C could account for the relatively high amount of fine table wares which includes a high proportion of Nene Valley colour-coated wares, however samian ware is higher in C than in either Areas A or B. Taken together, the overall status of Area C could imply occupation of some refinement.

TABLE 13: SHR93 LATE IRON AGE AND ROMAN POTTERY - Function of Area C Forms as a percentage of the number of sherds

No shs	Percent	Function
1379	46.87%	-
50	1.70%	Amphorae
77	2.62%	Liquid Holders
308	10.47%	Drinking
750	25.49%	Kitchen
78	2.65%	Storage
174	5.91%	Table to Kitchen
125	4.25%	Table Ware
1	0.03%	Ritual
2942	100.00%	TOTAL

b (iv) Function Unstratified

Table 14 (below) lists the function of the unstratified pottery as a whole which, to a large extent , is very similar to that from Area C. However, amphorae, liquid holders and table to kitchen wares form a larger proportion of the total. As is the case with Area C, the overall function of the unstratified material would fit well with an assemblage for a Roman town of some substance, rather than that of a rural settlement.

TABLE 14: SHR93 LATE IRON AGE AND ROMAN POTTERY - Function of Unstratified Forms as a percentage of the number of sherds

No shs	Percent	Function
784	43.15%	-
56	3.08%	Amphorae
144	7.92%	Liquid Holders
246	13.54%	Drinking
220	12.11%	Kitchen
56	3.08%	Storage
197	10.84%	Table to Kitchen
112	6.16%	Table Ware
1	0.06%	Lighting
1	0.06%	Ritual
1817	100.00%	TOTAL

1.1(iv) Condition of the material (Map2 A4.1.1(iv))

Appendix 1 lists the condition of the individual context groups and a number of aspects emerge. In general, the pottery is in good condition and does not require any special storage or conservation. There is evidence for redeposition in that many of the contexts have pottery of mixed dates and a number of sherds, particularly the colour-coated wares, show evidence of abrasion or worn surfaces. However, the latter may also be due to the soil conditions. Evidence of burning, other than that normally acquired during cooking, is present in a relatively large number of contexts. In some cases the wares are very burnt, which suggests that there may have been destruction at some point which was the result of a substantial fire. A more precise understanding of this aspect will result from future analysis with the phased data.

1.1(v) Primary sources and relevant documentation (Map2 A4.1.1(v))

Roman pottery from sites in the vicinity, collated and recorded to the same level as SHR93 and stored in the CLAU database include: Ancaster 1980 (ANC80); Gosberton (GBT92 & GOS93); Market Deeping (MAD91); Mill Drove, Bourne (BMD94); Morton saltern (MOS93); Saltersford: Anglian Water (SAW93); Saltersford Treatment Plant (STP93); Silk Willoughby to Peterborouh pipeline (SWP93). These sites, together with the vast data base of sites excavated within the City of Lincoln, constitute a valuable data base for comparison between urban and rural environments.

Iron Age and Roman pottery from sites in the vicinity held at The City and County Museum (Lincoln), to which we have direct access, include: Bourne kiln material; Old Sleaford;

Sapperton and some of the material from Ancaster. Grantham museum holds a large collection of pottery from Saltersford, some of which appear to be wasters (pers. comm. T Lane).

Published sites from the area, together with forthcoming publications, with particular relevance for mid to Late Iron Age, conquest material and the Nene Valley pottery industries include: *Ancaster* (Todd,1981 & Trollope, 1870); *Bourne* (Swan, 1984); *Camp Hill, Northampton* (Shaw, 1979); *Castor, Normangate Field* (Dannell & Wild, 1971 & Perrin & Webster, 1990); *East Midlands* (Elsdon, 1993); *Great Casterton* (Corder 1951,1954, 1961; Todd, 1968; Perrin, 1981); *Greetham, Rutland* (Bolton,1968); *Haddon by pass - A605/H* (Rollo, forthcoming); *Longthorpe* (Dannell & Wild, 1987); *Mancetter* (Hartley, 1971); *Maxey* (Pryor et al, 1985); *Monument- M97* (Rollo, forthcoming); *Nene Valley* (Hartley, 1960; Howe et al, 1981; Woods, 1974); *Northampton* (Williams, 1974); *Sapperton* (Simmons? forthcoming); *Park Farm, Stanground* (Wild & Dannell, forthcoming);*Wakerley* (Jackson & Ambrose, 1978); *Werrington* (Mackreth, 1988); *Weekley* (Jackson & Dix, 1988).

1.2 Means of collecting the above data (Map2 A4.1.2)

The pottery has been collated and recorded according to level of the City of Lincoln Archaeology Unit's Basic Ceramic Archive (ref. Study Group for Roman Pottery draft guidelines), with the exception of unstratified miscellaneous grey and shell-tempered body sherds which were bulk weighed, not sherd counted. The record was entered into a UNIX based database and consists of the following fields: fabric; form; decoration; number of vessels; drawing status; context join; number of sherds; date; condition; and, where appropriate, weight.

Statement of Potential (Map2 A4.2)

2.1 Aims of the Research (Map2 A4.2.1(i))

2.1.1. In order to resolve the following aims of the research, and to form the basis for new research from the data collection (2.2 -below), it is essential that the Iron Age and Roman pottery assemblage is fully analysed. This requires a detailed study of the fabrics and illustration of the vessels extracted for intrinsic and stratigraphic value (Appendix 4), but full quantification is not necessary. There are 335 forms extracted, although not all of these may require drawing, most are considered to be vital. Analysis of the fabrics (see Appendix 3) would take place in conjunction with the study of the forms. The distribution of the wares should be combined with the site phasing which should be provided in a compatible data base format. It is estimated that this study would involve the following work:

Task	:	Time
Fabric analysis	:	3 days
Illustration	:	33 days
Data analysis	:	3 days
Summary report	:	6 days

2.1.2 To refine the dating of the site and the main Roman road. The site phasing should be provided in a compatible data base format. It is estimated that manipulation of the data base, refinement of the dating evidence, consultation with the site director, and the preparation of this part of the report would take 2 days to complete.

Specialist reports are required for the samian wares, mortaria and for stamped vessels: a locally produced Parisian type fine ware vessel and an amphora, to provide more precise dating evidence. The specialist wares have been extracted and an initial assessment suggests that this would entail approximately 5 days work with perhaps two more days for reports. (This requires clarification with the individual specialists concerned - see Appendix 6).

2.1.3 To clarify the interface between the Iron Age and Roman occupation at Stainfield. To determine cultural affinities and whether there is any evidence for early Roman military occupation. To date, there has been no defined end date for the conquest period or any indication of how long pottery made in the native tradition continued. A more detailed study, in conjunction with the site phasing, of the forms and fabrics of those vessels considered to overlap between the two periods would help to resolve these questions (see 2.1.1 above). Research and consultation with the site director and the preparation of a summary report would take 2.5 days to complete.

