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Late Iron Age & Roman settlement, Weekley

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FEATURES IN THE AREA OF ENCLOSURE G (cf FIG 5)

Ditches

G1 At the terminal the ditch was 0.41m deep and had a very stony filling. At Section 8 it was only 0.17m deep.

G2 0.35m deep at the terminal but only 0.16m deep at Section 7. Filling - mostly brown clayey loam but darker at the north east corner.

G3 Broad and shallow (0.10m deep). Filling - brown clayey loam.

G4 At the entrance it was 0.39m deep but was shallower where surviving beneath the Roman ditch, A3. Filling - brown clayey loam, but more stony near the entrance.

G5 0.32m deep at the terminal; 0.22m deep at Section 3. Filling - mainly dark stony loam. Possible recut visible in Section 3.

G6 0.25m deep but shallow near the Roman ditch, A3. Filling - brown clayey loam.

G7 Gully up to 0.20m deep. Filling - dark loam at the west end and brown loam at the east.

G8 Short channel or gully, 0.24m deep. Fairly vertical sides. Even depth and width. Filling - dark brown silty loam. Cuts G2.

Other features

No.	Depth (mm)	Diameter (m)	Description	Site Phase	Infill; other comment
710	150	0.30 wide	Gully		Brown soil. Continuation of G3?
711	160	0.80 x 0.65	Pit	1	Large pieces of fired clay, oyster shells, unfired clay and pottery in a dark filling.
712	380	1.00 x 0.65	Pit	1	Bath-shaped. Contents as 711, but from top of pit only.
713	280	1.60 x 1.00	Pit	1	Dark ash
714	250	1.10 x 0.90	Pit		Mixed, stony
718	210	0.90 x 0.85	Pit		Mixed, stony

No.	Depth (mm)	Diameter (m)	Description	Site Phase	Infill; other comment
720	200-270	1.40 x 0.65	?2 pits		Dirty clay and limestone slabs, some vertical
721	70	0.12	Stakehole		Dark loam
722	60	0.23	Posthole		Packing stones
723	30	0.23	?Posthole		Mixed
724	150	0.38	Clay-lined pit		Glacial pebbles in filling. Green clay sides 30mm thick
725	80	0.46 x c 0.25	Uncertain		Dark loam and stones
726	100	0.23 x 0.20	Posthole		Dark loam
727	30	0.60 x c 0.45	Uncertain		Dark loam and stones
728	220	0.31 x 0.09	? Slot	1	Dark loam. Widening at bottom
729	40	0.13	Stakehole		Brown loam
730	130	0.52 x 0.42	Pit	?1	Bowl-shaped. Dark loam at top
731	60	0.30	? Posthole		Dirty clay
732	100	0.15 x 0.10	Stakehole		Dark loam and marl
733	100	0.28 x 0.23	Post or stakehole		Yellow marl
734	100	0.13	Stakehole		Mixed
735	200	0.20 x 0.15	Post or stakehole		Dark loam. Packing stone
736	60	0.13	Stakehole		Yellow marl
737		0.33 x 0.13	Uncertain		Dark loam at top
738	60	0.12	Stakehole		Dark loam
739	150	0.52 x 0.45	Pit		Dark loam. Containing two possible postholes
740	60	0.28	Pit		Brown loam
741	50	0.30 wide	Uncertain		Dark loam
742	170	0.46 x 0.22	?Posthole		Dark loam
743	60	0.39	Clay-lined pit		Blue clay

FEATURES IN THE AREA OF ENCLOSURE A (FIG 5)

No.	Depth (mm)	Diameter(m)	Description	Site Phase	Infill; other comment
800	130	0.70	Pit		Blue clay
801	180	0.66	Pit		Green, silty loam
802	80	0.45	Pit		Green, silty loam
803	140	0.70	Pit		Loam and clay
804	–	–	Uncertain		Dark loam
805	–	–	Uncertain		Dark loam. Part of 804?
806	50	2.00 x 0.45	?Trench		Dark loam
807	60	0.50	Clay-lined pit		Ironstone slab on base
808	250	1.00 x 0.58	Uncertain	2	Pear-shaped. Filled with dark loam. Shallow channel adjoining on SW
809	380	1.75 x 1.00	Pit	3a	Dark loam containing early RB pottery and kiln debris
810	240	0.54	Pit		Dark ash
811	190	1.05	Pit		Stony
812	100	0.25	?Posthole		In 817
813	120	0.40 x 0.30	Posthole		Mixed
814	100	0.15	Posthole		Brown loam
815	150	0.55 x 0.38	Posthole	?2a	Mixed
816	170	0.35	Posthole	?2a	Dark soil with red flecks
817	–	–	?Gully		Burnt loam
818	Up to 50	0.15	Post or stakehole		Dark filling with red flecks
819	Up to 50	0.20 x 0.15	Post or stakehole		Dark filling with red flecks
820	Up to 50	0.25 x 0.20	Post or stakehole		Dark filling with red flecks
821	–	–	?Gully		Dark filling
822	300	0.95 x 0.75	Pit		Dark silty loam
823	70	2.00 x 0.38	?Channel	3a	Dark loam
823A	280	0.42	?Posthole		Appears to be part of 823
845	–	–	Burnt subsoil		?Base of hearth
846	100	0.40 x 0.25	Posthole		Dark filling with red flecks
847	–	0.65	Uncertain		Shallow pit or hearth
848	80	0.25 x 0.15	Posthole		Mixed
849	100	0.40 x 0.25	Posthole		Dark, stony
850	180	0.20	Posthole		Dark loam
851	–	–	?Posthole		Cut by later ditch
634	330	0.65	Hearth pit		Slightly burnt edges. Black ash in filling
635	220	0.35	Pit		Infant or small animal bones in filling

UNASSOCIATED FEATURES IN AREA A (FIG 5)

No.	Depth (mm)	Diameter (m)	Description	Site Phase	Infill; other comment
A3	Up to 400	-	Ditch	3b	Light brown loam
A4	Up to 400	-	Ditch	3b	Light brown loam
A5	Up to 200	-	Ditch	3a	Medium brown loam
A6	150	-	Ditch	2	Dark clayey loam
A8	150-350	-	Ditch	2	Dark loam
A9	100	-	Ditch	2	Brown loam
A11	Up to 150	-	Ditch	?2	Variable
A12	Up to 150	-	Ditch	2	Variable
A22	200-600 at W	-	Ditch	2	Mainly dark loam
520	100	-	Uncertain		Possibly part of A11
521	100	1.10 x 0.45	Uncertain	3	Area of dark loam
627	80	-	?Ditch		Dark loam
628	50	-	?Ditch		Dark loam and clay
629	130-260	-	?Connecting pits	?3	Layer of clay on base
630	80	0.90 x 0.55	Pit		Some infant bones in dark filling
631	60	0.78 x 0.30	Uncertain		Brown loam and pebbles
636	100	-	Ditch		Brown clayey loam
637	190	1.15 x 0.70	Pit	3a	Black silty loam
638	100	0.40	Pit		Slight fire-reddening Black ashy filling
640	200	1.00 x 0.55	Pit(s)	3a	Layer of clay on base. Puddling pit?
641	170	1.30 x 0.80	Pit		Kiln debris in filling
642	210	1.30 x 1.15	Pit	3	Dark loam
643	110	0.48	Pit		Dirty blue clay
644	110	0.46	Pit		Circular with a fired clay-lining. Associated with kiln 13. No kiln debris. Mixed filling
645	70	0.35	Pit		Traces of burning round sides. Bowl-shaped. Filling-black loam
646	160	1.00 x 0.70	Pit	3a	Rectangular. Mixed dark filling
647	150	0.46	Clay-lined pit	?2	Filled with stones
648	300	0.70	Pit		Blue clay. Storage pit for potters?
649	60	0.55	Pit		Dark brown loam

No.	Depth (mm)	Diameter (m)	Description	Site Phase	Infill; other comment
650	–	0.38	Uncertain		Dark brown loam
664	150–400	0.40	Pit or gully	3a	Storage jar standing vertically in green clay
665A	280	–	Ditch	2a	Dark clayey loam
665B	250	–	Ditch	2a	Dark clayey loam. Earlier than 665A
666	–	–	Ditch		Bottom only. Filling–brown loam
667	190	0.45 x 0.35	Posthole		Packing stones. Red ash in filling
668	190	0.33	Posthole		Lumps of blue clay in filling
669	–	0.20 x 0.15?	Depression		Dark loam
670	60	0.22	Posthole		Dark loam
671	50	c0.60?	Pit		Ashy loam
672	110	0.37 x 0.30	Posthole		Dark, with an iron-stone block
673	50	0.50 x 0.40	Clay-lined pit		Brown loam
674	100	1.35 x 0.50	Pit		Rectangular. Filled with dirty blue clay
675	60	0.27	Uncertain		Clay
676	120	–	Ditch		Continuation of A5?
677	250	4.6 x 4.2	Pit		Quarry? Modern finds from top
690	–	–	?Ditch		Shallowly surviving
691	200	–	Ditch	2–3	Some blue clay in dark loam
691A	250	–	Ditch	2	Brown loam
692	150		Ditch	2	Dark loam
693	80	0.55	Clay-lined pit		Brown loam
695	80	0.75	Pit		?Hearth Burnt sides. Ashy filling
696	30	0.65	Pit		?Hearth Burnt sides. Brown loam
697	–	0.60 x c0.50	?Pit		Bottom only. Dark filling
698	90	–	Gully		Dark stony loam
699	–	–	Ditch		Brown clayey loam. Rounded profile. Relationship with 703 uncertain
701	200	–	Ditch		Gritty clay. Later than 702
702	200		Ditch		Orange clay and loam. Probably deliberately filled

No.	Depth (mm)	Diameter (m)	Description	Site Phase	Infill; other comment
703	280	-	Ditch	3a	Dark loam containing pottery similar to forms from nearby kilns
704	-		?Ditch		Dark clayey Bottom only
706	200	0.65	Pit		Dark stony loam
708	100	-	Uncertain		Dark filling Bottom only
709	120	1.6 x 0.45	Uncertain	?3	Brown loam
710	150	-	Gully		Possible continuation of G3
743	60	0.39	?Clay-lined pit		Blue clay. Lined?
744	-	0.20+	?Clay-lined pit		Bottomonly surviving
745	160	0.80 x 0.35	?Grave	?3	Infant burial. 1 RB sherd
747	100	1.20 x 0.40	Pit		Dark loam
748	Up to 400	-	Ditch	3b	?Roadside ditch Probable butt end with smaller ditch swinging north. Some stones
749	-	-	?Pit	3b	Pot from top. Not excavated
756	-	-	Uncertain		Line of dark loam
757	100	-	?Gully		As 756. Cut into subsoil
758	600	1.85 x 0.85	Pit	3a	Kiln debris in pit. Uniform filling. Posthole in section?
759	100	1.20 x 0.60	Hearth/pit		Intense burning of sides and bottom
760	130	0.27	Posthole		Dark loam
761	Up to 100	Up to 0.20	Post or stakehole		Dark loam. Bowl shaped
762	Up to 100	Up to 0.20	Post or stakehole		Dark loam
763	Up to 100	Up to 0.20	Post or stakehole		Dark loam
764	Up to 100	Up to 0.20	Post or stakehole		Dark loam
765	100	0.60	Pit or posthole		Flat stones in shallow hole. ?Post-pad
766	100	0.60	Pit or posthole		Similar to 765. Both could be related to 758

DESCRIPTIONS OF THE LAYERS SHOWN IN THE SECTIONS ILLUSTRATED IN FIG 6

Ditch A Section A-B	(2) Dark loam; (3) Brown loam with stones; (4) Light brown loam with stones; (5) Brown gritty loam.
Ditch A Section C-D	(1a) Light brown subsoil; (2a) Burnt clay particles and ash; (2b) Dark earth with charcoal; (3) Brown stony loam; (4) Light brown loam; (5) Brown loam with stones; (6) Light gingery brown loam.
A10 Section S-T	(1) Dark loam; (2) Dark brown loam; (3) Brown stony loam; (4) Gingery-brown loam, small stones; (5) Gingery brown loam.
G5 Section 2	(1) Dark loam; (2) Brown clayey loam.
G4 Section 1	(1) Brown clayey loam; (2) Dark loam; (3) Orange clayey loam.
A4, G4, A3 Section G-H	(1) Light brown loam; (2) Brown loam; (3) Orange-brown loam; (4) Orange clay.
A2, A23 Section J-K	(1) Dark loam with lenses of orange clay; (2) Brown clayey loam; (3) Orange brown clay.
A24	(1) Mainly pieces of limestone; (2) Orange clay.
691, 691A, 692	(1) Dark brown loam with pieces of blue clay; (2) Dark loam; (3) Brown clayey loam.
A22, A23 Section N-P	(1) Dark loam; (2) Brown clayey loam; (3) Gingery-brown clayey loam and stones.
A21, A22, A23, 779, 780, 781, Section L-M	(1) Dark loam; (2) Grey-brown clayey loam with stones; (3) Gingery brown clayey loam; (4) As (2); (5) as (3); (6) Dark gingery-brown loam.
A22	(1) Mixed stony clay; (2) Red ash; (3) Dark loam; (4) Mixture of dark and brown gritty loam.
777, 754, 755	(1) Dark loam; (2) Brown clayey loam; (3) Orange-brown clayey loam; (4) Gritty loam.

IRON AGE FEATURES AT THE NORTH-EAST CORNER OF ENCLOSURE B (cf FIGS 5 & 10)

The following series of shallow ditches, gullies and elongated pits were located near the end of Iron Age ditch A23. Their function is not understood.

752 Ditch. Wide and flat-bottomed. 0.20-0.25m deep. Dark filling.

753 Ditch. Up to 0.55m wide and 0.20m deep. Filling, gingery-brown loam.

754 Short length of gully or pit. Length 1.4m. Depth 0.38m. Brown gritty clay.

755 Recut of 774. Width 0.60m. Depth 0.38m. Dark filling.

774 Ditch or pit (if a ditch wide for its depth). Depth 0.38m. Brown stony filling.

775 Ditch? Probably replacing 774. Depth 0.45m. Brown stony filling.

776 Ditch. Continuation of 753 and 777. Broad and shallow. Gingery-brown filling.

777 Ditch. Description as 776.

778 Pit? Probably later than 753. Distinction not clear. Depth 0.35m. Brown filling.

779 Short gully or pit. Depth 0.46m. Filling similar to A21. Dark brown stony loam.

780 Similar to 779. Depth 0.22m. Filling gingery brown stony loam.

781 Description as 780. Probably later. Width 0.60m. Depth 0.32m.

DESCRIPTIONS OF THE LAYERS SHOWN IN THE ILLUSTRATED SECTIONS OF DITCH Z, FIG 7

Section 1 (1) Very dark loam; (1a) Red ash or ashy loam; (2) Grey-brown clayey loam; (3) As (2) with orange clay.

Section 2 (1) Dark loam; (1a) Orange-pink ash, overlying black ash; (2) Light brown clay or clayey loam; (3) Dark clayey loam with charcoal; (4) Brown clay.

FEATURES IN THE AREA OF HUT 1 (FIG 5)

No.	Depth (mm)	Diameter (m)	Description	Site Phase	Infill; other comment
824	30	c0.20	Depression		Dark filling
825	30	c0.20	Depression		Dark filling
826	150	1.55 x 0.25	?Post-trench	1	Irregular sides. No post impressions
827	110	0.15	Posthole		Vertical sides
828	130	0.23	?Posthole		Cut through shallow pit?
829	50	0.25	Posthole		Dark filling
830	100	0.24	Posthole		Dark filling
831	-	1.30 x 0.40	Post-trench		Probably 3 posts in trench
831A	250	0.20)			Dark filling
831B	270	0.25)	Linked postholes		Dark filling
831C	140	0.30)			Brown filling. Later than 831B?
832	70	0.34	Posthole		Brown fill
833	50	-	Gully		Brown fill
834	-	0.50 x 0.25	Uncertain		Patch of dark loam
835	40	0.28	?Posthole		Dark filling
836	140	0.15	Posthole		Fairly vertical sides
837	110	0.65 x 0.55	Pit or posthole		Mixed
838	110	0.50 x 0.42	Pit or posthole		Irregular
839	-	0.60	Clay-lined pit		Bottom only
840	50	0.40 x 0.30	Posthole		Dark filling
841	60	0.25	Posthole		Dark fill. Possible recut
842	300	0.60 x 0.40	Posthole	1	Dark core (?300mm diameter)
843	110	0.45 x 0.40	Posthole	1	Irregular
844	110	0.30	Posthole		Dark filling

FEATURES IN HUT 3 AND TO THE NORTH AND EAST (FIG 5)

No.	Depth (mm)	Diameter (m)	Description	Site Phase	Infill; other comment
Hut 3					
514	250	0.45	Posthole		Gingery-brown
515	230	0.37	Posthole		Gingery-brown
516	190	0.40	Posthole		Gingery-brown
517	150	0.27	Posthole		Gingery-brown
518	200	0.33	Posthole		Gingery-brown. Irregular
519	170	0.32	Posthole		Gingery-brown. Irregular
522	270	0.31	Posthole		Gingery-brown
523	250	0.40	Posthole		Gingery-brown. Squarish
524	230	0.52 x 0.20	Uncertain		Gingery-brown
525	300-380	0.38 x 0.22	Uncertain		Gingery-brown
526	180	0.90 x 0.25	Uncertain		Probably disturbed posthole
527	350	0.60 long	Uncertain		Gingery-brown
528	140	0.30 x 0.35	?Posthole		Darker at top
Features to the north and east					
502	80	0.68	Clay-lined pit		Lined twice (blue and green clay)
503	120	0.45 x 0.35	?Posthole		Brown filling
504	160	0.36	?Posthole		Brown filling. Large stones
505	50	0.50 x 0.35	Depression		Brown filling
506	250	0.40	?Posthole		Brown filling. Post impression 0.25 x 0.12m.
507	250	0.40 x 0.35	?Posthole		Brown filling. Channel to 509?
508	160	0.30	?Posthole		Dark filling
509	120	0.25	?Posthole		Mixed. Bowl-shaped
510	120	0.80 x 0.70	Pit		Brown filling
511	300	0.35 x 0.30	Posthole		Some green clay in filling; otherwise as 506
512	220	0.32	Posthole		Gingery-brown
513	150	c0.50	Uncertain		Patch of dark clay
625	90	0.42	Clay-lined pit		Dark filling
4-post structure					
651	230	0.35	Posthole		Dark filling
652	280	0.32	Posthole		Dark core
653	280	0.33	Posthole		Dark core
654	220	0.35 x 0.29	Posthole		Core diameter 0.16m

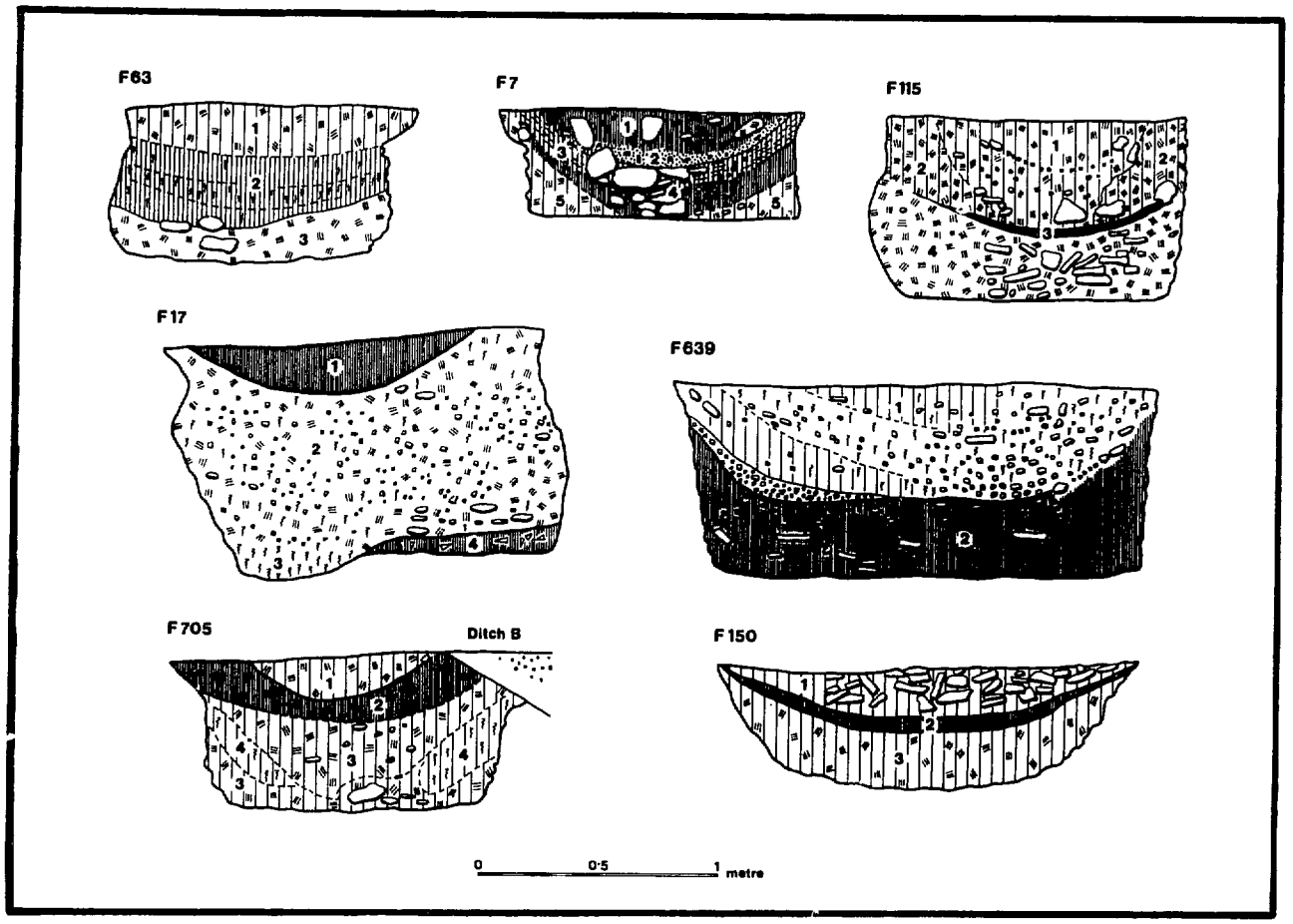
No.	Depth (mm)	Diameter (m)	Description	Site Phase	Infill; other comment
655	90	0.48	Pit		Brown stony
656	200	0.65	Pit		Brown stony
657	160	0.55	Pit	?2	Brown stony
658	190	0.33	Posthole		Blue clay and loam
659	130	0.45	Pit		Mainly clay
660/661	-	0.20	Bottoms of postholes		Gingery-brown
662	100	0.90	Pit		Gingery-brown gritty loam
663	190	0.55	Pit		Dark brown loam

IRON AGE PITS

No.	Diameter (m)	Depth (mm)	Remarks
Area A (FIG 5)			
626	2.00 x 1.70	160	Phase 2 or later?
632	1.15	280	No dating evidence
633	1.00 x 0.90	200	No dating evidence
639	2.10	800	Sterile filling. One Iron Age sherd only
678	1.25	330	Dark stony filling
679	1.10	220	Dark stony filling
680	1.05 x 0.80	220	Dark stony filling
682	1.50	400	Dark stony filling
685	1.10	320	Dark stony filling
686	0.95	200	Dark stony filling
687	1.50	370	Dark stony filling
688	1.00	250	Dark stony filling
689	1.00	290	Dark stony filling
694	1.30 x 1.10	430	Three Iron Age sherds only
705	1.30	660	Earlier than Ditch B
707	1.00	400	No dating evidence
711	0.80 x 0.65	160	In Enclosure G
712	1.00 x 0.65	380	In Enclosure G
713	1.60 x 1.10	280	In Enclosure G
714	1.10 x 0.90	250	In Enclosure G
715	1.20 x 0.95	30	Bottom only
716	1.15 x 0.95	30	Bottom only
717	1.00 x 0.90	250	No dating evidence
718	0.90 x 0.85	210	In Enclosure G
719	0.75	160	No dating evidence
746	1.10	80	Earlier than Ditch A22
751	1.70 x 1.10	320	Gully 750 appears to be contemporary
778	0.90	350	No dating evidence
Area B (FIG 10)			
7	1.25	450	Green clay in filling
17	2.60 x 1.70	100	Mainly sterile filling. Pottery from top only
29	1.60 x 1.15	150	Later than Ditch T
63	1.20	630	LT decorated pottery from filling
115	1.70 x 1.20	760	Mixed filling

No.	Diameter (m)	Depth (mm)	Remarks
AREA C (FIG 12)			
150	1.70	400	Cut by Ditch C. Early Phase 2? Disarticulated human bones in filling
154	1.30 x 1.00	200	Probably Phase 2
234	2.10 x 1.30	450	Miniature pot in filling (FIG 28, 87); also ash and burnt earth

SELECTED PIT-SECTIONS



Layer Descriptions

F63 (1) Brown clayey loam; (2) Dark brown loam with some marl; (3) Mainly orange clay.

F7 (1) Dark brown loam with charcoal; (2) Ash and charcoal; (3) Dark silty loam; (4) Dark loam with marl and small stones; (5) Gingery-brown clay loam.

F115 (1) Grey-brown clayey loam; (2) Brown clayey loam; (3) Dark earth containing pottery; (4) Brown loam or clay.

F17 (1) Dark loam; (2) Mixture of limestone chippings, marl and orange clay; (3) Yellow marl; (4) Dark gritty loam.

F639 (1) Mainly small pieces of limestone and marl with some loamy bands; (2) Dark brown gingerish loam with some stones.

Layer Descriptions of selected pit sections, contd (cf M15)

F705 (1) Brown clayey loam; (2) Dark brown clayey loam; (3) Brown clayey loam; (4) Brown loam and marl.

F150 (1) Brown loam with many stones; (2) Dark loam and charcoal; (3) Brown clayey loam.

FEATURES WITHIN AND AROUND THE HOUSE IN AREA K (FIG 8)

All Phase 1

No.	Depth (mm)	Diameter (m)	Description	Infill; other comment
404	380	0.50 x 0.43	Posthole	Mainly filled with large stones including some ironstone and slag. Stones protruding 150mm above the Boulder Clay
405	580	1.20 x 0.65	?Posthole	Small pit (?post removal) set within larger post-pit. The small pit contained charcoal in an otherwise clean clay filling.
406	130		?Slot	Cut by drain. See 408
407	450	0.75 x 0.43		Clay, with post impression containing charcoal, c0.30 x 0.15m.
408	450	0.80 x 0.45	Posthole	Post-impression c0.30 x 0.17m. Filling as 407. A slot or channel projected to the east, 0.57 x 0.30m and 0.10 - 0.15m deep; dark filling
409	500	c0.95 x 0.55	?Posthole	Clean clay. No post impression detected
418	320-420	1.65 x 0.65	?Pit	Possibly two features. Dark clayey loam and stones at north end (?posthole). Rest of filling horizontal layers of clay or silt.
419	150-280	0.90 x 0.55	?Posthole	Irregular vertical stones and dark earth in filling. Possibly double posthole
420	470	1.10 x 0.55	?Pit	Clay with some charcoal. No post impression
421	270	0.27	Posthole	Clay with charcoal
422	200	0.30	Posthole	Clay with charcoal
423	280	0.70 x 0.47	?Posthole	Clay with charcoal. Flat stone on base
424	300	c0.60	Pit	Brown clay. Irregular
425	260	0.25	Posthole	Clay with charcoal
426	150	0.40	Uncertain	Brown clay
427	200	0.25 x 0.20	Posthole	Clay with charcoal
428	120	0.20	Depression	Dirty clay. ?Natural
429	160	0.28 x 0.24	Posthole	Clay with charcoal
430	200	0.60 x 0.45	Uncertain	Brown clay. Bowl-shaped
432	270	0.29 x 0.22	Posthole	Clay with charcoal. Base diameter 150mm.
433	140	0.35 x 0.30	Uncertain	Grey clay
434	160	0.25 x 0.20	Uncertain	Grey clay

No.	Depth (mm)	Diameter (m)	Description	Infill; other comment
435	120	0.25	Depression	Dirty clay. ?Natural
436	150	0.70 x 0.30	Uncertain	Clay with charcoal
437	100	0.15	?Stakehole	Clay with charcoal
438	280	0.25	Posthole	Clay with charcoal
439	120	0.20	Depression	Clay with sparse charcoal
440	140	0.25	Uncertain	Grey clay. ?Natural
441	60	0.35 x 0.30	Uncertain	Some dark clayey loam
442	80	0.15 x 0.13	?Stakehole	Dark clayey loam
444	Up to 100	-	?Wall trench	Clay with charcoal
445	180	0.35	Posthole	Clay with charcoal. Packing stones
446	80	0.20	Depression	Clay with charcoal
447	70	0.20 x 0.15	Depression	Clay with charcoal
448	120	0.33 x 0.22	Depression	Brown clay
449	120	0.20	Depression	Brown clay

OTHER FEATURES IN AREA K (FIG 8)

400 Pit, or possibly continuation of Ditch KXV. 1.55m wide by at least 0.65m long x 0.35m deep. Squarish shape. Filling : uniform spongy light brown clay. Cut by avenue ditch. Small pit with similar filling adjacent on the south side, 0.65m x 0.45m x 0.10m deep.

401 ?Pit. Pear-shaped 0.75m x 0.50m and 0.17m deep. Filling : dark brown clayey loam with some charcoal and small stones.

402 Circular pit 0.35m in diameter and 0.15m deep. Filling: mostly charcoal, with some clayey loam.

403 Pit, or possibly a continuation of Ditch KXIV. Approximately 2.3m x 1.00m and 0,25-0.30m deep. Filling : brown silty loam containing some large stones (as in KXIV).

410 Pit? Irregular, up to 2.3m long x 1.10m wide and up to 0.25m deep. Filling : mainly grey silt or clay, but block of dark loam could represent a posthole.

411 Posthole 0.34m in diameter and 0.33m deep. Filling : charcoal flecked clay.

412 Pit. 1.00m x 0.80m, with an irregular bottom. Up to 0.40m deep. Filling : clay with charcoal bands.

413 Pit (not on plan). 1.00m x 0.85m; depth 0.30m. One side of the pit was reddened by heat and there was up to 50mm of charcoal on the bottom. Bowl-shaped. Filling : grey-brown silt with charcoal.

Extending from the pit on its west side was a wide, shallow channel filled with dark clay and charcoal. It was 0.50-1.00m wide x 5.5m long and up to 0.10m deep.

414 ?Pit. Pear-shaped. 0.90m x 0.55m and 0.15m deep. Filling : clay with charcoal.

415 ?Pit 0.90m x 0.45m and 0.23m deep. Filling as 414.

416 Uncertain. 0.60m x 0.48m and 0.20m deep. Filling : dirty clay. ?Natural.

417 Patch of dark loam about 0.40m in diameter and 50mm deep.

443 Pond or quarry? Filled with dark clay or silt containing small red stones. Although irregular, its size was $\subseteq$ 9.30m x 5.00m and 0.35m deep.

DESCRIPTIONS OF THE LAYERS SHOWN IN THE ILLUSTRATED SECTIONS FROM AREA K, FIG 9

Ditch KI. Section 4 (1) Brown clayey loam (F403); (2) Yellow Boulder Clay; (3) Black clayey loam with much charcoal; (4) as (2); (5) Greenish-brown clay.

KI. Section 3 (1) Dark brown clayey loam; (2) Dark grey-black clayey loam, some charcoal; (2a) As (2), but with brown lenses; (3) Brown clay; (4) Greenish brown clay; (5) Clayey silt.

KI. Section 2 (1) Grey-blue clay with brown mottles; (2) Dark band ? organic; (3) Greenish brown chalky clay.

KVII. Section 3 (1) Dark grey-brown loam; (2) Dark loam with lenses of yellow clay; (3) Dark band?; (4) Grey-brown clay; (5) Very dark clay loam; (6) Greenish-brown clay.

KX (1) Grey-brown clay with russet mottles.

KIX (1) Grey-brown clay with russet mottles; (2) Greenish-brown clay.

KI. Section 1 As KI. Section 2.

KII. Section 2 (1) Brown clayey loam; (2) Dark grey clay with charcoal; (3) Grey clay with brown mottles; (4) Blue-brown Boulder Clay.

KII. Section 3 (1) Brown clay; (2) Blue-brown clay.

KXI (1) Blue-brown Boulder Clay; (2) Light blue Boulder Clay.

KIII (1) Dark clayey loam; (2) As (1), with browner patches; (3) Dark loam with much charcoal; (4) Clayey silt; (5) Greenish-brown clay.

KVI (1) Dark clayey loam; (2) Boulder Clay.

KXII (1) Boulder Clay with charcoal.

F408	(1) Dark clay with charcoal; (2) Brown clay.
KXIII	(1) Dark clayey loam; (2) Mainly orange clay; (3) Clay with charcoal.
KV	(1) Brown clay; (2) Black clayey loam; (3) Blue-brown clay with charcoal at base; (4) Greenish-brown clay.

UNASSOCIATED FEATURES IN AREA B (FIG 10)

No.	Depth (mm)	Diameter (m)	Description	Site Phase	Infill; other comment
1	200	0.60	Pit	3	Very dark loam
2	260	0.75	Pit		Circular. Burnt clay in filling
3	150	0.50	Pit?		Brown loam
4	100	0.42	Clay-lined pit		Variable
6	160	1.60 x 0.64	Pit	3a	Dark crumbly loam. Rectangular. Containing several metal objects, some of military-type (FIGS 22, 8; 25, 46; 26, 56-7)
8	100	0.50 x 0.25	?Posthole		Dark clayey loam
9	150	0.38	?Posthole		Dark clayey loam
10	100	0.45	?Posthole		Dark clayey loam
11	170	0.90 x 0.75	Pit		Brown clayey loam
12	200	0.48	Pit		Parts of 4 broken pots in filling. (1st century AD) 40mm of greenish clay on bottom
13	200	0.63	Pit		Dark crumbly loam
14	-	-	Uncertain		Sloping towards hedge and probably part of ditch
15	40	-	Cremation	?2	Base of pot only. 170mm diameter.
16	330	1.45	Pit		Circular. Large quantity of kiln debris in pit. Filling-dark loam.
18	Up to 300	-	Uncertain		True extent unknown. Thought to be later than Ditch B
21	100	0.70	Pit		Burnt clay and loam
22	80	0.11	Stakehole		Dark loam
23	270	0.70	Clay-lined pit	3	Green clay (40mm) patchily on sides and bottom. Dark filling
24	-	-	Base of pit		?1st century AD
25	-	0.55 x 0.40?	Uncertain		Patch of dark loam
26	150	0.60 x 0.40	Cremation		Dark loam. No pot
27	100	0.55 x 0.40	Cremation		Dark loam. No pot
28	10	0.20	Uncertain		Patch of dark loam
30	600	0.90	Pit or posthole		No post-pipe. Very stony filling with silt on bottom

No.	Depth (mm)	Diameter (m)	Description	Site Phase	Infill; other comment
31	210	0.45	Posthole		Brown stony loam
32	Up to 600	0.65 x 0.40	Posthole		Post 0.20 x 0.13m. Possibly squared
33	300	0.40	Posthole		Post 0.20 x 0.15m. Stone packing
34	400	0.38	Posthole		Stone packing
35	380	0.45	Posthole		Stone packing
36	380	0.40	Posthole		Stone packing
37	380	0.50	Posthole		Stone packing
40	1.25	1.75 x 1.25	Pit	3b	Funnel-shaped, 0.45m wide at bottom. Mixed stony filling
41	200	0.80 x 0.50	?Double posthole	3b	Loose stones in filling
42	100	1.60 x 0.90	Pit ?	3	Variable
43	Up to 230	0.37	?Posthole		Dark brown loam
44	50	0.40 x 0.30	Pit ?		Dark loam
45	70	0.40 x 0.30	Pit ?		Dark loam and ironstone
46	100	0.16	?Posthole		Black loam with charcoal
47			Uncertain	1/2a	Shallow spread of dark clayey loam
48	30	0.25	?Posthole		Dark loam
49		0.25?	Uncertain		Possible posthole (charcoal)
50		0.60?	Pit bottom?		Dark loam and charcoal
51	200	1.25 x 0.40	Slot?	?1	Dark loam
52	100	0.25	?Posthole		Dark clayey loam
53	200	0.35	?Posthole		Dark clayey loam
54	30	Width 0.10	Gully		Dark clayey loam
55	120	0.60 x 0.40	Pit or Posthole	?1	Dark clayey loam
56	60	0.45	Pit		Dark clayey loam
57	100	0.90 x 0.55	Pit or gully	?2a	1 loomweight and parts of 3 others in topsoil above
58	100	0.20 x 0.16	?Posthole		Brown clayey loam
59	100	0.80 x 0.70	Pit	3	Dark loam
60	120	0.36 x 0.25	?Posthole	?2a	Dark loam
61	250	1.10 x 0.90	Pit	3	Dark clayey loam
62	70	Width 0.10 to 0.20	Gully/slot		Dark clayey loam
64	-	(.50	Pit bottom ?		Dark loam and charcoal
65	200	0.40	Posthole		Brown loam

No.	Depth (mm)	Diameter (m)	Description	Site Phase	Infill; other comment
66	200	0.40	Posthole		Mainly small stones
67	50	0.25	Posthole		Dark loam
68	100	Width 0.20	Palisade trench?		Dark loam
69	-	Width 0.10	Gully?	2	Dark loam, possibly re-cut
70	160	0.24	Posthole		Brown loam with stones
71	150	0.55 x 0.43	Pit or posthole		Mixed dark loam
72	400	1.25 x 0.70	Pit		Bath-shaped. Neatly dug. Bottom diameter 0.95 x 0.40m. Stony brown filling
73	230	0.20 x 0.10	Stakehole		Dark loam
74	50	Width 0.20	Gully	3	Dark loam
75	150	0.53	Pit		Dark loam. Traces of burning.
76	120	0.22	Posthole		Brown silty loam
77	150	1.00	Pit		(1) Dark loam (2) Dirty Clay
78	150	0.40	Re-cut Posthole		Clay and loam
78A	180	0.30			Greenish clay and stones
79			Re-cut Posthole		Similar to 78.Probably a pair
80	200	0.50	Pit		Dark loam
81	150	0.27 x 0.17	Uncertain		Variable
82	100	0.70	Pit		Dark loam and marl
83	-	0.30+	Uncertain		Burnt pieces of clay
84		c0.70 x 0.50	Uncertain	3	Area of black ashy loam
85	70	0.65 x 0.40	Pit?		Brown stony loam
86	40	0.25	?Posthole		Dark brown loam
87	90	c0.40 x 0.25	Uncertain		Dark brown loam with stones
89	100	0.35	?Posthole		Large stone on bottom
90	160	0.40	?Posthole		Bowl-shaped. Stony brown loam
91	30	Width 0.12	Gully	3	Dark brown loam
92	150	0.43 x 0.37	Pit or Posthole		Bowl-shaped. Brown silty loam
93	60	0.47 x 0.37	Fire-pit		Sides and base burnt (charcoal)
94	80	Width 0.15 - 0.25	Gully		Dark brown loam
95	100	0.37	?Posthole		Stakehole (100mm diameter 60mm deep) in bottom Filling-dark loam and marl
96	130	0.40 x 0.30	?Posthole		Similar to 95
97	200	0.40	?Posthole		Bowl-shaped. Some green clay in filling.On line with 78-9?

No.	Depth (mm)	Diameter (m)	Description	Site Phase	Infill; other comment
98	230	0.40	Posthole	3	Many stones and a piece of brick/tile in filling
99	50	0.50	Pit	3	Dirty clay
100	100	0.32 x 0.22	?Posthole		Brown loam
101	300	0.42	?Posthole	?1	Brown stony loam Slope on north side
103	30	0.27	?Posthole		Dark brown loam
104	120	0.65	Pit		Dirty brown clay
106	70	0.35?	Posthole or gully	3	Variable
107	100	0.30	?Posthole		Bowl-shaped. Dark brown loam
108	80	0.70 x 0.45	Pit		Dark brown clayey loam
109	-	0.40 x 0.35?	?Posthole		Brown stony loam
110	210-270	0.50 - 0.55	?Posthole	?1	Stones, clay and dark loam. Slope on side similar to 101
111	100	0.35 x 0.25	?Posthole		Dark brown loam
112	100	0.50 x 0.45	Pit?		Bowl-shaped. Burnt stones in filling
113	-	0.30 x 0.25?	?Posthole		Dark loam
114	100	Width 0.10-0.20	Uncertain		Brown loam

DESCRIPTIONS OF THE LAYERS SHOWN IN THE ILLUSTRATED SECTIONS FROM DITCH B, FIG 11.

Trench B VI (2) Gritty loam (?furrow); (3) Brown loam with many stones; (4) Brown silty loam; (5) As (4) but ashy; (6) Mixture of marl, clay and brown loam; (6a) Dark silt; (7) Orange stony, clay; (8) Yellow sandy silt.

Trench B XII (1) Dark brown ashy loam; (2) Grey-brown clayey loam; (3) As (2) with some yellow marl. Stony; (4) Bands of yellow marl and charcoal flecked loam; Ditch A21 (5) Brown stony loam; (6) Brown clayey loam.

Trench B2 VII (1) Gingery-brown silty loam; (1a) Small pieces of limestone (roadway); (2) Dark brown loam; (3) Very dark crumbly loam with charcoal at base; (4) Green - brown clayey loam; (5) Mixture of yellow marl and orange-brown clay, stony.

Trench BI (3) Light brown loam; (3a) Dark brown gritty loam; (4) Very dark loam containing kiln debris. Layer of ash below; (5) Ginger clay, with a lump of burnt green clay; (5a) Dark brown loam; (6) Grey brown ashy loam. Gritty at the south; (7) Dark grey loam with charcoal; (8) Dark gingery-brown loam with some yellow marl and charcoal; (9) Brown loam and gritty yellow marl; (10) Yellow stony silt; (11) Hard-packed stony marl; (12) Yellow stony marl and orange clay; (13) Yellow silt.

Note: Layers (7) in Trench B VI, (5) in Trench B2 VII, and (12) in Trench B I are basically the same and represent deliberate infilling. Individual tip-lines are depicted within them and should not be confused as separate layers.

FEATURES WITHIN ENCLOSURE E (FIG 13)

No.	Depth (mm)	Diameter (m)	Description	Infill; other comment
617	40	0.70	Pit	Brown stony loam. Sealed beneath the bank. Sides and bottom patchily reddened and overlain by charcoal. Possibly burnt stones around the edge. Pottery around but not in feature.
767	180	0.90	Pit	Dark loam with charcoal. Bowl-shaped. Large limestone slabs, some burnt. Fragment of CP1-type pottery with internal rim.
768	280	0.25	Posthole	Variable. Packing stones (Limestone) Fragments of CP1-type pottery
769	320	0.25	Posthole	Forms a pair with 768, to which it is similar
4-post structure				
770	400	0.20		Dark loam with charcoal and particles of ?daub
771	400	0.20		As 770
772	400	0.25		Dark loam with clay? packing. Possible post-pipe 180mm in diameter
773	400	0.25		As 772

DESCRIPTIONS OF THE LAYERS SHOWN IN THE SECTIONS ILLUSTRATED IN FIG 14

Ditch E Section 1

(1) Brown clayey loam; (2) Stones, yellow marly clay, and blue clay; (3) Orange-brown silty loam with a band of dark loam; (4) Dark brown clayey loam; (5) Brown clay; (6) Blue-brown clay.

Trench C V and bank

(1) Brown clayey loam; (2a) Brown loam and orange clay; (2b) Dark brown clayey loam; (2c) Dark brown silt; (2d) Medium brown silt; (2e) Light brown silt; (2f) Dark brown silty loam; (3) Grey crumbly clay; (4) Grey clayey loam with much charcoal; (4a) Light blue sticky clay; (5) Orange and grey bands of gritty silt; (6) Orange-brown silty loam. Dark at top; **Bank** (7) Clay with large stones; (8) Orange-brown silty loam; (9) Dark brown loam; (10) As (8), but dark at the top.

DESCRIPTIONS OF THE LAYERS SHOWN IN THE SECTIONS ILLUSTRATED IN FIG 15

Trench C VI Section A-C (2) Khaki-brown clayey loam; (3) As (2) with grits and small stones; (4) Brown silty loam; (8) Compact limestone with some glacial pebbles and gravel (causeway); (9) Stiff khaki-brown to grey clayey loam; (10) Dark grey clayey loam with much charcoal. Also a little fired clay and lumps of blue clay; (11) Grey clay or clayey loam; (12) Boulder clay and silts.

Trench C VI Section D-E (2) Khaki-brown clayey loam; (3) Yellow marl and brown loam; (4) Brown silty loam; (4a) As (4) but clayey; (5) Grey-brown clayey loam; (5a) Stony orange clay; (6) Grey clay; (7) Dark grey clay; (9) Stiff grey-brown clayey loam with horizontal lenses; (10) Dark grey clayey loam with much charcoal; (11) Grey clay or clayey loam; (12) Boulder clay and silts.

Trench C X (2) Light brown clayey loam; (3) Grey-brown clayey loam; (4) As (3) but more clayey; (5) Brown clayey loam; (6) Brown clayey loam with lumps of grey-blue and yellow clay (upcast); (7) Grey-brown clay or clayey loam; (8) Dark brown clayey loam with much charcoal; (9) Blue-brown clay; (10) Stony yellow marl and sandy silts.

HUMAN BURIALS

A grave containing an inhumation burial had been cut into the filling of Ditch A10 and other, disarticulated or disturbed, human bones were found in pit 150. Apart from three cremations and the occurrence of undated infant-remains, they were the only evidence of human burial found in the excavated area.

The grave cutting Ditch A10 contained the remains of an adult laid in a crouched position with head at the north-east. There were no associated finds. The grave, which was 200-300mm deep, was aligned along the ditch, suggesting that the boundary line may still have been visible when it was dug. Pottery from the filling in the ditch is of early CP2-type (cf. printed Appendix), providing a terminus post quem in the middle of the 1st century AD for the interment.

Human bones in pit 150 were probably partly disturbed when Ditch C was dug, removing part of the pit. Their original burial may date to the transition between Phases 1 and 2.

Three cremations occurred in shallow pits at the east side of Enclosure B (15, 26, 27: cf M22) where one preserved the base of a possible early CP2-type vessel. Two infant burials within Area A (635, 745) were undated except that a sherd of Roman pottery was found with 745.

FEATURES AT THE ENTRANCE TO ENCLOSURE C (FIG 16)

120 Brown earth, surrounded by stones, visible in the top of 127. It could indicate a hole where a post was removed or may simply be part of the filling pattern. In section the brown earth narrowed to a point $\leq$ 0.30m deep.

121 Shallow gully, probably a post-trench. Average depth, 0.20m. It appeared to overlay 129 but did not extend across 127. Joins 132 at the south. Filling - brown loam with no obvious packing stones.

122 Large posthole. Diameter 0.95 x 0.85m. Depth 0.84m. Post-pipe 0.30-0.40m in diameter: larger at the bottom. Very stony filling. Posthole forms a pair with 131.

123 Probable post-trench. 0.18m deep at the north, falling to 0.50m deep by 127. Up to 0.45m wide. No clear evidence that 123 and 127 were not contemporary, but some browner loam in section P-N opposite 123. Filling - brown clayey loam with some marl. No post-impressions.

125 Gully or slot running along the top of 128, 0.15-0.20m wide and 0.22m deep. Possible post-impression beneath the ends of the slot, but not visible at a higher level. Filling of slot - dark loam. No packing stones.

126 Probable post-trench. Shallower than 128 but probably a continuation of it. 0.20m deep at the north, but 0.40m deep near 128. Filling - brown clayey loam with some marl.

127 A large post-pit holding perhaps more than one post. Opposite to, and forming a pair with 134. Hole at least 1.25m wide x 1.75m long. Depth 0.85m. Nothing to prove that it is not contemporary with 123 and 129, but was 127A at the back of the hole? Vertical stones suggest it held more than one post (palisade?).In Section L-M there appears to be a post-impression, but this was not confirmed in plan. Filling - brown clayey loam, marl and stones. Several 'false bottoms' of yellow marl loam with flecks of burnt clay and charcoal found in 127 and 129.

127 A Hole in bottom of 127. 0.17m deep; 0.65 x 0.27m at top, 0.35 x 0.13m at bottom. No post-impression. Filling - similar to 127. Is it a pair with 134A?

128 Probable stockade-trench. Up to 0.75m deep (0.50m deep near 126); 0.95m wide and 3.3m long (excluding 126). No post-impressions found other than those mentioned under 125. Appears to be later than 129/127 and could have been re-cut. Presumably contemporary with 126 and probably the same feature (difference defined by a change in levels). Uncertain if 125 is later, or evidence for a timber wall set within 128. Filling - mainly ginger clay or loam with many stones. Two brooches and a little pottery found by west side (FIG 22, 4-5).

129 Probable post-pit or trench. Depth 0.62m. Width 0.90m. Length uncertain. Undercut on north-east side. Probably contemporary with 127. Filling - marl, loam and large stones.

130 ?Post-trench (continuation of 126?). 0.85 x 0.32m and 0.25m deep. Filling - ginger clay and loam.

131 Large posthole. Depth 0.77m. Diameter, 1.05 x 0.70m. Post-pipe $\leq$ 0.30m in diameter. This post forms a pair with 122; the posts being 2m apart. Filling - ginger clay and stones with a darker core.

131 A Shallow pit. 0.90 x 0.50m and 0.15m deep. Bowl-shaped. Filling - dark charcoal flecked loam.

132 Shallow gully or post-trench. Depth 0.18-0.30m. No post-impressions. Later than 133 but does not cross 134. Filling - brown loam.

133 ?Post-trench. 0.52m deep and 0.45m wide. Undercut on north side. Thought to pre-date 134, which it does not cross. No post-impressions or packing stones. Filling - clayey loam with some marl and stones.

134 Large post-pit, similar to 127. Diameter 1.80 x 1.35m. Depth 0.80m. Sections C-D and E-F appear to show a re-cut, but the variation in the filling may indicate different fills at either side of a post. The feature is likely to have held more than one post. Filling - ginger clay, marl, stones, and some loam.

134 A Hole in the bottom of 134. 0.17m deep; 0.50 x 0.28m at the top, 0.40 x 0.20m at the bottom. Square 'stain' 0.22 x 0.12m by south side (see 127 A).

135 Brown earth and stones in the centre of 134 (cf. 120). At 0.10m down the brown earth was 1.00m long and 0.20-0.25m wide, but it was not found any deeper than 0.25m. This loam probably indicates where posts had been removed from 134.

136 Probable post-trench to the south of 134. Bottom on two levels: 0.15m deep near south end, and 0.28m deep near 134. Possibly earlier than 134 but not certain.

137 ?Post-pit. Depth, 0.70m. Diameter, 1.00 x 0.50m but rounder at base. No post-impression. Unconvincing relationship with 140. Ledge on south side? Filling - mainly brown loam and large stones (bottom not drawn).

138 Posthole or post-pipe. Visible on the surface of 140. Depth 0.70m. Diameter at top c.40m; at base, 0.15m wide and possibly 0.37m long. Split timber or plank?

Possibly related to the slot in 140 (139). Filling - very dark earth. Roman pottery (grey ware) from the top.

139 A line of brown loam along the top of 140, $\underline{c}$ 0.10m wide. Possibly the upper filling of a post-slot.

140 ?Post-pit. Depth, 0.80m. Diameter, 1.75 x 1.00m. Ledge on east side? Probably later than 134. No post-impressions apart from 138 (see above), but below 138, and perhaps at the south end of 140, darker loam on the bottom may indicate the position of posts in an earlier phase. In Section A-B a vertical line of dark earth, 20-30mm wide may indicate the position of the presumed stockade fence. However, it was not a continuous feature. Filling - ginger clay and gingery-brown stony loam.

141 Post-pit. Depth, 0.70m. Diameter, 0.85 x 0.75m. Post-pipe $\underline{c}$ 0.25m in diameter. Filling - pipe, dark brown loam; packing mainly gingery clay and stones. Depression in the top containing stony loam.

DESCRIPTIONS OF THE LAYERS SHOWN IN THE SECTIONS ILLUSTRATED IN FIG 17

F141 (1) Light brown stony loam; (2) Brown loam; (3) Marl, clay and stones.

Section D–C (1) Brown loam; (2) Marl, clay and stones (some loam); (3) As (2) but more marl; (4) Dark loam; (5) Marl, clay and stones; (6) Stony marl.

F122 (1) Clayey loam and stones; (2) Brown loam; (3) Band of charcoal; (4) Marl,clay and stones.

Section L–M (1) Stony loam; (2) Stony loam with some marl; (3) As (2) with more marl; (4) Marl; (5) Marl and clayey silt; (6) Loam with some marl; (7) As (6) with more marl.

F140 Section A–B (1) Loam; (2) Dark loam; (3) Marl, clay and stones; (4) As (3) with some loam; (5) Dark loam.

F128 Section J–K (1) Dark loam; (2) Loam, marl and stones; (3) Marl with silty clay.

Section R–S (1) Dark brown loam; (2) Clay and marl; (3) Marl,clay and stones.

FEATURES WITHIN ENCLOSURE C (FIG 12)

No.	Depth (mm)	Diameter (m)	Description	Site Phase	Infill; other comment
142	240	0.73 x 0.56	Pit	1	Dark clayey loam
144	100	0.62	Pit	?1	Orange clay and charcoal
145	350	0.38	?Posthole		Stony loam. Sloping side on SSW. Probably held diagonal post
146	160	0.40 x 0.35	Posthole	3	Very gravelly loam
147	170	0.25	Posthole		Brown clayey loam
148	120	0.25	Posthole	3	Cutting Ditch V. Packing stones
149	150	0.30 x 0.25	Posthole		Bowl-shaped. Filling-very dark loam
150	400	1.70	Pit	2a	Layers:- (1) Mostly stones (2) Charcoal band (3) Clayey silt. Ribs, pelvis and leg bones of human skeleton on top Cut by Ditch C
151	-	0.40+	?Hearth		Charcoal. Reddened base Former size uncertain
153	200	0.70	?Pit		Clay with loam. Charcoal on base and sides
154	200	1.30 x 0.99	Pit	2a	Rectangular. Mixed loam
155	-	-	Layer	3	Dark earth over trackway
156	100-150	-	Furrow		Not on medieval alignment? Filling-dark brown clayey loam
157	140	0.90 x 0.60	Pit		Sub-rectangular. Possibly re-cut. Dark loam and brown clay
158	100	0.40	Clay-lined pit		Very dark loam
159	300	0.80 x 0.47	?Posthole		Squarish. Many large stones and dark loam in filling. Bottom diameter 0.40 x 0.20m
160	1000		Ditch	1	Mainly clay with a dark layer at south end
161	350	Uncertain	Uncertain	3	Dirty clay and dark loam
162	250	0.20	Posthole		Stones in clay
163	-	-	Pitched stone		Line of stone in plough soil running N-W
164	160	1.60 x 0.75	Pit		Roughly rectangular. Trace of burning. Black ashy loam at base. Dark brown loam above
165	100	0.33 x 0.25	Posthole	3	Gravelly filling

No.	Depth (mm)	Diameter (m)	Description	Site Phase	Infill; other comments
166	200	0.45 x 0.40	Posthole	3	Squarish. Large packing stones in situ
167	–	–	Stone rubble	3	Part of trackway?
168					As 167
169	10	0.30	?Posthole	3b	Brooch found on surface (FIG 23,16)
170	140	0.35 x 0.30	?Posthole		Black core (diam.15-20cm)
171	140	0.21	?Posthole		Dark stony loam
172	190	0.22	?Posthole		Variable
173	30	0.22 x 0.16	?Posthole		Dark loam
174	30	0.24	Depression		Variable
175	60	0.15	?Posthole		Variable
176	50	0.20	Depression		Variable
177	150	0.28 x 0.21	Posthole		Dark loam
178	60	0.18	Depression		Variable
179	70	0.17	Uncertain		Brown clay
180	70	0.20	?Posthole		Dark loam
181	200	0.20	Gully or ditch	1	Dark silty loam
182	270	0.60	Pit or posthole		Hole 200mm x 160mm and 130mm deep in base Filling-clay and dark loam
183	300	1.60 x 1.10	Pit		Dark loam and clay. Irregular
184	100	0.25 x 0.17	?Bottom of posthole		Dark loam
185	100	0.35	?Pit		Dark loam
186	90	0.35 x 0.32	Clay-lined pit	1	Dark loam
187	140	0.23 x 0.19	?Posthole		Large vertical stone filling hole
188	100	0.30	Uncertain		Brown clay. Bowl-shaped. Stones on top
189	10	0.36	?Pit		Dark loam
190	170	0.32 x 0.20	Uncertain		Could have held a plank, but possibly animal disturbance
191	100	0.80 x 0.40	Pit	3a	Dark loam
192	70	0.53 x 0.40	?Pit		Dark loam
193	10	0.48 x 0.26	Depression		Dark loam
194	10	0.37	Layer		Spread of burnt marl and loam
195	90	0.46 x 0.36	?Pit	1/2a	Dark loam
196	19	0.23	Layer		as 194
197	110	0.15 x 0.10	Stakehole		Variable

No.	Depth (mm)	Diameter (m)	Description	Site Phase	Infill; other comments
198	150	0.75 x 0.40	?Pit		Dark loam. Irregular
199	Up to 500	1.70 x 0.50	Possible post-slot		Five levels from 0.12m to 0.50m deep. Possible post-impression 0.40 x 0.18m at deeper end. Filling-dark loam
200	40	0.30	Uncertain	3	Gravelly
201	90	0.60 x 0.30	?Pit		Glacial pebbles in pit or pressed into natural clay
202	120-150	1.70 x 0.76	2 pits or kiln		No burning. Filling brown clay with marl (some reddened)
203	150	0.43 x 0.63	Pit		Bowl-shaped. Filling as 202
204	220	0.90	Pit		Squarish with shallow feature on one side. Filling-grey brown clay-loam
205	220	0.50	Pit		Dark brown clayey loam
206	60	0.30	?Posthole	3	Brown gravelly loam
207	520	2.05x 1.55	Pit	3	Stepped edges. Irregular Filling-mixed clay and loam
208	250	0.50	Pit		Clay and dark loam
209	50	0.35	Depression	3	Gravelly loam
210	140	1.85 x 1.00	Pit		Dark clayey loam
211	160	0.60 x 0.50	Pit or posthole		Dark clayey loam. Hole 0.23 x 0.12m in base at W end
212	50	0.88 x 0.67	Pit		Marl on bottom with mixed burnt earth above
213	50	0.64 x 0.54	Uncertain		Probably part of 214
214	310	0.36 x 0.24	Posthole		Clayey. Packing stones
215	180	0.62 x 0.35	Pit		Dark clayey loam
216	100	0.25	Posthole		Brown clay
217	100	0.82 x 0.67	Pit		Dark clayey loam
218	40	0.35	Depression	3	Gravelly loam
219	40	0.50	Pit	1	Dark clayey loam
220	190	0.25	Posthole		Some burnt marl in clay
221	90	0.56 x 0.44	Uncertain	3	Gravelly loam
222	300	1.67 x 0.30	Slot or channel		Very dark loam. Cuts layer (2) in Ditch Z but no proof found that it cut layer (1)
223	160	0.80 x 0.60	?Posthole		Includes A and B below
223A	220	0.30	?Posthole		Squarish. Dark filling
223B	220	0.25	?Posthole		Dark filling

No.	Depth (mm)	Diameter (m)	Description	Site Phase	Infill; other comment
224	220	0.26	?Posthole		Stone packing
225	90	Width 0.25	Gully		Dark loam with burnt and unburnt marl
226	400	1.00 x 0.60	Pit or posthole		Dark clayey. Hole at base 0.27 x 0.17m. Cuts layer (2) of Ditch Z but uncertain about layer (1)
227		0.40 x 0.30	Depression		Dark clayey. Possibly part of gullies 225 and 228
228	50	Width 0.38	Gully		Dark clayey. Relationship with Ditch Z uncertain
229	189	0.90 x 0.75	Pit	3	Brown gravelly loam
230	100	0.50	Pit	3	Brown gravelly loam
231	100	0.30	Uncertain	3	Gravelly
232	90	0.38 x 0.23	Uncertain	3	Brown gravelly loam
233	450	1.00	Pit	3	Dark brown gravelly loam
234	450	2.3 x 1.3	Pit	?1	Rectangular. Black and red ash on bottom; brown clayey loam above
235	100	0.55 x 0.35	Uncertain	3	Dark gravelly loam
236	300	1.00 x 0.80	Pit	3	Dark gravelly loam
237	90	0.50 x 0.40	Pit	3	Brown gravelly loam
238	50	0.50 x 0.35?	Uncertain		Grey-brown clayey loam
239	150	0.70 x 0.40	Pit or posthole		Brown clayey loam. Ledge round sides. Overall diameter 0.80 x 0.70m.
240	300	0.49	Pit or posthole	3	Dark brown gravelly loam
241	100	0.30	?Posthole	2b/3a	Stones in ditch filling
243	150	0.15	Post or stakehole		Dark loam
244	100-200	Width 0.18	Gully		Dark loam
245	90	0.30	Uncertain		Dark grey silty loam
246	80	0.14	?Stakehole		Dark loam
247	50	0.15	?Stakehole		Dark loam
248	70	0.14	?Stakehole		Dark loam
249		0.15?	Uncertain		Dark loam
250	160	0.23 x 0.18	?Posthole		Dark loam
251	140	0.16	Post or stakehole		Dark loam
252	100	0.14	?Stakehole		Dark loam
253	60	0.68	Pit		Brown clay with charcoal. Traces of burning round edges
254	240	0.45	Clay-lined pit		Mixed, with much charcoal near bottom. Lined at bottom with blue-green clay. Patchy burning on pit sides

No.	Depth (mm)	Diameter (m)	Description	Site Phase	Infill; other comment
255	150	0.19	Posthole		Mixed. Packing stones
256	260	0.24	Posthole		Mixed. Bottom diam 0.15m. Large packing stone
257	290	0.24 x 0.18	Posthole		Many stones in clay filling. Probable posthole on SW side 0.20m diam and 0.15m deep
258	200	0.40	?Pit		Bowl-shaped. Many stones in a filling of brown clay
259	170	0.22	Posthole		Mixed. No stones
260	300	0.33 x 0.23	Posthole		Packing stones. Clay at bottom and dark loam at top
261	100	0.35 x 0.25	Pit or posthole		Brown clay
262	70	0.34 x 0.25	Posthole		Pear-shaped. Mixed stone filling
263	150	0.26	Posthole		Packing stones. Burnt earth in filling
264	340	0.83	Pit		Mainly clay with some large stones. Layer of charcoal on bottom. Sides burnt
265		0.70 x 0.55?	Pit bottom		Dark loam
266	200	0.35 x 0.22	Posthole		Bottom 0.24 x 0.12m. Packing stones. Filling-mixed. Probably earlier than 265
267	170	0.35 x 0.25	?Posthole		Mixed. Packing stones. Probable replacement for 268-9
268	170	0.40 x 0.30	?Posthole		Hole filled with stones
269	170	0.40	?Posthole		Orange clay and stones
270	10	0.12	?Stakehole		Dark loam
271	80	Width 0.30	Gully	?2a	Dark loam
272	240	2.35 x 0.60	Gully or pit	1/2a	V-shaped. Overlying 271 & 273. Filling-mainly clay but some burnt earth and charcoal
273	80	Width 0.30	?Channel		Dark loam, some burning
274	100	0.30?	Uncertain		Irregular, ?animal disturbance
275	140	0.90 x 0.65	Pit	3	Brown gravelly loam. Irregular
276	120	1.30 x 0.65	?Pit		Brown clayey loam
277	120	0.25	?Posthole		Dark loam
278	180	0.16	?Posthole		Brown clay
279	80	0.15	?Posthole		Dark loam

No.	Depth (mm)	Diameter (m)	Description	Site Phase	Infill; other comment
280	c 80	c 0.20	?Posthole		Standing stone. Hole uncertain
281	80	0.22	?Posthole		Dark loam in centre. Perhaps held plank or stake, 0.20 x 0.05m
282	10	c 0.20	?Posthole		Brown stony loam
283	190	0.30	Posthole		Many stones in mixed loam and clay
284	100	1.50 x 0.90	?Pit		Dark brown clayey loam
285	230	0.28 x 0.20	Posthole		Dark loam. Packing stones. Probably held plank (as 281)
286	190	0.40 x 0.17	Posthole		Dark loam. Packing stones. Probable replacement for 287
287	170	0.36 x 0.15	Posthole		Brown clayey loam. Packing stones. Overall pit size 0.63 x 0.57m
288	140	0.28	Posthole	?3	Brown loam
289	100	Width 0.15	Uncertain		Dark brown. ?animal disturbance or part of 290
290	100	Width 0.25	Gully		Brown clayey loam. Discontinuous
291	290	1.10x 0.75	Pit		Mixed clay and loam
292	360	1.20 x 0.95	Pit	3	Brown gravelly loam
293	200	0.28 x 0.20	Posthole	3	Brown gravelly loam
294	210	0.35 x 0.24	?Posthole	3	Brown gravelly loam
295	200	0.55 x 0.40	Pit or posthole	3	Brown gravelly loam
296	–	?	?Clay-lined pit		Patch of blue green clay
297	100	1.40 x 0.70	?Pit	?2a	Dark clay
297A	250	0.28 x 0.23	?Posthole		Clay. Beneath 297
298	200	2.05 x 0.90	Pit	3	Brown gravelly loam
298A	320	0.23	?Posthole		Beneath 298
299	120	0.80 x 0.54	Pit	3	Gravelly clay
300	50	0.22	?Posthole		Mixed clayey loam
301	40	1.00	Pit	3	Brown gravelly loam
301A	200	0.25 x 0.15	?Posthole		Sandy. Beneath 301
302	200	0.30	Posthole		Mixed clay and loam
303	110	0.48	?Pit		Dark clayey loam
304	220	0.30	?Posthole		Mixed. Packing stones
305	70	c 0.35	Pit or posthole		Loam and marl
306	240	0.40 (top)	Posthole		Dark loam. Packing stones. Post impression, 0.15m diam.

No.	Depth (mm)	Diameter (m)	Description	Site Phase	Infill; other comment
307	–	–	Layer		Burnt and unburnt marl
308	110	0.40	Pit or posthole		Grey brown clayey loam
309	170	0.30 x 0.25	?Posthole		Dark clayey loam
310	30	–	Layer		Grey-brown clayey loam
311	170	1.15 x 0.85	Pit		Grey-brown clayey loam
312	200	0.85	Uncertain		Grey clay. Pre I.Age?
313	100	0.50 x 0.42	Pit		Very dark loam
314	50	0.20	Uncertain		Very dark loam
315	80	0.30 x 0.15	Uncertain		Very dark loam
316	50	0.20	Uncertain		Very dark loam
317	50	0.40 x 0.35	Uncertain		Very dark loam
318	200	0.80	Pit		Dark clayey loam
319	160	1.00 x 0.90	Pit		Light brown clayey loam
320			?Layer		As 310
321	350	0.45 x 0.35	?Posthole		Dark loam. Bottom 0.35 x 0.20m
322/3	120	–	Uncertair		?Animal disturbance
324	180	0.43 x 0.23	?Posthole		Mixed dark loam. Squarish
325	110	0.30	Posthole		Dark loam
326	110	0.27	Posthole		Dark loam
327	110	0.30 x 0.23	?Posthole		Dark loam
328	120	0.90 x 0.40	Uncertain		Dark loam and large stones
329	100	1.20 x 0.33	Uncertain		Similar to 328
330	10	0.35 x 0.20	Uncertain		Variable
331	330	1.30 x 0.40	Post-trench		Post-impression, c 0.23 x 0.15m, 0.50m from north end. Filling-dark loam at top; clay below. Large stones packing west end
332	110	0.33 x 0.25	?Posthole		Mainly marl
333	400	0.40 x 0.33	Posthole		Mixed loam and clay. Packing stones
334	250	0.30 x 0.25	Posthole		Post-impression, 0.20 x c 0.15m. Dark stony filling (packing)
335	310	0.22	Posthole		Dark loam. Packing stones
336	120	0.53 x 0.38	Pit		Variable
337	380	0.66 x 0.32 (top)	Posthole		Clay with charcoal. Bottom diameter, 0.25m
338	360	0.26 x 0.23	Posthole		Leaning west. Filling as 337
339	370	0.30 x 0.24	Posthole		As 337

No.	Depth (mm)	Diameter (m)	Description	Site Phase	Infill; other comment
340	150	0.66 x 0.56	Pit		Mainly marl
341	100	0.27	?Posthole		Variable. Large stone
342	70	0.28 x 0.24	?Posthole		Variable. One stone
343	50	0.20 x 0.15	Uncertain		Variable
344	200	0.25	Posthole		Dark loam
345	260	0.28 x 0.24	Posthole		Dark loam
346	30	0.40 x 0.35	Uncertain		Probably not a posthole
347	240	0.30 x 0.29	Posthole		Variable with burnt clay
348	330	1.12 x 0.42	Uncertain		Stepped sides. Filling-dark loam at top; clay below
349	50	c 0.90	Layer		Dark loam
350	280	0.45	Pit or posthole		Brown loam with particles of burnt clay. Many stones on south
351	80	-	Uncertain		Could be related to 348-350; similar filling
352	280	0.97 x 0.60	?Pit		Mixed clay and loam
353	120	0.80 x 0.45	Uncertain		?Animal disturbance
354	90	0.20	Uncertain		Dark loam. Bowl-shaped
355	200	0.75 x 0.37	?Pit		Dark loam and marl. Irregular
356 357	250 300	0.76 x 0.30	Linked postholes		Black gritty clay; charcoal; daub; packing stones
358	100	0.15	Uncertain		Brown clay
359	120	0.16	Posthole		Dark brown clay
360	200	0.30	?Posthole		Black, baked clay in centre
361	120	0.25	Posthole		Variable. One stone
362	80	0.23	?Posthole		Dark stony clay
363	240	0.46 x 0.30	Posthole		Black gritty loam at top; clay below. Some daub
364	100	0.24	?Posthole		Gritty loam
365	30	0.25	Depression		Dark brown loam
366	50	0.26 x 0.22	Posthole		Dark clay. Packing stones
366A	50	0.15	Depression		Charcoal filled. Some daub
367	140	0.46 x 0.42	?Posthole		Large stones; charcoal; some daub
368	160	0.20 x 0.14	?Posthole		Brown clay and stones
369	80	0.45 x 0.40	Uncertain		Variable, some burnt flecks
370	140	0.26 x 0.19	?Posthole		Brown clay and stones
371	60	0.25 x 0.21	Uncertain		Brown clay

No.	Depth (mm)	Diameter (m)	Description	Site Phase	Infill; other comment
372	160	0.55 x 0.50	Pit		Patchily burnt sides. Much charcoal in filling
373	130	0.40	Pit or posthole	?3	Dark brown gravelly loam. Bowl-shaped
374	200	0.80	Pit	3	Dark brown gravelly loam
375	300	3.10 x 0.40	?Post-trench	3	Dark brown gravelly loam with some stones
376	180	0.14	?Posthole		Brown stony clay
377	30	0.25 x 0.13	Uncertain		Dark loam
378	60	0.19	Posthole		Dark loam
379	110	0.20	Posthole		Dark brown loam. Packing stones
380	80	0.30 x 0.24	Posthole		Dark brown loam. Packing stones
381	60	0.45 x 0.20	?Posthole		Dark brown gravelly loam. ?Modern
382	160	1.05 x 0.50	Pit		Grey-brown clay. Probably pre-Iron Age
383	250	0.25 x 0.20	Posthole	3	Dark brown gravelly loam
384	40	0.55	?Pit	3	Gravelly loam
385	240	0.25	?Posthole	3	Dark brown gravelly loam
386	100	0.30	?Posthole	3	Gravelly loam
387	300	0.90 x 0.70	Pit		Dark brown stony loam
388	110	0.35	?Posthole	3	Dark brown gravelly loam
389	140	0.35	?Posthole	3	Dark brown gravelly loam
390	120	0.60 x 0.19	?Animal disturbance		Variable
391	120	1.05 x 0.25	?Animal disturbance		Variable
392	50	0.20	Depression		Dark loam with charcoal
393	50	0.20	Depression		Dark loam with charcoal
394	120	0.40 x 0.22	Uncertain		Mixed dark loam
395	230	0.27	?Posthole		Dark loam, clay and charcoal
396	-	-	Animal disturbance		Variable
397	100	0.22	Posthole		Dark loam, much charcoal
398	200	0.65 x 0.45	Pit		?Lined with pottery. Green clay base
399	60	1.50 x 0.70	Depression		Light brown clay
450	270	0.35 x 0.22	Posthole		Large stones filling hole
451	250	0.37 x 0.27	Posthole		Large stones filling hole
452	250	1.50 x 0.30	?Post-trench	?2	Many large stones practically filling feature. Dark loam at top; clay below

No.	Depth (mm)	Diameter (m)	Description	Site Phase	Infill; other comment
453	60	0.38	Depression		Dark loam
454	240	0.35	Pit		Cylindrical with patchily burnt sides. Filling-dark loam
455	120	0.12	Uncertain		Possibly not a feature
456	200	1.20 x 0.70	Pit		Variable with red flecks
475	80	2.00 x 0.40	Uncertain		Filled with topsoil and could be modern
457A	100	0.30 x 0.25	Depression		Dark loam. Beneath 457
458	200	3.75 x 0.60	?Gully or pit	2	Dark loam
458A	750	0.60	Pit	2	Pit at end of 458. Probably contemporary. Same filling
459	220	0.50 x 0.35	Pit or posthole		Variable with much charcoal. Probably a pit, but clay at sides raises a doubt
460	230	0.23	Posthole		Stones. Variable filling cut by 458
461	270	0.26	Posthole		Some stones. Dark core Possibly later than 458
462	200	0.15	?Post or stakehole		Brown clay. Bottom diameter 60mm
463	130	0.20 x 0.15	?Posthole		Clay with charcoal
464	100	2.20 x 0.20	?Post-slot		Dark loam. Some vertical stones. Part of triangular loomweight
465	100	0.20	Posthole		Stones in brown clay
466	120	0.33 x 0.27	Posthole		Stones in dark brown clay
467	70	0.24	Depression		Bowl-shaped. Much charcoal
468	100	0.25	Posthole		Brown clay. Packing stones
469	70	0.51	Pit		Dark brown gritty loam
470	160	0.39 x 0.28	Posthole		Dark clay. Packing stones
471	140	0.32 x 0.26	Posthole		Dark clay. Large stones
472	-	0.50 x 0.45	?Clay-lined pit		Bottom only (green clay)
473	100	0.35	?Posthole		Dark loam
474	100	0.66 x 0.44	Pit		Grey-brown clay Pre-Iron Age?
475	120	0.48	Pit		Dark brown loam with charcoal
476	70	0.27	Posthole		Brown clay with stones
477	200	0.40	Pit		Grey-brown clay. As 474?
478	450	Width 0.15	?Slot		Dark loam. Narrows below and undercut to west Did it hold stakes?

No.	Depth (mm)	Diameter (m)	Description	Site Phase	Infill; other comment
479	220	0.30	Posthole		Dark brown loam with stones
480	100	0.24	Posthole		Dark grey-brown clay Charcoal
481	120	0.22	Posthole		Brown clay and stones
482	150	0.34 x 0.19	Posthole		Mixed. Large stones at top
483	100	0.30 x 0.15	Uncertain		Dirty clay. ?Animal disturbance
484	260	0.72 x 0.45	Pit		Variable. Silty at bottom
485	180	0.50 x 0.45	?Pit		Grey clay with red flecks
486	140	0.30 x 0.26	Uncertain		Grey clay with red flecks
487	240	0.21	Posthole		Dark brown loam with small stones. ?Core 0.7-0.10m diameter
488	-	-	Uncertain		Patch of stone in Ditch Z Some large; some vertical
489		c 0.30	Uncertain	?3	Gravelly patch in Ditch Z
490		c 0.50	Uncertain	?3	As 489
491	150	0.36	Pit		Dark loam. Bowl-shaped
492	70	0.15	?Posthole		Brown clay. Some stones
493	150	0.23	Posthole		Brown loam. Packing stones
444	150	1.40 x 1.00	Pit		Clay with loam
495	150	1.05 x 0.56	Pit	2	Dark brown loam
496	120	0.70	Pit		Dark brown loam
497	300	0.60	Pit		Lining of blue clay on bottom Dark loam
498	190	0.45 x0.40	Pit		Dark loam; burnt particles
499	120	0.35 x 0.25	Uncertain		Charcoal in dirty clay
529	60	0.26	?Posthole		Charcoal in clay
530	260	0.44	Pit or posthole		Dark silty loam. Red flecks
531	160	0.40	Pit or posthole		As 530
532	240	0.90 x 0.60	?Pit		Roughly rectangular. Many stones in filling, including ironstone
533	200	0.25	Posthole		Very dark loam
534	100	1.65 x 0.30	Uncertain		Dark loam. Some pottery
535	230	0.60	Pit		Dark silty loam
536	360	1.15 x 0.75	Pit	3	Gravelly loam. Some stones
537			Uncertain		Stones at base of plough soil
538	100	0.42	?Posthole	3	Gravelly loam
539	150	0.50 x 0.35	?Posthole	3	As 538
540	200	2.20 x 1.80	Pit	3	Brown gravelly loam

No.	Depth (mm)	Diameter (m)	Description	Site Phase	Infill; other comment
541	–	–	Gully		Brown loam
543	170	0.60 x 0.40	Pit	3	Dark gravelly loam
544	Up to 450	Width 0.50	?Trench	2	Two levels. Stones in filling but not packing as found. Filling- brown clay
545	110	0.45	?Pit		Dark silty loam
546	100	0.65 x 0.50	Pit		Dark loam. Burnt particles
547	150	0.33	Posthole		Dark silty loam. Stone slab on base. CP I pottery
548	200	0.35 x 0.25	Posthole		Variable with red flecks. CP I pottery
549	100	0.70 x 0.60	?Pit		Clay with charcoal
550	100	0.55	?Pit		Dark clayey loam. Below Ditch C

FEATURES IN THE AREA OF HUT 2 (FIG 18)

The drainage gully

C2 Final stage. Depth, 0.40m. Dark loam and gravel in filling but no stones.