2.1.4 To determine the nature and status of the settlement, and the *flourit* of the occupation; to investigate the pottery for any evidence of a major expansion during the 4th century, and to support the idea that market functions had been being decentralised. To determine whether the settlement functioned as a centre for selling and redistributing local agricultural produce. Specialist reports on the samian and mortaria (required for the dating of the site - see above 2.1.2) will provide additional evidence for trade, and also the status of the site. This also applies to the amphorae which, although moderately presented on the site, offer evidence for trade and possible status. The study of the Iron Age and Roman pottery coarse ware assemblage (2.1.1 above) would provide the basis for this investigation at a local and regional level. Research and consultation and the preparation of a summary report would take 2.5 days to complete.

2.1.5 To prepare the results of the aims and objectives for publication; mounting the figures; and consultation with the site director would take 5 days to complete.

2.2. New Research from Data Collection

2.2.1 The study of the Iron Age and Roman pottery assemblage (2.1.1 above) would provide a substantial part of a regional fabric reference collection. The material from Hangman's Lane is of significant importance because of the unique range of new fabrics and forms that are emerging, and also because there is little or no comparative material published from this area. In particular the fact that there appears to be a continuum within the pottery production from the Late Iron Age and Conquest period into the second century. The later pottery is also important for comparison with the distribution of products of the Nene Valley industries, especially the precursors to the main second century production. Initially the fabrics would form part of the City of Lincoln Archaeology Unit's fabric collection with a view to future integration into a regional fabric reference collection. The first element would be

encompassed within the work detailed in 2.1.1 (above) and it is estimated that it would take 0.5 days to integrate within a regional collection.

2.2.2 Shell-tempered wares from this area are difficult to determine, both from the point of view of source and also dating. The large quantity of Iron Age and Roman shell-tempered pottery constitutes a substantial and wide ranging assemblage, which, with the appropriate analysis, would provide the potential for resolving these problems. The results also have national implications in view of the imminent establishment of the National Sherd Collection for Roman pottery, which, in turn, forms the basis for the setting up of Regional Fabric collections.

Examples of the Roman shell-tempered wares should be thin-sectioned or sent for chemical analysis together with the selected Iron Age material to clarify the provenance of these wares. This would form part of an overall project for future publication which would be primarily concerned with the Iron Age shell-tempered wares. Such a project would be of benefit to pottery studies in the Peterborough, Fen Edge, and Lincolnshire area, especially as a possible source could be in the Bourne area. Consultation between all parties would be necessary in order to estimate the scale of the project.

2.3 Potential Value of Data Collection to Local, Regional and National Research Priorities

The Iron Age and Roman pottery assemblage from Stainfield provides an important topographic indicator for the dating and distribution of Nene Valley and related products, both locally (2.3.1), regionally (2.3.2) and nationally (2.3.3); and for the study of the economy and social structure of roadside settlements in the East Midlands.

2.3.1 A number of sites in close vicinity to Stainfield (see above - 1.1(v)) have recently been excavated and the Iron Age and Roman pottery recorded to the same level as the Stainfield assemblage. The resulting database provides a substantial basis for the investigation of the dating and local distribution of Nene Valley and related products. This would provide useful evidence for discerning differences between various types and status of sites; in particular for the study of the economy and social structure of roadside settlements. Primarily a study of the Bourne to Ancaster link between King Street and Ermine Street (Margary, 1973:232-34), where there has been substantial work in the past on the sites and pottery from Bourne, Sapperton and Ancaster, but which require re-evaluation in the light of recent excavation and research. The incidence of Iron Age material from all these site, as well as from Stainfield, suggests a route that was in use in the Iron Age and later utilised in the Roman period. These sites would also form the basis of an East Midlands survey of Iron Age and early Roman pottery, in particular shell tempered wares. It is recommended that these studies are considered as individual projects for future publication, and that a proposal document is prepared to determine the parameters of the projects.

2.3.2 Regionally, the Roman pottery assemblage from Stainfield provides a valuable contrast to the equivalent wares arriving in Lincoln and the Lincoln hinterland. As the Roman pottery from Stainfield has been recorded to the same level as the City of Lincoln material it will be been possible to compare the two sets of data. This data combined with data from the sites mentioned in 1.1(v) could form the basis of a wider study which investigates the interface

between rural settlements and the Colonia at Lincoln. A project proposal should be considered.

2.3.3 The Nene Valley products were distributed nationally, but although the distribution of these wares has been investigated towards the south of the area, to date, there has been no exploration of the distribution northwards (L. Rollo pers. comm.) The results of such an investigation would enhance the understanding of the scale of the distribution of the Nene Valley products and also determine the trade routes through which the wares were marketed.

From the above preliminary investigations it is clear that the Stainfield assemblage has great potential for furthering the understanding of the various products of the Nene Valley industries, trade routes, status differences between rural sites as well as the contrast between the City of Lincoln and its hinterland. Therefore it is recommended that the assemblages of Nene Valley and related products from Stainfield should be analysed in more detail for comparison with kiln products, and for the understanding of the distribution within the Peterborough and Lincoln hinterlands, and the City of Lincoln. This would entail a degree of research and consultation with Lindsay Rollo (Fenland Survey) and Rob Perrin (Central Archaeological Services) who have been collating data on both the chronology and typology as well as the distribution of the Nene Valley industry. A substantial part of this analysis would already have been completed under 2.1.1 (above). A project proposal document should be prepared.

2.4 Integration of Studies of Material Categories (Map2 A4.2.1(ii))

In the past pottery has been viewed in isolation or presented as a separate section within a site report. Whilst this type of presentation is important for the discussion and illustration of purely ceramic parameters the advent of computerised data bases has shown that the understanding of a site is greatly enhanced by the integration of the pottery with other artefactual and ecofactual material. In view of this, points 2.1.1 - 2.1.4 should be considered as part of an integrated study.

2.4.1 The pottery provides the main dating evidence for the site (see 2.1.2 above), but the dating of the site would be enhanced by considering the pottery evidence with the coins and other closely datable small finds.

2.4.2 The understanding of the interface between the Iron Age and early Roman settlement (see 2.1.3 above) would be more clearly understood if the Roman pottery was not viewed in isolation.

2.4.3 Whilst the pottery provides the basis for the determining of the nature of the settlement (see 2.1.4 above) it should not be viewed in isolation. The integration of the data together with all other artefactual and ecofactual finds data within the structure of a phased site database would provide a richer and more cohesive understanding of the settlement through time. Consideration should be given to all the above aspects and time allowed for specialist and site director consultations and integration of reports.

3. Storage and curation (Map2 4.3)

3.1 The Roman pottery should be stored in boxes by context. The specialist wares: amphorae; mortaria; and samian as well as illustrated material should be boxed separately with a list of contents included inside.

3.2 It is recommended that all of this collection be retained for future study to form a substantial part of a regional pottery reference collection; for the study of roadside settlements, in particular the Bourne to Ancaster link between King Street and Ermine Street; and as part of an East Midlands survey of Iron Age and Roman shell tempered wares.

Summary of Recommendations

1 To research, analyse, illustrate, phase, and write a summary report on the Iron Age and Roman pottery assemblage (Ref: 2.1.1) - 45 days

2 The manipulation of a phased data base with the Iron Age and Roman pottery to refine the dating of the site and a summary report (Ref: 2.1.2) - 2 days

3 The specialist identification together with reports on the amphorae, mortaria, and samian wares (Ref: 2.1.2) 7 days (to be confirmed with the appropriate specialists).