C3 Stage 1 (south side). Depth, 0.20m. Filling - silty loam and clay.

C3A Stage 2. Extension of Gully C3 at its east end (across the entrance). Depth 0.40m at Section 10, 0.20m where joining C3. Fairly steep sides with little erosion. Gravel in top of gully, overlain by stone rubble. Filling - clay and loam.

C4 Stage 1 (south side). Depth at terminal, 0.35m; further west, 0.25m. Filling - large stones and dark sticky loam at the terminal, but not to the west, where it was more variable.

C5 Final stage. Depth, 0.60m. Gravel and small stones in filling (stones eroded from inner "floor").

C6 Stage 1. Overflow gully. Depth, 0.45m. Filling - mainly clay.

C6A Final stage (or later?). Either draining gully C2 or a continuation of 566. Depth, 0.15m. Filling - dark gravelly loam.

C7 Stages 1-2? Depth, 0.35-0.40m. Filling - clay or clayey loam. Re-cut in Section 1?

C8 Stage 1. Early phase at north-east terminal. Depth, c 0.12m. Much blue clay in filling.

Other features in the area of Hut 2

No.	Depth (mm)	Diameter (m)	Description	Site Phase	Infill; other comment
551	-	-	Posthole		Depression containing dark loam in the stony upper layer of 567
553	250-500	2.00 x 0.70	?Irregular pit	3	Dark loam with stones (from floor). Later than gully C5
554	320	0.28	Posthole		Stones in orange clay
555	300	0.40 x 0.35	?Posthole		Stones in orange clay
556	620	0.85 x 0.55	Pit or posthole		Orange clay and dark earth. Possible post-impression. Probably a pair with 557
557	500	0.60 x 0.50	Pit or posthole		Shallow channel, c 0.12m deep on south side
558	100	0.75 x 0.60	Pit		Dirty clay
559	100	0.40 x 0.32	Posthole		Stones (packing?) and dark loam in filling. Stones as in track?
560	240	0.23	Posthole	3	Brown loam
561	100	1.30 x 0.18	Uncertain		Gravelly filling
562	c 300	0.30 x 0.16	Posthole		Dark loam. Aligned along C7?
563	290	0.35 x 0.26	Posthole		Dark loam. Packing of yellow limestone
564	260	0.28	Posthole		Similar to 563
565	200	Width 0.26	?Post-slot		Fairly vertical sides. Dark filling. Large glacial pebbles in fllling may be packing; if so posts could have been 0.40 - 0.50m apart
566	150	Width 0.35	?Gully	?3	Dark gravelly loam Later than stone "floor"
567	550	1.90 x 1.45	Pit		Rectangular with sloping sides (bottom diameter 1.30 x 1.00m). Top filled with limestone rubble ("floor" make up). Filling - dark brown clay or clayey loam
568	140-240	Width 0.16	?Slot or Channel		Filling similar to gully C7 and pit 567. Is it contemporary? Bottom sloping from pit to ditch
569	320	0.24 x 0.21	Posthole		Many stones and grey loam Stage 1?
570	180	0.22	Posthole		Some stones and dirty clay

No.	Depth (mm)	Diameter (m)	Description	Site Phase	Infill; other comment
571	260	c 0.75 x 0.50	Pit	?3	Later than stone "floor"? Large stone, some clay, and greenish loam in filling
571A	200	c 0.?	Uncertain		Bowl-shaped. Filling - dirty clay
572	Up to 400	0.70 x 0.36	?Posthole		Square outline with stones on top. Filling - dirty clay with some large stones. No post-impression, but flat base at west end
573	130	0.20	?Posthole		Stones (2) in clay
574	100-200	1.05 x 0.41	Uncertain		Dirty clay with pebbles, mainly in centre
575	-	Width 0.35	Depression		Dirty clay. Relationship with 576 uncertain
576	240	0.35 x 0.25	Posthole		Dark loam, clay, and stones as found in Stage 1 features
577	80	0.90 x 0.18	Slot		Yellow marl
578	70	0.37 x 0.17	Uncertain		Small stones and dirty clay; one stone on edge? Earlier than 565?
579	310	0.48 x 0.25	?Post-slot		Many stones in filling but no post-impression. Earlier than 565?
580	240	0.26	Posthole		Many stones in filling. Probably Stage 1
581	260	0.26 x 0.22	Posthole		Dark clayey loam with many stones as found in Stage 1 features
582	70	0.22	Depression		Gravelly filling
583	200	0.26	Posthole		Clay, loam, stones, and gravel
584	170	0.10	Post or stakehole		Gravelly filling
585	70	0.13	Post or stakehole		Dark clayey loam
586	60	0.13	Post or stakehole		Dark clayey loam
587	110	0.21	Depression		Bowl-shaped. Gravelly filling
588	140	0.30 x 0.25	Posthole		Some stones in filling and perhaps a little gravel
589	100	0.50 x 0.27	Uncertain		Very dark loam
590	350	0.28+	?Posthole		Chamferred edge on east side (bottom diameter 0.24m). Almost entirely filled with small stones. Brown loam
591	140	0.27 x 0.23	?Posthole		Dark loam with red flecks. Two stones

No.	Depth (mm)	Diameter (m)	Description	Site Phase	Infill; other comment
592	140	0.35 x 0.20	?Posthole		Could be part of 593. Several stones lengthways
593	190	0.40 x 0.35	Pit or posthole		Clean clay but containing CP2 type pottery
594	Up to 70	c 0.78	?Pit		Several large pieces of limestone overlying 593. Very shallow at north end containing marl
595	40	0.17	Depression		Brown loam
596	190	0.28 x 0.18?	?Posthole		Gritty marl and loam
597	100	0.18	?Posthole		Brown clay. Indistinct
598	140	0.20	?Posthole		Brown clay and small stones. Indistinct
599	170	0.22	?Posthole		Brown clay and small stones. Indistinct
600	150	0.17	?Posthole		Brown clay and small stones. Indistinct
601	190	0.19	?Posthole		Brown clay and some gravel. Indistinct
602	200	0.25	?Posthole		Brown clay and small stones. Indistinct
603	180	0.20	Posthole		Brown stony loam. Gravel
604	180	0.20	Posthole		Brown stony loam. Gravel
605	180	0.21	Posthole		Brown stony loam. Gravel
606	-	0.60 x 0.40	Hearth or pit		A patch of reddened loam
607	150	1.60 x 1.40	Pit		Bowl-shaped pit, filled with flat stones lying horizontally. Traces of burning on uppermost stones, but no ash or charcoal amongst stones. ?Base of hearth. Or was burning secondary?
608	140	0.35 x 0.20	?Posthole		Dark clayey loam
609	260	0.35?	?Posthole		Dirty clay containing charcoal. Beneath 607
610	400	0.45 x 0.35	Pit or posthole		Small pieces of limestone in clayey loam. No post-impression. Later than gully 3A. Not noticeably cut through overlying stone
611	370	0.20	?Posthole		Or animal disturbance?
612	180	0.25	?Posthole		Gravelly fill. Overlying 610?
613	300-370	0.35	?Posthole		Centrally placed in ditch with packing stones against sides. Was ditch open when post erected?

No.	Depth (mm)	Diameter (m)	Description	Site Phase	Infill; other comment
614	370	0.75 x 0.50	Pit or posthole		Dark brown loam with large stones. Possibly re-cut
615	180	0.40	Pit or posthole		Bowl-shaped. Dark brown loam
616	300	0.28	?Posthole		As 613. Stones on bottom
618	260	0.23	Posthole		Some packing stones. Dark core. Shape of hole suggests post could have been leaning to east
619	260	0.25 x 0.20	Posthole		As 618 and presumably a pair
620	130	0.35 x c 0.25	Uncertain		Vertical stone in dirty clay
621	50	0.30	?Posthole		Charcoal in dirty clay

THE POTTERY KILNS

The 14 early Roman pottery kilns were widely distributed (cf FIGS 3-4), with 6 examples in Area A (kilns 9, 10, 11, 12, 13 and 14), 7 in the area of Enclosure B (kilns 1, 2, 3, 4, 5, 6 and 15), and 1 in Enclosure C (kiln 9). A fifteenth example is doubtful (kiln 8 in Area A). Many of the surviving kilns were shallow or poorly preserved and it is reasonable to assume that evidence of others had been destroyed by ploughing.

Kiln 1 (FIG 19) was one of the deeper, and therefore better preserved, kilns at the site. It was sited on the southern edge of the partly filled ditch of Enclosure B which was utilised as its stoking area. The kiln had probably been constructed in the third quarter of the 1st century AD.

Of normal up-draught design, the kiln had a clay-lined oven, roughly 1.3m in diameter and dug some 0.45m into the natural bedrock. The lining survived for a height of 0.25m above the bottom, and niches at intervals around it may have supported fire-bars radiating from a central pedestal. The fire-bars found in the kiln were of elongated cigar-shape and may formerly have been held in place by blue-black clay, of which traces had survived in places around the oven wall. In the centre of the kiln there was a flimsy pedestal built of stone, clay, and earth. As found it was in a collapsed condition, but it is possible that it had originally been luted with clay and could have been capped with a clay plate or disc similar to the kiln at Weston Favell (Bunch & Corder 1954). It is possible that some of the better stones had been removed when the kiln went out of service.

There was a layer of black ash at the bottom of the oven (which did not extend beneath the pedestal) and both the underlying floor and the edges of some of the stones in the pedestal had been scorched by heat. On the east side, part of the kiln wall had collapsed and had been patched with rubble, suggesting that the kiln had been used more than once - a fact possibly supported by the presence of pieces of fire-bar in the pedestal.

The kiln had been fired from the north, where two cheek-stones of a flue, 0.40m wide, remained *in situ*. The flue had apparently been blocked with yellow clay or marl when the kiln was cooling down after its last firing, thereby indicating that the pottery products were removed by dismantling the dome. The partially filled ditch of Enclosure B seems to have served as a stokehole and ashpit where, in addition to layers of ash, there was also a deposit of kiln debris and related refuse (layer 4). Two brooches dating to the mid-1st century (?AD50-65) were also present (FIG 23, 12, 14).

The kiln had been backfilled with rubbish which included wasters possibly discarded from another contemporary kiln close by. Among them were fragments from 11 bead rimmed storage jars, many of which had been combed. Body sherds from the flue/stokehole displayed a wide range of colour variation from buff to bright red.

Kiln 2 lay just to the north of the Enclosure B ditch, and had been fired from the south-west side. It is of a design common in the post-Conquest kilns at Hardingstone, with a long and narrow flue leading off a near circular oven (cf Woods 1974, fig 2, type IIA). The oven was 1.05 m in diameter and had been cut into subsoil to a depth of 0.18 m. However, it was barely deep enough to penetrate the natural bedrock and its edges were defined by burnt earth. Above a layer of ash at the bottom were many large fragments of storage jar and pieces of fire-bar; a small number of finer wares may also have been kiln products. No clear flue was discernible, but a channel ran south-west from the oven for a distance of at least 1.2 m. Adjacent to the oven the channel was of similar depth and 0.28 m wide; at its south-west end it had widened to 0.50 m but very little depth had survived.

Kiln 3 Like kiln 2, this kiln was adjacent to the ditch on the south side of Enclosure B, but its channel/flue was orientated to the south. The kiln had been partially destroyed by Ditch D but, apart from more intensive burning, was probably similar in most respects to kiln 2. It contained fragments exclusively of storage jars (at least 3 separate vessels), which bore vertical and horizontal combing.

Kiln 4 lay at the edge of the excavated area and was overlain by Ditch L. Its roughly circular oven was 1.10 m in diameter and had been dug 0.40 m deep into the bedrock. The flue or stokehole was on the east side but was not fully exposed. Although 0.40 m wide at its junction with the oven, the flue widened as its length increased and the bottom rose. The sides of the oven were only lightly burnt and there was no evidence of a pedestal, clay lining, or blocking material. No pottery was found in the kiln.

Kiln 5 initially appeared as a bell-shaped pit. The oven was situated at the narrow, western end of the feature. The overall length of the kiln and its stokehole was 2.25 m with the oven being 0.80 m wide and the stokehole 1.2 m wide. Its plan revealed no constriction for a flue, but the junction between the oven and the stokehole was only 0.40 m wide at the base. The oven was 0.35 m deep in the natural clay, with the stokehole of approximately the same depth and fairly flat. The sides of the oven and flue area had been unevenly reddened by heat but

there was no evidence of burning and very little ash in the stokehole which was largely filled with clay and marl.

Kiln furniture, glacial pebbles, and pottery were found above a layer of ash at the west end of the oven. Beneath it there was, firstly, a thin layer of sand, then a layer of greenish-blue clay, and finally another layer of ash - all three layers laying in a depression up to 0.10 m deeper than the stokehole area.

The shape of the kiln and stokehole is unusual and although there is no clear evidence that the stokehole area was a later pit, the possibility should perhaps be considered.

Body sherds of storage jars with combed decoration were present only in the stoke-pit and flue areas, possibly indicating that, whilst storage jars may have been produced in the kiln, most of the wasters had been removed, perhaps for use in loading or stacking later kilns.

Kiln 6 All that remained of this feature was a shallow depression, some 0.80 x 0.60 m in diameter, with slight burning around its edges. There was some evidence of a flue-stokehole on its north side. It contained a quantity of kiln refuse. The majority of pottery vessels consisted of storage jars in fabrics B1, D, and F2 which may be considered kiln-products (see M63).

Kiln 7 had been dug to a depth of 0.20 m into the limestone bedrock. The oven was 1.05 m in diameter and there was a flue-stokehole, 0.7 m long and 0.40 m wide, on the west side. The edges of the oven had been unevenly burnt and its filling consisted of black ash, brown loam, and kiln debris. There was no evidence of a central pedestal or clay lining.

The kiln contained predominantly waster storage jars in fabrics F2 and B1. A small percentage of other jars seem also to have been kiln-products, in particular channel-rimmed and bead-rimmed barrel types. On the basis of similar forms occurring at Hardwick Park, the forms fall within the mid-1st century AD (Foster et al, 1977, 78).

Kiln 8 can be regarded as a possible kiln mainly because of its similar shape to some of the other examples. It consisted of a pit or oven, 0.50 m in diameter, and a possible flue-stokehole on the south side which tapered from 0.42 m wide near the oven to 0.20 m wide. The overall length of the feature was 1.45m. The feature was only shallow and there was no evidence of burning. It contained black ashy loam and early CP2 pottery.

Kiln 9 (FIG 20) was the only kiln found within Enclosure C. It had been dug into Boulder Clay and at 0.65m deep was considerably deeper than the majority of kilns found at the site. In plan the oven and stokehole formed an approximate figure-of-eight: the oven being 1.10m wide, the constriction or flue on average 0.3m wide, and the stokehole 0.90m wide. The overall length of the furnace and stokehole was 2.8m. The kiln was deepest in the oven with the bottom gradually rising in the stokehole to an average depth of 0.40m.

The sides and base in the oven and flue had been burnt red up to a maximum thickness of 50mm. A fragmentary clay-lining survived *in situ*, but with sides of natural clay it is perhaps unlikely that it was formerly extensive. Lumps of fired clay above black ash at the bottom of the oven could represent collapsed dome-material. No pedestal was found in the kiln and, despite its depth, there was no evidence of niches in the sides to take the end of the fire-bars. A large block of clay, 0.25m thick, in the flue/stokehole had presumably been introduced to close down the kiln after its final firing. It was burnt red on the oven side. As with Kiln 1, its presence indicates that the pots were removed from the top after firing. Black ash was found at the base of the kiln, but pieces of pottery and fire-bar were distributed throughout its filling.

The majority of vessels produced in the kiln were storage jars in fabrics B1 and F2. However, channel-rimmed jars were also produced in fabric D, and the repertoire probably also included copies of finer wares in fabrics B, B1 and F2, in which bowl, platter and jar-forms are represented.

Kiln 10 was of two phases. Initially the stokehole had been at the east, but was later moved to the west. In both phases the kilns were cut only shallowly into the bedrock (maximum depth 0.27m) and there was little difference in the dimensions of the two structures. The latest structure, which was the best preserved, had a roughly circular oven, 1.25m in diameter, a constriction or flue, 0.55m wide, and a stokehole 0.70m wide. The overall length of the kiln was 2.5m. The edges of both ovens were defined by burnt natural limestone and the only clay lining found *in situ* occurred in the flue of the second structure.

At the east end of the latest oven, two pre-fired clay blocks had been used to form a wall between it and the earlier structure. The blocks, which were 0.35 and 0.33m long respectively, survived to a height of 0.27m. They were 0.16m wide at the base, but the tops were poorly preserved. Loose stones had been placed on the existing kilns behind them, presumably as a support. Pieces of fired clay, with grass or straw impressions, overlay the black ash at the base of the second kiln and had presumably come from its dome or that of another oven. The rest of the filling in the two kilns was a mixture of dark and lighter loams with some stones and ash. A fragment of Claudio-Neronian samian was found at the base of the kiln (cf M147).

A channel roughly 1.00m long, 0.35m wide, and 0.12m deep extended in a north-west direction from the stokehole of the later kiln. A layer of black ash covered its bottom and a wedge of greenish-blue clay from its filling could possibly have been a dislodged or discarded blocking. The purpose of the channel may have been to facilitate better draught and it may have been for a similar reason that the kiln was re-orientated.

The main types of pottery present were storage jars in fabrics B1 and F2, many with hooked rims and a variety of combed decoration on the body. Smaller quantities of fine ware were also represented in the same fabrics.

Kiln 11 was a spread of dark loam and kiln debris covering an area of approximately 1.5m x 1.3m; beneath it the natural bedrock was patchily burnt. There may have been a flue, up to 0.50m long and 0.30m wide, on the east side. The feature was unlike the other kilns at the site and could have been a clamp-structure.

All the pottery it contained appears to be kiln-waste. The range of forms includes storage jars, fine vessels, and cooking pots, with the latter predominating.

Kiln 12 (FIG 20) survived only shallowly in the bedrock. The oven was probably at the west where a length of fired clay-lining occurred in situ at its north side. There were also many pieces of fire-bar in the filling at that end. The oven was 1.3m long and 0.85m wide but only 0.05m deep. The stokehole contained black ash and loam but no kiln-refuse. It was 0.18m deep, 0.80m long and 0.90m wide, with its width reducing to 0.37m at its intersection with the oven.

Its products appear to have been primarily storage jars, in which there are slight variations of form and decoration.

Kiln 13 (FIG 20) was better preserved than many of the other kilns at the site. It had a roughly circular, clay-lined, oven with a long, narrow flue/stokehole at the south. The oven was 0.25m deep in the bedrock and 0.97m in diameter. The clay-lining continued right around it into the flue, with the natural bedrock behind burnt for a thickness of 50-80mm and showing evidence of considerable heat. The short flue was 0.34m wide and 0.23m deep; the stokehole was 1.5m long, up to 0.65m wide, and 0.15m deep. The overall length of the kiln was 2.6m.

A burnt-out and collapsed clay pedestal was found in the oven; the disposition of fire-bars in its rearward part suggests they had remained in situ from when the kiln was abandoned. The considerable amount of dome-material above them suggests that the roof had either collapsed or had been pushed in after the last pots had been removed. A block of yellow clay or marl, 0.18m high, had been placed in the flue to close the kiln down after the final firing. The clay was reddened by heat on the oven-side. Whilst a layer of black ash covered the bottom of the oven and the stokehole, the remainder of the filling consisted of brown clayey loam with pottery and pieces of fire-bar distributed throughout.

Storage-jars in fabrics B1 and F2 accounted for the majority of waster-products, but a small number of fine wares were also represented in fabric B1.

Kiln 14 (FIG 20) was similar to Kiln 13 except that it had a much shorter stokehole, positioned on the south-east. The oven was 0.35m deep, 0.92m in diameter, and had been lined with clay in a similar way to that of Kiln 13. There was also a similar degree of burning behind the clay-lining. The short flue was 0.36m wide, and the stokehole up to 0.60m wide. The combined length of the flue and stokehole was 0.90m and the overall length of the kiln 1.83m. The bottom of the stokehole rose from the level of the oven floor to only 0.10m deep at its south-east end. A layer of black ash and charcoal covered the bottom of the oven and stokehole. Above it, most of the kiln had been filled with a black ashy loam containing much powdery burnt clay, potsherds, fire-bar fragments and stones.

The pottery was predominantly storage jars in fabrics B1 and F2, although finer wares and channelled rimmed jars were also present in smaller quantities.

Kiln 15 was largely destroyed by a quarry drainage-trench, some 6m east of Kiln 1. It had been cut 0.2m deep into the bedrock and contained burnt clay and fragments of fire-bar in its filling. The true size and orientation is uncertain but the flue was not on the south side.

Other features

In addition to the six pottery kilns found in Area A (kilns 7, 10-14), a number of ditches and pits containing their products are likely to have been of broadly contemporary date (Ditches A5, 636 and 703, and pits 641, 758, and 809). A number of small pits found in the area may have been more directly associated with pottery-making: for instance pit 644 (near Kiln 13) had a fired clay-lining and an adjacent pit, 645, had fire-reddened sides. Another pit, 638, also had burnt sides and three pits, 640, 643, and 648, may have been clay-storage or puddling pits.

DESCRIPTIONS OF THE LAYERS SHOWN IN THE ILLUSTRATED KILN-SECTIONS, FIGS 19–20.

FIG 19

Kiln 1 (1) Very dark stony loam with much pottery; (2) Dark brown loam with flecks of burnt clay and marl; (3) Mainly red ash or ashy loam; (4) As (3) with quantities of yellow marl or collapsed lining; (5) Dark loam and stones. Pedestal; (6) Black ash; (7) Yellow-brown clay blocking; (8) Light brown silty loam; (9) Dark brown loam with much charcoal; (10) Dark brown loam.

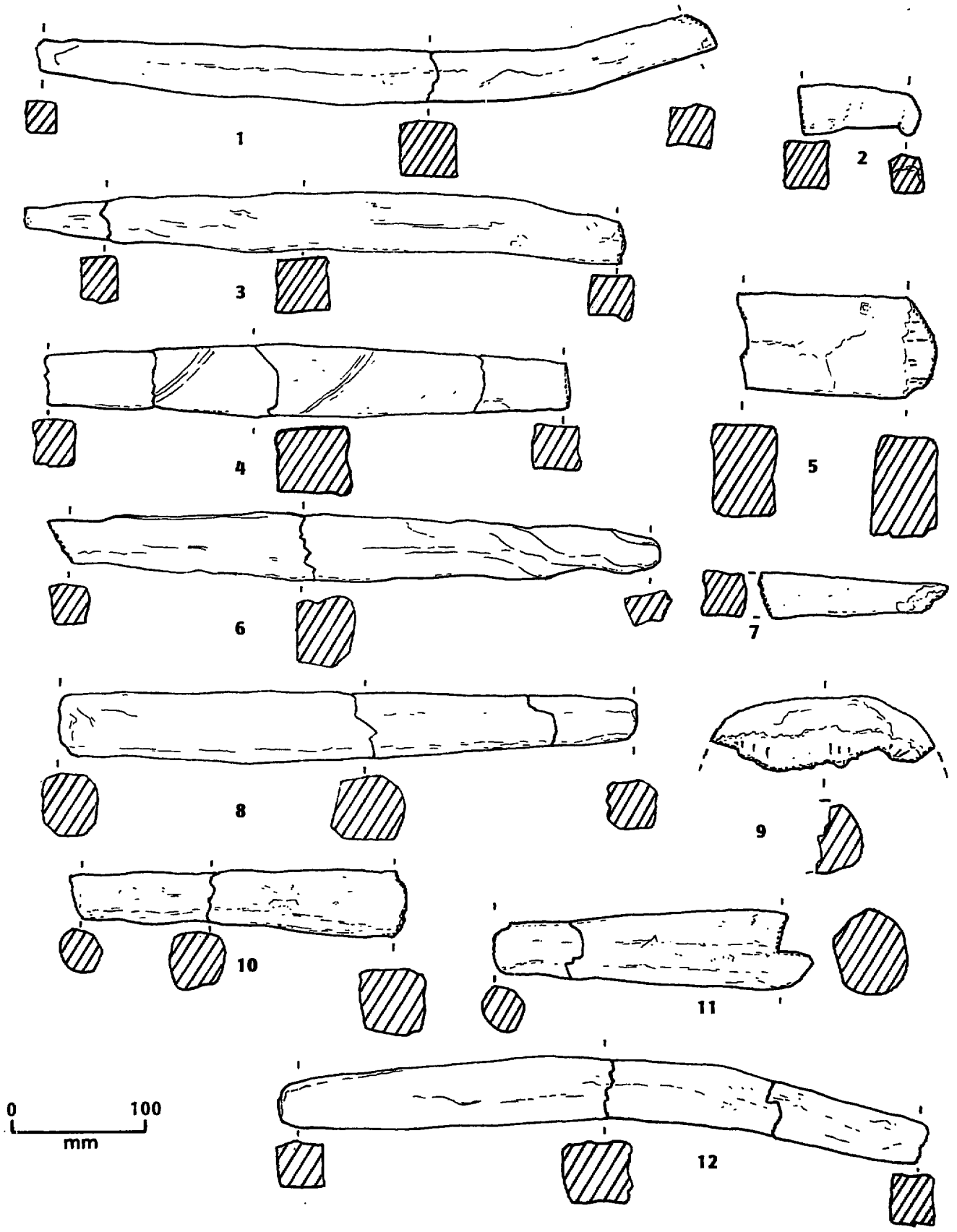
FIG 20

Kiln 9 (1) Dark grey loam with stones and fine gravel; (2) Very dark ashy loam; (3) Yellow-brown clay blocking; reddened on oven-side; (4) Black ash.

Kiln 13 (1) Dark loam with collapsed dome material and fire-bars; (2) Yellow-brown clay; (3) Collapsed dome material; (4) Yellow-brown clay blocking, reddened on oven-side; (5) Black ash.

Kiln 14 (1) Brown clayey loam; (2) Black ashy loam with burnt clay and fragments of fire-bar; (3) Black ash.

Kiln 12 (1) Dark brown loam; (2) Black ash.



Fire-bars from various kilns

THE FIRE BARS by Rita Rattray

All the fire-bars and fired clay contain large quantities of tempering material which appears to have been deliberately added for several reasons. It would reduce the plasticity of the clay, facilitate the uniform drying of the bars, and would counteract excessive shrinkage, particularly during firing, by opening-up the texture of the clay and increasing its porosity. The majority of the fire-bars and fired clay contain abundant vegetable temper, which from the evidence of carbonised grain within some of the bars and grain impressions on their exterior surfaces may have consisted of straw and chaff. In addition, some bars contain large quantities of fossil-shell, which would behave in much the same way as a tempering agent. However, the addition of shell may have provided greater strength than vegetable-temper, since clay forms a better bond with angular surfaces than with rounded or malleable ones (Shepard, 1980, 27); the choice of shell for these bars could reflect a difference in function. As rounded grains weaken a body more than angular ones, it may explain the tendency of most of the vegetable-tempered fire-bars to occur in fragmented form.

Two sources of clay used in the manufacture of the fire-bars may be suggested. The clay used in most of them contains abundant fine sub-rounded quartz, with occasional large lumps of shell, limestone, and iron. This closely corresponds with inclusions occurring naturally in Boulder Clay, which is the nearest source of clay on the site. In contrast, the presence of frequent and large-sized (maximum size 20mm) fossil-shell in the predominantly shell-filled bars indicates a source of clay in the Upper Estuarine beds. The shell-type can be identified as fossil oyster Praexogyra hebridica, which occurs in the Upper Estuarine clays. (R Clements, pers, comm).

It is uncertain if the fossil shell was deliberately added to the clay normally used at the site, or whether the Upper Estuarine clay was used direct from its source. The large size of the fossil-shell within the bars when compared with similar sized shell occurring in the Upper Estuarine deposits, indicates that it had not been deliberately crushed. This might therefore suggest that the Upper Estuarine clays had been purposely chosen for manufacture of these bars, rather than that the extracted and crushed fossil-shell had been deliberately added. The difficulties of interpretation are increased by the realisation that the size of fossil oyster shell varies within the Upper Estuarine beds.

The majority of small and medium fire-bars appear to have been used to form load-bearing, raised floors (cf M59, 2-4, 6-8, 10 and 11), where they would span a central pedestal and the top of the oven-lining. Support for this interpretation is provided by the evidence of the fire-bars which still radiated around the remains of a central pedestal in kiln 13, and by the presence of hooked (M59, 2), flattened (M59, 7), or tapering (M59, 6) fire-bars, which would easily

latch on to the wall and/or on to a central pedestal. A parallel example to the hooked bar is known from kiln 2 at Ecton, Northants, where it has been suggested that the hooked end was intended to fit the recessed top of a pedestal (Johnston 1969, 94, fig 9, 7). In addition, the base of a pedestal fragment found at Little Billing, Northants, is recessed to form a foot. A similar arrangement on the top would accommodate such hooked ends of fire-bars (Woods 1969, 34).

A possible distinction may exist between fire-bars made specifically for an individual structure, and those produced in batches for general use. The former would probably be 'hooked' or smoothed into position, and the entire arrangement may have been pre-fired to produce a more stable structure than if the kiln was immediately fired complete with pottery.

Stunted ends may be a characteristic feature of fire-bars made in batches (e.g. M 59 , 4, 8, 10 and possibly 12). However, those made for a specific kiln with tapering or hooked ends could equally have been re-used in a later kiln. The majority of the fire-bars have gently tapering ends.

There are some bars amongst the material which are distinguished by differences in shape and/or fabric,suggesting that they may have served different functions. Bars with a noticeably bowed appearance (M 59 , 1 and 12) could have been used in the construction of flue-arches and other prefabricated sections of the kiln structure (cf. Musty 1974, 52). However, the bars may have become bowed due to uneven shrinkage in the firing of the first structure, and then been incorporated in the flue-arches of a later structure, so utilising the bowed shape.

The remains of two large rectangular fire-bars in kilns 1 and 3 (M 59, 5) both contain large fossil-shell inclusions. Their different shape and fabric suggest that they serve a specific purpose, possibly reinforcing the clay-lining of the oven, or they could have been used in pairs as flue-arch supports similar to those which survived in situ in kiln 1 at Hardwick Park, Wellingborough (Foster et al 1977, 71, fig 8). Related bars with shell-inclusions occurred at Rushden, Northants, (Woods 1974, fig 6) and Grendon, Northants (A McCormick, pers. comm), where they may have served similar supportive functions. The choice of adding shell-temper for extra strength could reflect this difference in function.

Firing conditions may be suggested from the colour range of individual fire-bars. The majority are incompletely oxidised, with buff/pink exteriors and black cores, suggesting that the atmosphere was one of oxidation. Presumably temperatures were not high enough, and the period of firing was insufficient, to burn-out all the carbon derived from the high percentage of organic matter (vegetable-temper) in the bars, and to convert the carbon to carbon dioxide (CO_2). The preservation of carbonised grain in the core of a fragment of a medium-sized fire-bar

in kiln 11 confirms the suggestions of relatively low temperatures and short firing times. In addition, from the unaltered appearance of the fossil-shell, temperatures from c. 650°C - 898°C were not likely to have been reached. Within this temperature range, shell ($CaCO_3$) decomposes, losing carbon dioxide (CO_2) and forming calcium oxide (CaO) which, on absorption of moisture from the atmosphere, forms calcium hydroxide ($Ca(OH)_2$) in an exothermic reaction which is accompanied by expansion, popping, and surface spalling. However, if the rate of temperature increase is slow, the initial rate of decomposition of fossil-shell will also be slow, and the effects hardly visible or significant. The temperatures were high enough, and the length of firing sufficient, to produce an oxidised terracotta. Temperatures of c. 600°C - 700°C held for a period of 5-7 hours may therefore be suggested for the kilns.

The function of numerous small fragments of fired clay recovered from the kilns is difficult to recognise. The majority of smaller pieces are likely to be part of the lining of the kiln structures, though from which part remains enigmatic. Larger fragments may be parts of platelets, which could have been used to form the superstructure. Evidence for the appearance of the dome or superstructure remains, as for most contemporary kilns, almost completely lacking.

THE KILN POTTERY : FABRICS, FORMS AND TECHNOLOGY by Rita Rattray

Fabrics

1,723 sherds were examined using a binocular microscope at x20 magnification and were initially divided into 24 groups, according to their visible inclusions (cf. Peacock 1977, 30-3). Sherds from each group were examined subsequently in thin-section to test the reality of the preliminary fabric divisions and to examine more precisely the composition of the fabrics. As a result, the number of fabric groups was reduced.

Petrological examination resulted in the recognition of 12 individual fabric groups which fall into three categories:

(1) those in which fossil shell inclusions predominate (fabrics D, A and F)

(2) those in which grog and quartz predominate (B, B1 and F2)

(3) those in which quartz predominates (R, P, P1, T, T1 and H).

The description of the individual fabric groups is as follows. (Grain size is not given for inclusions which occur occasionally).

D Abundant, well-sorted fossil shell predominates (0.02 - 2.4 mm); abundant, fine sub-angular quartz (0.05 - 0.12 mm), and sparse fine sub-rounded quartz (0.02 - 0.2 mm), with voids, occasional sandstone, limestone, iron, and flint.

A Moderate, well-sorted fossil-shell (average size 1.25 mm); moderate, fine sub-angular quartz (0.02 - 0.2 mm), with voids, occasional iron, sandstone, limestone, and a scatter of mica.

F Sparse, ill-sorted fossil-shell (average size 1.25 mm), abundant fine, sub-angular quartz (0.05 - 0.15mm), occasional voids, limestone, and mica. Variation: fabric W.

B Moderate to abundant fine, sub-rounded quartz (average size 0.02 - 0.25 mm), sparse to moderate fine-grained angular grog temper of the same fabric as body (0.9 - 2.2 mm); occasional voids, flint, limestone, sandstone and iron (the latter frequently in the form of iron staining) and organic matter. A homogeneous fabric with a 'soapy' texture. Variation: fabric K.

B1 Sparse to moderate fine, sub-rounded quartz (average size 0.05 mm), moderate, fine-grained angular grog temper (average size 0.06 - 1.3 mm), voids, occasional sandstone, limestone, rounded flint, and organic matter. Variations: fabrics B2, X, J, G, M, C, N.

F2 Abundant, fine, sub-rounded quartz (average size 0.04 mm); ill-sorted, abundant medium to large angular, fine-grained grog (0.25 - 2.5 mm); voids, occasional iron, flint, and organic matter. A hard fabric. Variation: fabric L.

R Moderate, medium sub-rounded quartz (average size 0.4 mm); abundant, fine, sub-angular quartz (0.05 mm); voids and occasional flint, iron, very fine mica, sandstone, and organic matter. Variation; fabric Y, which also contained occasional fine-grained grog, microcline feldspar and limestone.

P Moderate, fine, sub-angular quartz (average size 0.07 mm); moderate, medium sub-angular quartz (0.3 mm); occasional iron and rounded grains of ironstone, occasional sandstone, mica, and organic matter.

P1 Abundant, fine sub-angular quartz (0.15 - 0.2 mm); occasional iron, mica, and organic matter.

T Moderate to abundant, fine, sub-angular quartz (average size 0.2 mm); strained quartz (0.3 mm); occasional fine quartz, sandstone, iron,mica, limestone, and organic matter.

T1 Abundant, fine to medium sub-angular metamorphic quartz (0.2 - 0.5 mm); occasional limestone and plagioclase feldspar.

H Moderate fine to medium sub-angular quartz (0.2 - 1.5 mm), an occasional fresh pyroxene, limestone and shell.

From examination and comparison of the fabrics with clay samples collected from the area of the site, two local clay sources are suggested for the production of pottery and kiln furniture: Boulder Clay, and clays from the Upper Estuarine beds.

Boulder Clay contains the same impurities which are present in the fabrics B, B1, F2, their related fabrics (K, B2, X, J, G, M, C, N and L), and the majority of small and medium fire-bars. These impurities are limestone, sandstone, iron, ironstone, occasional fossil-shell, and flint. Since Boulder Clay is of glacial origin, these impurities occur naturally as ill-assorted fragments. This may, in part, explain the reason for the initial difficulties experienced during

fabric classification. It is therefore suggested that B, B1, F2 and all their related fabrics are derived from the one source.

In addition, Boulder Clay is the nearest clay source, actually occurring at the site. It would seem reasonable for the potter to travel no farther than necessary in the search for adequate clay. With some preparation, the Boulder Clay in this area is quite workable as a potting clay. It contains organic matter (visible in thin-section as voids where the organic matter has completely burnt out, or as black specks where it has incompletely burnt out) which helps to reduce its plasticity. Boulder Clay is also a fusible clay, quite suitable for the production of low fired terracotta. (Hamer 1975, 35).

The fabrics D, A and F, the related fabric W, and certain large fire-bars, are derived from a different source. They contain fine-grained sub-angular quartz and varying quantities of fossil oyster shell (possibly Praexogyra hebridica, R Clements, pers. comm.), which are characteristic of clays in the Upper Estuarine beds. These are readily available (cf. FIG 2) and are therefore suggested as a second source of raw material.

Further classification of fabrics was made by the presence, in varying degrees, of materials in the fabrics which had been deliberately added as tempering materials: in particular, crushed angular-shaped grog, fossil-shell, and sand. Feel, texture and appearance were also used in the classification of these, particularly the grog-tempered fabrics.

The dominant fabrics B, B1 and F2 and related fabrics represent a progression from a fine-grained soft fabric with the addition of small quantities of grog particles to coarse-grained grog-tempered fabrics B1 and F2. Grog particles in fabric F2 appear to be marginally larger and more frequent than in fabric B1. It was also noted that fabrics B and B1 were softer with a 'soapy' feel, and the grog particles were often pink/buff. This is in contrast with fabric F2, which was hard, and in which the grog particles were often black.