4 Research and consultation with the site director and preparation of a summary report to clarify the interface between the Iron Age and Roman occupation of the site (Ref: 2.1.3) - 2.5 days

5 Research and consultation with the site director and preparation of a summary report to determine the nature and status of the settlement (Ref: 2.1.4) - 2.5 days

6 To prepare the results of the aims and objectives for publication; mounting the figures; and consultation with the site director (Ref: 2.1.5) - 5 days

7 The fabrics should be integrated within the CLAU fabric collection (Ref: 2.1.1 & 2.2.1) and be available for future integration within a regional fabric collection (Ref:2.2.1) which would take 0.5 days

8 Thin section and/or chemical analysis of the Iron Age and Roman shell-tempered wares forming part of a wider study of shell-tempered wares from the region (Ref: 2.2.2) - to be discussed and estimated with all parties concerned.

9 Consideration should be given to preparing project proposal documents for: a) a study of the economy and social structure of roadside settlements in the East Midlands (Ref: 2.3.1); b) a survey of the Iron Age and early Roman pottery, in particular the shell-tempered wares, of the East Midlands (Ref: 2.3.1); c) an investigation of the interface between rural settlements and the Colonia at Lincoln (Ref: 2.3.2) d) a study of the distribution and marketing of products and related wares from the Nene Valley kilns (Ref: 2.3.3)

10 Time should be allowed for consultation with specialists of material categories and the amalgamation of their data and reports as part of an integrated study of Hangman's Lane, Stainfield (SHR93) (Ref:2.4.1-3)

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APPENDIX 1 :SHR93 IRON AGE AND ROMAN POTTERY - Condition

* 335 B * * * 3
FILL OF 334 NOT ON MATRIX

0 417 B FILL PF 417 RO
FILL OF 416 NOT ON MATRIX

\ 307 \ \ \ \ 3
NOT ON MATRIX UNUSED BUT POT

\ 50 \ \ \ \ 1-2
NOT ON MATRIX SAMPLE? SCRAP OF FIRED CLAY

\ 721 \ \ \ \ 3+
MOST ABR UNUSED BUT POT NOT ON MATRIX

\ 79 \ \ \ \ 2
NOT ON MATRIX

\ 906 \ \ \ \ L1-2
UNUSED CONTEXT BUT POT NOT ON MATRIX

\ 909 \ \ \ \ M2+
UNUSED CONTEXT BUT POT NOT ON MATRIX

\ 956 \ \ \ \ M2
UNUSED CONTEXT BUT POT NOT ON MATRIX

2005 47 A FILL TF 57 1-E2
SOME ABRADED

2006 82 A FILL PF 83 1-2
WORN SURFS

2007 64 A FILL PF 65 LIA-M1
GOOD GROUP

2008 72 A FILL PF 71 3
MIX DATES SOME VABR DATED ON NVCC SOME EARLY POT

2013 35 A FILL TF 42 1-2
FRAGS OF STONE? SLAG?

2014 351 B FILL GF SEE MEMO ML2+
SOME BURNT 1 BONE FRAG

2015 30 A FILL PF 67 2+
SOME VABR MIXED DATES?

2016 34 A FILL PF 26 EM2
FRAG OF BURNT BONE

2018 18 A FILL TF 26 ML2-3
LGE GROUP SOME ABR SOME EARLY POT

2021 7 A FILL TF 14 RO?
SIMILAR TO BRIQUETAGE SIMILAR IN 003

2022 5 A FILL SF 8 2?
MOST SHS ABRADED

2024 95 A FILL PF 98;99;100;101 ML2
SAM ONLY

2024 97 A FILL PF 98;99;100;101 EM2?
MOST 1 POT SOME BURNT

2030 102 A FILL TF 107 M3+
CC VABR

2032 104 A FILL PF 58 1-3
DR20 ONLY

2032 89 A FILL? PF 92 L1-2
NOT ON MATRIX

2035 93 A FILL TF 58 M3+
MIX DATES? SOME EARLY POT

2036 15 A FILL(NA) PF 16 2-3
FAIRLY SCRAPPY SOME EARLY? POT

2036 32 A LAYER ALLUV 0 M3+
FAIRLY ABRAEDED SOME EARLY? POT STONE FRAG

2037 19 A CUT DITCH 0 0
SCRAPPY SHS MOST ABRADED

2037 238 B FILL PF 290 L3-4
MIX DATES SOME EARLY POT

2039 88 A FILL? SF? 0 ML2
DATED ON SAM

2045 212 B FILL TF 213 L1-E2
GOOD SHELL GROUP SOME IA? POT

2046 225 B LAYER/FILL ALLUV 0 L3-4

SOME VABRADED SOME BURNT MIX EARLY POT

2046 239 B FILL/LAYER TF 241 1-2+
SOME VABRADED

2046 415 B FILL/LAYER PF 424 L1-2
SOME SMASHED VESSELS

2049 266 B LAYER ALLUV 0 ML1
SOME IA? POT PREF SAM

2052 268 B FILL(NA) TF 281 ML1+
SOME IA? POT

2054 325 B FILL SF 331 LIA-M1
MLIA?

2067 493 B FILL TF 497 E2+
DATED ON NVGW

2073 808 C FILL(DUMP?) TF 785 EM2
SAMSG 37 1 RIVET 1 RIVET HOLE

2083 214 B FILL PF 257 L1-2
MANY SCRAPS

2087 410 B FILL PF 411 RO
SOME BURNT

2113 333 B FILL PF 388 ML1-E2?
COMPLEX GROUP MANY VESSELS

2123 217 B FILL PF 226 L3+
SCRAPPY 1 FRAG OF STONE

2123 393 B FILL PF 394 RO/POSTRO(L3-4)
1 SH MPOT GREEN GLAZE EXTR

2126 537 B FILL GF 539 L3-E4
GRAVE FILL FINDS

2152 1162 B LAYER NA? SEE MEMO L2-3
PINK FAB NOT POT LAYER NOT ON MATRIX

2152 1163 B LAYER NA? SEE MEMO 2+
LAYER NOT ON MATRIX

2172 264 B FILL PF 1253 1-E2
SOME BURNT

2181 293 B FILL SF 287 ML3+
CC VABR SOME BURNT

2181 299 B FILL SF 287 4
CC ABR SOME BURNT

2181 328 B FILL SF 287 RO
MOSTLY FLAKES 1 V BURNT

2195 1209 B FILL PF 1210 M1?
SCRAPPY ABR

2206 1134 B FILL PF 1135 1-2?
FILL OF 1135 NOT ON MATRIX

2207 1129 B FILL PF 1124 1
SAM ONLY FILL OF 1124 NOT ON MATRIX

2214 1132 B FILL PF 1125 L1-2
FILL OF 1125 NOT ON MATRIX

2218 1165 B FILL(AMPHORA) PF 1155 1-2
ALL 1 VESS V FLAKED

2221 1158 B LAYER/FILL NA? 0 2+
1SH RPOT? OX SOME BURNT

2252 313 B FILL TF 369 ML3+
MIX DATES SOME EARLY POT

2258 528 B FILL PF 529 1-4
ABR BURNT

2293 422 B LAYER NA 0 E2
SOME BONE SOME BURNT

2297 1179 B FILL PF 1180 M2+
FILL OF 1180 NOT ON MATRIX

2298 1177 B FILL PF 1178 2+
SOME V BURNT FILL OF 1178 NOT ON MATRIX

2306 401 B CUT UNKNOWN 0 0
CC VABR

2309 364 B LAYER DUMP 0 EM4
FRAGS BURNT CLAY

2310 356 B LAYER NA 0 EM4

CC VABR OTHER POT SOME ABR FRAG STONE MIX DATES

2315 426 B LAYER UNKNOWN 0 ML2+
SAM ONLY DATE

2316 443 B LAYER NA 0 L2-3
MIXED DATES?