Similarly, fabrics D, A and F show differing amounts of fossil-shell inclusions, from abundant to moderate and sparse. These variations may reflect natural variations in the frequency of fossil-shell occurring in the clay beds. Alternatively, they can represent the deliberate addition of fossil-shell as a tempering material. From the frequency of fossil-shell occurring in fabric D, it is suggested that more such material was added either to the Estuarine clays, which in themselves are adequate potting clays, or possibly to Boulder Clay which was already in use on the site. (This may explain the presence of both sub-angular and sub-rounded fine quartz in fabric D. However, this combination may be present in the upper beds of the Upper Estuarine Clays).

The question of the reason for and choice of tempering material apparent in these dominant fabric groups is further clarified when related to the form and function of the vessels, and a distinction between the deliberate addition or the natural occurrence of fossil shell is also apparent.

It is suggested that sand was used as temper in local pottery, used by, but not manufactured by the Weekley potters. The Northampton Sand Ironstone deposits which occur close by the site (cf. FIG 2) are likely to be the origin of the quartz in fabrics R, P, P1, T and T1, which are not considered to be the products of the excavated kilns. These fabrics occur in relatively small numbers in all the kilns where some sherds are well-worn and could represent refuse which had accumulated after the last firing. In addition, these sherds are not associated with 'waster' features, such as warping or spalling.

One sherd, fabric H, may be related to plough-scatter since it appears to be a body sherd of an amphora, possibly associated with the villa-phase of the site. A fresh pyroxene in thin-section supports the suggestion that the fabric is not of local origin; pyroxenes occurring in Boulder Clay usually have a more battered appearance. Further examination and possible analysis of these intrusive fabrics were not therefore considered valid.

Forms (cf. FIG 21)

The pottery present in the kilns falls within a basic range of forms: the storage-jar, channel-rim jar, and copies of Gallo-Belgic forms. Small quantities of fine wares, mainly beaker forms, some from neighbouring production centres, are also present.

The storage-jar occurring in fabrics B1 and F2 is the predominant form, intended for dry storage, possibly for grain since the fabric is porous. Few survive below the shoulder of the vessel and complete profiles are difficult to reconstruct. All rims are of everted type and vary from the hooked type, which resembles Hawkes & Hull 1947, type 270B (FIG 21, 4), to the beaded type, resembling ibid,form 271 (e.g. FIG 21, 2-3), with a wide range of intermediate types. Characteristic of the Weekley storage-jars is the survival of a cordon, or several cordons, on the neck and at the shoulder off-set, which originated in Belgic forms. This survival seems peculiar to the Upper and Lower Nene Valley in the mid-1st century AD, but is particularly prominent in the Weekley products (Johnston 1969, 86; V Swan pers. comm.). Decoration, characteristic of this area and this period, frequently consists of a band of stabbing on the shoulder between two parallel grooves, and a variety of combed decoration over the body (FIG 21, 1-2).

Channel-rim jars, occurring in fabric D, are present in smaller quantities (eg FIG 21, 9). Some appear to be characteristic products from the kilns, showing 'waster' features, generally spalling which had occurred during the firing, whilst others appear to have been used for cooking purposes and preserve thick layers of carbon on the underside of their rims and bases.

Copies of Gallo-Belgic forms, mostly occur in fabric B (cf. FIG 21, 11), but some also occur in fabric B1. The beaker or jar, FIG 21, 6, appears to be a particularly characteristic form which was produced.

Items of mid-1st century pottery occurring in fabrics R, P, P1, T, T1 and H are also present in the kiln-refuse, and are not indigenous to the site. They are mostly fine wares, likely to have arrived from neighbouring production centres to supplement the range of forms produced by the Weekley potters.

The small quantities of fine wares present in the kiln-refuse may reflect a tendency to place such vessels in parts of the kiln less likely to suffer damage during firing, so that the wastage represented is a small proportion of the original quantity which may have been manufactured for marketing. Conversely, storage-jars may be over-represented in the kiln assemblages. Large, poorly executed, hand-built vessels are more likely to warp and fracture along weak points and coil junctions where the clay has been insufficiently bonded. This is particularly so at the junction between the base and wall of the vessel, and at the shoulder, where it would be difficult to bond the clay adequately. The difficulties involved in the firing of large vessels are greater than those involved in the firing of small vessels, since with their large surface areas they are more likely to suffer from uneven heat, the effects of which are accentuated by their uneven wall thickness. Production of storage-jars may not, therefore, have been so large as is immediately apparent from the minimum number of vessels represented in the kiln assemblages.

Technology

Tempering material was deliberately added to all the forms of vessels represented on the site in order to increase the workability of the clay, reduce its plasticity, and control the drying shrinkage and firing shrinkage, by opening up the body of the fabric. The type and degree of temper was seen to relate directly to the size, form and function of the vessel. The large storage-jars, more prone to shrinkage during drying and firing by virtue of their size and wall thickness, are heavily grog-tempered. In contrast, the fabrics of imitation wheel-thrown vessels, homogeneous and fine-textured, contain few, small grog particles. This lack of tempering may explain the characteristic spalling of these wares during firing, occurring as a result of excessive shrinkage of the clay.

All channel-rim jars consistently occur in fabric D, containing abundant fossil-shell. The consistency and frequency of the shell suggests that it was deliberately chosen as a tempering material, probably for similar reasons to the use of grog-temper in the storage-jars. Since it has already been suggested that the channel-rim jars were used for cooking purposes, the fossil-shell may have been used to open up the body of the fabric still more, in order to counteract thermal shock and reduce the occurrence of cracks during use over a fire, when vessels would be subjected to sudden heat. A more porous body would also retain its heat for longer periods. In addition, thin walls are less prone to thermal shock than thick walls, which may explain the consistently thin walls of the channel-rim jars. Quartz, which occurs in some channel-rim jars on contemporary sites, and which may have been deliberately added, would also reduce the effects of thermal shock in this way.

All products from the kilns are hand-built, being coil-or ring-built, and were originally finished on a wheel or turn-table. Amongst the storage-jars, there is evidence of less attention in wedging and kneading the clay. The occasional presence of larger fragments of limestone and shell, which generally seem to have been hand-removed, has often caused surface pitting. There is evidence of uneven wall thickness and often, where bases survive, there are instances of discrepancy between base and wall thickness with fractures occurring along the junction where the clay has been insufficiently bonded. In these fractures, the round, unbonded coil is sometimes visible.

Evidence for coil-manufacture is particularly visible in the fractures of shell-filled fabrics, in which the alignment of elongated shell particles and voids indicates the use of coils or rings. There is less evidence of coil-construction in the finer, homogeneous fabrics, where the fine clay particles are too small and round to show any alignment. There is, however, no evidence of wheel-throwing in the form of throwing rings, and the fine finish associated with these wares could have been achieved on a wheel or turn-table.

A number of storage-jar rims showed lines of cracking in their fractures, which suggested that at least two methods had been used in their construction. Having built the vessel to the required height, the first method seems to have involved folding the clay outwards and downwards, and subsequently smoothing it on to the wall of the vessel whilst in a plastic state. A second method may have involved the addition of a coil-ring around the edge of the top of the vessel and smoothing down. In practice, however, the addition of a coil-ring would seem to be an easier method of construction.

The degree of finish on the pottery varies according to the different forms. In comparison with the channel-rim jars and finer vessels, storage-jars were given less treatment in the finishing stages of manufacture, where greatest importance was given to the rims which were often finely

wheel-turned. Evidence suggests the use of cord, or horsehair, for drawing the vessels from the wheel or turn-table.

Both rims and bases of channel-rim jars and native imitation vessels are well finished. Knife-trimming, on occasion, appears to have been used in the finishing process.

Many vessels showed traces of having been wiped with leather, cloth, or by hand while the clay was still wet. Some of the channel-rim jars had been wiped in a slightly drier state, since the scoring of the shell particles over the surface was quite deep and unobscured by excess wet clay.

Various combinations of decorative techniques were used and survive mostly on isolated body sherds.

On storage jars, traces of slip may represent an attempt to mask constructional defects. However, the distinction between a slipped surface and one which had been wiped was not always clear, except where the slip was red, suggesting a high iron content. The external surfaces and rim interiors were often burnished, possibly to decrease the porosity of the fabric and so prevent the penetration of moisture to the contents, such as grain. Alternatively, the burnishing may have been a purely decorative feature. One example showed burnishing with acute angle lattice decoration, which is characteristic of the 1st century AD. There is no evidence to suggest that the Weekley potters used red paint to decorate their fine wares, such as occurred at Rushden (Woods & Hastings 1984).

A combination of stabbed, combed and incised decoration was applied to some vessels whilst the clay was in a plastic state, as is evident from indentations on the internal surfaces caused by the presence of stabbing, and excess clay, which had not been removed from the areas concerned on the external surfaces. Combed decoration predominated, both on channel-rim jars and on storage-jars. On the former, the combing was generally horizontal, but it varied in direction on the storage-jars.

The combs used appear to have varied in size and in the number of teeth. The vertical stabbed decoration in some cases was likely to have been made with the same tool used for combing, while in others a different implement appears to have been used, possibly the femur of a bird.

DESCRIPTIVE CATALOGUE OF THE POTTERY ILLUSTRATED FROM THE KILNS, FIG 21

1. Storage-jar. Fabric F2. Rim diameter 310-330 mm; thickness 13 mm. Pink slip int. and ext. Buff/grey core. Cordons on underside of rim and 3 on shoulder off-set. Band of vertical stabbed decoration (? bone tool) between horizontal grooves. Horizontal and sweeping combed decoration on body. Extremely warped. Coil-built (evidence prominent in fracture), wheel-finished. A substantial part of the pot survives.

2. Storage-jar. Fabric F2. Rim diameter 390 mm; thickness 10 mm. Pink int. and ext. Sandwich grey and pink core. Slip on int. and ext. Rounded hooked rim. Cordons on neck and shoulder off-set. Band of vertical stabbed decoration (? 5-toothed comb) within 2 parallel horizontal grooves. Horizontal combing on shoulder. Coil-built, wheel-finished.

3. Storage-jar. Fabric B1. Rim diameter 440 mm; thickness 11 mm. Pink/orange int., ext., and core. Slip or wiped int. and ext. Angular everted rim (folded over). Cordon on shoulder off-set, warped. Coil-built, wheel-finished.

4. Storage-jar. Fabric B1. Rim diameter 400 mm; thickness 13 mm. Pink/red int., ext., and core. Traces of slip on int. and ext. surface. Two cordons on shoulder off-set and horizontal groove on shoulder. Coil-built, wheel-finished. A soft fabric.

5. Globular storage-jar. Fabric B1. Rim diameter 280 mm; thickness 8 mm. Pink/red slip int. and ext. Buff/pink core. Angular everted rim, vestigial cordon on shoulder off-set. 2 parallel horizontal grooves on shoulder. Coil-built and finely wheel-finished.

6. Beaker. Fabric B. Rim diameter 135 mm; thickness 8mm. Buff/pink int. and ext. Black core. Hand-built,though possibly wheel-finished. Waster, evidence of spalling at junction between lower half and first cordon.

7. Straight-sided jar. Fabric A. Rim diameter 210 mm: thickness 9 mm. Red/pink int., ext., and core; wiped int. and ext. and poss. red slip. ? Knife trimming of rim and sides causing score marks where coarse inclusions were drawn to the surface. Coil-built. An unusual form, but likely to be a kiln product on basis on fabric and fracture.

8. Carinated bowl. Fabric B1. Rim diameter 140 mm; thickness 7 mm. Pink/red int. and ext. Grey core. Similar form to Hawkes & Hull 1947, type 215A. Two pairs of horizontal grooves, 3 cordons. Wiped int. surface ? slipped and burnished ext. surface. Coil-built and finely wheel-finished. ? Waster.

9. Channel-rim jar. Fabric D. Rim diameter 140 mm; thickness 6 mm. Pink/buff int., ext., and core; evidence for flashing. Wiped ext. surface giving appearance of horizontal combing where shell frags. have scraped along surface. A kiln waster. Coil-built, wheel-finished. Almost complete.

10. Bowl. Fabric F2. Rim diameter 230 mm; thickness 6 mm. Pink int. and ext. Grey core. Spalled int. surface. Kiln waster. Burnished ext. and incised decoration. Hand-built and finely wheel-finished.

11. Stepped bowl or dish. Fabric B. Rim diameter 190 mm; thickness 12 mm. Pink/buff int., ext., and core. Wiped and finely finished inside, soft 'soapy' fabric. Knife trimming on ext. Badly spalled. A kiln-waster, though most of the pot is represented. Coil-built, wheel-finished. A form peculiar to the Northampton area (cf.Johnston 1969, fig 5, 5).

DESCRIPTIVE CATALOGUE OF THE OBJECTS ILLUSTRATED IN FIGS 22-28

The objects illustrated in FIGS 22-28 of the volume-printed report are described and commented upon in the following order:-

METALWORK

Brooches of copper alloys	FIGS 22-23, 1-17	M73-77
Iron brooches	FIG 24, 18-25	M78-79
Other iron objects	FIG 25, 26-46	M79-82
Other Cu alloy objects	FIG 26, 47-61	M82-85

NON-METAL OBJECTS

Worked animal bones	FIG 27, 62-83	M85-87
Glass vessel	FIG 28, 84	M87
Baked and fired clay	FIG 28, 85-87	M87-88
Spindle-whorls	FIG 28, 88-91	M88
Sling-bullets	FIG 28, 92-95	M88
Glass beads	FIG 28, 96-99	M89
Miscellaneous items	FIG 28, 100-103	M89-90

Details of published works referred to in the catalogue will be found in the bibliography at the end of the volume-printed report.

Following selective cleaning and radiography at the Ancient Monuments Laboratory (AML), the items of metalwork have been described by Quita Mould who would like to thank Miss Sarnia Butcher, Miss Justine Bayley and Mr Adrian Olivier for commenting upon the brooches. The results of XRF-analysis of the copper alloy brooches are discussed separately by Miss Bayley on M91-95 (=AML Report 3760). A full list of metal objects, arranged according to function, is given on M96-97 and details of unillustrated items are provided on M98-107 where individual objects are described in small find (SF) order.

Species identifications of the worked animal bones have been provided by Christine Whatrup and Miss Louise Monk has identified the glass finds.

Throughout, each item description is followed by appropriate details of individual object or small find number, provenance, and site-phasing. Major ditch contexts are listed in abbreviated form, e.g. B XIII 1 refers to Enclosure ditch B, trench 13, layer (1).

METALWORK by Quita Mould, with contributions by Justine Bayley and Adrian Olivier

Copper alloy brooches (FIGS 22-23)

1. La Tene III brooch of bronze with a 4-coiled spring and internal chord, the pin is broken. The rectangular-sectioned bow is ornamented below the head by 6 transverse mouldings. The bow tapers to the square, pierced foot, now fractured, with a return catchplate. Almost complete. Length 51 mm; head width 10 mm.
SF12 B IX 4 (Phase 3a).

2. La Tene III brooch of bronze as the last, but the pin is missing. The thin, round-sectioned bow is decorated near the head and close to the foot by a series of 3 transverse mouldings. The pierced square-shaped foot was cast in one piece with the bow and has a turned-back catchplate. Similar to examples from Rotherley (Pitt-Rivers 1888, pl XCIX, fig 4 and 7). Almost complete. Length 61 mm; head width 10 mm.
SF19 Ditch A4 (Phase 3).

Comment

The transverse mouldings on the bows of nos. 1 and 2 represent the skeuomorphic survival of the functional collar which linked the foot to the bow in preceding La Tene II brooch-types. The mouldings on the iron Aylesford-type brooches, nos. 18-20 below, may be similarly interpreted. The square-footed La Tene III examples are paralleled at Maiden Castle, Dorset, in addition to Rotherley and in various Belgic burials in Gaul (cf. Wheeler 1943, fig. 83, 8-10), although the continental brooches of this type are more usually of iron.

3. Nauheim derivative of bronze with 4-coil spring, external chord and remains of a simple rectangular-sectioned bow. The bow has a sharp curve at the crest before the point of fracture. The round-sectioned pin is complete, catchplate and foot are missing. Incomplete. Length 39 mm; head width 8 mm.
SF21 AIII 2 (Phase 2b).

4. A bronze brooch bent into a ring as scrap, with another brooch (no. 5) pushed through the remains of 2 coils from the chord which was probably external. The flat-sectioned bow is decorated by an incised line down each edge and a central faintly raised rib. The catchplate appears to have been pierced. Probably a variant of the true Nauheim form which may be related to other examples with an external chord, dating from possibly as early as the late-1st century BC but also as likely to occur up to (? and including) the Roman Conquest (A. Olivier, in litt., 8/8/83). Incomplete. Length 27 mm.
SF76 128 (Indeterminate).

5. One-piece bronze brooch with 4-coiled spring, broken pin and external chord. The upper part of the flat-sectioned, tapering strip-bow is decorated by an incised line running down each side and a central line of 3 sets of stamped square motifs followed by 3 transverse mouldings. The lower bow is plain and the broken catchplate appears to have been open. The lower bow is bent out of shape and brooch no. 4 was attached by the remains of its chord. Parallels among La Tene III brooches occur in a narrow distribution stretching fron north Kent to Leicester and whilst a pre-Conquest date could be expected, the form may also be present, as a survival, in the early part of the second half of the 1st century AD (A Olivier, in litt, 8/8/83). Almost complete. Length 33 mm; spring width 9 mm.

6. Nauheim derivation one-piece bronze brooch with 4-coiled spring and internal chord. The flat strip-bow tapers in width to the 'knife edge' foot. The bow is decorated by an incised line running down each edge and a central band of rocked tracer ornament. The solid catchplate is now broken and the pin is incomplete. Length 38 mm; spring width 8 mm.
SF87 B2VII.2 below roadway (Phase 3a).

7. Nauheim derivative one-piece brooch manufactured in a gunmetal. 3 coils of the 4-coiled spring remain and an internal chord. The thin, flat-sectioned bow is decorated by an incised line running down each side close to the edge. The catchplate and pin are missing. Incomplete. Length 35 mm; spring width 9 mm.
SF190 Hut 2 area Unstratified.

Comment

Nauhiem derivative brooches, as nos. 6 and 7 and the iron examples nos. 21-23 below, are frequently found in pre-Conquest contexts such as those included in groups I and II at Skeleton Green, Herts. (D Mackreth in Partridge 1981). However, at Fishbourne, Hants., 19 out of 21 stratified examples could be securely dated to AD 43-75 (Hull 1971, 100) and others occur elsewhere in later deposits.

8. Brass Bagendon brooch of lattice design with 3 transverse mouldings of diminishing length below. The tapering lower bow terminates in a simple moulded footknob with a single moulding above.
Miss Justine Bayley writes 'The bow is divided into 3 parallel strips between which are pairs of copper alloy cylinders, held in place by an iron peg going alternately through perforations in the strips and the cylinders. The iron protrudes beyond the outer strips and may have had some sort of decorative terminal though none survive on this example.

The brooch originally had at least 3 iron peg assemblies.' Comparable with the earliest example of the style from Bagendon, Glos., where the floruit of the type is said to be the second quarter of the 1st century AD (Clifford 1961, fig. 33,1). Incomplete. Length 42 mm; width 11 mm.
SF35 6 (Phase 2b).

9. Colchester - type one piece brass brooch with long thin tapering bow of oval section and broken catchplate. The bow is straight without the more usual curve of the Colchester. The forward facing hook secures the remains of the chord, only one coil of the spring is present. Both wings are fractured and the pin is missing. Cf. Hawkes & Hull 1947, Camulodunum Type III, AD 10-65. Incomplete. Length 58 mm; remaining head width 5 mm.
SF204 Ditch A, surface (?Phase 2b).

10. Colchester. Small one-piece brass brooch with six-coiled spring. The chord is now missing and the hook is broken. The small wings are decorated by an incised line near the end and at the junction of the wing and bow suggesting mouldings. The thin, tapering bow is of D-shaped section. The catchplate is missing and the pin is fractured. Camulodunum Type IIIb, post-AD70 (cf. Hawkes & Hull 1947, pl XC1, 33). Almost complete. Length 22 mm; head width 14 mm.
SF231 CVI3 (Phase 3b).

11. Colchester-type one-piece brass brooch with 3 coils of the spring remaining. The external chord is held by a forward-facing hook resting on top of the bow. The plain, rectangular sectioned bow is narrow and has a rather angular profile. Only a fragment of the catchplate remains, the pin is missing. Cf. Hawkes & Hull 1947, Camulodunum Type III, AD 10-65. Incomplete. Length 41 mm; head width 10 mm.
SF 222 B XIII 1 (Phase 2b).

12. Colchester derivative brooch of leaded gunmetal with 8-coiled spring on an axis bar passing through the lower hole which pierces the plate projecting from the back of the head. The external chord passes through an upper hole in the crest which has a vestigal hook cast solid in one-piece with the head. The plain wings are poorly finished. The round-sectioned bow tapers to a solid catchplate. Justine Bayley comments that the brooch 'is much rougher on one side of the foot than elsewhere on its surface and traces of white metal can be seen there. This might be the remains of a soldered on catchplate, perhaps a repair.' Almost complete. Length 38 mm; head width 17 mm.
SF2 BI4 (Phase 3a).

13. Colchester derivative brooch of gunmetal with 8-coiled spring on an axis bar passing through the lower hole in the plate projecting from the back of the head. The external chord passes through an upper hole in the plate which extends into a vestigal hook, it being cast in one-piece with the head. The plain wings are of D-shaped section. The bow has a triangular section and is decorated by a central raised rib nicked along its length to produce a serrated or ribbed effect. An incised line runs along each edge. The catchplate is solid. Cf. Hawkes & Hull 1947, Camulodunum Type IV, AD 50-65. Complete. Length 39 mm; head width 18 mm.
SF 40 BII 3 (Phase 3a).

14. Colchester derivative bronze brooch with 10 coiled spring on an axis bar passing through the lower hole in the plate projecting from the back of the head. The external chord is held through an upper hole in the plate which is ornamented by a vestigal hook, it being cast solid in one-piece with the head. The wings are decorated at each end by 2 incised lines to suggest mouldings. The thin, tapering bow has a central decoration of 2 raised lines bearing a series of small nicks in opposing directions. The catchplate is solid, the pin is broken in 2 places. Charcoal was found on the spring during cleaning. Cf. Hawkes & Hull 1947, Camulodunum Type IV, AD 50-65. Complete. Length 44 mm; head width 22 mm.
SF3 BI 4 (Phase 3a).

15. Developed Colchester derivative of leaded bronze. A T-shaped brooch with thin wings curving round to form a cylinder to hold the axis bar, now lost. A gunmetal pin, found with the brooch, ends in one and a half turns of spring and is not the usual hinged pin. The wings are decorated at each end and at their junction to the body by an incised vertical line to suggest mouldings. The tapering, D-sectioned bow has a central serrated ridge decorating the crest. The bow tapers to a small, simple foot knob with a transverse moulding above. The catchplate is solid. The bow is similar to one from the Jewry Wall, Leicester (Kenyon 1948, fig. 80,6) and Thistleton, Rutland (unpublished); both are from later contexts, but typologically this is probably from first half of 2nd century AD. Almost complete. Length 46 mm; head width 25 mm.
SF86 Ditch U (Phase 3b).

16. Developed Colchester derivative of leaded bronze with a gunmetal pin. The brooch has a spring-case from which a square hole has been cut and the pin secured to the axis bar by being wrapped around it in 2 coils. The wings are decorated by a series of vertical lines of stabbed dots to suggest fluting, 3 on each wing with a fourth at the junction of the wing and the bow. The D-shaped sectioned bow is humped and decorated by a central raised rib; it tapers to a simple foot with a transverse moulding above. The

catchplate is solid. Pin is broken. Not closely datable but probably belongs to the second half of the 1st century AD. Almost complete. Length 40 mm; length of head 30 mm. SP90 169 (Phase 3b).

Comment

Miss Justine Bayley reports in M94-95 : 'The Colchester derivatives nos. 12-14 conform less well to the expected pattern. Most of these two-piece brooches are leaded bronzes, commonly containing 10-15% lead. The group from Richborough (Bayley and Butcher, 1981) does however contain a few brooches of other compositions though it is curious that all three examples here fall outside the normal range. The pins are of different compositions to those of the brooches.

The two further Colchester derivative brooches nos. 15 and 16 are rather different in construction though the overall shape conforms to the general type. They are both leaded bronzes with gunmetal pins. Both have cylindrical heads which one would normally expect to contain an axis bar on which would hang a plain hinged pin. In this case the pins hang on an axis bar but instead of having a flattened, perforated end as usual, they end in one and a half turns of spring, a cross between sprung and hinged pins. This form of construction appears to be original and not a repair, as the slots cut in the brooch heads to take the pins fit them exactly and that in no. 16 is set asymmetrically in a position unsuitable for any other form of pin; there is even a cut-out to take the short end of the spring. The head of no.15 was not cast as a cylinder but was formed by bending two protrusions till they touched as was done in, for example, Langton Down type brooches. The form of construction shown by these two brooches is not common and may be considered as intermediate between Colchester derivatives with sprung pins and T-shaped brooches with hinged pins. Perhaps it was a short-lived or local solution to a new design of brooch before the corresponding pin type had been developed.'

17. Fragment of penannular bronze brooch of round-section with curled terminal at right-angle to the plane of the ring. Cf. Fowler 1960, Type C and Hawkes & Hull 1947, Camulodunum Type A. Incomplete. Length 16 mm; width of terminal 3 mm.
SF216 BXIII 1 (Phase 2b).

Iron brooches (FIG 24)

18. Aylesford-type brooch with 6-coiled spring held by a lug projecting from the back of the flat, round trumpet-like head. The chord is internal. The thin, round-sectioned bow is decorated at the crest by a series of 3 transverse mouldings. In radiograph they appear to be 2 flat collars with an angular collar between. The pin is broken and the lower bow and the catchplate are missing. Incomplete. Length 42 mm; head width 15 mm.
SF211 BXIII 1 (Phase 2b).

19. Aylesford-type brooch with flat, round trumpet-like head with small protuberance at the back of the head remaining from the lug which once held the spring. The long, thin bow has 3 transverse mouldings on the crest. Spring, chord, catchplate and pin are missing. Incomplete. Length 49 mm; head width 11 mm.
SF212 BXIII 1 (Phase 2b).

20. Aylesford-type brooch with 6-coiled spring held by a lug projecting from the back of the head. The internal chord is hidden behind the flat, round trumpet-like head. The long, thin, round-sectioned bow is decorated by a single transverse moulding just below the head. Remains of the catchplate indicat · that it was pierced. The pin is broken. Almost complete. Length 73 mm; head width 15mm.
SF218 BXI (Phase 2b).

Comment

Brooches 18-20 are comparable with copper alloy brooches found in Grave 13 at Swarling and with those found in the Aylesford 'Y' burial for which an Augustan date has been suggested due to their similarity to brooches from the Ornavasso cemetery in northern Italy (Birchall 1965, 290). The brooch-type is characteristic of the Welwyn phase of La Tene III in the south of England and dated by associated metalwork to the second half of the 1st century BC. The Weekley examples are similar to an iron brooch from Hitchin, Herts. (cf. Stead 1976, fig 3, 4).

21. Nauheim derivative with 3 coils of the spring remaining and an internal chord. The simple tapering bow of round section is slightly humped at the head. The lower bow gradually tapers to the remains of the solid catchplate which is now bent out of its original plane. The pin is missing. Almost complete. Length 45mm; head width 10 mm.
SF4 BI4 (Phase 3a).

22. Nauheim derivative brooch with the remains of 2 coils of the spring with an internal chord. The simple round-sectioned bow is broken off before the catchplate. Pin missing. Incomplete. Length 36 mm; spring width 8 mm; height 20 mm.
SF189 Hut 2 area Unstratified.

23. Nauheim derivative brooch with the 2 remaining coils of the spring ending in a loop at the front indicating the former position of the external chord. The long thin tapering bow is decorated by an incised line running along each edge. Catchplate and pin are missing. Incomplete. Length 55 mm: bow width 7 mm.
SF203 Ditch B, surface (Phase 3a).

24. Colchester brooch with spring of apparently 8 coils and an external chord held by a forward-facing hook on the head. The wings appear to be plain, the long tapering bow has a D-shaped section. The broken catchplate was pierced. The pin is missing. Rather too corroded for a more detailed identification. Almost complete. Length 63 mm; head width 24 mm.
SF81 BIV4 (Phase 3a).

25. Three fragments from a small penannular brooch. Two are from the round-sectioned stem, the other has a curled terminal. Found in the same context as two of the Aylesford-type brooches (nos. 19 and 20), suggesting a pre-Conquest date, although such penannular brooches occur over a long time-span : cf. Fowler 1960, Type C. Individual fragment lengths 28 mm; 16 mm; 10 mm.
SF211 BXIII 1 (Phase 2b).

Other iron objects

26. Small hooked blade with simple socket formed by folding over the two side wings, pierced by a nail hole. The socket contains wood remains identified by Miss J Watson (AML) as being a fruit wood (Pomoideae). Cf. Rees 1979, Type 1a; whilst the majority of small pruning hooks of this type are of Iron Age date, they are also found in Romano-British contexts. Complete. Length 71mm; hook width 41 mm; socket diameter 13 mm.
SF208 Ditch C, surface (Indeterminate).

27. Curved blade, tip missing, with thickened back. At the end of the blade the two sides are curved inward to form a simple socket with a single back rivet-hole. Probably a reaping hook : cf. Rees 1979, Type 1b. Almost complete. Length 130 mm; socket width 25 mm.
SF236 CVI II (Phase 2a).

28. Narrow, tapering blade tip with straight, thickened back and slightly convex edge. Probably the tip of a scythe blade. Incomplete. Length 58 mm; width 13 mm.
SF225 BXIII I (Phase 2b).

29. Round-sectioned stem becoming square where it tapers gradually to a pointed tip. The opposite end is fractured Possibly a long awl or a drill bit. Almost complete. Length 112 mm; diameter 6 mm.
SF67 Kiln 5 (Phase 3a).

30. Square-sectioned shank expanding to a distinct shoulder towards one end before constricting to the broken point. The object is badly corroded and fractured at both ends. Probably an awl. Almost complete. Length 57 mm; max. width 8 mm.
SF92 Area C, trackway (Indeterminate).

31. Needle with round-sectioned stem tapering to a fine point at one end. The other end is less sharply pointed and takes a flattened section around the oval eye. Complete. Length 86 mm; width around eye 4mm.
SF165 Ditch A21/385 (Indeterminate).

32. Fragment of a needle with round-sectioned stem, flattened toward the remains of the slit eye, now represented by a bifurcated end. Both ends are fractured. Incomplete. Length 57 mm; width bifurcated end 4 mm; diameter 3 mm.
SF181 Area C, trackway (Indeterminate).

33. Blade with centrally placed tang formed by folding the 2 edges together, the other end is fractured. Both the sides are straight. Since the object has suffered extreme flaking from all surfaces it is now difficult to discern a back and edge or possibly 2 edges. The blade is bent into a crescentic, curved profile which if original may point to its use as a fleshing knife or scraper. The crude tang and flat section could suggest a knife blank, although in radiograph both edges appear to have been worked. Almost complete. Length 151 mm; tang length 25 mm; width 26mm.
SF188 Kilr 9 (Phase 2b/3a).

34. Square-sectioned shank of a metalworker's file tapering gradually from a slight shoulder at one end. Below the shoulder a series of transverse grooves cover 2 opposing faces (they may have existed on all 4 originally but this was not visible after cleaning). Similar to an example from Halton Chesters (Manning 1976, 53) and from other sites including Silchester and London. Complete. Length 109 mm; width 7 mm.
SF244 752 (Phase I).

35. Cranked tang of square section, flattened and expanded towards one end to form a narrow, leaf-shaped blade. The upper surface has been lost through flaking and no distinct edges are visible on radiograph. Probably a small implement, possibly a plasterer's trowel for fine work, or a ? small file. Complete. Length 86 mm; blade length 47 mm; blade width 10 mm.
SF44 BIV 4 (Phase 3a).

36. Ring-headed pin with round-sectioned stem and looped terminal. The stem tapers to a pointed tip which is slightly upturned. Complete. Length 95 mm; head length 11 mm; head width 16 mm.
SF95 Ditch U (Phase 3b).

37. Round-sectioned stem of a pin with scrolled loop-terminal of rectangular section. Almost complete, tip fractured. Length 104 mm; head length 22 mm; head width 13 mm.
SF7 AIII 2 (Phase 2b).

38. Badly flaked knife blade, now with a virtually flat section, but of common Romano-British form. The back is slightly sinuous and is met at the upturning tip by the convex edge. The edge is distinctly stepped and is fractured before the beginning of the tang. Minerally replaced bone remains occur on one surface above the stepped edge. Almost complete. Length 115 mm; width 35 mm.
SF240 713 (Phase 1).

39. Knife blade with straight back and convex edge. The edge rises to meet the back at the pointed tip, now bent. The edge is worn and very little metal is visible in radiograph. Tang is missing. Almost complete. Length 83 mm; width 23 mm.
SF43 BIV/ Ditch D (Phase 3).

40. Knife blade with flat centrally placed tang and straight back and edge. Blade is slightly bent upward at the tip end, tip is missing. Almost complete. Length 61 mm; width 15 mm; tang length 27 mm.
SF182 Ditch A12 (Phase 2b/3a).

41. Tumbler-lock slide-key with rectangular sectioned stem and pierced ring bow, constricting in width below a stepped shoulder. The square shaped bit set at a right-angle to the stem has four grooved teeth. Complete. Length 102 mm; bow width 24 mm; bit length 32 mm.
SF96 CIV 1 (Phase 3b).

42. Length of flat strap of rectangular section and slightly S-shaped profile. The wider end terminates in two projections remaining from the pierced ring now fractured. The strap tapers slightly toward the rounded end where a barb has been welded onto the main strap, in radiograph the position of a second barb can be seen alongside the first. This is the remains of a sprung-fastener used as a locking mechanism on caskets, etc. Similar examples come from the Romano-British casket burials at Skeleton Green (Partridge 1981, fig. 112, L; 113, M; 115, H). Almost complete. Length 154 mm; strap width 17 mm; max. width fractured terminal 36 mm.
SF68 CIII Unstratified.

43. Tapering tip of blade of lentoid section. In radiograph the blade appears to be double-edged, so probably from a spearhead. Incomplete. Length 74 mm; width 20mm.
SF147 Ditch KVII (Phase 1).

44. Tapering tip of a blade with lentoid section. The shape of the section suggests it is the tip of a spearhead rather than a knife. Incomplete. Length 30 mm; width 15 mm.
SF156 Ditch KI (Phase 1).

45. Gently tapering tip of a double-edged blade with a lozenge-shaped section. Probably from a spearhead. Fragmentary and incomplete. Length 63 mm; width 18 mm.
SF122 Ditch KVII (Phase 1).

46. Large coiled ferrule of round-section, constructed by coiling a length of rectangular sectioned strap. The socket contains a large quantity of burnt wood identified as Spindle (Euonymous sp.) Cf. smaller examples from Rotherley, Dorset and Old Penrith, Cumbria (Pitt-Rivers 1888, pl CVI, fig 18; unpublished AML 7814324). In fragments, but otherwise complete. Length 92 mm; diameter 46 mm.
SF37 6 (Phase 2b).

Other copper alloy objects (FIG 26)

47. Fragment of flat strip tapering at each end. One end is forked and the other is constricted in the opposite plane and tapers to a pointed tip. The upper surface is decorated by an incised line running along each edge and a central band of ornament consisting of an incised V-shaped groove between 2 lines of rocked tracer decoration. The decoration is typical of that frequently found on brooch bows and the fragment may come from a scrapped or miscast brooch or a decorated strip bracelet. Tool marks are visible on the lower surface. Incomplete. Length 64 mm; width 6 mm.
SF30 815 (Phase 2).

48. Wide, flat, parallel-sided strip or bracelet bent into a semi-circular profile. The upper surface is decorated by a central band of opposed cable motif. One end is fractured, the other is also of irregular outline although smoothed by wear. A similar bracelet with 2 rows of raised decoration separated by a plain central band was found at Skeleton Green (Partridge 1981, fig. 54, 9). Incomplete. Length 46 mm; width 14 mm.
SF10 BVIII 4 (Phase 3a).

49. Broken pin with a round-sectioned stem. The head is decorated by two sets of angular transverse mouldings, each comprising a large moulding between two smaller examples. Almost complete. Length 35 mm; head diameter 8 mm.
SF98 CIVI (Phase 3b).

50. Nail-cleaner with pierced ring terminal for suspension, now broken, and a distinct neck, assuming a flat section at the shoulder before gently tapering to the bifurcated end. The edges on both surfaces are emphasised by an incised line. Similar nail cleaners with linear decoration were found at Gadebridge Park, Herts. (Neal 1974, fig. 62, 185-88). Almost complete. Length 38 mm; width 7 mm.
SF39 BII 3a (Phase 3a).

51. Nail-cleaner with a round-sectioned stem, pierced ring terminal, and long neck ornamented by a series of incised lines producing wide transverse mouldings. Below this the section is constricted before flattening at the bifurcated end which is now broken. Almost complete. Length 50 mm; width 5 mm.
SF50 18 (Indeterminate).

52. Nail-cleaner of flat section with pierced ring terminal and neck ornamented by a series of transverse mouldings. The distinctly expanding shoulders taper to the bifurcated end. Tool marks are visible on both faces. Similar to an example from Hod Hill, Dorset (Brailsford 1962, pl XI, 160). Complete. Length 47mm; width 12 mm.
SF172 Ditch X (Phase 3b).

53. Simple strip nail-cleaner with pierced loop terminal and expanding shoulders which taper to the bifurcated end, now missing. The ring terminal is set at right-angles to the flat body. Similar to an example from Richborough, Kent (Cunliffe 1968, pl XLIII, 178). Almost complete. Length 45 mm; shoulder width 8 mm.
SF242 Ditch A22/758 (Indeterminate).

54. Ear-scoop with thin, rectangular-sectioned stem, pierced loop-terminal for suspension (now broken), and small shallow bowl. Almost complete. Length 45mm; bowl width 4 mm.
SF192 Ditch C5 (Phase 3a).

55. Ligula with long round-sectioned stem, bent at one end, and a slightly angled spatulate terminal. Similar unguent spoons are recorded from Gadebridge Park (Neal 1974, fig 63, 200-208). Complete. Length 123 mm; spatula width 6 mm.
SF173 Ditch X (Phase 3b).

56. Harness ring with stud attachment, the interior of the ring shows signs of wear opposite the stud. The ring is decorated by a single groove running around the circumference. The upper surface of the flat, round stud is decorated by 2 opposed incised half circles and possibly 2 others, although this is masked by the rather pitted surface. Undecorated examples are known from Broxtowe (Webster 1958, fig 3, 14), Colchester, and Hod Hill (Brailsford 1962, pl XI, 197). Complete. Diameter 37 mm; stud diameter 16 mm; height 16 mm.
SF33 6 (Phase 2b).

57. Plain ring of D-shaped section. Complete. Diameter 41 mm.
SF34 6 (Phase 2b).

58. Harness clip with D-shaped sectioned hook ornamented by an incised line along each edge and a series of transverse incised lines at the base which continue for a short distance down the attachment strip. The attachment strip is pierced by two rivet holes. The decoration is rather crude. More elaborate and better executed harness clips occur at Verulamium, Wroxeter and other sites with military associations (cf. Webster 1958, nos. 153, 180, 202, 247, 262). Complete. Length 54 mm; hook width 16 mm; strap width 11 mm.
SF78 CIII 4 (Phase 3a).

59. Flat strip of square shape with rounded corners centrally pierced by a round rivet hole, with a small rivet present at one edge. With the exception of 2 oblique cuts, the remainder of the edges are fractured. Probably from a belt fitting. Incomplete. Length 20 mm; width 14 mm.
SF56 57 (?Phase 2a).

60. Rectangular strip mount pierced by a round rivet hole at either end, one with the stub of a rivet remaining. Probably a belt fitting. Complete. Length 24 mm; width 12 mm.
SF177 Ditch C5 (Phase 3a).

60. Rectangular strip mount pierced by a round rivet hole at either end, one with the stub of a rivet remaining. Probably a belt fitting. Complete. Length 24 mm; width 12 mm.
SF177 Ditch C5 (Phase 3a).

61. Length of U-shaped binding strip with a curved profile. Possibly from a shield binding. Length 60 mm; width 4 mm.
SF104 BII 4 (Phase 3a).

NON-METAL OBJECTS

Worked animal bones (FIG 27)

62. Cattle rib, polished and serrated along one edge. The original function remains unknown, but the item may have been used as some form of beater or comb in weaving. Incomplete. Surviving length 250 mm.
SF5 BI 8 (Phase 3a).

63. Whorl made from the head of a bos femur which has been drilled slightly off-centre. Diameter 37 mm; hole width 4-6 mm.
SF239 712 (Phase 1).

64. Part of a cattle rib perforated by a series of three holes which were probably drilled with a hollow bit, as suggested by the appearance of an unfinished example close to one edge. Length 55 mm; hole width 4-5 mm.
SF238 712 (Phase 1).

65. Bos radius, chopped and possibly used as a gouge or similar tool. Length 140 mm.
SF144 Ditch KVII (Phase 1).

66. Sawn section of a cattle rib drilled with two centrally positioned holes, 27 mm apart. Cf. no 64 above. Length 65 mm; hole diameter 5 mm.
SF255 Ditch Z (?Phase 1).

67. Fragment of decorative inlay incised with circular motifs. Incomplete.
SF194 Ditch X (Phase 3b).

68. Cut or chopped red deer brow tine from which the cancellous tissue has been hollowed to receive the tang of a knife, hook or similar blade. A notch 3 mm wide has been cut into one side. Complete. Length 173 mm.
SF206 AVII I (Phase 1).

69. As the preceding item, but lacking additional cuts around its sides. Length 114 mm.
SF89 160 (Phase 1).

70. Needle, broken across its eye. Incomplete. Length 40 mm.
SF241 713 (Phase 1).

71. Needle with steep-sided eye possibly drilled with a metal bit. Complete. Length 64 mm.
SF221 680 (Phase 1).

72. Pin with slightly expanded head. Highly polished. Length 76 mm.
SF41 BII 9 (?Phase 3a).

73. Chopped roe deer antler tine, smoothed and worn through use.
SF73 Ditch KVII (Phase 1).

74. Flat bone from cattle or horse incised on one surface with a criss-cross pattern which was originally embellished with red-brown paint or ochre. A small hole drilled towards one end suggests that it may have been attached to another plate to form the handle of a knife or razor, as in an example from Richborough, Kent (Cunliffe 1968, pl XLIX, 240). Incomplete. Length 103 mm; hole diameter 2 mm.
SF9 BIX 4 (Phase 3a).

75. Right ovis tibia in which the shaft has been cut obliquely towards the distal end to expose the medullary canal and form a point which is smoothed and worn. Worked ovicaprid tibiae of this type are well known in both Iron Age and Roman contexts and many of them may have been used as 'pin-beaters' for beating the weft in between the warp threads during weaving (Crowfoot 1945). Complete. Length 117 mm.
SF100 204 (Indeterminate).

76. As the last item, but a left tibia has been used. Length 160 mm.
SF 237 CVI 10 (Phase 2a).

77. Worked sheep/goat tibia as no. 75, except that additionally the tibia-crest at the proximal end has been chopped away and the opposite end has been gnawed by a dog. Length 118 mm.
SF148 Ditch KVII (Phase 1).

78. Ovis left metatarsal perforated towards the distal end by a small drilled hole, 2 mm across. Possibly used in weaving. Incomplete. Length 118 mm.
SF254 Ditch Z (?Phase 1).

79. Sheep-goat metacarpal in which the shaft is smoothed and polished, particularly between the series of grooves or notches which have become worn in its sides. Similar worn and grooved ovicaprid metapodials are often present in collections of weaving tools (cf. Bulleid & Gray 1948, 316), suggesting a use in textile production, although their exact function remains unknown. Incomplete. Length 124 mm.
SF256 Ditch B Unstratified.

80. Sheep metatarsal perforated with a drilled hole which reduces in width from 6 mm to 4 mm. Possibly used as a bobbin (cf. Pitt-Rivers 1888, pl CXVII). Incomplete.
SF253 Area K Unstratified.

81. Lateral metapodial of a horse suitable for use as a tool or implement. Tip missing. Surviving length 98 mm.
SF232 677 (Phase 1).

82. Fragment of worn sheep metatarsal similar to no. 79. Incomplete.
SF26 809 (Phase 3a).

83. Another, as the preceding item and found with it. Also fragmentary.
SF26 809 (Phase 3a).

Glass vessel (FIG 28) by Louise Monk

84. Fragment of the rim and side of a pillar-moulded bowl of blue-green glass. Cast with both sides of the rim wheel-polished and the exterior fire-polished. From a tall bowl with prominent, widely spaced ribs. 1st century AD. Rim diameter c. 100 mm.
SF72 Ditch Ca (Phase 3b).

Baked and fired clay (FIG 28)

85. Bun-shaped weight perforated at the centre by a hole 10 mm across. Diameter 90 mm; thickness c. 70 mm.
SF 103 313 (Indeterminate)

86. Sherd from a storage jar in fabric 1b , chipped into an approximately circular shape and perforated with a central hole, 6 mm wide, perhaps for use as a whorl or similar weight. Diameter 60-70 mm.
SF47 CII 6 (Phase 2b/3a).

87. Small crucible or similar miniature vessel crudely made of clay containing an abundance of shell and fired grey-brown in colour. Internal diameter 35 mm; height 23 mm. SF187 234 (?Phase 1).

Spindle-whorls (FIG 28)

88. Of chalk. Diameter 34 mm; thickness 7 mm; hole diameter 4 mm. SF 224 BXI 1 (Phase 2b).

89. Of sandstone. Diameter 38 mm; thickness 11 mm; hole diameter 4 mm. SF105 Ditch B Unstratified.

90. Of chalk. Diameter 30 mm; thickness c. 10 mm; hole diameter 8-9 mm. SF82 Area B Unstratified.

91. Possible whorl of fired clay. Incomplete. Diameter c 30 mm; hole diameter 4 mm. SF 113 Ditch KI (Phase 1).

Sling-bullets (FIG 28)

Examples are mostly of common ellipsoid type and all are of fired clay. They are extremely light and were probably intended for use with a ribbon-sling in bird-shooting or hunting.

92. Length 37 mm; thickness 23 mm. SF108 Ditch KI (Phase 1)

93. Length 38 mm; thickness 18 mm. SF162 Ditch KVII (Phase 1).

94. Length 40 mm; thickness 25 mm. SF 109 Ditch KI (Phase 1).

95. Length 36 mm; thickness 22 mm. SF110 Ditch KI (Phase 1).

Glass beads (FIG 28) by Louise Monk

96. Very small square-sectioned bead with circular perforation. Drawn from a rod of dark natural blue-green glass and subsequently flattened. The type occurs throughout the Roman period but is most common in the 4th-5th centuries AD (cf. Guido 1978, fig. 37, 7). Length c. 6 mm; diameter c. 2mm.
SF195 Enclosure E, bank (Indeterminate).

97. Fragment of annular bead. The opaque dark blue ground is decorated with yellow inlaid rays which radiate from the perforation and are overlaid by dark blue horizontal and diagonal bands. Formed from a circular-section rod. Weathered, with the yellow partly leached away. Cf. Guido 1978, Class 7, type a : 'Celtic Ray' : 150 BC-AD 50. Diameter c 17 mm; height c 8 mm.
SF161 Ditch KVII (Phase 1).

98. Poorly made annular bead of opaque dark blue glass decorated with 3 white eyes of unequal size, each with a central yellow translucent blob and marvered almost flush with the surface. On one side there are traces around the perforation of a thin groove which originally contained a white filling that has now mostly leached away. Similar to Guido 1978, Class 3, South Harting-type of the 1st century BC - 1st century AD, but different in that the eyes have yellow centres rather than blue. Complete, but the surfaces are pitted and weathered. Diameter 17 mm; height c 12 mm.
SF58 Ditch D (Phase 3b).

99. Fragment of a small annular bead of plain natural blue-green glass. Unevenly drawn from a circular-section rod. Cf. Guido 1978, Group 6, iia - found throughout the Roman period. Diameter c 14 mm; height 3-7 mm.
SF101 CIV 2 (Phase 3a).

Miscellaneous items (FIG 28)

100. Fragment of chalk with smooth, rounded edges and preserving part of a central perforation suggesting use as a weight or whorl. Incomplete. Diameter c 35 mm; thickness 14 mm; hole diameter 5 mm.
SF 226 678 (?Phase 1).

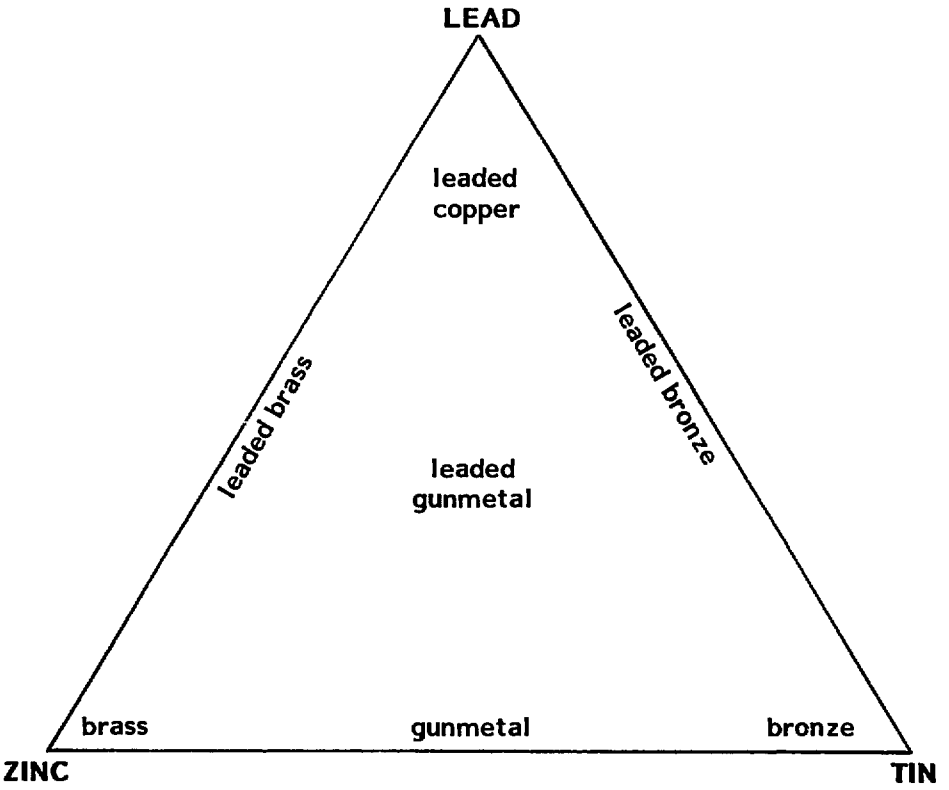
101. Lead plug or similar form of seal. Width c 35 mm; maximum thickness 10 mm; hole diameter 8 mm.
SF59 Ditch D1 (Phase 3).

102. Triangular crucible with a rounded base. No metal-residues are present, but gunmetal has been identified on a separate fragment from kiln 11 (SF209: Justine Bayley, in litt, 25/7/83). Complete. Length of each side c 90 mm; depth 30 mm.
SF153 Ditch KVII (Phase 1).

103. Triangular baked clay loomweight, pierced obliquely across two angles for suspension and worn at the corner-edges. Of common Iron Age and Roman type. Complete. Length of each side 180 mm; thickness 65 mm.
SF61 57 (?Phase 2a).

QUALITATIVE ANALYSES OF SOME BROOCHES by Justine Bayley, Ancient Monuments Laboratory

All copper alloy brooches from the site were analysed qualitatively by energy dispersive X-ray fluorescence (XRF). The results are given in the table below, M92-93. In most cases zinc, tin and lead were detected in addition to the copper but the proportions varied widely. Where the major alloying element is zinc the resulting metal is brass, while bronzes contain tin and copper. Mixed alloys containing significant amounts of both tin and zinc are known as gunmetals. Some bronzes and gunmetals also contain appreciable amounts of lead. The diagram below shows the relationships between the elements present in the copper and the name given to the alloy. It also shows that there are no hard and fast divisions between different alloys - it all depends on where one draws the lines.



Results of qualitative analysis of the copper alloy brooches from Weekley, Northants

Brooch-type (by report catalogue no. followed by original SF no)	Elements present Zn	Sn	Pb	Alloy
La Tene III				
1(12)		+	+	Bronze
2(19)		+	+	Bronze
Nauheim Derivatives				
3(21)		+		Bronze
4(76)		+	(+)	Bronze
5(76)		+		Bronze
6(87)	+	+	+	Bronze
7(190)	+	+	+	Gunmetal
-(25)		+	(+)	Bronze
Bagendon				
8(35)	+	(+)	(+)	Brass
Colchester (1-piece)				
9(204)	+		(+)	Brass
10(231)	+			Brass
11(222)	+	(+)	(+)	Brass

Note to Table

(+) means detectable but very weak signal; the element can be disregarded for the present discussion.

Results of qualitative analysis of the copper alloy brooches from Weekley, Northants (contd)

Brooch-type (by report catalogue no. followed by original SF no)	Elements present Zn	Sn	Pb	Alloy
Colchester Derivatives				
12(2)	+	+	+	Leaded Gunmetal
pin	+	+	+	Gunmetal
13(40)	+	+	(+)	Gunmetal
pin	+	+		Gunmetal
14(3)		+	+	Bronze
pin	+			Brass
15(86)	+	+	+	Leaded Bronze
pin	+	+	(+)	Gunmetal
16(90)		+	+	Leaded Bronze
pin	+	+	(+)	Gunmetal
Penannular				
17(216)		+		Bronze

Note to Table

(+) means detectable but very weak signal; the element can be disregarded for the present discussion.

Discussion of Results

The two La Tene III brooches (nos. 1-2) are of similar composition, both being bronzes containing a percent or two of lead. I have not analysed any comparable brooches so I cannot say whether this composition is normal or not.

The Nauheim derivative brooches, nos. 3-7, are mainly bronzes. Two contain some zinc but only in no. 7 is it present in sufficient quantity (a few percent) for the alloy to be re-classified as a gunmetal. The lead contents range up to a percent or two. The Nauheim derivative brooches from Richborough are a mixture of brasses, bronzes and gunmetals, about half the total being brass (Bayley and Butcher, 1981). The Weekley brooches would not be out of place in the Richborough group but it is interesting that they all fall to one end of the distribution.

The Bagendon (no. 8) and 1-piece Colchester (nos. 9-11) brooches are of brass though most contain traces of tin and lead too. The Bagendon type is made with the bow divided into three parallel strips, between which are pairs of copper alloy cylinders, held in place by an iron peg going alternately through perforations in the strips and the cylinders. The iron protrudes beyond the outer strips and may have had some sort of decorative terminal though none survive on this example. The brooch originally had at least three iron peg assembles. The Colchester brooches from Richborough (Bayley and Butcher, 1981) are made of all types of leadless alloys, though brasses predominate, while those from the King Harry Lane Cemetery at St Albans are all brass (Bayley, forthcoming). The composition of the examples from Weekley therefore fit in with the general pattern found on these other sites.

The Colchester derivatives (nos. 12-14) conform less well to the expected pattern. Most of these two-piece brooches are leaded bronzes, commonly containing 10-15% lead. The group from Richborough (Bayley and Butcher, 1981) does however contain a few brooches of other compositions though it is curious that all three examples here fall outside the normal range. The pins are of different compositions to those of the brooches.

The two further Colchester derivative brooches, nos. 15-16, are rather different in construction though the overall shape conforms to the general type. They are both leaded bronzes with gunmetal pins. Both have cylindrical heads which one would normally expect to contain an axis bar on which would hang a plain hinged pin. In this case the pins hang on an axis bar but instead of having a flattened, perforated end as usual, they end in one and a half turns of spring, a cross between sprung and hinged pins. This form of construction appears to be original and not a repair as the slots cut in the brooch heads to take the pins fit them exactly and that in no. 16 is set asymmetrically in a position unsuitable for any other form of pin; there is even a cut-out to take the short end of the spring. The head of no. 15 was not cast as a cylinder but was formed by bending two protrusions till they touched as was done in, for example, Langton Down

type brooches. The form of construction shown by these two brooches is not common and may be considered as intermediate between Colchester derivatives with sprung pins and T-shaped brooches with hinged pins. Perhaps it was a short-lived or local solution to a new design of brooch before the corresponding pin type had been developed.

Wrought penannular brooches such as no. 17 are usually made of a variety of lead free alloys; this one (a bronze) is no exception.

TYPES OF METALWORK FINDS

The major categories of metal-object are listed by function. Illustration numbers refer to items shown in FIGS 22-6 of the volume-printed report and described individually above in M 73-85. Non-illustrated objects, classified only by the excavator's small find number are described in numerical order in M 98-107. Details of provenance follow each item-description.

Object Type	Material	Illus No.	SF No.	Object Type	Material	Illus No.	SF No.
AWL	Fe	29	67	BROOCH (contd)	Fe	21	4
	Fe	30	92		Ae	1	12
BINDING					Ae	2	19
nailed	Fe		28		Ae	3	21
	Fe		45		Ae		25
	Fe		46		Ae	8	35
	Fe		69		Ae	13	40
	Fe		130		Ae		42
	Fe		146		Ae	4;5	76
	Fe		155		Fe	24	81
	Fe		213		Ae	15	86
nailed & angled	Fe		94		Ae	6	87
U-shaped	Ae	61	104		Ae	16	90
					Fe	22	189
BLADE					Ae	7	190
curved	Fe	33	188		Fe	23	203
double edged	Fe	45	122		Ae	9	204
	Fe	43	147		Fe	25	211
	Fe	44	156		Fe	19	212
knife	Fe	39	43		Ae	17	216
	Fe		49		Fe	20	218
	Fe		136		Fe		220
	Fe	40	182		Ae	11	222
	Fe	38	240		Ae		223
scythe	Fe	28	225		Ae	10	231
BRACELET	Ae	48	10	BUCKLE	Ae		36
BROOCH	Ae	12	2	EAR SCOOP	Ae	54	192
	Ae	14	3	FERRULE	Fe	46	37
				FILE	Fe	34	244

Object Type	Material	Illus No.	SF No.
HANDLE			
strap	Fe		23
	Fe		48
twisted	Fe		16
HARNESS CLIP	Ae	58	78
HOBNAILS	Fe		127
	Fe		129
	Fe		228
KEY	Fe	41	96
NAIL CLEANER	Ae	50	39
	Ae	51	50
	Ae	52	172
	Ae	53	242
NEEDLES	Fe	31	165
	Fe	32	181
PIN			
decorative	Ae	49	98
	Ae		245
ring headed	Fe	36	95
	Fe		191
	Fe		215
scroll headed	Fe	37	7
	Fe		31
PRUNING HOOK	Fe	26	208
REAPING HOOK	Fe	27	236
RING			
finger	Ae		219
	Ae		230
harness	Fe		14
	Ae	57	34
	Fe		214
studded harness	Ae	56	33
SHEET			
decorated	Ae		8
	Ae		20
SHEET (contd)			
	Ae	47	30
	Ae		51
	Ae		164
riveted fitting	Ae	59	156
	Ae	60	177
SOCKET	Fe		11
SPRUNG FASTENER	Fe	42	68
STAPLE	Fe		116
	Fe		199
	Fe		243
STEM			
pin/needle	Fe		13
	Ae		60
	Fe		175
	Ae		197
	Ae		233
STUD, head	Ae		38
TANG			
cranked	Fe	35	44
implement	Fe		52
	Fe		97
TWEEZERS	Ae		107
UNGUENT SPOON	Fe		70
	Ae	55	173
	Ae		200

DESCRIPTIVE CATALOGUE OF THE NON-ILLUSTRATED METALWORK by Quita Mould

Arranged by small find number within material category.

Objects of copper alloy

1. Offcut of sheet strip of rectangular shape with a bifurcated end. Length 42 mm; width 10 mm.
Bl 4a (Phase 3a).

8. Sheet of crescentic shape with a series of crude nicks decorating the interior edge. Tool marks are visible on the upper surface. Probably an offcut. Length 30 mm; width 28 mm.
Al 2 (Phase 2b).

20. Decorative binding of fitting of rectangular shaped sheet bent into a semicircular profile. Ornamented by a raised moulding at each end and a central collar indicated by a pair of incised vertical lines. Similar to a bronze tube decorated with 5 raised bands thought possibly to be the casing of the spring of a fibula (Pitt-Rivers 1892, pl. CLXXV, fig 2). Badly corroded, surface lost. Length 18 mm; diameter 9 mm.
Ditch A 4 (Phase 3).

22. 4 small fragments with curved profile, possibly all from a bow brooch. The largest is a flat strip with an incised line decorating one edge. Length 13 mm; width 5 mm. Fragment of square-sectioned stem from a pin. Length 15 mm. Stem fragment flattening and expanding towards one end. Length 15 mm. Also small fragment.
AIII 2 (Phase 2b).

25. Remains of a 4-coiled spring and an apparently internal chord from a bow brooch. Also two other small fragments. Probably from a Nauheim Derivative but not enough remains for a positive identification. Incomplete. Length 8mm.
809 (Phase 3a).

36. Small, square-shaped buckle with a flat section; the perimeter of the upper surface is emphasised by incised linear decoration. The pin is missing but the former position of the central cross-bar of iron remains. Medieval/Post-medieval shoe buckle. Almost complete. Length 22 mm; width 20 mm.
Ditch B, surface (Phase 3a).

38. Small round, domed decorative covering for a stud, presumably of iron. Complete. Diameter 10 mm.
BV, surface (Phase 3a).

42. Complete long, round-sectioned, pin with the remains of the spring on one side; 4 coils are present. Iron corrosion products can be seen inside the spring, possibly from the axis bar. The pin is from a Colchester or a Colchester derivative brooch. Length 74 mm; spring width 8 mm.
BIV, Ditch D (Phase 3).

51. Small fragment of flat sheet with all edges fractured. However the former position of two rivet holes may be visible along two of the fractured edges. Upper surface is decorated by two horizontal incised lines with a row of stamped crescents containing central dots between. Incomplete. Length 25 mm; width 19 mm.
CIII I (Phase 3b).

54. Flat concretion, no iron visible on the radiograph. Length 36 mm; width 20 mm.
55 (Indeterminate).

60. Length of round-sectioned stem, bent, tapering to a point at one end and fractured at the other. Pin or needle. Almost complete. Length 91 mm.
Ditch D (Phase 3b).

107. 2 fragments of simple strip tweezers. The larger being the arm and half of the spring, fractured at each end, decorated by an incised line along each edge. Similar tweezers with narrow arms have been found at Gadebridge Park (Neal 1974, fig 62, 181, 182). Incomplete. Length 26 mm; width 5 mm.
B2 VII 2 (Phase 3a).

164. 4 fragments of sheet, the largest of which is triangular in shape with a straight edge and 2 fractured edges, one being bent over suggestig an edge-binding. The central raised and curved decoration is all that now remains of the repousse ornament on the complete object. Length of largest fragment 28 mm; width 22 mm.
Ditch Z, 1 (Phase 2a).

197. Fine round-sectioned stem tapering to a point at one end and fractured at the other. From a pin or needle. Almost complete. Length 85 mm.
Area C, trackway (Indeterminate).

200 Ligula with long, round-sectioned stem, now bent, and spatulate terminal. Complete. Length 106 mm; spatula width 5 mm.
Ditch X (Phase 3b).

219 Small ring of sub-rectangular section, fractured. Reduced in section at the point of fracture through wear. Probably a link rather than a simple finger ring. Complete. Diameter 15 mm.
BXI (Phase 2b).

223. Round-sectioned brooch pin, fractured, with 3-coils of the spring remaining. From a Colchester derivative. Length 49 mm; head width 5 mm.
BXII I (Phase 2b).

227. Strip with parallel edges and each end bent over to form a looped terminal. Presumably used as a clip. Complete. Length 83mm; width 4 mm.
677 (?Modern).

230. Half of a rectangular-sectioned ring with one end bifurcated at the point of fracture, the strip gradually tapering in width to a point at the other. Decorated along its length by a central incised line. Probably a fractured finger-ring or earring; however, the broken forked terminal may suggest a strip bracelet terminal. A finger-ring with remains of a curved, presumably, ring-ended terminal was found at the Romano-British village on Woodcuts Common, Cranbourne Chase (Pitt-Rivers 1887, pl XV, fig. 10). Incomplete. Length 18 mm; terminal width 4 mm.
CVI 3 (Phase 3b).

233. Small tapering pin shank of oval section. Length 26 mm.
Ditch A3 (Phase 3).

245. Round-sectioned stem with flat-topped, spherical head with decorative moulding on the neck beneath. Similar spherical headed pins were found at Gadebridge Park (Neal 1974, fig 64, 220-223). Complete. Length 96 mm; head diameter 8 mm.
Area A Unstratified.

Objects of iron

6. Fragment of parallel-sided strap twisted along its length, both ends are fractured. Scrap. Length 115 mm; width 21 mm. Also length of flat strip, fractured at one end. Length 58 mm; width 10 mm.
Ditch D (Phase 3b).

11 Simple round-sectioned socket terminating in a long round-sectioned stem, the end of which is fractured. Probably from a large flesh-hook or socketed candlestick. Incomplete. Length 166 mm: socket diameter 27 mm.
2 (Indeterminate).

13. Round-sectioned stem with slightly curving profile. Incomplete. Length 74 mm.
Ditch A1, surface (Phase 2b).

14. Half of a round-sectioned ring. Incomplete. Maximum diameter 39 mm.
Ditch A1, surface (Phase 2b).

16. Heavy, square-sectioned shank twisted along its length, each end is flattened and now fractured. Decorative handle in good condition, probably modern. Length 177 mm; width 10 mm.
BIX, surface. Unstratified.

18. Square-sectioned pointed shank with projecting tine; terminal with down-curving tip. Probably a door bolt, modern. Complete. Length 66 mm; tine length 23 mm.
Area A Unstratified.

23. Small strap handle of curved profile terminating in a rounded nailed terminal, one only remaining. Similar to an example from Rotherley (Pitt-Rivers 1888, pl CVI, fig 4). Almost complete. Length 73mm; width 13 mm; height 46 mm.
AIII 2 (Phase 2b).

27. 4 fragments of parallel-sided strip, one bent. Width 11 mm. 3 fragments of thin sheet, one with curved profile. Probably scrap/waste.
809 (Phase 3a).

28. Fragment of strap with gently curving profile, expanding in width slightly along its length. Badly corroded, the original edges are now obliterated. Centrally pierced by a large, square nail-hole. Incomplete. Length 127 mm; maximum width 49 mm.
815 (Phase 2).

31. Pointed, round-sectioned stem with a scrolled loop terminal. Complete. Length 90 mm; head length 20 mm; head width 12 mm.
AIII 2 (Phase 2b).

45. Length of rectangular-sectioned strap pierced by a central nail-hole and one at each end at the points of fracture. Incomplete. Length 80 mm; width 18 mm.
BIV 4 (Phase 3a).

46. Length of rectangular-sectioned strap pierced by a square nail-hole at one end, the other is slightly upturned. One of the parallel sides has a small semi-circular indentation in the middle of its length. At least one end is fractured. Incomplete. Length 102 mm; strap width 22 mm.
CII 6 (Phase 3a).

48. Flat strap of lentoid shape and arched profile, constricting at each end into a rectangular-sectioned tang or tine, one of which is set at a right-angle to the strap. Both terminals are fractured. Possibly a handle or, less likely, a large cleat. Almost complete. Length 83 mm; width 16 mm. Height 24 mm.
CII 7 (Phase 3a).

49. Small blade with square-sectioned tang set on line with the straight back. The stepped edge rises steeply to meet the back of the tip, giving the blade a triangular shape: the result of frequent sharpening. Complete. Length 90 mm; tang length 28 mm; blade width 25 mm.
18, surface (Indeterminate).

52. Long, square-sectioned tang or handle bent at the tip. The other end flattens and expands to form the beginning of a blade or possibly a shallow bowl, now fractured. Spatula or ladle? Incomplete. Length 26 mm; width 26 mm.
CIII Unstratified.

57. Rectangular-sectioned bar/shank slightly upturned at one end, and second similar fragment probably from the same object. Length 133 mm; length 79 mm.
57 (?Phase 2a)

66. Long square-sectioned shank with a pointed tip, flattened and bent over by hammering at the terminal to produce an asymmetrical head. Complete. Length 260 mm; head length 13 mm.
Ditch B, surface (Phase 3a).

69. Small binding strip with apparently lentoid section; however, the object has flaked badly and the section may be the result of the surface lifting as it seems flatter on one surface. The strip expands in width gently toward each straight edged terminal. In radiograph each end is seen to be centrally pierced by a small round rivet hole. Complete. Length 65 mm; maximum width 13 mm.
CIII 2 (Phase 3b).

70. Fragment of oval-sectioned stem expanding into an oval, spatulate terminal. Stem is slightly curved. Possibly a fragment of ligula. Incomplete. Length 61 mm; terminal width 7 mm.
CIII 2 (Phase 3b).

91. Fragment of bar of rectangular-section, very dense in radiograph. Iron working-billet or smith's stock bar fragment. Length 34 mm; width 17 mm.
Area C, trackway (Indeterminate).

94. Angle-binding of D-shaped section with flattened, rounded terminals centrally pierced by a nail-hole. Binding from a wooden box such as those from the Romano-British casket burials XXX and LIX at Skeleton Green, Herts (Partridge 1981, fig 112, g; 116 a,b). Almost complete. Length 55 mm; 38 mm; terminal width 14 mm.
Ditch U. (Phase 3b).

97. Pointed, tapering square-sectioned tang, flattened and expanded to form an angled semi-circular head or blade, apparently fractured. Possibly a plasterer's modelling tool or the remains of a long handled bowl/ladle. Almost complete. Length 100 mm; head length 15 mm; head width 16 mm.
CIV 1 (Phase 3b).

99. Rectangular-sectioned strip, fractured at one end. Probably a nail shank but too disintergrated for full identification. Incomplete. Length 62 mm; width 6 mm.
182 (Indeterminate).

102. Rectangular-sectioned shank, flattened and expanded slightly at one end. Appears very dense in radiograph with a very good edge: modern, or possibly just the result of a different burial environment. Length 55 mm.
CIV 3 (Phase 3b).

106. Round-sectioned shank, very dense in radiograph. Incomplete. Length 50 mm.
BII 6 (Phase 2b).

114. Rectangular-sectioned shank. Incomplete. Length 48 mm.
Ditch K 1 (Phase 1).

115. Heavy piece of thick, rectangular-sectioned strap, tapering in width slightly toward the rounded end. One surface is flat, the other has a wide irregular central groove. Stock-bar fragment for further working. Length 53 mm; width 29 mm; breadth 12 mm.
Ditch KI (Phase 1).

116. Flat strip with parallel edges terminating in a short pointed and upturned tang. A second fragment has a small rivet or, more likely, a blister visible. Probably a small cleat or staple. Incomplete. Length 31 mm; width 15 mm; tang length 30 mm. Second fragment: length 31 mm; width 10 mm.
Ditch KVII (Phase 1).

117. Fragment of round-sectioned stem, flattened and expanded at one end where it is fractured. Probably from a stylus or pin. Incomplete. Length 24 mm.
Ditch KVII (Phase 1).

121. Large wedge-sectioned fragment tapering to a point and bent over upon itself to form a hook. The thicker end is fractured. Function unknown. Incomplete. Length 68 mm; width 40 mm.
Ditch KVII (Phase 1).

123. Flat-headed nail with square-sectioned shank, fractured. Almost complete. Length 20 mm; head length 12 mm.
Ditch KVII (Phase 1).

125. Rectangular-sectioned shank fragment with bifurcated terminal. Possibly from a nail-cleaner. Incomplete. Length 15 mm; width 7 mm.
Ditch KVII (Phase 1).

126. Fragment of strip tapering slightly in width. Incomplete. Length 30 mm; maximum width 16 mm; minimum width 11 mm.
Ditch KVII (Phase 1).

127. Small, round, domed head and remains of a short shank from a hobnail. Almost complete. Head diameter 10 mm.
Ditch KVII (Phase 1).

129. Small, domed head and short, square-sectioned shank from a hobnail. Complete. Length 14 mm; head diameter 9 mm.
Ditch KVII (Phase 1).

130. Fragment of flat binding strip with rounded terminal centrally pierced by a small rivet hole. Incomplete. Length 25 mm; width 17 mm.
Also a rectangular-sectioned shank flattened and expanded at one end and with a flattened tip at the other. The shank is bent into a U-shaped profile to form a hook. Complete. Length 43 mm; width 11mm.
Ditch KVII (Phase 1).

131. Iron shank. Incomplete. Length 33 mm.
Ditch KVII (Phase 1).

132. Nail shank with square-section. Incomplete. Length 23 mm.
Ditch KVII (Phase 1).

133. Bent shank fragment. Incomplete. Length 27 mm.
Ditch KVII (Phase 1).

134. Strip fragment with rectangular-section. Incomplete. Length 27 mm; width 8 mm.
Ditch KVII (Phase 1).

136. Fragment of sub-triangular shape with wedge-shaped section. Possibly a fragment of a heavy knife blade with a straight back and convex edge; however, no worked edge is visible on radiograph. Incomplete. Length 53 mm; width 31 mm; maximum breadth 11 mm.
Ditch KVII (Phase 1).

146. Fragment of flat binding strap, pierced centrally by a large round nail hole. Incomplete. Length 63 mm; width 35 mm.
Ditch KVII (Phase 1).

155. Fragment of flat strip binding, pierced by a small round rivet-hole at one end. Incomplete. Length 46 mm; width 10 mm.
Ditch KI (Phase 1).

154. Two fragments of fine square-sectioned stem. Length 29 mm; length 18 mm.
Ditch KXIV (Phase 1).

157. Rectangular-sectioned fragment. Incomplete. Length 26 mm.
Ditch KVII (Phase 1).

158. Encrusted shank fragment. Incomplete. Length 22 mm.
Ditch KVII (Phase 1).

167. Flat,round nail head, fractured. Diameter 15 mm.
Also fragment of flat strip, slightly curved in profile. Length 22 mm; width 13 mm.
372 (Indeterminate).

174. Long, tapering, square-sectioned shank which in radiograph shows a flat, straight-edged terminal. The flattened terminal is fractured and badly corroded. The object may represent a stylus broken before the point or merely a damaged shank. Almost complete. Length 121 mm; terminal width 8 mm.
Ditch X (Phase 3b).

175. Fine round-sectioned stem with both ends fractured. Pin or, more likely, a needle. Incomplete. Length 70 mm.
Ditch X (Phase 3b).

183. Rectangular-sectioned shank tapering to a point. Length 40 mm.
Ditch A12 (Phase 2b/3a).

191. Rectangular-sectioned curved stem with looped ring terminal. Probably the pin from a large harness buckle. Complete. Length 94 mm; head length 18 mm; head width 17 mm.
Ditch C5 (Phase 3a).

198. Rectangular-sectioned tapering nail shank with sides expanding slightly to form a blunt head. Complete. Length 57 mm; head length 10 mm; width 5 mm.
Area C, trackway (Indeterminate).

199. U-shaped staple with rectangular-sectioned upstanding arms, one of which is fractured. Almost complete. Arm length 60 mm; length 40 mm.
Area C, trackway (Indeterminate).

205. Fragment of flat strap with parallel edges, one end is fractured. Incomplete. Length 41 mm; width 26 mm.
AIII 2 (Phase 2b).

213. Flat strip binding with parallel sides; one end is straight, the other rounded and both are pierced by a round nail hole. Complete. Length 74 mm; width 16 mm.
Ditch A2 (Phase 2b).

214. Round-sectioned ring, probably from a harness. Complete. Length 55 mm; width 46 mm.
BXIII I (Phase 2b).

220. Triangular solid catchplate and fragment of pin from a bow brooch. Incomplete. Length 41 mm; maximum width 18 mm. Catchplate length 25 mm.
BXIII I (Phase 2b).

228. Small hobnail with domed head and square-sectioned shank. Complete. Length 18 mm; head diameter 14 mm.
CVI 3 (Phase 3b).

229. Triangular-shaped strap of rectangular-section tapering in width and thickness toward one end. Probably smith's stock. Complete. Length 54 mm; width 21 mm.
CVI 3 (Phase 3b).

234. Square-sectioned nail shank, tip missing, and remains of flat head. Encrusted. Almost complete. Length 33 mm; head width 10 mm.
CVI 8 (Phase 3a).

235. Rectangular-sectioned shank, fractured at each end, one of which is slightly upturning. Incomplete. Length 65 mm; width 10 mm.
CVI 10 (Phase 2a).

243. Staple comprising a rectangular-sectioned strap with an upstanding arm at each end, both broken. Almost complete. Length 58 mm; width 13 mm; arm length 34 mm.
Also a small fragment of flat strip. Length 20 mm; width 12 mm.
CVI 10 (Phase 2a).

THE COINS by W R G Moore

The coins are reported upon by excavator's small find number in approximate chronological order of issue. References are given to coin-types described in R P Mack, The Coinage of Ancient Britain (2nd edn.), London, 1964.