2323 1141 B FILL(DUMP?) PF 1140 1+
DR20 ONLY

2339 916 C LAYER OCCUPATION 0 EM2
V LGE GROUP V BURNT MIX DATES

2348 967 C LAYER DUMP 0 L3-4/POSTRO
1 SH PMED

2352 922 C LAYER NA? 0 2
SOME BURNT

2376 903 C LAYER OCCUPATION 0 ML3+
MIXED? SOME BURNT

2388 978 C FILL(DUMP) PF 975 EM2
SOME BURNT

2395 946 C FILL PF 929 1-E2
SOME BURNT

2397 979 C FILL SF 986 ML2
SOME BURNT

2398 921 C FILL TF 929 M2+
SOME BURNT

2421 734 C LAYER NA 0 EM4
SOME V BURNT SOME CC ALMOST LOST

2441 629 C FILL PF 626 L1-2
NVCC INTRUSIVE DATED ON EARLIER POT

2447 638 C FILL PF 639 L-VL4
FILL OF 639 NOT ON MATRIX

2451 680 C FILL PF 681 ML2+
MIX? SOME EARLY POT SOME BURNT GOOD SHELL

2459 612 C FILL PF 611 3+/POSTRO
3 SHS PMED POT

2459 660 C CUT FURROW 0 0
NVCC VABR

2463 686 C FILL PF 685 L1
SAM STAMP

2464 616 C FILL PF 615 E2+
SOME BURNT

2470 728 C FILL(POT) PF 731 RO
ALL ONE VESSEL POT CONTEXT NOT ON MATRIX

2472 717 C CUT DITCH 0 0
MOST 1 VESS SOME BURNT

2479 654 C FILL TF 669 L2-3
MIX DATES? VABR NVCC

2509 726 C FILL TF 727 M3-4
SOME V BURNT MIX DATES? DATED ON NVCC OPEN

2512 796 C FILL PF 795 2+
FILL OF 795 NOT ON MATRIX

2513 1558 C FILL PF 1557 L2-E3
MOST FRESH FILL OF 1557 NOT ON MATRIX

2518 898 C FILL PF 1585 1-2
V FRAGMNETED

2519 1552 C FILL PF 1551 1-2
V FRAGMENTED

2519 1562 C FILL PF 1561 LIA-M1
V BURNT

2520 1566 C FILL PF 1565 IA/RO
MIX DATES NVCC INTRUSIVE? IA PEDESTAL BASE

2522 716 C FILL TF 801 M3?
MIXED DATES? DATED ON NVCC

2525 832 C FILL PF 802 1-3
BURNT

2526 803 C FILL SF 802 E2+
SOME BURNT

2530 769 C FILL PF 768 3/POSTRO

1 SH PMED POT

2531 723 C FILL SF 768 M3+
SOME BURNT

2532 724 C FILL TF 768 M3+
SOME BURNT

2540 656 C FILL TF 655 EM4
1 SH MPOT

2541 621 C FILL PF 622 E2+
SOME BURNT

2548 738 C FILL PF 739 2+
SOME BURNT

2550 900 C FILL PF 899 1-2
FRAG OF FIRED CLAY

2554 1015 C FILL PF 1014 ML3
SOME BURNT

2555 1578 C FILL PF 1579 3+/POSTRO
SOME BURNT 2 SHS PMED POT

2556 1036 C FILL PF 1035 M2-3
SOME V BURNT

2557 1016 C FILL TF 1014 EM4?
SOME BURNT COOKING?

2559 818 C FILL(POT) PF 817 2+
MOSTLY 1 SHELL VESS

2582 619 C LAYER PLOUGHSOIL 0 3+
TOP SOIL NOT ON MATRIX

2582 665 C LAYER PLOUGHSOIL 0 ML2+/POSTRO
1 SH PMED TOPSOIL NOT ON MATRIX

2585 603 C SEE MEMO CLEAN 0 EM4 PLUS PMED POT TILE
PMED POT TILE CLEANING LAYER NOT ON MATRIX MIX DATES

2586 628 C FILL(NA) PF 642;643 ML2+
NATURAL? NOT ON MATRIX

2593 454 B FILL SF 453 1-2?
FILL OF 453 NOT ON MATRIX

2596 630 C FILL SF 631 M3+/POSTRO
3 SHS PMED FILL OF 631 NOT ON MATRIX

2616 259 B LAYER ALLUV 0 1-2
SOME BURNT

2616 385 B LAYER NA 0 L1-2
EARLY SAMIAN

2616 474 B LAYER NATURAL 0 LIA?
NATURAL NOT ON MATRIX

2616 490 B LAYER NATURAL 0 1-2?
LAYER NOT ON MATRIX

2623 601 C FILL CLEAN 1581 2-3?
POT FROM UNEXCAVATED FEATURE NOT ON MATRIX

2624 602 C FILL CLEAN 1582 M2-3
SOME BURNT POT FROM UNEXCAVATED FEATURE NOT ON MATRIX

APPENDIX 2 :SHR93 IRON AGE AND ROMAN POTTERY - Sherd Joins

2002 53 A FILL PF 54 2?
SLGY?, CLSD BSS J SANDY 0.2 Q 0CC LARGER Q FS AS IN 047

2005 47 A FILL TF 57 1-E2
SLGY?, BSS 0.2 Q AS IN 053

2015 30 A FILL PF 67 2+
SLGR?, JL BSS VABR RIM SAME FAB IN 007 005

2021 7 A FILL TF 14 RO?
SLGR? BS BURNT ORANGE BN GROG + VEG? AS IN 005

2022 5 A FILL SF 8 2?
SLGR?, JL RIM FRAG BURNT ORANGE BN GROG + VEG AS IN 007

2030 102 A FILL TF 107 M3+
NVCC, BKFOS BSS WHT FAB V FRAG ABR RPNV38 SAME IN 093
NVGY BSS J DK GRY CORE BURNT BN SURFS SAME IN 093

2032 104 A FILL PF 58 1-3
DR20, A BS MOD GRITTY SLIGHTLY BURNT SAME IN 093

2035 93 A FILL TF 58 M3+
DR20, A BS MOD GRITTY SLIGHT BURNT SAME IN 104
NVGY BS DK GRY CORE BURNT BN SAME IN 102

2036 15 A FILL(NA) PF 16 2-3
SLGR BSS BURNT ORANGE BN AS IN 032

2036 32 A LAYER ALLUV 0 M3+
SLGR BSS SOME BURNT AS IN 015

2037 238 B FILL PF 290 L3-4
DR20, A BSS GRITTY BURNT AS IN 323 319
NVCC, BFBL? BASE BS VABR SAME IN 225

2046 225 B LAYER/FILL ALLUV 0 L3-4
DR20, A BSS FLAKED GRITTY BURNT SAME IN? 323 238 319
NVCC, BFBL RIM CF DWG 3817 VABR CR FAB SAME IN 238

2056 319 B FILL(NA) PF 1113 ML1+
DR20, A BSS FLAKES GRITTY V BURNT AS IN 238 323 225?