193 AE 16 mm; Catuvellauni, Tasciovanus, c. 20BC-AD10. Mack 177. (Ditch C5).

53 AE 12 mm; obv: head, rev: animal/horseman, Catuvellauni, Tasciovanus. (C11).

77 AE 14 mm; obv: illegible, rev: animal/horseman. Catuvellauni, ?Tasciovanus. (Road surface).

180 AE 22 mm; very worn and illegible. ?local imitation of an as of Claudius I. (Area C).

29 AE 26 mm; worn as of Trajan, AD98-117. Cf. BMC 929 (Unstratified).

84 AE 14 mm; illegible. ?3rd/4th century AD. (Road).

107 AE 14 mm; worn; rev: Gloria Exercitus, one standard, ?Contemporary copy. AD 335-41 (Road).

201 AE 20 mm; worn and illegible, 4th century AD. (Kiln 10).

Also AE Trinovantes, Addedomaros, c. 15-1 BC. Mack 274. (A casual find from c. SP 885817 which remains in private possession; photographs have been deposited in Northampton Museum).

ANIMAL BONES by Christine Whatrup and R T Jones

Animal bones were recovered in sufficient quantity to enable a reconstruction of some aspects of the former economy. The conclusions emerging from their study are incorporated into the volume-printed Discussion with supplementary information provided below. It should be noted that deposits were not sieved, and this could account for the total lack of fish bones and for the paucity of small mammal and bird bones.

The animal bones were recorded in accordance with the method outlined by Jones 1974 in the Ancient Monuments Laboratory using the modern comparative skeletal collection housed there.

The data-archive is available in machine-readable form in a number of standard formats on diskette and magnetic tapes. A copy of the printed archive-catalogue and the detailed analysis and report from which this summary is drawn (Whatrup et al. 1985) is lodged in the Northamptonshire Archaeological Archive along with the original animal bone material. The information can also be consulted at the Ancient Monuments Laboratory, The Historic Buildings & Monuments Commission for England, 23 Savile Row, London.

The total number of bones from the site is 22,726 of which 6,481 (c 28.5%) were identified to the following species, with a further 13,873 (61%) mammal bones not assigned specifically.

Species	No. bones	% of total
CATTLE (Bos sp.)	2184	9.61
SHEEP/GOAT (Ovicaprid)	2961	13.02
PIG (Sus sp)	1032	4.54
HORSE (Equus sp.)	217	0.95
DOG (Canis sp.)	74	0.32
RED DEER (Cervus elaphus)	1	0.004
BADGER (Meles Meles)	1	0.004
HARE (Lepus sp.)	4	0.02
DUCK (Anas sp.)	3	0.01
SWAN (Cygnus sp.)	1	0.004
CRANE (Gruidae sp.)	1	0.004
PARTRIDGE (Perdix sp.)	1	0.004
RAVEN (Corvus sp.)	1	0.004
	6481	28.494

There is excellent preservation of bone although the degree of fragmentation is high. This does not necessarily reflect the activities of the inhabitants of the site, but is due to conditions of burial and to excavation-techniques since many of the bones have modern breaks.

The numerical data derived from the identification of bones has been analysed according to the phase-sequence proposed in the volume-printed report. A summary of the information for each main phase follows. Supporting metrical data, comparisons with results from other sites, and other analyses are retained in the archive-record.

PHASE 1

Of the total number of 8,917 bones, 2,141 have been attributed to specific species. The following animals and groups are represented:

Species	No. bones	% of total
Cattle	281	3.15
Large Mammal	1	0.01
Sheep-Goat	1327	14.90
Pig	482	5.40
Horse	36	0.40
Large Ungulate *	1280	14.35
Small Ungulate **	3530	39.60
Dog	6	0.07
Rabbit	2	0.02
Hare	1	0.01
Unid. Mammal	1966	22.04
Dom. Duck	1	0.01
Unid. Bird	1	0.01
Dog/Fox	3	0.03
TOTAL	8917	100.00

* horse, cattle or deer (Red or Fallow)

** sheep/goat or Roe deer

The number of left and right elements represented by the mandibles and limb bones of each major species is

	CATTLE		SHEEP/GOAT		PIG		HORSE		DOG	
	L	R	L	R	L	R	L	R	L	R
Mandible	11	17	82	97	34	25	0	2	1	0
Scapula	4	5	18	12	14	14	0	2	0	0
Humerus	1	2	21	23	4	6	1	1	0	1
Radius	4	3	18	20	7	11	0	1	0	0
Ulna	2	6	4	2	12	8	0	2	0	0
Metacarpal	7	7	19	20	0	0	0	0	0	0
Pelvis	10	9	30	27	3	4	2	6	0	0
Femur	1	2	5	8	2	2	0	2	1	0
Tibia	2	8	26	28	1	5	1	0	0	0
Calcaneum	4	3	3	5	2	8	0	0	0	1
Astragalus	4	6	4	5	0	1	0	1	0	0
Metatarsal	2	2	17	12	0	0	2	0	0	0

Cattle

281 limb bones and jaws (including loose teeth) have been identified. Although jaws are the most highly represented element, the fact that all bones of the body are represented fairly evenly is taken to indicate that the animals were slaughtered and consumed on site, and not butchered elsewhere.

The majority of bones were damaged either by food-processing or by post-deposition processes. The cattle appear to have been of a small horned variety. Of 28 mandibles, the sequence of tooth-eruption in 11 give the following calculation of age (cf Silver 1969):

No.	age in months
1	5-6
5	24-30
5	28-36

The sample is too small to predict overall slaughter patterns.

Sheep/Goat

The number of identified bones, including mandibles and loose teeth, is 1,327, by far the greatest number for any species in this phase. As with cattle, mandibles are the most highly represented element although the post-cranial bones are evenly represented with the exception of the ulna, which is a fragile bone having less chance of survival than more robust bones such as the humerus and tibia.

Metrical analysis shows a division into two size-groups which probably indicates the presence of goats.

Of 180 mandibles and mandibular fragments identified, only 55 could be used to establish a slaughter-pattern. If lambing occurred in February/March, then 76% of animals were killed in their second year between 18-24 months of age, and only 24% in their first year of life. Of the latter, 11% died in the first 3 months after birth, possibly reflecting neo-natal mortality rather than any human intent. None were killed between the ages of 6-9 months (late August-early November), but deaths occurred between 9-12 months. No animals appear to have been killed during March - August (12-18 months), but between September and November 7% were killed. At 21-24 months the death-rate increased enormously with 69% of the animals being slaughtered. The conclusion is therefore that most animals were kept until 18 months to 2 years of age, with only a very small proportion being taken out at 9-12 months. The majority were killed at 21-24 months, perhaps indicating effective management of the animal for meat-production. If they were being kept primarily to produce wool, it might be expected that larger numbers of older animals would be present in the population.

Pig

Pig is the second most important animal in the Phase 1 assemblages, forming 23% of the total number of identified bones. All the specimens are accepted as coming from domesticated animals.

The pig is important in peasant economies for several reasons. It has a wide dietary tolerance and provides both meat and fat. It also has the added advantages of rapid growth and of a high fecundity ratio, with most sows capable of producing a minimum of 10-12 offspring in one year.

Although 59 jaw and jaw fragments were identified, only 13 could be used to suggest the following slaughter-pattern. 31% of the animals were killed in the period from 6 months to one year; 38% were killed between 12-18 months; and 23% between 18-22 months.

PHASE 2

The greatest number of bones come from this phase, a fact which is probably due to the overlap with elements of both Phases 1 and 3 occupation-levels.

The total number of bones from this phase is 10,384, of which 3,286 have been identified to specific species. The assemblage is composed as follows:-

Species	No. bones	% of total
Cattle	1424	13.71
Ovicaprid	1266	12.17
Pig	413	3.97
Horse	136	1.30
Red Deer	1	00.009
Large Ungulate *	2751	26.50
Small Ungulate **	2251	21.67
Dog	38	00.36
Hare	3	00.02
Unid. Mammal	2095	20.17
Unid. Bird	1	00.009
Badger	1	00.009
Duck	2	00.01
Partridge	1	00.009
Raven	1	00.009
TOTAL	10384	99.925

* horse, cattle or deer (Red or Fallow)

** sheep/goat or Roe deer

The number of left and right elements represented by the mandibles and limb bones of each major species is

	CATTLE		SHEEP/GOAT		PIG		HORSE		DOG	
	L	R	L	R	L	R	L	R	L	R
Jaws	84	92	161	155	36	33	7	0	4	2
Scapula	25	25	33	26	20	21	2	2	0	0
Humerus	16	15	36	34	10	6	3	1	1	0
Radius	26	36	27	37	9	6	4	5	0	1
Ulna	14	17	8	10	13	18	4	1	1	3
R + U	0	0	0	0	0	0	1	1	0	0

	CATTLE		SHEEP/GOAT		PIG		HORSE		DOG	
	L	R	L	R	L	R	L	R	L	R
Metacarpal	31	39	43	44	1	1	0	3	0	0
Pelvis	43	41	39	29	11	12	3	7	1	3
Femur	11	10	9	6	4	0	0	2	0	0
Tibia	35	22	32	36	8	13	3	8	4	3
Metatarsal	36	31	47	35	2	1	2	4	0	0
Calcaneum	27	20	7	8	5	3	1	1	0	0
Astragalus	27	18	0	3	0	1	1	2	0	0
1st Phal.	0	0	0	0	0	0	0	1	0	0
2nd Phal.	0	0	0	0	0	0	0	1	0	0

Cattle

1,424 limb bones and jaws (including loose teeth) have been identified. This is an increase of 10.6% when compared with the preceding phase.

As was the case in Phase 1, most bones of the skeleton are evenly represented. However, within the greater range of metrical data (held in archive), there is a suggestion that cattle may have been increasing in size and three groups may be distinguished : females, males (or castrates), and bulls.

58 mandibles were used to determine an age at death using tooth eruption sequences (Silver 1969). 65% of animals had been killed between one and a half years and three years of age. If this is broken down further, then the majority of animals (27.5%) were killed between 1.5-2.5 years; 18.9% between 2.0-2.5 years and the same number between 2.25-3.0 years of age. There is a peak of 20.6% at 5-6 months, which might be expected to have occurred too late if young males were culled soon after birth in a dairy economy. However, the high incidence of slaughter between 1.5-3.0 years suggests that dairying was in fact practised, with the older animals being lactating females and the younger ones being males which were raised for meat production.

Sheep/Goat

The number of identified bones, mandibles and loose teeth is 1,266 which is slightly less than the total in Phase 1.

Metrical analysis suggests that there was no change in selection and breeding, with goats continuing to be present in small numbers within the flock. Two separate groups or breeds of sheep may be represented.

187 mandibles were used to establish a slaughter-pattern. 49% of animals were killed in their second year of life. 7% died during the first two months after birth, with 18% killed between 3-6 months of age. At 9-12 months, 24% were slaughtered with a subsequent decrease to only 1.6% between 12-18 months. The majority of animals were therefore culled at 9-12 months and 21-24 months of age in a pattern which appears to combine 'autumn killing' with good livestock management, since the older animals would yield maximum meat/protein.

Pig

In Phase 2, pig is reduced to only 13% of the total for all species.

45 mandibles were used to produce a slaughter-curve. 40% of pigs were killed at 12-16 months of age and 27% between 17-22 months. Between birth and 6 months only 8-9% of animals were culled, but the number rose to 24% between 7-13 months. From 4 months onwards, there was therefore a fairly steady slaughtering of the population, with a slightly higher peak occurring around one year to 16 months of age. If farrowing had occurred between March-April, 24% of animals would have been taken out during winter months. However, the majority were culled soon after their first year at a time when ewes would be lambing and only 1.6% of sheep were slaughtered.

Other species

Although the number of horse bones has increased in this phase, the sample remains too small to determine their status and uses at the site. Similarly, it is not possible to determine the role undertaken by dogs and their increased numbers may only reflect the larger size of sample available from this phase. The presence of the wild species needs little comment, except to state that they were obviously present in the vicinity of the settlement where they could have been exploited by its inhabitants for both meat and skins.

PHASE 3

The final phase of settlement, dateable to the Roman period, provides the least number of bones. Despite this, changes in economic importance between the individual species are apparent. Cattle are steadily increasing, whereas sheep/goat may have declined and even pig, which had maintained roughly the same proportion in Phases 1 and 2, now seems to be giving way to cattle.

The total number of bones is 3,425, of which 1,062 have been identified to the following species:

Species	No. bones	% of overall total
Cattle	479	13.98
Ovicaprids	368	10.7
Pig	137	4.0
Horse	45	1.3
Dog	30	.87
Swan	1	.02
Crane	1	.02
Dog/Fox	1	.02
	1062	30.96

The number of left and right elements for each principal species is

	CATTLE		SHEEP/GOAT		PIG		HORSE		DOG	
	L	R	L	R	L	R	L	R	L	R
Mandibles	29	27	22	27	17	10	1	0	3	3
Scapula	13	15	9	8	5	2	0	0	0	1
Humerus	14	7	19	18	4	1	0	1	1	2
Radius	6	7	13	19	4	6	5	2	1	1
Ulna	3	2	5	5	5	3	0	0	0	3
Metacarpal	8	9	17	12	0	0	0	1	0	0
Pelvis	22	12	9	15	2	3	1	2	0	1
Femur	6	8	3	4	0	1	1	0	0	1
Tibia	5	8	18	23	2	1	0	1	1	3
Metatarsal	10	13	9	10	0	0	1	1	0	0
Calcaneum	3	4	3	3	0	3	0	0	0	0
Astragalus	4	5	0	2	0	0	1	0	0	0
1st Phal.	0	0	0	0	0	0	0	2	0	0

Cattle

When considered proportionally, cattle bones account for almost 14% of the total identified bones in this phase, compared to 13.7% in Phase 2 and only 3.1% in Phase 1. The increased emphasis evident in the preceding phase therefore continues and the same type of economy was practised.

Sheep/Goat

The ovicaprid population continues to steadily decline, forming only 10.7% of the species in this phase, as against 12.1% in Phase 2 and 14.9% in Phase 1. However, it is possible that the lower numbers simply reflect the smaller size of sample.

Although it may be inferred that goats were present, attempts to distinguish them have been inconclusive. However, it may be suggested that two breeds of sheep are represented.

25 mandibles have been used to give an age-at-death estimate. 63% of animals were killed between 18-24 months, presumably in an autumn/winter slaughter, but there is no evidence of a corresponding autumn killing in the first year of life at 9-12 months. It appears therefore that animals were over-wintered in the first year and slaughtered at the optimum time for meat production in their second year of life.

Pig

The decline in importance of the pig which was seen in Phase 2 continues into the Roman period, where pig forms only 4% of the total species.

Evidence derived from 13 mandibles shows that the majority of animals were killed during their second year from 12-22 months, but there is also evidence of a steady cull between 4-12 months.

Horse

The horse maintains roughly the same porportion as in the preceding phase, but there is still no evidence to suggest that it was used for any purpose other than transport. Comparison with horse bones from earlier phases suggests that the animals were of smaller stature, possibly indicating the introduction of a new breed.

CONCLUSION

Analysis of the faunal material has concentrated upon the main food animals and the change through time in the economy of the site. The relative proportions between the principal species is shown graphically on M 120.

Sheep were the most important factor in the Phase 1 economy and analysis of the tooth eruption sequences shows that 76% were killed in their second year of life (between 18-24 months). Such over-wintering in the first year of life is a husbandry practise which maximises the meat potential of the animal. The fleece may also have been used, but there is no confirmatory evidence from the bone analysis. Goats may have been present, but only in small numbers.

Pig appears to have been the daily basis of animal protein-source as it was killed fairly consistently all year-round. It has the advantage of a rapid rate of growth and does not need to be fattened over a long period. It also breeds prolifically and can produce a minimum of two litters a year, unlike sheep and cattle which only produce one or two offspring per birth.

It appears that cattle were raised mainly for meat, although there is insufficient evidence to substantiate a primarily dairy economy.

In Phase 2 the economic base changes as cattle become more prominent. The reasons for this change in emphasis are not clear but may reflect new farming methods involving the increased use of cattle for traction. If more land was being cultivated, less land may have been available for sheep-grazing, thereby causing the decline in the numbers of sheep which are represented. Differences in size suggests that two breeds of sheep may be present.

The reduction in the numbers of pigs is probably also related to the increase in cattle and it is possible that former woodland was being taken into cultivation. Pigs appear to have been consumed at a time when the sheep cull was at its minimum and 40% of them were killed at 12-16 months.

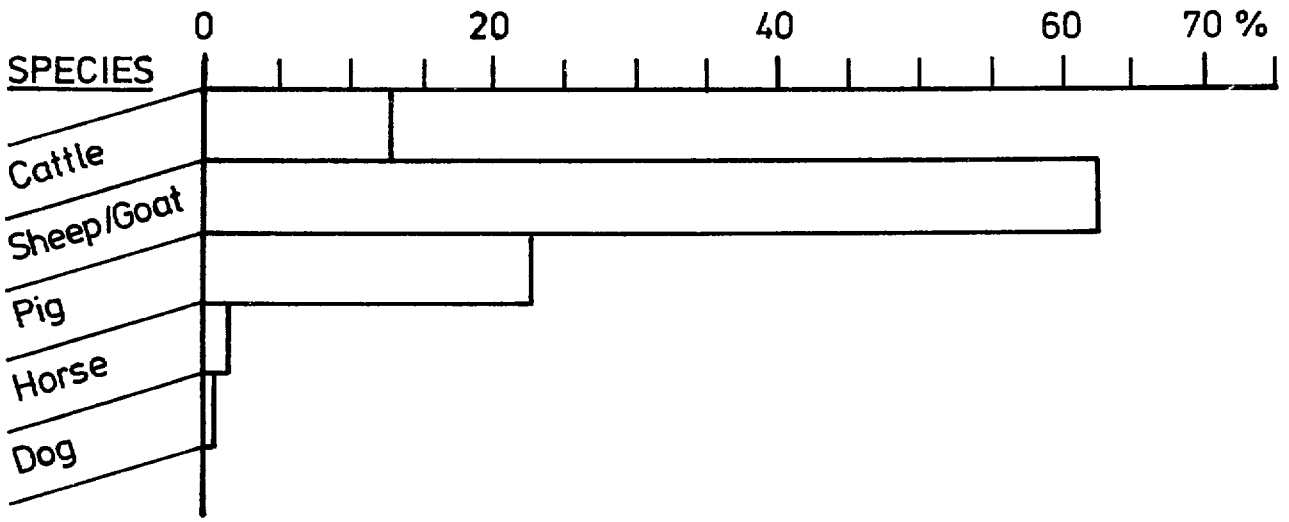
The increase in importance of cattle continues in the Roman period, although there is no obvious change in the type of economy being practised and it is still seen as a meat-based economy. The decline in sheep also continues, although the style of husbandry remains the same with the animals being over-wintered in their first year and killed in their second year of life.

The decline in numbers of the pig appears to have stabilised in Phase 3. Whilst the majority of animals were killed between 12-22 months, there was also a steady cull between 4-12 months of age, suggesting that pigs remained the choice for everyday consumption.

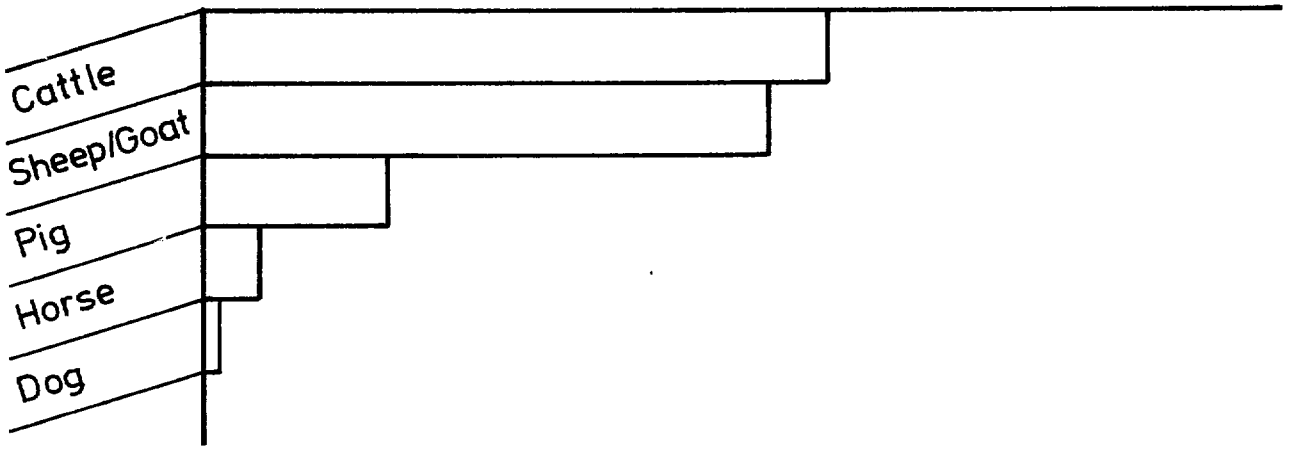
The status of the horse is not clear. It is present in small numbers in all phases, possibly indicating that it was considered too precious for use in traction and that its main role may have been for transport. The smaller stature of the horses in Phase 3 suggests an intrusive element.

Although the presence of dogs has been noted in all phases, their status remains uncertain. A number of animals appear to be of collie or alsatian size and they could have been used in hunting or as protection against predators.

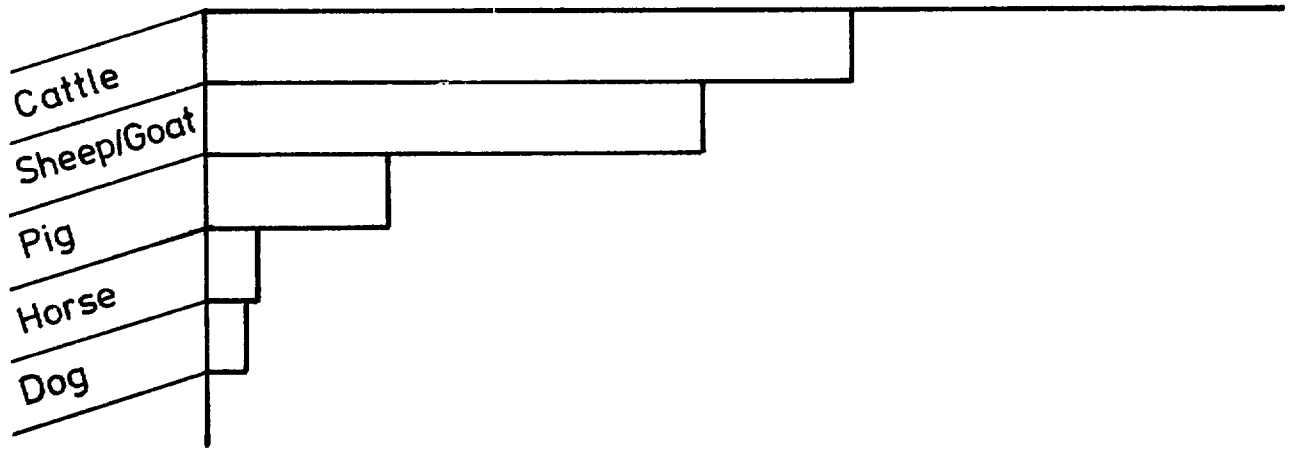
Most of the wild species represented were probably eaten, apart from fox and badger. Among them, the crane is of some interest as it is a species which no longer inhabits Britain.



PHASE 1



PHASE 2



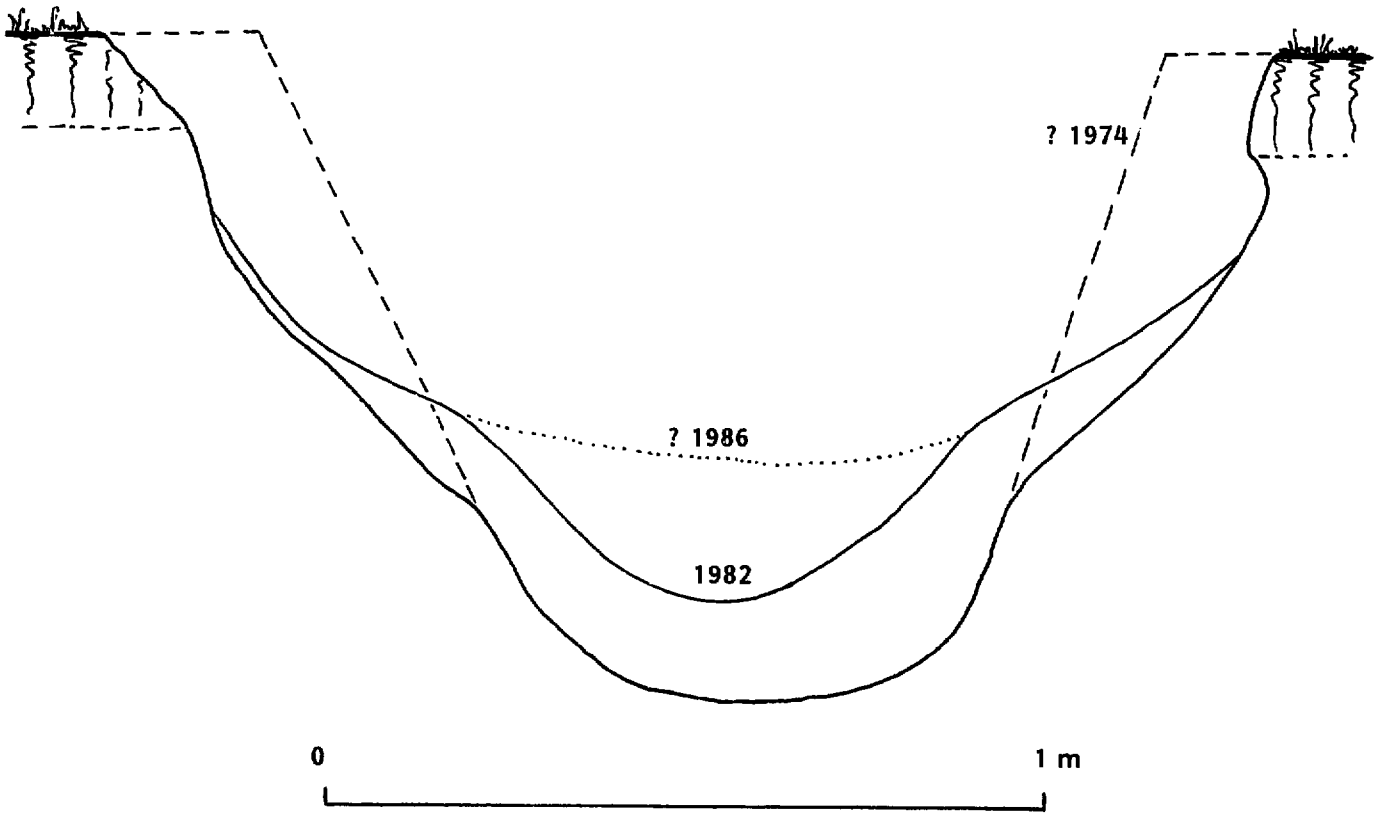
PHASE 3

WEEKLEY, NORTHANTS; ANIMAL BONES. TOTAL PERCENT OF PRINCIPAL SPECIES BY SITE PHASE.

OBSERVATIONS ON THE DITCH-SILTS

The processes of natural infilling observed in the modern quarry-dyke which crossed the excavated site may bear upon the interpretation of similar patterns of filling recorded from the ancient features.

The dyke was cut directly from topsoil through a bedrock of chalky Boulder clay. Eight years after it had been opened in 1974, c 150mm of silt and other soil had accumulated across the entire width of the ditch bottom, filling it to approximately one-sixth of its original depth of c 1m. It may be assumed that the rate of infilling would decline when equilibrium was reached between the angle of the free side-faces, already partly lowered by backward erosion, and the rising talus. This could have occurred within as short a period as another four years, when the ditch would become approximately one-third full.



Schematic section across modern quarry-dyke

By direct analogy, some 700mm of silt might be expected to have accumulated within about 7-8 years of the original excavation of the larger enclosure ditches at the site. This can

be compared with the observation made at Orsett, Essex, where extrapolation from the amount of silting recorded in an experimental ditch-length elsewhere suggested that stabilisation was reached after 5 years, when a mean depth of 650mm of fill had accumulated in the bottoms of similar deep ditches (Toller 1980, 38). However, at Weekley, the rate of infilling may have been slower in those ditches where their top edges were chamferred. Less topsoil would fall into the open ditch, thereby contrasting with the modern quarry-dyke where undercutting caused the eventual collapse of its lip. Similarly, the rate of side-erosion may have differed between flat-bottomed ditches and those with a V-shaped profile, and it could also have varied in other natural materials such as marl and stone.

Within these constraints, it might be suggested that the primary infilling of the later enclosure ditch B, which shared a similar profile to that of the modern dyke but cut through marl and limestone (cf. FIG.11), could have formed within a period of up to 15 years. Natural processes appear to have caused the ditch to become slightly over a third full before it was finally infilled with tipped material containing pottery and metalwork dateable from the mid-1st century AD.

Similar erosion-products also filled the lowest 700mm of ditch E, representing roughly 24% of its volume as cut into Boulder Clay to a depth of $\underline{c}$ 2.90m (FIG 15, Trench CVI section D-E: layer 12). Since the top edges of the ditch had been widely chamferred (cf. FIG 14), the infilling could have accumulated more slowly than that in the modern dyke. The only finds from above comprised jars in the pounded shell fabric characteristic of early CP2 pottery (see printed Appendix), suggesting that the ditch could originally have been opened in pre-Conquest times.

DISTRIBUTION OF CP1 POTTERY

	Total assemblage		LT decorated wares			
	No.sherds	Weight (g)	No.sherds	% of total	Weight (g)	% of total
Area K	1470	42115	267	18.2	3060	7.3
Ditches A2, A21	138	2300	8	5.8	85	3.7
Enclosure G	119	3335	-	-	-	-
Pits in Area A	173	3050	-	-	-	-
Pits in Area B	128	2750	10	7.8	385	14.0
Ditch Z,(2)-(5)	308	6715	67*	21.8	1485	22.1
Other features	184	2895	14	7.6	245	8.5
TOTAL	2520	63160	366	14.5	5260	8.3

* A notional 20-sherds has been included for a complete vessel found in many fragments.

CP1 FABRIC GROUPS

CP1 pottery occurs predominantly in a fabric group containing variable shell-inclusions which accounts for some 98% of the entire assemblage (Group A). Previous analysis of ceramic assemblages from other Iron Age sites in the region has shown that the largest group of pottery at each site is similarly shell-filled, but differences in the variety and texture between individual components suggests production at many different places within the Jurassic zone. Such widespread use of locally obtained materials precludes detailed or more specific identification other than by the relative frequency and size of inclusions.

The remaining CP1 pottery comprises a small group of sherds in a grogged or argillaceous fabric (Group B), a similar small amount of rough, sandy ware (Group C), and up to four individual vessels made of gabbroic clay (Group D).

Selected samples of each fabric group have been examined petrologically by Dr D F Williams whose report is contained on M126-128. Summary information is given below where the relative quantities of each group have been assessed (a) by sherd-count and (b) by weight.

FABRIC GROUP A : SHELL

The quantity and size-distribution of shell varies within the group and many sherds also contain quartz grains and small pieces of limestone. The presence of fossil-shell indicates that some pottery, at least, had been made from clays of the Upper Estuarine Series, but the local Boulder Clay may also have been used (cf. M64-65).

A1 Coarse shell Quantity: (a) 40%; (b) 60%
(Most jars were in this division, also some bowls)

A2 Fine shell Quantity: (a) 36%; (b) 21%
(Mostly fine wares and small vessels)

A3 Pounded shell Quantity: (a) 4%; (b) 2%

A4 Shell and grog Quantity: (a) 21%; (b) 15%

FABRIC GROUP B : GROGGED OR ARGILLACEOUS

Grog, normally visible, scattered throughout the fabric, with some grains of quartz and occasional pieces of limestone.
Quantity : (a) 0.6%; (b) 0.4%

FABRIC GROUP C : QUARTZ

Rough, sandy fabric containing frequent well-sorted subangular quartz grains, some pieces of flint and a few flecks of mica. Possibly of local origin.

Quantity : (a) 1%; (b) 1%.

FABRIC GROUP D : GABBRO

Small angular inclusions of white felspar clearly visible. In thin section the most prominent inclusions are made up of angular grains of partly decomposed and altered felspar, fresher plagioclase and colourless or brown amphibole. A few grains of pyroxene, serpentine and quartz are also present. The mineralogy closely resembles that described for the gabbro clays which outcrop at the Lizard Head, Cornwall (Peacock 1969b, 44).

Quantity : 10 sherds from possibly as many as 4 separate vessels.

PETROLOGICAL EXAMINATION OF IRON AGE POTTERY

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Introduction

A number of Iron Age decorated and plain sherds were submitted for a detailed fabric examination in thin section under the petrological microscope. The main object of the analysis was twofold: (1) to characterize in detail the fabrics involved and compare them both with each other and also with selected material from other local sites, and (2) if possible to suggest likely source areas for the pottery. All the sherds were initially studied macroscopically with the aid of a binocular microscope (x 20). Munsell colour charts are referred to together with free descriptive terms.

Petrology and Fabric

On the basis of the range of the non-plastic inclusions present in the pottery sampled, a number of broad fabric divisions have been made.

Group 1 : Gabbro (cf. M125, Fabric Group D)

5 sherds from ditches KI and KII were examined. They included two pieces from the pot illustrated in FIG 36, 91 and sherds from three other separate vessels.

All of the sherds are in a hard, fairly rough fabric, dark grey (Munsell 10YR 4/1) throughout, with small angular inclusions of white felspar clearly visible. In thin section the most prominent inclusions are made up of angular grains of partly decomposed felspar, some of which have altered to sericite, fresher plagioclase and colourless or brown grains of amphibole, many of which appear as fibrous aggregates. Also present is a little pyroxene, serpentine and some grains of quartz. This assemblage of minerals closely resembles Peacock's (1969a; 1969b) description of the natural weathering clays overlying the gabbro on the Lizard Head, Cornwall, and this is most likely to be the source of the clay used for the Weekley vessels (see also, for example, Freestone and Rigby 1982; Freestone 1982).

The curvilinear decorated bowl represented above is typologically similar to early Iron Age 'Glastonbury ware' bowls (Radford 1951; Peacock 1969b). The Weekley vessels, occurring as they do some 240 miles from the Lizard, lie well outside the main geographical distribution of Peacock's Glastonbury ware Group 1 (ibid.), which is centred mainly in Cornwall and Devon, with a few outliers to the east (e.g. the furthest at Chilgrove, Sussex: Cunliffe 1979). To the best of the writer's knowledge these four gabbroic vessels from Weekley are the furthest travelled of Peacock's Glastonbury ware Group 1.

Group 2: Shell (cf. M124, Fabric Group A)

5 sherds were examined, mostly from area K.

Fairly hard, roughish fabric, varying in colour from reddish-buff (7.7YR 7/4 - 7/6) to dark grey (7.5YR N4/). All the sherds contain fragments of shell, though the quantity varies. In thin section it is possible to see some examples of shell in which there is recrystalization of calcite, suggesting that it is fossiliferous. Weekley lies on the Jurassic Ridge, and so a fairly local source for the pottery seems likely. The local Boulder Clays should also be taken into account (cf. M64-65). All the sherds also contain well-sorted grains of quartz, average size 0.10mm and below, and in addition one has a small amount of argillaceous material. Most of these pieces appear to be fairly angular, and should therefore perhaps be regarded as grog. See also the comments on Group 3 below.

Group 3: Argillaceous (cf. M124, Fabric Group B)
Of 5 sherds examined, one was from ditch K VII with the remainder from ditch KI

Fairly hard, smooth fabric, with a slightly soapy feel, shades of grey in colour, and normally visible argillaceous inclusions. Thin sectioning shows a scatter of argillaceous material throughout the fabric, together with some grains of quartz and the odd piece of limestone. It is difficult always to be certain whether this should be regarded as grog (i.e. crushed up pottery) or naturally occurring clay pellets. Some pieces for example appear to be fairly fine-grained and quite well-rounded, pointing to clay pellets. However, as the majority of these inclusions tend to be fairly angular in shape and somewhat coarse-textured, they should perhaps be regarded as grog. A similar range of argillaceous inclusions have previously been noted by the writer in Iron Age pottery from another Northamptonshire site at Gretton.

Pedestal base illustrated in FIG 30, 30

Fairly hard, rough sandy fabric, with frequent quartz grains protruding through the surfaces, pinkish-white (Munsell 7.5YR 8/2) surfaces, light brown core (10YR 5/4). Thin sectioning reveals frequent well-sorted subangular quartz grains, average size 0.30mm-0.70mm, some pieces of flint and a few flecks of mica. It is difficult to suggest a likely source for this sherd when dealing with such a range of common inclusions. Flints can be found in the local Boulder Clays around Weekley (Taylor, 1963), and so a local origin is possible, though a source further afield cannot be ruled out at this stage. Cf. M125, Fabric Group C.

Comments

From the above thin section results and a macroscopic examination of additional sherds in the hand-specimen, it is clear that the majority of Iron Age pottery at Weekley was made from materials that could be obtained locally or fairly locally. The exceptions to this are the gabbroic sherds which point to a source on the Lizard peninsula some 240 miles to the south-west.

The majority of the Iron Age sherds recovered from Weekley are non-decorated but there is a large minority group which contains a distinctive scheme of curvilinear decoration. It has been recognised for some time that Hunsbury and other sites in Northamptonshire have produced a distinctively decorated range of pottery based on the scroll and returning scroll variety, as opposed to the predominantly geometric patterns on contemporary pottery in eastern England (Elsdon 1975). The flowing scroll decoration on Hunsbury-type bowls, represented also at Weekley and other local sites, bears a strong resemblance to the curvilinear decoration commonly present on Glastonbury ware gabbroic pottery (cf. Cunliffe 1978, Fig A:25).

At Weekley, for the first time, there is direct evidence for the movement of Glastonbury ware pottery into Northamptonshire, perhaps via the Jurassic zone (cf. Grimes 1951). It is difficult not to see in the Hunsbury-type decoration a local copying or adaptation of the Glastonbury-style. Thin section analysis of published curvilinear decorated pottery from Hunsbury (Fell 1936, fig. 6, D4), Twywell (Jackson 1975, fig. 22, 38), Ringstead (Jackson 1980, Fig. 6, 1), Hardingstone (Woods 1969, fig. 25, 161), and Northampton (Williams 1974, fig 35, 28, 32), and examination of an unpublished piece from Hemmingwell Lodge, Wellingborough as well as Weekley shows that all the sherds sampled contain raw materials that could be obtained fairly locally to the find-site, viz., shell, ?grog, ironstone, quartz. The variety and texture of the fabrics represented suggest that these vessels were not made at a single centre but produced at many different places.

LA TENE DECORATED POTTERY IN NORTHAMPTONSHIRE

Distribution (cf. FIG 32)

(a) Excavated collections for which quantified information is available. All late-Iron Age except Brigstock where the overall assemblage spans a longer period.