2055 323 B FILL TF 331 1
DR20, A BSS FLAKES V BURNT GRITTY AS IN 238 319 225?
SLGR, COL BSS BURNT ORANGE FOSSILS? IA? EXTR AS IN 493 212

2045 212 B FILL TF 213 L1-E2
SLGR, COL BSS HM COMB FAINT FOSSILS? IA? EXTR AS IN 493 333

2041 38 A FILL SF 0 M2-3
OX, BCAR? BS SAME IN 029

2054 325 B FILL SF 331 LIA-M1
SLGR, J186 RIMS BSS J CPN AS IN 429

2616 429 B LAYER ALLUV 0 LIA-M1?
SLGR, J186 BS NOT EXTR SAME IN 325

2066 754 C FILL(NA?) TF 884 E2
GREY? BS VEG IMPRESSIONS EXTR AS IN 903 926 922 978 940 916
NVGY? FTM BS W CALC BLK SANDW AS IN 833
NVGY?, J234 RIM BSS SOME J BLK SAME FAB IN 751

2418 883 C FILL PF 884 2
NVGY?, JBK RIM FRAG BS BLK SANDW W CALC SAME FAB IN 754

2339 916 C LAYER OCCUPATION 0 EM2
GREY? BSS VEG IMPRESSIONS EXTR AS IN 930 903 922 926 978 940 754
NVGY, CLSD BS BURNT BN SAME IN 734

2421 734 C LAYER NA 0 EM4
NVGY, CLSD BS BURNT SAME IN 916

2352 922 C LAYER NA? 0 2
GREY? BS VEG IMPRESSIONS AS IN 930 903 926 978 940 754 916
SLGY? BSS BURNT FE OBVIOUS AS IN 980 903

2367 928 C FILL(DUMP?) SF 933 2?
SLGFIN, B462 RIM FRAG BHEM? SMALL VESS JOINS 926

2368 926 C FILL TF 933 L3-4
GREY? BS VEG IMPRESSIONS EXTR AS IN 930 903 922 978 940 754 916
SLGFIN, B462 RIM FRAG BS BHEM? JOINS 928

2376 903 C LAYER OCCUPATION 0 ML3+
GREY? BSS VEG IMPRESSIONS EXTR AS IN 930 926 922 978 940 754 916
SAMLM?,18/31? RIM SAME IN? 940?
SLGY? BSS BASES FE OBVIOUS BURNT AS IN 922 980

2395 980 C FILL PF 986 RO
SLGY? BS BURNT AS IN 903 922?

2387 940 C FILL TF 984 2
GREY, PC16? RIM LWR WALL FTM FINE FAB GRITTY BLK SAME FORM IN 974?
916?
GREY? FRAG VEG IMPRESSIONS EXTR AS IN 930 903 926 922 978 754 916
SAMLM?,18/31? RIM SAME IN 903?

2397 974 C FILL SF 929 1-E2
GREY, PC16? RIM LWR WALL GRITTY SAME IN? 940?

2397 979 C FILL SF 986 ML2
GREY BS SPACED GROOVES MOD GRITTY MED GREY AS IN 978
GREY, B36 RIM BASE PROF BSS FLAKES MOD GRITTY FS SAME IN 940 916

2388 941 C FILL PF 984 2?
NVGY?, PC16? RIM FRAG DRAW? BLK AS IN 940 916

2388 978 C FILL(DUMP) PF 975 EM2
GREY? BS VEG IMPRESSIONS AS IN 930 903 926 922 940 954 916

2420 751 C FILL PF 885 M3+
GREY BSS BLK CF SLGY SAME IN 754 916? 921?
GREY, BKFO BSS GRITTY SPACED GROOVES BLK CORE AS IN 921?

2616 930 C LAYER DN 0 RO
GREY? BS VEG IMPRESSIONS EXTR BURNT AS IN 926 903 922 978 940 754 916

2089 403 B FILL SF 404 M1
SHEL BS DECAYED SHELL HM AS IN 399

2104 391 B FILL TF 392 ML1-E2
GRWM?, J199 RIM CF DWG 3837 STORAGE JAR SAME IN 444

2122 444 B FILL GF 446 L2-E3
GRWM?, J199 RIMS HM WHEEL FINISH STORAGE JAR AS IN 391

2109 1109 B FILL TF 593 RO
GREY BS GRITTY HM? BN INT AS IN 1107

2110 1107 B FILL PF 1108 1-2
GREY BS GRITTY HM? BN INT AS IN 1109

2118 395 B FILL GF 397 E2?
SLGY? ,RWEB BS AS IN 394

2123 394 B CUT GULLEY 0 0

SLGY?, RWEB BS BURNT AS IN 395

2157 318 B FILL SF 300 3?
SLSH, J201 RIM BS RILLED CORDON BURNISHED EXT AS IN 308?

2158 308 B FILL TF 300 ML2+
SLSH, CLSD BASE AS IN 318?

2218 1154 B FILL PF 1155 E2+
DR20, A BS FLAKED AS IN 1165 1166

2218 1166 B FILL(NA?) PF 1155 2+
DR20, A FLAKE AS IN 1154 1165

2252 313 B FILL TF 369 ML3+
SLGFIN?,BKBB? BSS JOINS 315
SLSH, J240 RIM BSS SAME IN 360

2341 965 C LAYER/FILL(DUMP) SF 960 1
NVGY? BSS BLK W BN CORE AS IN 912 919?

2351 912 C LAYER BS 0 IA/RO
NVGY? BS BLK W BN CORE CARINATED AS IN 965 919?

2353 919 C LAYER MS 0 RO
NVGY? BS BLK W BN CORE AS IN 912 965?

2354 837 C LAYER NA? 0 E2+
OX, JCUR RIM FRAG BURNT GRITTY BLK CORE AS IN 934

2366 934 C FILL PF 933 RO
OX BS GRITTY BLK CORE AS IN 837

2383 977 C LAYER DN/BS? 0 RO
GREY BSS SOME CALC ABUN FE OR ORGANICS FOSSILS? AS IN 753

2400 753 C FILL SF 889 RO
GREY BSS J SOME CALC ABUN FE OR ORGANICS MIN GROG CF GRWM AS IN 977

2395 946 C FILL PF 929 1-E2
SAMSG, 18 FTM STAMP JOINS 927

2397 927 C FILL SF 929 1-2
SAMSG, 18 STAMP FRAG JOINS 946

2428 1097 C FILL(POT) PF 1098 RO
SLSHC, J BSS BASES SCRAPS J + JL AS IN 1096

2429 1096 C FILL(DUMP) TF 1097 RO
SLSHC BSS SCRAPS AS IN 1097

2438 1094 C FILL(DUMP?) PF 1095 L2-3
GREY, CLSD BSS FLAKED GRITTY BURNT AS IN 1571? 1573?