Site	Total no. all sherds	No.decorated	% of total	Publication
Aldwincle	502	10	2	Jackson 1977
Brigstock	830	10	1.2	Jackson 1983
Northampton				
Blackthorn	270	4	1.5)	Williams 1974
Moulton Park	620	18	2.9)	
Weekley	2520	366	14.5	See further M123

(b) Other site-collections and individual find-spots

Ashley	Taylor & Dix 1985, fig. 5, 12-13	Hunsbury	Fell 1936
Brackley	unpublished	Northampton, Briar Hill	Bamford 1985
Cogenhoe	unpublished	Rainsborough	Avery et al 1967
Desborough	George 1916, pl 3	Ringstead	Jackson 1980
Draughton	Grimes 1946, 30-1; cf. Cunliffe 1978, fig. A:21,7	Stanwick	unpublished
Earls Barton	unpublished	Twywell	Jackson 1975
Hardingstone	Woods 1969	Wellingborough	unpublished

Comment

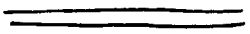
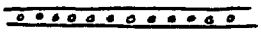
The relative quantity of LT decorated pottery from Weekley is considerably in excess of the average constituent it forms among broadly contemporary assemblages elsewhere, and even at Hunsbury, where material found during ironstone-quarrying of the hillfort has given its name to the general style (Fell 1936, pl XIB and fig 6; cf. Cunliffe 1978, 50-1), the number of vessels is less. However, the overall Hunsbury collection spans a longer period, dating from the 3rd or 2nd centuries BC, and contains many large pieces which no doubt reflect the circumstances of its salvage. The surviving vessels may therefore not be totally representative of the former use of LT decorated wares. Similarly, the absence of decorated pottery from other later Iron Age sites excavated in the county (eg Upton : Jackson et al 1969) may only be meaningful where the individual assemblage is of reasonable size.

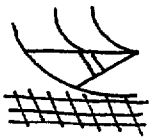
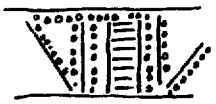
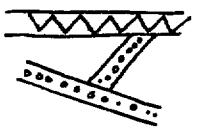
Within these constraints, it may be significant that no LT decorated pottery has so far been found in the north of the county beyond Harpers Brook and its absence from Wakerley and the area around Peterborough where sites have been extensively excavated (cf. Jackson & Ambrose 1978; Pryor 1984) could be part of a wider hiatus. However, the lacuna of sites producing such pottery to the south of Hunsbury could be due partly to lack of excavation in that area and also possibly to a reduced density in former occupation. The small number of decorated sherds from the hillfort at Rainsborough, close to the southern county boundary, are not readily paralleled.

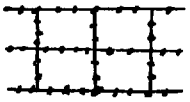
Comparison by thin section analysis between decorated sherds from several sites in central Northamptonshire suggests that vessels were produced at different places within the local area (see further, M128). It is hoped that, as more examples of LT decorated pottery are brought to light in the county, the improved definition of individual decorative styles will increase understanding not only of the mechanisms of distribution, but also of the 'neighbourhoods' or tribal infra-structure which their grouping probably represents.

SCHEDULE OF MOTIFS OCCURRING ON LT DECORATED POTTERY

Motifs occurring on the pottery vessels illustrated in FIGS 33-6 of the volume-printed report are denoted by appropriate illustration/catalogue number. The series of numbers with the suffix A refer to individual pottery-drawings retained with the archive-records. A full list of these unpublished illustrations is provided on M134

Motif No.	Type	Description	Examples	Total No.	Other possible
		EXECUTED WITH TOOLED LINES AND DIMPLES			
1		Running Scroll Single Dimple	50, 54, 58, 61, 79, 91, 31A, 32A, 34A, 38A, 39A, 48A	12	6
2		Standing Arc Single			3
3		Standing Arc Multiple	52, 53, 55, 57, 65	5	4
4		Pendant Arc Single	58, 59	2	1
5		Pendant Arc Multiple	53, 56, 51A, 59A, 63A	5	1
6		Pendant Arc Dimple Infill	54, 15A	2	
7		Wavy Line	92, 59A	2	7
8		Straight Line Single (Zone Divider)	58, 62, 69, 70 occurring on c 40% of vessels	28	4
9		Straight Line Multiple (Zone Divider)	50, 56, 61, 67 occurring on 27% of vessels	19	
10		Straight Line Multiple Dimple Infill	51, 64, 66, 68, 72, 81, 6A, 38A, 60A, 61A	10	
11		Straight Line Single with Dimple (Zone Divider)	73, 85, 52A	3	
12		Straight Line Multiple Zig Zag Infill (Zone divider)	88	1	

Motif No.	Type	Description	Examples	Total No.	Other possible
13		Grid	61, 66, 67, 68, 83, 93 6A, 18A	8	
14		Chevron Multiple	60, 63, 69, 89 58A	5	1
15		Chevron Dimple Infill	64, 66 16A	3	
16		Chevron Single Dimple Only	70, 73	2	
	UNIQUE DESIGNS				
17		Linked Scroll	97	1	
18		Running Scroll Complex	51	1	
19		Arc and Infill Complex	80	1	
20		Arcs and Grids Complex	86	1	
21		Chevron/Bar Infill Complex	87	1	
22		Chevron/Bar Dimple Infill Complex	62	1	
23		Chevron Double Line Zig Zag & Dimple Complex	88	1	

Motif No.	Type	Description	Examples	Total No.	Other possible
		EXECUTED WITH SCORED LINES OR STABBED DIMPLES			
24		Chevron & Stabbed Dots	90 (stabbed dots also on rim)	1	
25		Arcs Random	94	1	
26		Grid Stabbed Dots	78	1	
27		Straight Line Double Stabbed Dot Infill	81	1	
28		Chevron Infilled	46	1	

UNPUBLISHED DRAWINGS OF LT DECORATED POTTERY

Details of supplementary pottery-illustrations retained with the archive-records are arranged as follows:-

Drawing number; motif-type (and number where appropriate); provenance

Individual motifs are as catalogued on M131-133 .

6A	Grid (13, 10). Ditches KI, KIII.
10A	Single line below rim. Ditch K XIV
14A	Chevron, dotted line between grooves (cf. 16). Ditch KIII.
15A	Uncertain (? 6). Ditch KI.
16A	As 14A. Ditch KI.
18A	Grid below double line (13). Ditch KI.
31A	Large dimple (cf.1). Ditches KIII, KVII
32A	As the last. Ditches KI, K XIII.
34A	Running scroll, ? between single lines (1). Ditch KI.
38A	Running scroll below possible rouletted line (1, 10). Ditches KI, K VII.
39A	? Running scroll (1). Ditches KI, K VII.
43A	Uncertain, ? chevron and double groove. Ditch Z (2).
48A	Groove above base and below shoulder; uncertain line and dimple above (cf.1). Ditch Z(2).
51A	? Multiple pendant arc (5). 138.
52A	Single line and dots (11). Ditch A21.
58A	Grid or multiple chevron (13/14). Ditch BV2.
59A	Straight and wavy lines (7). Enclosure E below bank.
60A	Single line and line of dots. Enclosure E below bank.
61A	Line of closely spaced dots between straight lines (10). Ditch Z(2).
63A	?Pendant arcs (5). Ditch Z(1).
64A	?Running Scroll (cf.1). Ditch Z(3).
68A	As FIG 36, 92. Ditch Z(2).
69A	Possibly as the last; ? between lines. Ditch Z(2).
69AA	Dimple and line. Ditch Z(5).

CP 2-3 FABRIC GROUPS AND FORMS by P M Aird with additional notes by D A Jackson

Fabrics

Three principal fabric groups were distinguished by the main type of filler present within the clay body:

1 Grog
2 Sandy (usually quartz)
3 Calcareous (usually fossil-shell)

Within each group sub-divisions were made on the basis of 'feel' and appearance, and the density and size of inclusions present. Inclusions were identified according to the key published by Peacock 1977. An example of each fabric-type is stored with the archive-material. Not all fabrics can be attributed to a specific source, but the distribution of some may be chronologically significant.

Group 1 : Grog

1a Hard, with common to dense, medium to coarse, angular grog and sparse to common medium quartz. Usually off-white to grey with a self-coloured or grey core, sometimes orange.
Forms include channelled rim jars (form 3), narrow necked and storage jars (forms 2, 4), and large, deep, wide-mouthed bowls (form 7).
The fabric first appears in late-1st or early-2nd century assemblages and continues to the end of Roman occupation at the site.
Source remains unknown, but a local origin is suggested by the large quantities present. ? Made at the site or possibly at Rushden,Northants, where a similar fabric has been found and large, deep, wide-mouthed bowls are also common (unpublished information from P J Woods).

1b Distinguished by R Rattray and described petrologically as
Sparse to moderate fine, sub-rounded quartz (average size 0.05mm), moderate fine-grained angular grog (average size 0.06-1.3mm), voids, occasional sandstone, limestone, rounded flint and organic matter. Cf. M64, fabric B1.
Usually soft with a 'soapy' feel. Often orange with a grey or self-coloured core, but occasionally dark grey or black throughout.
Forms are mainly storage-jars with everted rolled or rounded rims (form 4).
This was the commonest fabric produced in the kilns at the site and its appearance in other contexts has been used to define the earliest Romano-British pottery horizon.

1c Usually soft with a 'soapy' feel, containing dense finely rounded grog-particles and variable quantities of sand, occasionally very hard. Colour ranges from black through chocolate brown to orange, normally with a grey core.
Forms include necked bowls or jars (form 5), carinated bowls with cordons or corrugated walls and often a central waist-construction (form 6), and occasionally butt-beakers (form 3), shallow bowls, platters and dishes (forms 7,8).
Whilst occurring in early CP2 assemblages, the earliest range of forms is restricted to carinated bowls and necked bowls or jars, with the full range of wheel-thrown grogged vessels not developing until the beginning of the third quarter of the 1st century AD.

1d Very similar to 1c but containing sparse, fine calcareous inclusions.

1e Distinguished by R Rattray and described petrologically as
Abundant, fine sub-rounded quartz (average size 0.04mm), ill-sorted, abundant medium to large angular, fine-grained grog (0.25-2.5mm), voids, occasional iron, flint and organic matter.
A hard fabric. Cf M64, , fabric F2.
Not common; possibly a variation of fabric 1b.
Rim-forms are rare and body-sherds are probably from storage jars.
A hard-fired, grogged fabric found in Phase 2 levels could belong in this group but sample sherds have not been compared in thin section.

Group 2 : Sandy

2a Fairly soft with moderate to abundant, fine to medium quartz visible without the aid of magnification. Usually quite open-bodied with a granular surface. Invariably reduced with colour ranging from light to dark grey or black.
Forms include narrow-and wide-mouthed bowls and jars (forms 2, 5), everted rimmed jars and 'poppy-head' beakers (form 3), moulded-rim dishes (form 7), and carinated bowls (form 6). Butt-beakers occurred in the earliest Roman levels (cf. Woods & Hastings 1984, fig 9.40, 209, 214-6).
Although sherds of this fabric were present in the kilns, they are not thought to have been produced at the site (cf. M64 : fabrics P, T and T1).

2b Soft, micaceous, reduced ware, usually dark grey or black.
Source unknown, but part of the East Anglian stamped tradition defined by Rodwell 1978.

2c Hard, close-bodied with sparse medium quartz. Usually mid-grey with a light grey core. Smooth surfaces.
Thought to be lower Nene Valley (cf. Howe et al 1981). Not common.

2d Lower Nene Valley colour-coated ware (Howe et al 1981).

2e Hard granular white ware with abundant medium to coarse quartz.
Sources various, but some ring-necked flagons may have been manufactured in the region around Verulamium (cf. Saunders and Havercroft 1977).

2f Fairly hard, smooth white ware with no filler visible in the hand-specimen.
Forms include flagons identified from body-sherds and handle-fragments and a single, finely made and well-finished butt-beaker.
Sources various, but otherwise unknown.

2g Variant of 2a with coarser quartz content.

2h Variant of 2a containing common, medium black, possibly organic, inclusions.

2k Further variant of 2a containing sparse to common fine calcareous inclusions.

2l Fairly soft, smooth fabric with fine quartz. Not common.

2m 'Early grey ware' with soft, powdery surfaces and very fine sand-filler.
The only rims are from ovoid jars, found in a single context, which are of short everted form.
As waster-sherds occur, these vessels were probably produced in kilns at the site.

A small number of sherds could not be attributed to any of the above groups. They were usually oxidised to orange or pink.

Group 3 : Calcareous

3a Distinguished by R Rattray and described petrologically as
Abundant, well-sorted fossil-shell predominant (size range 0.02-2.4mm), abundant fine sub-angular quartz (0.05-0.12mm), and sparse fine sub-rounded quartz (0.02-0.20mm), with voids, occasional sandstone, limestone, iron and flint. Cf. M 63, fabric D.
Fairly soft, varying in colour from buff through orange to grey or black with a grey or self-coloured core.

Forms usually restricted to channelled rim jars (form 3).
Commonest during the second half of the 1st century AD. Probably produced in kilns at the site.

3b Fairly soft, with abundant, well-sorted, finely comminuted or pounded shell-inclusions.
Usually grey or black, often with a buff interior.
Vessel-forms are typically slack-shouldered jars with a plain, sometimes off-set rim, but some channelled rim-forms also occur.
Mostly commonly present in early CP2 assemblages and probably residual thereafter.

3c Distinguished by R Rattray and described petrologically as
Moderate, well-sorted fossil-shell (average size 1.25mm), moderate fine sub-angular quartz (0.02-0.20mm), with voids, occasional iron, sandstone, limestone, and a scatter of mica. Cf. M63, fabric A.
Usually orange.
Not common, but probably a product of kilns at the site.

3d General coding assigned to sherds with an ill-sorted shell content, ranging from fine to very coarse and from sparse to abundant.
Usually from thick-walled, hand-made vessels which are frequently scored and are undoubtedly residual. Cf. M124, group A.

3e Similar to 3d, but containing an increased amount of limestone grits.
Mostly found in pottery from the bonfire-kilns in Ditch Z.

Forms

A form type series was established to facilitate cataloguing and quantification. Ten principal vessel-classes were defined on the basis of overall shape and each class was sub-divided according to rim or body features considered diagnostic of form or function. A detailed description of each form-type is retained, together with appropriate illustrations, in the series of archive records, and only a brief summary of the range of vessel-types follows.

1 Flagons Usually ring-necked (cf. Webster 1976, fig 1, 13). Several examples in a granular sandy white ware (fabric 2e) were found in the roadside ditches, and one in an orange ware was present in the ditch around Enclosure C (FIG 40, 170). A single example with a 'Hofheim-rim', published elsewhere (Woods & Hastings 1984, fig 9: 40, 207), is similar in both fabric and form to vessels from unpublished excavations at Ashton, Northants, and Odell, Bedfordshire (information by courtesy of Mr B Dix).

2 Narrow-mouthed necked jars Few examples survive below the shoulder. They represent a development of an existing bead-rimmed form which became either simply everted or sometimes hooked (cf. FIGS 38, 126; 39, 147; 40, 155). A cordon or double-cordon is common at the base of the neck and a groove often defines the shoulder. Similar vessels have been published from Brixworth, Northants (Woods 1970, fig. 22).

3 Jars and beakers Most commonly of channelled rim-type (e.g. FIG 40, 44, 45). The earliest examples are in shelly fabrics and often have a double-groove on the inside of the rim. By the 2nd century AD, the fabric was normally grogged and the rim invariably had a single channel or was hollowed.

Also, ovoid jars with everted rims (some possibly made at the site: FIG 40, 162, 163) and 'poppy-head' beakers in reduced sandy fabrics (FIG 40, 174). Butt-beakers occur in both oxidised and reduced fabrics (cf. FIG 40, 165 . Further examples from the site are published in Woods & Hastings 1984, fig. 9: 40, 209, 214-6).

4 Storage jars As these were apparently a major product of kilns at the site, it is hardly surprising that their fragments should form the bulk of the pottery in later CP2 assemblages (cf M66-67). The rim-forms are usually everted and rolled or rounded, with a tendency to become hooked (FIG 21, 1-5). Cordons occur at the base of the neck, and finger-nail impressions at the shoulder and combing on the body are common forms of decoration. By the 2nd century AD, storage-jars appear to have become less well represented and examples occur with smaller, more angular rims in a harder, grogged fabric or, if shelly, barely survive beneath a triangular rim.

5 Necked jars and bowls Usually decorated with multiple cordons or grooves at the base of the neck and a groove on the shoulder. The fabric is normally sandy and reduced to grey in colour. Similar examples at Brixworth dated apparently from the mid to later 1st century AD but occurred only spasmodically in post-Antonine levels (Woods 1970, 18 and figs. 17-21); however, at Thorplands, near Northampton, the form seemed to continue well into the 3rd century (cf. Hunter & Mynard 1977, 130).

6 Carinated bowls Although common in early CP2 assemblages (eg FIG 39, 144, 145) and in other mid-1st century AD pottery collections from elsewhere in Northamptonshire (cf. Williams 1974, 24), the grogged carinated bowl continued until at least the end of the century. The constriction at the waist is usually decorated with a single cordon or a hollow cordon with narrower examples above and below (FIG 39, 145).

By the end of the 1st century, or beginning of the 2nd, vessels usually had straight upper walls and had become shallow with an out-turned rim (as possibly FIG 40, 168); sometimes the rim is upturned at its tip and is decorated on the upper surface (FIG 40, 172). Deeper forms with a rounded carination and a beaded or plain rim also occur (eg. FIG 40, 158) and include one example with stamped decoration (not published).

7 Wide-mouthed bowls

Two different types of vessel have been assigned to this class. One is a large, deep bowl with a thickened rim, sometimes grooved or expanded internally, which occurs in a hard grogged fabric. Similar vessels are known locally at both Rushden (information from P J Woods) and Thorplands (Hunter & Mynard 1977, fig. 12, 129, 130). The other vessel-form is of 'pie-dish' type with a moulded rim and occurs in a sandy, reduced fabric (FIG 40, 176).

8 Platters and lids

Platters with an internal quarter-moulding are the commonest form in this class. Rims are usually triangular and upright and a selection of types from the site have been published previously in Woods & Hastings 1984, fig. 9: 38. Beaded rims also occur, but are more common on a shallow, carinated platter-form with a beaded moulding running around the inside of the base (ibid, 189). Other platters (and lids) varied considerably (e.g. FIG 39, 149, 154: 138, 151).

9 Round-shouldered jars or bowls

Characterised by a wide, rounded shoulder and flaring everted rim (cf. FIG 38, 128).

Hand-made in a grogged fabric. Apparently an early type which can be paralleled locally at Rushden (information from P J Woods).

10 Globular bowls or jars

Many examples are probably residual in CP2 assemblages. However, they include a variant with an everted rim which is not present in earlier contexts (FIG 37, 117).

The earliest CP2 vessels, represented by pottery from Phase 2 features, fall within the range of the 10 basic form-classes described on M138-140. Additional comments relating to them are provided below. The following table of the relative occurrence of each type within both sub-divisions of the site-phase is based on the analysis of 232 rims and other diagnostic sherds.

Form Class	Description	Percentage frequency Phase 2a	Phase 2b
2	Narrow-mouthed jars	-	0.8
3	Channel-rimmed jars	3.6	15.5
	Butt-beakers	-	4.0
	Slack-shouldered jars	46.0	16.0
4	Large storage-jars of the type made in kilns at the site	-	20.2
5	Medium-mouthed bowls and jars	1.2	0.8
4/5	Jar or bowl rims, not otherwise classified	1.2	2.0
6	Carinated bowls with a constricted upper wall	4.9	17.0
	Carinated bowls with a corrugated upper wall	4.9	1.4
5/6	Undifferentiated rims	20.0	17.0
8	Platters or lids	0.6	2.5
9	Round-shouldered jars with a pronounced everted rim	5.7	0.4
10	Globular vessels and other CP1-types	11.6	2.5
	NB: Overall % of fine-ware bowls (6, 5/6)	29.8	35.4

Comments

Form 3 Slack-shouldered jars were almost the only form occurring in the earliest CP2 assemblages, but the number of vessels represented was not very large and the quantity subsequently decreased. Many vessels of this type were found at Wakerley some 16km to the north (Jackson & Ambrose 1978).

Channel-rimmed jars were a secondary element which became a major constituent of subsequent ceramic assemblages.

Form 4 Very few large storage-jars occurred in assemblages which are likely to have pre-dated the introduction of the grogged vessels made in the excavated kilns. However, several examples, possibly from earlier deposits, which occurred in a shelly fabric and had rounded rims with short necks could represent precursors of the later jars (eg. FIGS 38, 124; 39, 148). It is possible that they also had been made at the site.

Form 6 Carinated bowls occur throughout CP2 but the number of those with a corrugated wall decreases subsequently.

Form 9 Only a few examples occur of the type of round-shouldered jar which is well-represented elsewhere in the county (cf. Williams 1974, 24). None were in primary Phase 2a contexts.

Other jars A number of other small jars include slack-shouldered, slightly globular vessels with an everted rim (eg. FIGS 37, 117; 38, 131) and small, thin-walled jars, possibly of ovoid shape with a short everted or cavetto-rim (eg. FIG 40, 162-3). Examples of both types were present in Phase 2a features, although the vessels illustrated in FIG 40 are slightly later. Both come from the lower silts of Ditch C and are in a grey-brown sandy fabric (cf. M137, fabric 2m). No. 162 is clearly a kiln-waster as are other, unillustrated pieces from the same deposits, suggesting that a type of grey-ware could have been made at the site possibly before the known kilns came into use.

SAMIAN WARE by Hedley Pengelly (with notes on the potters' stamps by Brenda Dickinson)

Approximately 130 samian sherds, including one unstratified from the villa site, range in date from about the mid-1st to the late 2nd centuries AD. The minimum number of different vessels, readily recognizable by form or type, is 76. Of 8 potters' name-stamps recorded,5, including one on form 29, are South Gaulish (maximum date range c AD 45-110) and 3 are Central Gaulish (c. AD 100-170); a rosette stamp from Lezoux is mid- to late-Antonine. The 3 remaining vessels giving decoration are all Central Gaulish (one rouletted (form 37R), one each with ovolos of X-13/Sacer i and the Cinnamus group) and of similar date to the Central Gaulish name-stamps, c. AD 120-170. The earlier, pre-Flavian material includes sherds from Ditch Z(1), Pit 6 and Kiln 10. The minimum number of vessels of pre-Flavian date from all contexts is 6 - 2 of form 29 and 1 each of forms 24/25, 27, 15/17R and Ritterling 5. Apart from a vessel count for the assemblage as a whole, only those sherds most important for dating, together with the remaining stamps, are dealt with below. A full catalogue is available among the archive records.

Vessel count

Forms (Dragendorff unless otherwise stated) are given in descending order of frequency. Where applicable decorated forms (29, 30, 37, 37R) are given first.

South Gaulish La Graufesenque

Forms	Stratified	Unstratified
29	2	-
30	1	-
37	1	-
27/27g	5	2
18	2	1
24/25	1 or 2	-
15/17 or 18	1	-
15/17R	1	-
18/31	1	-
36	-	1
totals	**15 (min)**	**4**

Central Gaulish a) Les Martres-de-Veyre

Forms	Stratified	Unstratified
18 or 18/31	2	-
totals	**2**	**-**

Central Gaulish b) Les Martres-de-Veyre or Lezoux

Forms	Stratified	Unstratified
27	1	-
31	1	-
totals	**2**	**-**

Central Gaulish c) Lezoux

Forms	Stratified	Unstratified
37	2	-
37R	1	-
31	10	2 (1 from the villa site)
33	8	2
35/36	3	-
27	2	1
33/33a	2	-
18/31	2	1
18/31-31	2	-
18/31 or 18/31R	2	-
18/31R	2	-
Curle 11	2	-
46	1	-
Walters 79 or 79R	1	1
Misc. dishes	3	-
totals	**43**	**7**

East Gaulish

Forms	Stratified	Unstratified
33	1	-
Curle 11	1	-
totals	**2**	**-**

WEEKLEY, NORTHANTS **M145**

? kiln

Forms	Stratified	Unstratified
Ritterling 5	1	–
totals	**1**	**–**
overall totals	**65**	**11**

ITEMS OF INTRINSIC INTEREST

Entries for stamped items read as follows:-

Name of potter; Die number; Form; Reading; Pottery; Parallels; Date.

Reference-numbers allude to the catalogue of potters' stamps being assembled at Leeds University.

Superscript letters indicate:

a. A stamp attested at the pottery in question.

b. Not attested at the pottery in question, but other stamps of the same potter known from there.

c. Assigned to the pottery on the evidence of fabric, distribution etc.

Significant sherds

Ditch Z (1)

Form 24/25, South Gaulish. Claudio-Neronian. Possibly from the same cup as a larger sherd from CIII (3). Both sherds appear very slightly burnt.

CI (6)

Form 31, Central Gaulish. Antonine.

CIII (6)

Form 30, South Gaulish, fragment from below the decoration; very slightly burnt. Late-Neronian/Flavian.

CIV (5)

Form 18, South Gaulish; slightly burnt. Flavian.

Form 18 or 18/31, South Gaulish; slightly burnt. Flavian or Flavian-Trajanic.

Pit F6

Form 29, burnt, with a basal stamp: Licinus 43a [LICI] NVS.F A stamp reserved mainly for form 29, and noted in a group of samian of c AD 50-60 at La Graufesenque. The upper zone of decoration contains a winding scroll, with five-beaded tie, spiral ending

in a rosette and a tendril with a bottle-shaped bud. The rosette occurs on a bowl from Wiesbaden stamped by Licinus (Knorr 1919, Taf 45A) and the tie is on bowls stamped by Daribitus, Namus and Primus iii, from Vindonissa (ibid., Taf 30B), Xanten and London (BM), respectively. The bud is perhaps one used on bowls stamped by Daribitus (ibid., Taf 30, 20). The chevron festoon in the lower zone is on a bowl from Cirencester stamped by Daribitus. The dogs (Hermet 1934, pl 26, 13 (?), and 35) were used by several La Graufesenque potters in the Claudio-Neronian period. The associations for the decoration and the rounded profile of the bowl suggest a date c. AD 45-60. One sherd from the pit, three including the stamp, from the Trackway.

Primus iii 3c 15/17R (substantial part of a large burnt dish with rivet-holes) [OFIC.P]RIMI La Graufesenque.[b] Primus iii's output includes forms 24, Ritterling 1 and 9, and form 29s with decoration suggesting a range c. AD 45-65. His stamps occur in Claudio-Neronian groups at La Graufesenque and Narbonne, and a few reached Flavian foundations. There is no close dating for Die 3c. Ten sherds from the pit, one, with the stamp, from the Trackway.

Kiln 10

orm Ritterling 5; very slightly burnt. An interesting piece, with good orange slip on a reasonably hard, though somewhat coarse fabric containing flecks of mica, and quartzite granules occasionally breaking the surface. The fabric appears very close to the Claudio-Neronian one at Lezoux, though determination of origin by thin-section analysis has not proved conclusive.

The remaining stamps

Ditch D1

Vitalis ii 27h/27g (very slightly burnt). ·VITAL· La Graufesenque.[b] Vitalis ii's career was mainly Flavian, though a record of one of his stamps on form 24 suggests that he began work in the late-Neronian period. His work turns up at Domitianic foundations (Butzbach, Cannstatt, the Saalburg). The stamp in question comes from a die which was used exclusively on cups. c. AD 65-95.

Ditch D2

An eight-petalled rosette stamp on Form 46 (two adjoining pieces) Lezoux.[c] This and many similar rosettes were used at Lezoux on a restricted range of forms in the Hadrianic and Antonine periods. This particular cup is mid- to late-Antonine.

Ditch P

C. N- Celsus 2a 15/17 or 18 (five pieces) [OF.C.N]. CEL La Graufesenque.[c] Several examples of this stamp occur at Flavian foundations, including Wilderspool and the main site at Corbridge. c AD 80-110.

Ditch U

Maccius ii 5a 33 etc. (burnt) MAC[CIVS.I] Lezoux.[a] Two stamped vessels of Maccius ii are in a pit of c AD 150-160 at Alcester, one the same as the Weekley stamp, the other on a decorated bowl. Die 5a was also used on forms 18/31R and 27. c AD 145-170.

Ditch X

Albucius ii 3a large dish (two adjoining pieces) [AL]BVCI.OF Lezoux.[b] A stamp from one of Albucius's earlier dies, recorded on forms 18/31R and 27. His output also includes forms 31R, 79, 79R and 80. His range will therefore be c AD 150-180, with c AD 150-165 for Die 3a.

Trackway

Balbinus 2a 18/31 IINIBINIM Les Martres-de-Veyre.[a] Clear impressions of this stamp give BALBINIM, but the die was damaged at an early stage, and most examples look like the Weekley stamp; many have been misread Enibinim or Ainibinim. The stamp occurs in the London Second Fire deposits and on form 15/17, which at Les Martres was only made in the Trajanic period. c AD 100-120. One other piece from Ditch V.

Secundinus i 4a 33 (burnt) [SE]CVNDINIMA La Graufesenque.[c] This stamp was used mainly on rouletted dishes; three examples of it are known from the Saalburg. Stamps from other dies occur at Cannstatt (2) and the main site at Corbridge. c AD 75-100.

Excavations at Castor, Cambs

Charles Green *et al*

Microfiche Section

Northamptonshire Archaeology
Volume 21, 1986-87

Pages 150-251

EXCAVATIONS AT [illegible]STOR

CAMBRIDGESHIRE IN 1957-8 AND 1973

by

Charles and Ida Green,

and Carolyn Dallas with John Peter Wild

FICHE 1
SITES AND NON-CERAMIC FINDS

THE EXCAVATION OF SITE I

As this site proved to be archaeologically sterile apart from a few worn potsherds in the topsoil, a very short general description will suffice. But, as it revealed certain limitations in the use of both air photographs and resitivity surveys using a Megger testing instrument, it has some value. A cruciform trench area was pegged out and eight test trenches were cut at selected points. It soon became apparent that the high readings of the resitivity survey coincided with a shallow ploughsoil, some 5.5in (0.14m) deep, which was resting on a stiff chalky boulder clay with flints. Deeper tests into this boulder clay showed that it was certainly a natural deposit. Here and there the surface of the clay showed traces of almost obliterated meltwater gullies filled with material derived from the matrix; slight variations in the readings tended to follow these.

As the readings of the survey fell off outside the central area, they were seen to coincide with the downward slope of the boulder clay surface which fell to 14-15 in (0.36-8m) below the modern surface. Even here the modern dark ploughsoil was nowhere deeper than c 7 in (0.18m), but this rested on a mixed loose earth which perhaps had earlier been a worked layer.

It is certain that both the higher resitivity readings and the light patch in the air photograph were caused by the presence of a dome of heavy boulder clay, the top of which had been ploughed approximately flat and become covered with a shallow skin of soil, contrasting with the deeper soil in the surrounding area.

The few potsherds found were of late 18th to early 19th century type, together with a single very worn sherd of Romano-British grey ware.

It should be noted that on the north side of the green lane, in a field once called 'Potter's Oven' (NGR TL 12625370), the farmer had raked many stones from the surface after ploughing. Together with these were many recognisable fragments of *tegulae* and *imbrices*. Similar fragments, we were told, had also been found in earlier years and it seemed possible that a Roman building could once have stood there. However, when the site was developed for housing in 1972, rescue-work undertaken by Mr D F Mackreth showed that the major archaeological presence consisted of a complex of Medieval buildings. Roman finds were few and there was no evidence for any Roman structure (Mackreth 1973).

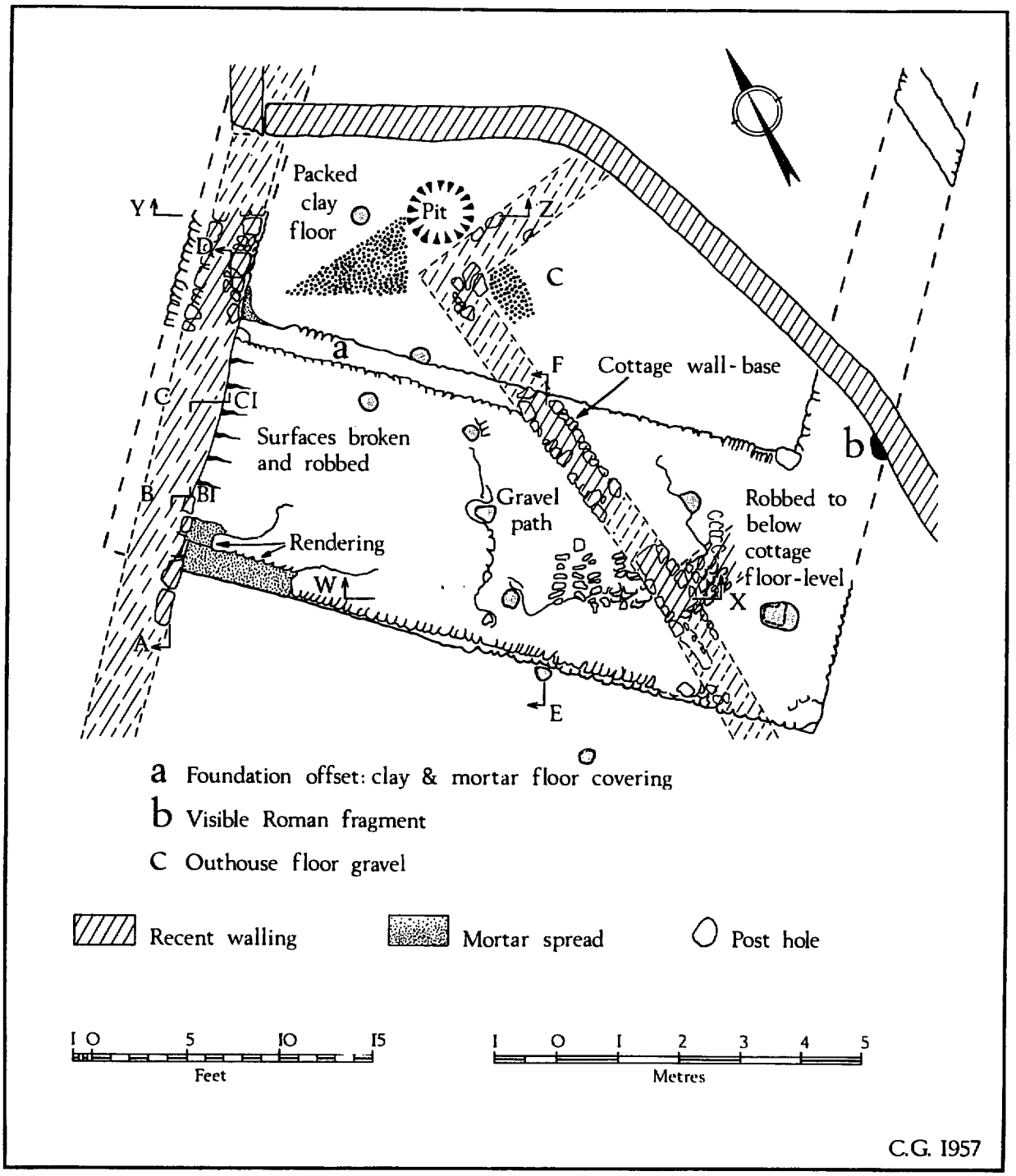
SITE II: EVIDENCE OF LATER OCCUPATION

In the very limited excavation outside the west wall of the Roman building or 'temple' on site II, the level of the natural clay lay below that of the top of the foundations and the ground was made-up by a deep layer of mixed clay (TEXT FIG 5 Section Y-Z). However, this was not a sealed deposit of Roman date for, intermingled with Roman potsherds, roofing tile fragments and wall-plaster, there were human bones representing relics of medieval grave-diggers activities, unless indeed Artis himself had disturbed this area. But it was too restricted by the presence of later graves for any extension to be made in order to detect the earlier digging lines.

Over the western part of the inside floor was a layer of mixed clay and building rubble, the latter increasingly dense towards the top (layer 7). The surface of this layer was apparently that of the cottage yard and from it had been dug the postholes and 19th century pit. On this floor lay mixed dark earth and rubble (Layer 6a) capped by the dark soil of the potato-plot (Layer 6). This was bounded on the west by the former churchyard wall which had not been demolished until afterwards, for its debris lay over the topsoil of the plot. Finally this western area was capped by a great heap of ash (Layer 2) which had been thrown against the higher edge of the churchyard earth.

The stratification in the eastern part of the area was somewhat different. Owing to the horizontal structure of the platform, this part of the cottage walling was also horizontal. In places the lowest course of the rear wall was still *in situ* and this, together with frequent traces of the basal mortar, made its line certain. At the slight angle in this line, over the platform, another led off at right-angles, apparently the northern end of the first dwelling, the more northerly part being apparently some kind of outhouse. Here remains of a gravelled floor were exposed. Immediately to the west was the narrow gravelled path. A posthole inside the wall-line, close to the south end of the outhouse, and another just inside the first cottage, may have held some parts of the structure. Over all this area lay the burnt debris from the cottages (TEXT FIG 4, Section E-F, Layer 2), covered by the topsoil of the potato plot.

To the north of the platform, the mixed clay below the cottage floor level had been extensively disturbed since Roman times for, although early pottery and roofing tile fragments were found in quantity, these were everywhere intermingled with Saxo-Norman, Medieval and later sherds, many of the latter being calcined. Nowhere in this eastern area could an undisturbed Roman layer be detected, for the later English remains were found at all levels down to the natural boulder clay. In consequence of this, the line of the temple floor had disappeared. Many potsherds, roofing tile fragments, iron nails, and other small objects also came from the garden topsoil.



SITE II, Detailed Plan

SITE III: THE EXCAVATION

Immediately below the surface of the site a seam of gravel represented the original playground which had later been turfed. This rested on old garden topsoil (Layer 2), which was present in the whole area and which covered a further layer of similar dark earth mixed with much rubble (Layer 3). In the eastern half of the site this rubble consisted almost entirely of Roman building debris, building stone, roofing tiles, box-tiles, painted wall plaster, and much broken pottery. In the western area, however, it proved to be more variable in both texture and content. This layer covered not only a Roman stone-walled building in the eastern half, but a complicated series of pits, ditches, and hut-sites of Roman, Saxon and Medieval date in all parts of the area. With the small labour force, the time available for excavation did not permit all these later features to be examined thoroughly. In the following description, the excavated features are treated chronologically. Associated finds catalogues are contained on M12-17 (non-ceramic) and
M49-75 (ceramic).