2443 658 C FILL PF 637;659 ML3
GREY BS GRITTY AS IN 657

2449 657 C FILL TF 659 M3+
GREY BS GRITTY AS IN 658

2468 604 C FILL PF 608 L2-3
OX FLAKE PMED FAB AS IN 612

2520 1566 C FILL PF 1565 IA/RO
GREY, J206 PEDESTAL BASE WM GRITTY SOME GROG IA SAME IN 811

2531 723 C FILL SF 768 M3+
SLGY, JCOR? BS BN CORE AS IN 724

2545 1037 C FILL PF 733 IA?-M1
SHEL?, JBKCOR BSS SOME J GRITTY W MIN SHELL AS IN 904

2546 904 C FILL TF 733 RO
SHEL?, JBKCOR BSS GRITTY W MIN SHELL BURNT AS IN 1037

2547 762 C CUT GULLEY 0 0
SLSHF BS BLK AS IN 738

2548 738 C FILL PF 739 2+
SLSHF, CPN? BSS RIM FRAG BASE HM WHEEL FINISH? BLK AS IN 762

2550 900 C FILL PF 899 1-2
SLSHF, J212A RIM BSS FRAGS PITCH? ON INNER RIM AS IN 1074

2554 1015 C FILL PF 1014 ML3
NVGW, J? BSS AS IN 1016

2557 1016 C FILL TF 1014 EM4?
NVGW, J? BSS SAME IN 1015

* 335 B * * * 3
NVCC, CLSD BS GROOVE CR FAB AS IN 307

\ 307 \ \ \ \ 3
NVCC, CLSD BS GROOVE CR FAB AS IN 335

APPENDIX 3: SHR93 IRON AGE AND ROMAN POTTERY - New Fabrics for Stainfield and South Lincolnshire

1	GRLT :	Grey light, fine fabric similar to NVGY - very rare
2	GRSH :	Grog with shell - mixed group of shell wiht obvious but rare grog - L. Rollo has a fabric group for this - rare
3	GRWM:	Grog tempered wares wheel made - grey exterior, gritty with occasional grog or possibly organics. Lindsay has something similar but has amalgamated it within her equivalent of NVGY/SLGY (L. Rollo fabric A3). NB we need a fabric sample for this as the only sample is in to be drawn.
4	NVGY:	Nene Valley type grey ware - well sorted 0.1-0.2 Q as per NV fabrics, slightly rough, fine sandy fabric, light to dark grey in colour. Similar to SLGY (below) but without occasional larger rounded quartz has some black fe. Probably a precursor of NVGW, (also suggested by L.Rollo). NVGY & SLGY could probably be amalgamated into one broad fabric group as per L. Rollo (fabric A3).
5	SLGY :	(see above NVGY). South lincs grey ware - well sorted 0.1 -0.2 SA Q, with rare larger rouned Q 0.4 - 1.0 ill sorted. NB NVGY & SLGY interelate and are better amalgamated into 1 fabric as per L. Rollo (fabric A3).
6	SLCR :	South lincs cream ware - well sorted SA 0.2 ish Q similar to NV quartz in general. L. Rollo has this fabric group.
7	SLGFIN:	Fine grey ware similar to SLCR but grey reduced fabric.
8	SLGR :	South lincs grog tempered fabric, handmade - NB the grog may be decayed shell in some cases. L. Rollo has this fabric.
9	SLSH :	South lincs shell - general group SLSHC : Sub-groups SLSHC = coarse shell; SLSHF = fine shell (need to SLSHF : extract fabric sample). L. Rollo/David Williams have similar from

Fenedge sites (I have a photocopy of this report). L. Rollo has noted clay beds with all 3 types of shell (fine, med, coarse) in it - so it is not necessarily added as it also occurs naturally.

NOTES

A) There is a subgroup of NVGW which also has a white core but is rougher to feel and contains abundant fine quartz. Rob Perrin feels that it may be from the upper NV area but is contemporary with NVGW. Suggestion - that we call this fabric NVGWC (a coarser version of NVGW).

B) There is a very gritty grey ware which is well finished and generally has very dark grey surfaces. This fabric was noted at Stainfield but recorded as grey. There appears to be a 'service set' from Stainfield in this fabric consisting of a flask, DR27 type cup and several plates of differing diameters (B35's).

APPENDIX 4 :SHR93 IRON AGE AND ROMAN POTTERY - Vessels for Drawing

Number	Fabric	Form
1	BB1	DPR
1	BB1?	BTR
1	CC	B475
1	CC?	B486
1	CR	B30
1	CR	B485
1	CR	BKEV
2	CR	FTR
1	CR	L
3	DR20	A
1	GFIN	BKCR
1	GFIN	FS?
2	GREY	B35
1	GREY	B36
1	GREY	B444
1	GREY	B449
1	GREY	B450
1	GREY	B470
1	GREY	B471
1	GREY	B472
1	GREY	B477
1	GREY	B?
4	GREY	BFB
1	GREY	BFL
1	GREY	BIBF
1	GREY	BKBB
1	GREY	BKEV
1	GREY	BR12?
1	GREY	BTR?
6	GREY	BWM
2	GREY	CP
2	GREY	DPR
1	GREY	FS
1	GREY	J
1	GREY	J196
2	GREY	J206
1	GREY	J235
1	GREY	J237
1	GREY	J248
1	GREY	J255
1	GREY	J257
1	GREY	J258
1	GREY	J259
1	GREY	J260
1	GREY	J264
1	GREY	J?

1	GREY	JB188
1	GREY	JBKEV
1	GREY	JCOR
1	GREY	JCUR
1	GREY	JEV
1	GREY	JUR?
2	GREY	L
2	GREY	PC16?
1	GREY?	B482
1	GRSH	B
2	GRSH	J181
1	GRSH	J267
1	GRSH?	L?
1	GRWM	B
1	GRWM	B440
1	GRWM	B441
1	GRWM	B445
1	GRWM	B479
1	GRWM	B480
1	GRWM	DPR
1	GRWM	J176
1	GRWM	J178
1	GRWM	J187
1	GRWM	J189
1	GRWM	J197
1	GRWM	J202
1	GRWM	JB194
1	GRWM	JB195
1	GRWM	JB198
1	GRWM	JCOR
2	GRWM	JCUR
1	GRWM	JS
1	GRWM?	B443
1	GRWM?	J199
1	KOLN?	BKCOR
1	LOND?	B30?
1	MOGA	MHK
1	MOMH	MHH
1	MOMH?	MHK
1	MONV	MBF
1	MORT	M
1	NVCC	B36
1	NVCC	B38
1	NVCC	B478
2	NVCC	BFB
1	NVCC	BFBL
2	NVCC	BHEM
1	NVCC	BHEM?
1	NVCC	BK

1	NVCC	BK274
2	NVCC	BK275
1	NVCC	BKCOR
3	NVCC	BWM
3	NVCC	DPR
1	NVCC	FS
1	NVCC?	BFB?
1	NVGCC	B36
1	NVGCC	BKFOC
1	NVGCC	DPR
1	NVGCC?	FDN
1	NVGW	B31
1	NVGW	B31?
1	NVGW	B457
1	NVGW	B459
1	NVGW	B469
1	NVGW	B476
1	NVGW	B481
1	NVGW	B488
1	NVGW	BK276
1	NVGW	BK277
1	NVGW	BKCR
1	NVGW	BKFOS
2	NVGW	BWM
1	NVGW	CAND
2	NVGW	DPR
2	NVGW	FS
1	NVGW	J190
1	NVGW	J233
1	NVGW	JCUR
1	NVGW	L
1	NVGW	L?
1	NVGY	B36
1	NVGY	B448
1	NVGY	B451
1	NVGY	B460
1	NVGY	B467
1	NVGY	B487
1	NVGY	BBR
1	NVGY	BCOR?
1	NVGY	BFB
1	NVGY	BKEV
1	NVGY	BWM
1	NVGY	J179
1	NVGY	J230
1	NVGY	J244
1	NVGY	J246
1	NVGY	J253
1	NVGY	J254

1	NVGY	J256
1	NVGY	JB192
1	NVGY	JB200
1	NVGY	JBCAR
1	NVGY	JBKEV
1	NVGY	JCUR
1	NVGY	L?
2	NVGY	PC16?
1	NVGY?	B36
1	NVGY?	B465
1	NVGY?	BFBL
2	NVGY?	BKEV
1	NVGY?	C
1	NVGY?	C27
1	NVGY?	DPR
2	NVGY?	FS
1	NVGY?	J221
1	NVGY?	J229
1	NVGY?	J234
1	NVGY?	J252
1	NVGY?	J263
1	NVGY?	JB236
1	NVGY?	PC16?
1	OX	J207
1	OX	JUR
1	OX?	B484
1	OX?	BKBB
1	OX?	J
1	OX?	J231
1	PART	B36
1	PART	CLSD
1	PINK	FX2
1	PRW?	PPR?
1	SHEL	B453
1	SHEL	B466
1	SHEL	BD452
1	SHEL	BFL
1	SHEL	C?
1	SHEL	DPR
1	SHEL	J203
1	SHEL	J204
1	SHEL	J205
1	SHEL	J208
1	SHEL	J215
2	SHEL	J225
1	SHEL	J261
1	SHEL	JB239
1	SHEL	JL
1	SHEL	JUG

1	SHEL	L
1	SHEL?	BKBB
1	SLCR	FS?
1	SLCR	FTR
1	SLCR	L
1	SLCR	TV
1	SLCR?	BFL
1	SLCR?	FHOF
1	SLCR?	L
1	SLGFIN	B
1	SLGFIN	B447
3	SLGFIN	B462
2	SLGFIN	BKBB
1	SLGFIN	FS?
1	SLGFIN	J175
1	SLGFIN	J180
1	SLGFIN	J228
1	SLGFIN?	BFL
1	SLGFIN?	J175
1	SLGFIN?	J209
1	SLGFIN?	J247
1	SLGFIN?	JBKEV
1	SLGR	B442
1	SLGR	CPN
1	SLGR	J177
1	SLGR	J182
2	SLGR	J186
1	SLGR	JEV
1	SLGR	JL
1	SLGR	L
1	SLGR?	J268
1	SLGR?	JB193
1	SLGR?	L?
1	SLGY	BKCOR?
1	SLGY	J118
1	SLGY	J173
1	SLGY	J214
1	SLGY	JBK174
1	SLGY	JBKCUR
1	SLGY	JBKEV
1	SLGY	JGB
1	SLGY	P
1	SLGY	PC16?
1	SLGY?	B456
2	SLGY?	B458
1	SLGY?	B483
1	SLGY?	CLSD
1	SLGY?	J213
1	SLGY?	J?

1	SLGY?	JB241
1	SLSH	B464
1	SLSH	B473
1	SLSH	B489
1	SLSH	BFB
1	SLSH	J201
1	SLSH	J223
1	SLSH	J224
1	SLSH	J226
1	SLSH	J238
1	SLSH	J240
1	SLSH	J243
1	SLSH	J250
1	SLSH	J251
1	SLSH	J266
2	SLSH	JCUR
2	SLSH	L
1	SLSHC	B474
1	SLSHC	J216
1	SLSHC	J217
1	SLSHC	J220
1	SLSHC	J242
1	SLSHC	J245
1	SLSHC	J249
1	SLSHC	J265
1	SLSHC	JCUR
1	SLSHC	JS
1	SLSHC	OPEN
1	SLSHF	B446
1	SLSHF	B454
1	SLSHF	B455
1	SLSHF	B468
2	SLSHF	BRR
1	SLSHF	DPR
1	SLSHF	J183
1	SLSHF	J191
1	SLSHF	J212
1	SLSHF	J213
1	SLSHF	J219
1	SLSHF	J222
2	SLSHF	J227
1	SLSHF	J814
1	SLSHF	JB185
1	SLSHF	JB211
2	SLSHF	L?
1	SLSHF?	J210
1	SLSHF?	J218
1	SLSHF?	J232
1	SLSHF?	JS

1	SMSH	JSM?
335	TOTAL	

APPENDIX 5 :SHR93 IRON AGE AND ROMAN POTTERY -Unstratified fabrics listed by Area

Unstratified fabrics + - based on the percentage of the number of sherds

No shs	Percent	Fabric
1	0.39%	CC
1	0.39%	CR?
5	1.93%	DR20
102	39.38%	GREY
1	0.39%	GREY?
15	5.79%	GRSH
5	1.93%	GRWM
2	0.77%	GRWM?
1	0.39%	KOAN?
1	0.39%	MONV
21	8.11%	NVCC
14	5.40%	NVGCC
8	3.09%	NVGW
10	3.86%	NVGY
2	0.77%	OX
4	1.54%	OX?
1	0.39%	RC
5	1.93%	SAMCG
1	0.39%	SAMSG
3	1.16%	SHEL
2	0.77%	SLCR
1	0.39%	SLCR?
2	0.77%	SLGR?
23	8.88%	SLGY?
20	7.72%	SLSH
3	1.16%	SLSHC
1	0.39%	SLSHC?
4	1.54%	SLSHF
259	100.00%	TOTAL

Unstratified fabrics Area A - based on the percentage of the number of sherds

No shs	Percent	Fabric
4	2.63%	CR
8	5.26%	DR20
1	0.66%	GFIN
63	41.45%	GREY
27	17.76%	GRSH
2	1.32%	GRWM?
5	3.29%	NVCC
1	0.66%	NVGCC
1	0.66%	NVGW

6	3.95%	NVGY
5	3.29%	OX
3	1.97%	OX?
11	7.24%	SAMCG
8	5.26%	SAMSG
2	1.32%	SLGFIN
1	0.66%	SLGR?
3	1.97%	SLGY
1	0.66%	SLGY?
152	100.00%,TOTAL	

Unstratified fabrics Area B - based on the percentage of the number of sherds

No shs	Percent	Fabric
1	0.18%	CC?
56	10.35%	CR
23	4.25%	DR20
160	29.57%	GREY
3	0.55%	GROG
9	1.66%	GRSH
2	0.37%	GRWM
1	0.18%	KOAN
1	0.18%	KOAN?
2	0.37%	LOND?
3	0.55%	MOGA
2	0.37%	MOMH
4	0.74%	MORT
65	12.01%	NVCC
12	2.22%	NVGW
10	1.85%	NVGY
2	0.37%	NVGY?
59	10.90%	OX
1	0.18%	PART?
11	2.03%	PINK
14	2.59%	SAMCG
1	0.18%	SAMEG?
28	5.18%	SAMSG
16	2.96%	SAMSG?
7	1.29%	SHEL
4	0.74%	SLCR
1	0.18%	SLGFIN
9	1.66%	SLGR
1	0.18%	SLGR?
30	5.54%	SLSH
1	0.18%	SLSHC
2	0.37%	SLSHF
541	100.00%	TOTAL

Unstratified fabrics Area C - based on the percentage of the number of sherds

No shs	Percent	Fabric
1	0.13%	BB1
38	4.82%	CR
1	0.13%	CR?
11	1.40%	DR20
1	0.13%	GFIN
210	26.65%	GREY
7	0.89%	GREY?
2	0.25%	GROG
18	2.28%	GRSH
1	0.13%	GRWM
1	0.13%	GRWM?
2	0.25%	H70?
1	0.13%	LOND
2	0.25%	LOND?
2	0.25%	MOMH
4	0.51%	MONV
3	0.38%	MORT
3	0.38%	MORT?
197	25.00%	NVCC
11	1.40%	NVCC?
1	0.13%	NVGCC
25	3.17%	NVGW
16	2.03%	NVGY
2	0.25%	NVGY?
64	8.12%	OX
6	0.76%	OX?
3	0.38%	OXWS
4	0.51%	PARC
4	0.51%	PART
1	0.13%	PINK
55	6.98%	SAMCG
1	0.13%	SAMCG?
2	0.25%	SAMEG?
5	0.63%	SAMSG
1	0.13%	SAMSG?
10	1.27%	SHEL
1	0.13%	SLCR
1	0.13%	SLCR?
2	0.25%	SLGFIN
1	0.13%	SLGR?
4	0.51%	SLGY
48	6.09%	SLSH
9	1.14%	SLSHC
6	0.76%	SLSHF
788	100.00%	TOTAL

Unstratified fabrics MT - based on the percentage of the number of sherds

No shs	Percent	Fabric
1	9.09%	NVGW
2	18.18%	NVGY?
6	54.54%	SLGY
1	9.09%	SLSH
1	9.09%	SLSHF
11	100.00%	TOTAL

Unstratified contexts fabrics - based on the percentage of the number of sherds

No shs	Percent	Fabric
4	5.88%	DR20
11	16.18%	GREY
1	1.47%	MOMH?
5	7.35%	NVCC
7	10.29%	NVGW
3	4.41%	NVGW?
5	7.35%	NVGY
5	7.35%	OX
3	4.41%	SHEL
1	1.47%	SLCR
1	1.47%	SLGFIN
13	19.12%	SLGR
1	1.47%	SLGR?
7	10.29%	SLGY
1	1.47%	SLGY?
68	100.00%	TOTAL

APPENDIX 6:SHR93 - ROMAN POTTERY Requiring specialist reports excluding Dressel 20 amphorae

Specialist pottery - based on the percentage of the number of sherds

No shs	Percent	Fabric
1	0.31%	AMPH?
1	0.31%	DR20-STAMP
1	0.31%	GAU4?
2	0.62%	H70?
1	0.31%	KOAN
2	0.62%	KOAN?
AMPHORAE		
3	0.92%	MOGA
4	1.23%	MOMH
5	1.54%	MOMH?
15	4.63%	MONV
1	0.31%	MONV?
10	3.09%	MORT
5	1.54%	MORT?
MORTARIA		
1	0.31%	PART
STAMP		
134	41.36%	SAMCG
21	6.48%	SAMCG?
2	0.62%	SAMEG
4	1.23%	SAMEG?
1	0.31%	SAMLM
4	1.23%	SAMLM?
84	25.92%	SAMSG
22	6.79%	SAMSG?
SAMIAN		
324	100.00%	TOTAL

Appendix 6

Secretary of State's criteria for scheduling Ancient Monuments - Extract from *Archaeology and Planning* DoE Planning Policy Guidance note 16, November 1990

The following criteria (which are not in any order of ranking), are used for assessing the national importance of an ancient monument and considering whether scheduling is appropriate. The criteria should not however be regarded as definitive; rather they are indicators which contribute to a wider judgement based on the individual circumstances of a case.

i *Period*: all types of monuments that characterise a category or period should be considered for preservation.

ii *Rarity*: there are some monument categories which in certain periods are so scarce that all surviving examples which retain some archaeological potential should be preserved. In general, however, a selection must be made which portrays the typical and commonplace as well as the rare. This process should take account of all aspects of the distribution of a particular class of monument, both in a national and regional context.

iii *Documentation*: the significance of a monument may be enhanced by the existence of records of previous investigation or, in the case of more recent monuments, by the supporting evidence of contemporary written records.

iv *Group value*: the value of a single monument (such as a field system) may be greatly enhanced by its association with related contemporary monuments (such as a settlement or cemetery) or with monuments of different periods. In some cases, it is preferable to protect the complete group of monuments, including associated and adjacent land, rather than to protect isolated monuments within the group.

v *Survival/Condition*: the survival of a monument's archaeological potential both above and below ground is a particularly important consideration and should be assessed in relation to its present condition and surviving features.

vi *Fragility/Vulnerability*: highly important archaeological evidence from some field monuments can be destroyed by a single ploughing or unsympathetic treatment; vulnerable monuments of this nature would particularly benefit from the statutory protection that scheduling confers. There are also existing standing structures of particular form or complexity whose value can again be severely reduced by neglect or careless treatment and which are similarly well suited by scheduled monument protection, even if these structures are already listed buildings.

vii *Diversity*: some monuments may be selected for scheduling because they possess a combination of high quality features, others because of a single important attribute.

viii *Potential*: on occasion, the nature of the evidence cannot be specified precisely but it may still be possible to document reasons anticipating its existence and importance and so to demonstrate the justification for scheduling. This is usually confined to sites rather than upstanding monuments.

Appendix 7

The Archive

The archive consists of:

1261	Context records
1627	Photographic records
353	Scale drawings
15	Boxes of finds
1	Stratigraphic matrix
1	Context group matrix

All primary records and finds are currently kept at:

Archaeological Project Services
The Old School
Cameron Street
Heckington
Sleaford
Lincolnshire
NG34 9RW

City and County Museum, Lincoln Accession Number: 31.94