ROMAN

Period I

Ditch I (TEXT FIGS 6-8)

This ditch was first evidenced by the discoloured filling where it underlay Rooms 3 and 3a of the later Roman building (see below). Here it was some 8 ft (2.44 m) wide. Its approximate line was fixed by this discoloration and a section through it was cut near the north-east limit of the site. Although it was not possible to uncover quite its entire width, this was inferred from the lines of the filling to be at least 12 ft (3.66 m). The ditch was emptied to a depth of 7 ft (2.13 m) from the surface and its base was conjectured to lie some 1 ft 6 in (0.46 m) or 2 ft (0.61 m) lower (TEXT FIG 7, Section A-B). Near the bottom of the exposed filling a single sherd of Roman pottery was found. This part of the ditch had been cut well into the gravel which underlay the loam and here it was filled, apart from some fallen slabs of limestone, with a somewhat discoloured loam/gravel mixture. This doubtless was the upcast when the ditch was originally dug; the absence of a clearly defined stratification pointed to its having been returned at one time and not filled gradually by weathering.

A second section on the outer side of the west wall of the Roman building was also excavated (TEXT FIG 7, Section E-F). This proved that the ditch pre-dated the building and again the homogeneous filling pointed to its having been returned at one time. At this point it was some feet shallower and narrower than at the north-east end. When the later Pit 1, which obscured this western end of the ditch, had been excavated, it appeared that the ditch must have ended here, a conclusion confirmed by there being no evidence for its continuation beyond (cf TEXT FIG 6).

Period II

The Building (TEXT FIG 8)

This rectangular building stood on a surface of natural loam. Some 22 ft (6.71 m) wide, the excavation exposed its southernmost 35 ft (10.67 m). In addition, recent graves on the north side of this area have revealed, since 1950, that it continued for at least another 17 ft (5.18 m), so that its known length is 52 ft (15.85 m). The outer walls, of coursed limestone slabs, stood in places some three courses high and were 2 ft 3 in (0.69 m) thick, erected on a shallow rubble foundation which in places was a little wider. In some parts, however, only the rubble foundations remained and these were occasionally seen to be much mutilated.

Room 1, internally 8 ft 6 in (2.59 m) wide x 12 ft 6 in (3.81 m) long, had been warmed by a hypocaust, the lower part of which was all that remained *in situ* (PL4). It was floored with a coarse brick-concrete, on which stood *pilae* of bricks; a few of the *pilae* were missing. The brick-concrete had disappeared from the north-east corner, but in the opposite north-west corner, the angle was filled with laid stone packing, mortared over. In the centre of the north wall, an opening in the stonework, 1 ft 6 in (0.46 m) wide, was lined on either side by a projecting stub wall of bricks, in places standing four courses high. These brick linings formed the sides of the communication with the stokehole in Room 2, the floor of which stood at a slightly higher level, so that the passage floor sloped slightly down towards Room 1. Where the partition wall had bridged this opening, there had formerly been an arch of brick-concrete between the brick sides. The western part still stood, but the arch itself had collapsed.

Room 2 was 8 ft 6 in (2.59 m) wide x 11 ft 3 in (3.43 m) long. Here the floor was the natural brown loam, very discoloured but not otherwise disturbed. The southern half, particularly between the side walls and the brick passage walls, held masses of soot and ash, in places mixed with some earth, together with much carbonised wood debris. In the aperture to the hypocaust was a bed of undisturbed soot. The northern half of the room was free from soot and ash. Though there was no evidence of *pilae* to carry a floor above, there were in different parts of the room large fallen fragments of a brick-concrete floor.

Room 3a was 7ft 6 in (2.29 m) wide x 7 ft (2.13 m) long. Its east side was bounded by the central partition wall of the building and in it was an opening 1 ft (0.30 m) wide into the hypocaust of Room 1. Its northern half held the base of a solid mortared limestone platform with a brick-lined recess in its west side.

Room 3 was L-shaped, the main part being 7 ft 6 in (2.29 m) wide and 23 ft (7.01 m) long, with a 5 ft (1.52 m) wide recess almost 5 ft (1.52 m) deep at its north-east angle. This room was also floored by the discoloured brown loam.

The Water-tank. To the east of the north end of Room 3 were the remains of a water-tank (PL 3). Internally this was 3 ft 6 in (1.04 m) wide and 4 ft 6 in (1.37 m) of its length still survived, the northern end having been cut away by a later pit (Pit 2; cf TEXT FIG 6). Built into the angle between the main east wall and the north wall of Room 2, the tank was lined with a 2-3 in (51-76mm) layer of brick-concrete, with a quarter-round moulding at its base. On the east side, a drain ran from the tank through the rubble foundation of the main east wall, the waste liquid apparently soaking away in the underlying loam. If this drain was originally central in the tank's side, its internal length would have been about 6 ft (1.83 m). It is more probable, however, that the damaged north wall of Room 3 ran through to the east wall and, if so, only the extreme end of the tank had been destroyed.

Room 4 lay outside the area of our excavation, but as the Rector had kept a record of walling exposed in new graves dug in this area, it is possible to say that the main west wall continued for 11 ft 6 in (3.51 m) beyond the partition wall with Room 3 and the main east wall for at least 17 ft (5.18 m). No partition wall between them, running either north-south or east-west, had been seen.

Indeterminate

Pit 1 (TEXT FIGS 6;8;7, Section D-E-F-G)

Pit 1 was dug after the west wall had been built and the narrow intervening strip of natural loam, as well as the entirely different contents and the slope of its filling lines, showed that it did not form a part of the early ditch.

Though the pit contained layers and pockets of black ash, its filling was by no means limited to this. At its base was a continuous layer of fragmentary brick-concrete flooring, of which one piece still carried the impressions of the tesserae which had formerly been bedded on it. A thin line of oyster valves divided this basal layer from one of loam with pockets of ash, over which was a deeper layer of mixed dark earth in which was notably a sherd of decorated samian (Form 37, see M49) and an iron building tie (M15, item no. 11). Over this was a thick but variable layer of ash and a thin skin of dark earth. All these layers contained many sherds of Roman coarse wares of which the latest pieces were of the mid-2nd century AD (TEXT FIG 10, nos 9-22; FIG 11, nos 23-42). The pit had then been sealed by a deeper layer of dark loam containing much limestone rubble; through the middle of this layer ran a thin seam of similar rubble tightly packed to secure the sealing. From the surface of this layer was dug a posthole, apparently of post-Roman date. Above this were only the dark earth layers (1, 2, and 3) which covered the whole site.

The Aqueduct (TEXT FIG 8)

Parallel to the main east wall at the north end of Rooms 2 and 3 of the Period II building and distant from its outer face about 5ft (1.52 m) was what appeared to be a small water conduit. This consisted of a line of *imbrices*. They were set in the usual fashion with the ends overlapping, but were inverted and were bedded in a matrix of clay and stony rubble. Over one of them was part of a second *imbrex*; this was laid with its convex side uppermost, though later disturbance had crushed it. This line had been seen in graves to the north and its course is known for an overall length of 28 ft (8.53 m). Its observed south end lay below an Anglo-Saxon hut (Hut 2; cf TEXT FIGS 6 and 13) and no attempt was made to ascertain if it continued further.

For Roman pottery see M49-57 and for other finds M13-17 respectively

SAXON

Huts

Cf TEXT FIGS 6, 12 and 13. Fully described in volume-printed section of the report.

Pits

(TEXT FIG 6. Selected sections illustrated on M9 and 10)

Pit 2

Pit 2 was dug from the top of the building debris below the dark earth of Layer 3 (cf M4). It cut into the partition wall between Rooms 3 and 4 of the Roman building and had removed the north end of the water-tank. Its bi-lobed plan suggested that it was of double construction, but the whole was filled with a homogeneous grey earth, apparently at one time. There was one sherd of Ipswich ware in the filling.

Pit 4a (M10, Section Q-R)

Pit 4a lay close to the west wall of the Roman building where it was partly cut away by Pit 4b (see M8). It contained sherds and other debris of Roman date, together with pieces of Ipswich ware which are now unfortunately lost.

Pit 6 (M9, Section Y-Z)

A homogeneous filling suggested that this pit had been filled at approximately one time. As well as late-Roman coarse wares and other debris, the pit contained a large sherd of Ipswich ware and two sherds of Maxey Group III-type. At the base were Roman sherds and a piece of Anglo-Saxon handmade pottery in a gritty fabric.

Pit 7 (M9, Section W-X)

Pit 7 was a roughly circular pit which had been dug from the top of the Roman building debris. The lower filling was a greyish loam and archaeologically sterile. The upper layers contained odd Roman fragments and a sherd of Anglo-Saxon pot (TEXT FIG 15, no 90; see M63). The pit was later intersected on the north side by Pit 8.

For Saxon finds see M58-63.

MEDIEVAL AND LATER

Pits

Pit 3 (M9, Section U-V)

Pit 3 was a small oval pit located over the north-west corner of Room 3 of the Roman building. It post-dated Hut 1 which it had intersected. Its layering showed that it was filled slowly; a patch of fallen loam at the base had doubtless been spilled at the time the pit was dug. This deposit contained two oyster valves, some fragments of brick-concrete, and a few small sherds of pottery, the latest of which is of the 13th-14th centuries.

Pit 4 (M10, Sections Q-R and O-P)

Pit 4 lay to the west of Pit 3, with its eastern edge just cutting into the west wall of the Roman building (cf TEXT FIG 6). Its bi-lobed appearance was the result of there being two pits with the easternmost, 4b, having been cut into the filling of 4a, as the section Q-R makes clear. The earlier feature contained Saxon pottery (see M7). Pit 4b contained a greater proportion of building rubble and, together with the usual Roman remains, sundry fragments of Stamford ware and later pottery extending in date-range to the 17th century.

Pit 5

Pit 5 had been dug from a higher level directly above Hut 1 (TEXT FIG 12; Note, no record survives of Pit 12). The pit had been gradually filled; sundry sherds of St Neots ware were present in the basal layer and, from a little higher, was found the spout and neck of a Lyveden-type jug with glaze and stamped decoration.

Pit 8 (M9, Section W-X)

Pit 8 was a shallow feature which had partly cut away Pit 7. It appears not to have been open for a long period. The finds comprised a worn sherd of local colour-coated ware and a glazed medieval sherd of Lyveden type.

Pits 9, 10, 10a, and 10b (M9, Sections S-T; M10, Sections AA-BB, CC-DD)

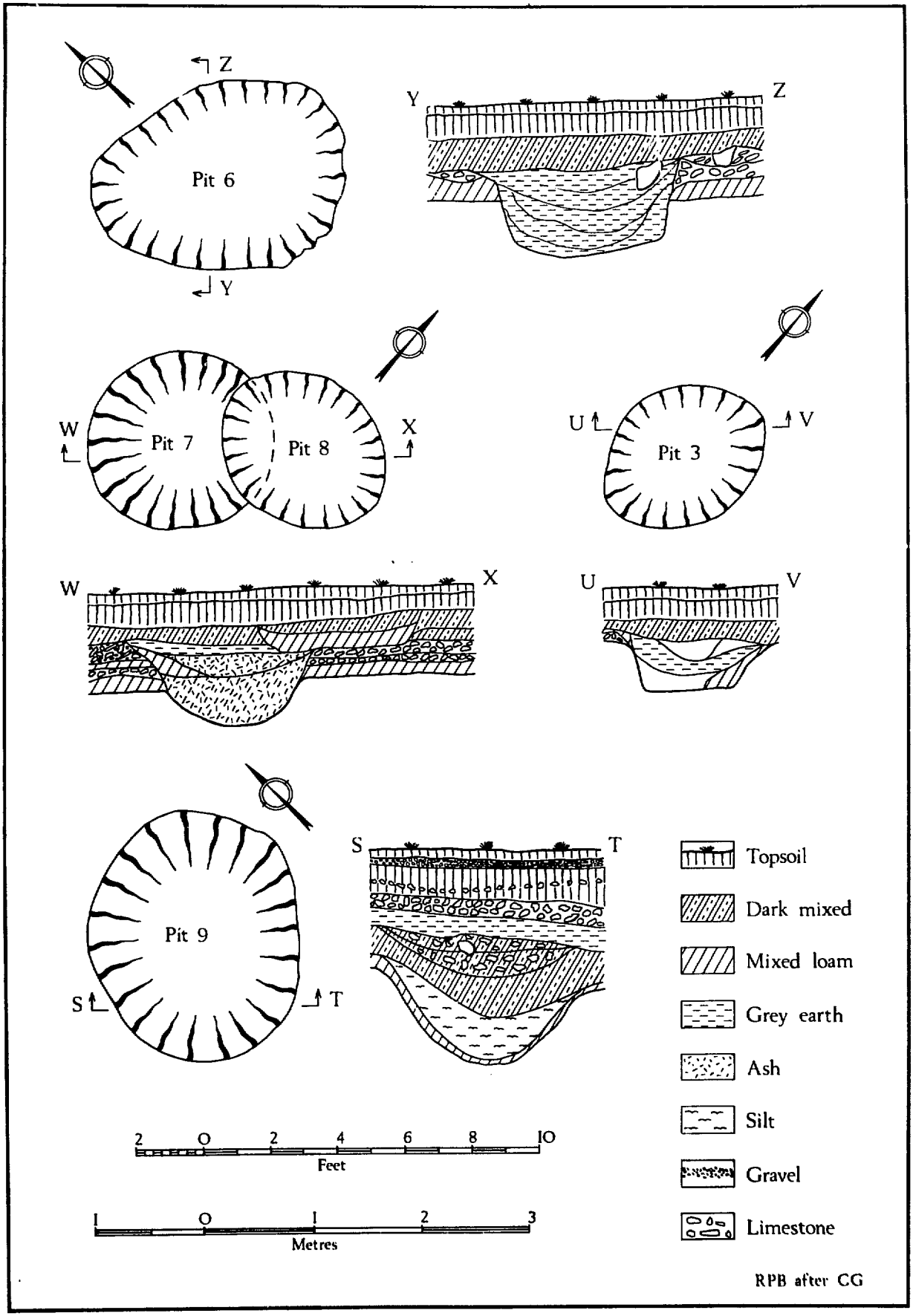
These are best treated as one multiple unit. About 3 ft (0.91m), to the west of Pit 7 a line of limestone slabs marked the crest of a shallow slope running down to the west. It was continued to the south by a number of irregular shallow cuts pointing in various directions. To the west of the stone line, a wider, more deeply cut area, some 10 ft (3.05 m) x 10 ft (3.05 m), sloped down more rapidly towards the south and west. Near its south-east angle the base rose a little to leave a slight ridge where it sloped down again into the smaller area of 10a, the base of which levelled out towards the west. A few feet beyond was a roughly circular pit, 9, which was deeply cut from this surface. Pit 10b was another almost circular hollow, taken a little deeper than the surrounding scooped-out area.

The lower filling of Pit 9, above a thin lining of disturbed loam, was a bed of what appeared to be a black waterlaid silt, above which were layers of dark mixed earth with a limestone rubble content. Apart from odd Roman sherds and a box-tile, there were a few of Saxo-Norman, Medieval, Tudor, and 17th century date.

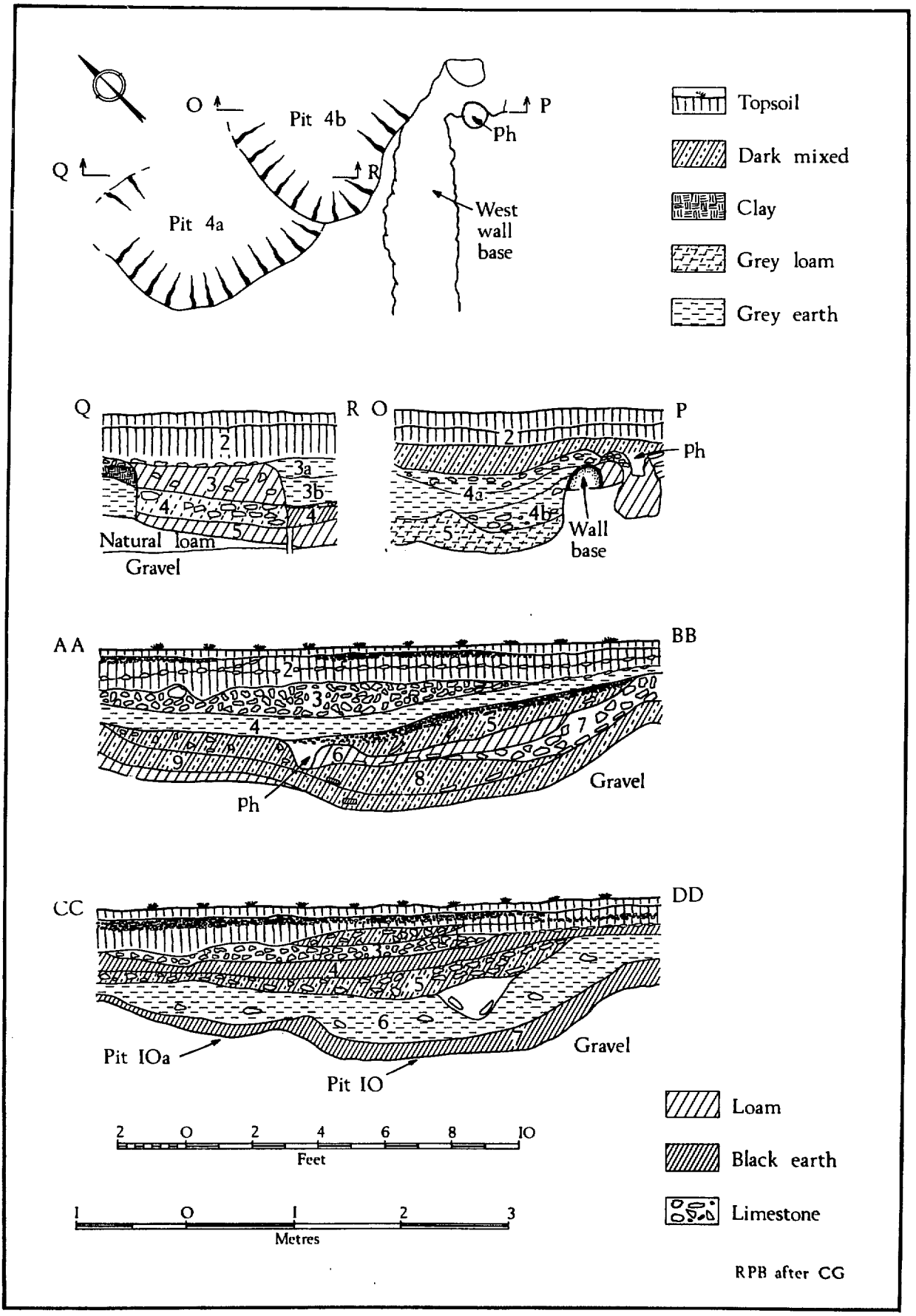
The large expanse of Pit 10 contained a few sherds only of medieval wares. Pit 10a held a few Roman sherds and a box-tile fragment. Pit 10b had a single early Medieval sherd and a fragment of a horseshoe.

Layer 8 in Pit 10, of dark earth with much limestone rubble (M10, Section AA-BB) appeared to have been a surface for some time. On its southern edge there was a posthole apparently standing alone.

The whole complex (as also the adjoining area of Pit 11, see below) had later been sealed and levelled up with a thick layer of compacted limestone rubble.



SITE III: Post-Roman Pits



SITE III: Post-Roman Pits

The Pond

Pit 11 was much larger and deeper than any other. Its whole area could not be examined, but the exposed section (Section EE-FF: TEXT FIG 13b) showed that, if it was roughly circular, as the filling lines suggested, it must have been at least 25 ft (7.62m) in diameter. It was about 6 ft (1.83 m) deep (ie from the original level) and had been dug into the natural gravel underlying the top skin of loam. Through this gravel, however, there ran a band of stiff clay. The pit was cut through this and well into the underlying gravel. Both the upper and lower parts, where gravel formed the sides and base, had been carefully lined with a skin of puddled clay, which had been omitted only where an exposure of the natural clay made this lining unnecessary.

Above the puddled clay (Layer 10), the basal layer of filling (Layer 9) was a band of waterlaid black silt. Apart from a couple of ox bones, it was archaeologically sterile. Resting on the silt were two well-defined layers (7 and 8) of mixed brown earth, with pockets of silt and rubble. The top of Layer 7 must for a time have formed the surface, for, above it, Layer 6 was another spread of black silt, later covered by two more layers (4 and 5) of mixed dark earth. Finally, the whole area, as to the east over Pits 9, 10, 10a, and 10b, was sealed and levelled up to the rest of the area with a deep deposit of compacted limestone rubble, on which rested the lower topsoil of the old Rectory garden (Layer 2).

Apart from odd fragments of earlier pottery, the significant sherds were of black manganese-glazed ware, early salt-glaze ware, and slipware, all in Layers 7 and 8, and a fragment of an early 18th century clay pipe which lay on the surface of the silt of Layer 9.

Ditches

Although Ditches II and III, which seem to be related, produced no pottery which need be later than the 14th century (cf M70), both cut into Layer 3 and must therefore be of 16th century or later date. They may have formed part of a property boundary.

Ditch II

This had been dug into the filling of the north end of Ditch I, the early Roman ditch (TEXT FIG 7, Section A-B). To the north of the excavated section there lay recent graves. On June 23, 1958 a grave was dug to the north of the modern gravel path; this grave straddled the ditch which here was some 5 ft 9 in (1.75 m) wide. The filling showed no trace of there having been a water content, and was the normal mixed loam and darker earth. Apart from Roman debris, there were masses of mussel valves and several sherds of medieval wares. The loam surface of the rounded south end of the ditch was roughly packed with limestone slabs, which formed a crude kerb.

Ditch III

Ditch III continued the line of Ditch II, but its northern end was divided from the tip of II by some 2 ft (0.61 m) of undisturbed Roman filling. It was both rather shallower and narrower than Ditch II and did not follow the curve of the Roman ditch, but continued in a straight line beyond. Medieval pottery similar to that in Ditch II was found in the small part excavated.

For Medieval and Post-medieval pottery see M64-75

SITE III:THE FINDS

INTRODUCTION

The site was excavated in a series of grid squares using AI, BII, etc as the code, with the layers sequenced afresh in each square. The finds were additionally labelled with specific bag numbers which, being non-repeated, are used in conjunction with unique 'small find numbers' (SF) to provide exact details of individual findspots. Grid square references have been omitted as they have not been used in the main text and are therefore meaningless here.

Finds which are significant for dating are mentioned in the volume-printed text.and a selection of Roman and Saxon pottery is shown in TEXT FIGS 9-11 and 14-15.

The full range of ceramic evidence is catalogued and discussed in M49-75.

The other finds from the site are reported on in the following order:

Coins	by T H McK Clough and C Green	M13
Non-ferrous metals		M14
Iron		M15
Clay		M16
Wall-plaster	by C G Dallas	M16
Glass	by C G Dallas	M16
Flint		M16
Stone		M17
Tesserae	by C Green	M17

All published works to which references are made are cited in full in the printed Bibliography.

COINS *by* T H McK Clough and C Green

1 AE From Hut 1. Bag 248.
Obv: IMP.C.VAL.LICIN.LICINIUS.P.F.AUG. Radiate bust right.
Rev: IOVI CONS-ERVATORI. Jupiter standing left, *chlamys* across left shoulder, holding sceptre with eagle on top, Victory on globe in right hand, eagle with wreath to left, captive to right on ground.

Cyzicus mint, AD 321-4. Licinius I. Pierced for suspension.
See RIC VII, 645, 15.

2. AE From Layer 3. Bag 56.
Obv: DN. CONSTAN-TIUS P.F.AUG. Pearl-diademed bust right.
Rev: FEL.TEMP. R-EPARATIO. Falling Horseman (Virtus left, shield on left arm, spearing horseman falling from horse and raising arm behind him).

Mint mark DI, Arles mint, AD 353-4. Constantius II.
PCON
See Carson et al 1960, 55, no 455.

3 AE From Layer 2. Bag 33.
Obv: AVE MARIA GRATIA PLEN.
Rev: no legend. Bead circle enclosing quatrefoil enclosing cross with fleur-de-lys and quatrefoil centre.

French jetton. Fourteenth century.

4 AR From top of Pit 11, Layer 4, residual in pit which is mid-18th century. Bag 163.

Elizabeth I shilling, clipped.

5 AE From Layer 3 in area of Pit 11. Bag 135.
Obv: WOLF.LAVFER.IN.NURNBERG. Three crowns and three fleurs-de-lys alternating.
Rev: RECHA.PFENING.MACHER.I. Cross-crosslet on circle in shield.

Nuremburg jetton. Early 17th century.

6 AE Unstratified.
Illegible, perhaps nonsense legends.
A very crude jetton.

7 AE From Layer 2 topsoil.
Illegible token.

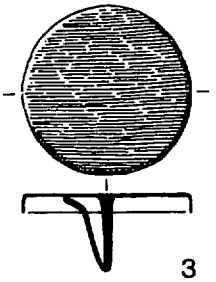
8 AE blank.

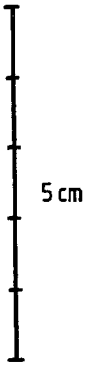
NON-FERROUS METALS

1 From Layer 2 just to the west of the Roman building.
Silver thimble, nineteenth-century English. Not illustrated.

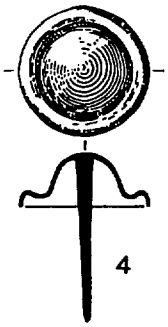
2 From Layer 2 just to the west of the Roman building.
Copper teaspoon, nineteenth-century English. Not illustrated.

3 From Layer 3 east of the Roman building.
SF 25. Boss of sheet copper alloy, comprises a plain disc some 23.5 mm in diameter with turned-down edge. The tapered staple is rectangular in section. Though distorted by earth pressure, the disc has been drawn in its original form; the staple may perhaps have been bent ittach it to some fabric or leather. Probably Roman.

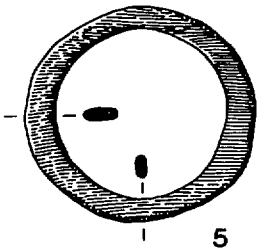




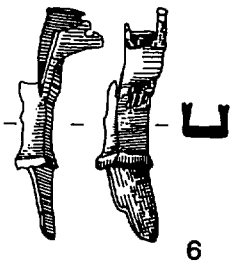
4 From base of the rubble covering the disturbed loam to the south of Pit 6.
SF 80.Boss of sheet copper alloy, dome-shaped with rounded rim, 18 mm in diameter, and with long, rectangular-sectioned, tapered staple. Probably Roman.



5 From Pit 4b, Layer 4a.
SF 110.Copper alloy, almost-circular, elliptical in shape and cast in one piece. The pin is missing but the section on one side, somewhat rounded by wear, shows where the looped attachment had been. Cf Ward Perkins et al 1940, pl LXXVII.1-3; no 3, like this specimen, is of flat section though this one is undecorated. Medieval.

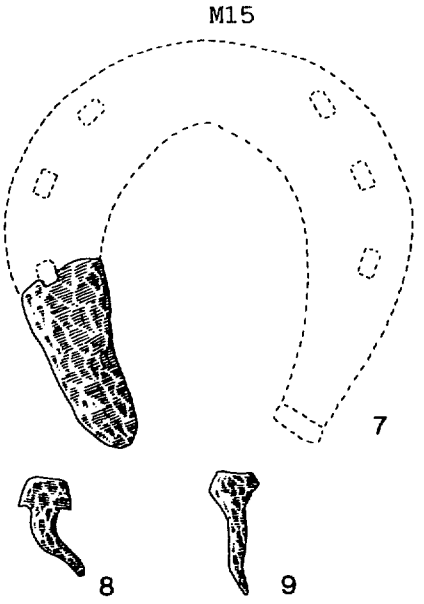


6 From Layer 2 over Pit 4b.
SF 109.Lead fitting, fragment only, comprising a flat strip with side flanges, terminated below by a simple moulding, below which is a tongue. At the upper end is a forward-curving projection, also with side flanges. The surface of the metal is very rough, but there appear to be two narrow bands of simple hatching across the front. In addition, the whole piece has a lateral curve which appears to be original. Its use is unknown, though it is possibly part of a major unit in window-tracery.



Also found, but not illustrated, was a small fragment of sheet-lead from the rubble which filled the hypocaust; a tiny scrap of sheet copper alloy and a small brad, found together in the dark earth near the bottom of Pit 1.

IRONWORK

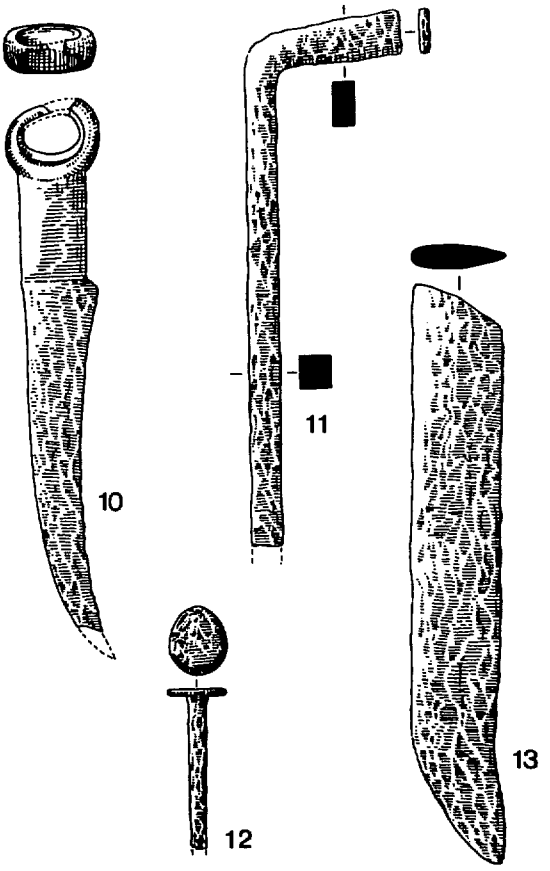


7 From Pit 10b.
SF 107. Horseshoe, fragment of branch only, with a single nail-hole of rectangular out-line. The end has no calkin. This shoe belongs to Ward's sub-group, 'The River Dove Type' (1938, 158, pls XX.10, 11; XXI.13, 14; XXVI.75). One of the characteristic features of the type is a calkin on one branch only. Ward attributes the type to the early 14th century. The single pottery sherd found in this pit with the shoe was of 13th century type, so that Ward's dating would suit very well.

8 From Pit 4b.
SF 86.Horseshoe nail, fiddle-key type, almost unworn.

9 From the topsoil east of the Roman building.
SF 16. Horseshoe nail, fiddle-key type, somewhat worn.

Both these nails are typically those used with the earlier lobate horseshoe of Roman to 13th century times.



10 From Layer 4 between Pits 6 and 7.
SF 104.Knife, the short rectangular -sectioned haft terminates in a rounded loop and the tapering blade is slightly curved. Knives of this general type were common in Roman times. A very similar example is pictured by Wheeler (1930, pl XXV.5).

11 From Pit 1 between the ash layers.
SF 101. Building-tie,which has a square section with one end turned and beaten into a taper with thin edge. The other end is now broken away, but doubtless originally had a similar terminal. The two bladed ends could be hammered into two adjoining beams to provide a tie of great tensile strength.

12 From Pit 1 between the ash layers.
SF 115. Nail,the head is discoidal. This is a good example of the many nails, some fragmentary, found in various parts of the site. Roman

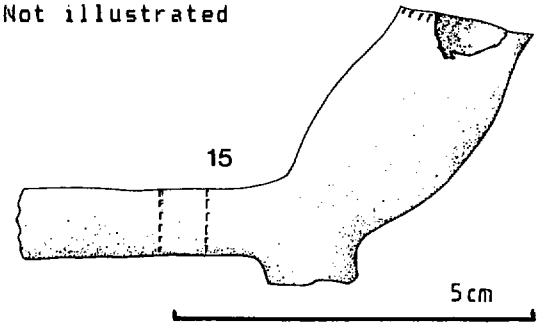
13 From the mixed earth and soot in the west side of the stoke-hole in Room 2.
SF 73. Knife, blade has slightly curved point. The haft end of the blade has been broken away. The thickness of the blade is slightly reduced towards the tip, giving a flat-sided section near the point. Roman.

Also found, but not illustrated, were sundry fragments of iron strip and sheeting of indeterminate use. These came from within or below the building rubble on the west side of the Roman building. An iron key and a fragment of a small tube, found in the topsoil to the south of the building, are of post-medieval date. These also are not illustrated.

CLAY

14 From Layer 3 east of the Roman building, near Hut 2. SF 30.Spindle-whorl,19.5 mm diameter, made from the pedestal base of a colour-coated Castor butt-beaker. The dark colour-coating is worn and the damage to the pottery doubtless ante-dated its reuse. Probably Anglo-Saxon. Not illustrated

15 From Pit 11. Bag 163. Clay pipe, comprising bowl and part of stem. Mr P K Wells has most kindly examined this pipe and dates it to c AD 1690-1720. He comments that the make is unknown, and notes that it is not typical of local types and is perhaps of south west origin.



WALL-PLASTER *by* C G Dallas

The six pieces found in Pit 1 are all either white or red, but the red is a brighter colour than that from the building and need not be attributed to that source. The painted wall-plaster from the building is all red and white except for some pieces which are white with brown stripes. Rooms 1 and 2 produced over twenty pieces each, including all the above types, and there were two red pieces from Rooms 3 and 3a. No pattern can be made of the brown stripes as there are too few pieces. Some obvious corner pieces from Room 2 which have red stripes in the corners are the only fragments from which any inference concerning decorative schemes may be drawn. A mainly red-and-white geometric decor seems likely.

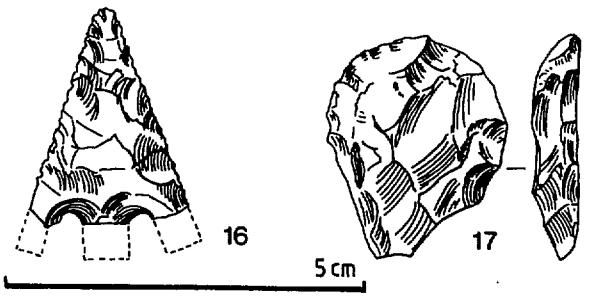
GLASS *by* C G Dallas

The glass from the site consists of about thirty pieces of which seventeen seem to be Roman and the rest post-medieval. The late Miss Dorothy Charlesworth very kindly examined the material and noted that there is no Anglo-Saxon or medieval glass and that the Roman pieces are often weathered and abraded. She reported that, other than the presence of 1st to 2nd century Roman window-glass, there is little of interest about the group. There are two Roman pieces which are definitely in a Roman context. One is an abraded 1st to 2nd century window-fragment which comes from Pit 1, dated to the second quarter of the 2nd century. The other is a small piece of deep blue, 1st century glass from the cleaning over the top of Ditch I where it was sealed under the Roman building, ie under Rooms 1 and 2.

FLINT

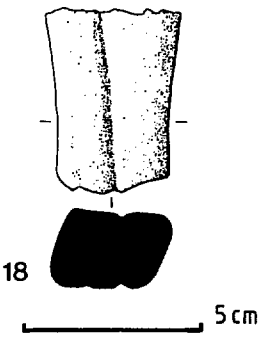
16 From the disturbed loam of the floor surface at the north end of Room 3. SF 74. Arrowhead.Almost entirely white-patinated. The tang and barbs have been broken off.

17 From the disturbed loam of the floor surface of Room 3a. SF 68.Scraper.



Both these objects come from the same context and, as there had been some clearance of topsoil before the building was erected, they were doubtless previously well below the surface and were brought near to it at the time of building. The arrowhead is typical of the Beaker period and the scraper is doubtless its contemporary.

OTHER STONE



18 From Layer 2 east of the Roman building, though not directly over Hut 2. SF 28. Whetstone of fine-grained grey mica-schist. A fragment only. Imported mica-schist hones are well-known in Saxo-Norman England: see Ward Perkins *et al* 1940, 293-4.

Three other whetstone fragments, of fine-grained sandstone, came from topsoil layers over the Roman building. These are almost certainly of post-medieval date.

TESSERAE by C Green

Many limestone tesserae and two of brick were found. Some of these came from the topsoil layers (1 and 2) over or immediately adjacent to the Roman building. However, a considerable number of the former type, at least 265, lay heaped on the floor of Room 2, close to the passage to the hypocaust of Room 1.

All these limestone tesserae were of a fine-grained stone, quite roughly made and varying considerably in size, the largest being a smoothed face some 20 mm square. Few, however, had the carefully squared faces seen in good-class pavements. Most had one smooth face and in many this was clearly due to the attrition of years of wear. The differences in wear could well be explained by their relative positions in a single pavement, for some would always be more frequently trodden then others.

Another find, which perhaps complicates the discussion of these tesserae was made in Pit 1. Among the fragments of brick-concrete floor which lined the pit's base was one with a face some 4.5 in (114.3 mm) x 5 in (127 mm), which had clearly been the bedding for irregularly shaped tesserae of this type, though none was now *in situ*.

When considered in conjunction with this heap of tesserae, the many fragments of brick-concrete flooring found in Room 2, particularly near the south end, may well have once formed part of the missing floor over the hypocaust of Room 1, though there is no direct evidence for this. But the flooring fragments found at the base of Pit 1 cannot have come from the same source. The fact that this pit appears to have been dug before the building was erected and the early date of the pottery found in its filling make it impossible that it should contain remnants of a floor in use until the last days of the building, probably represented by the Room 2 finds. But, as more of the building underlay the churchyard to the north, these earlier fragments could well have come from another, undiscovered room, where for some reason the floor had been replaced.

EXCAVATIONS AT ELMLEA; DETAILS OF SELECTED FEATURES

PRE-MEDIEVAL

(TEXT FIG 17 and M19)

(a) Possibly earlier than the Middle Saxon pit

The tile scatter

Layer 198 lay over the Roman surface in the southern half of the trench and though containing no dating evidence would seem to be an early feature. It comprised a thin but solid layer of Roman roofing tile deliberately laid on top of the yellow Roman mortar and trampled to an even surface. The feature seemed to be from an east-west pathway c 3 m wide. All pieces were broken, and varied in size from c 100 mm down to small chips. There was no loam separating the layer from the underlying Roman deposits, but some loam and much pea-gravel had accumulated among the tile chips. This layer sealed no features and was itself cut by others. Unfortunately, its relationship to the Middle Saxon pit is ambiguous. Although the tile protruded as much as 60 mm over the edge of the pit, it cannot be regarded as later or definitely contemporary with the pit; for the overhang could have been caused by the erosion of the pit sides. Thus, it could be earlier, and possibly Anglo-Saxon, if one accepts that the Roman surface is not in its original state but had been subjected to later wear.

In the southern corner of the trench the tile was overlain by a make-up of small limestone chippings which levelled up the slope down to the south layer (141). No structures could be related to the layer but its alignment was at an angle to the Roman building lying to the south, and it was cut by medieval features 48, 145 and 182 (cf TEXT FIG 19).

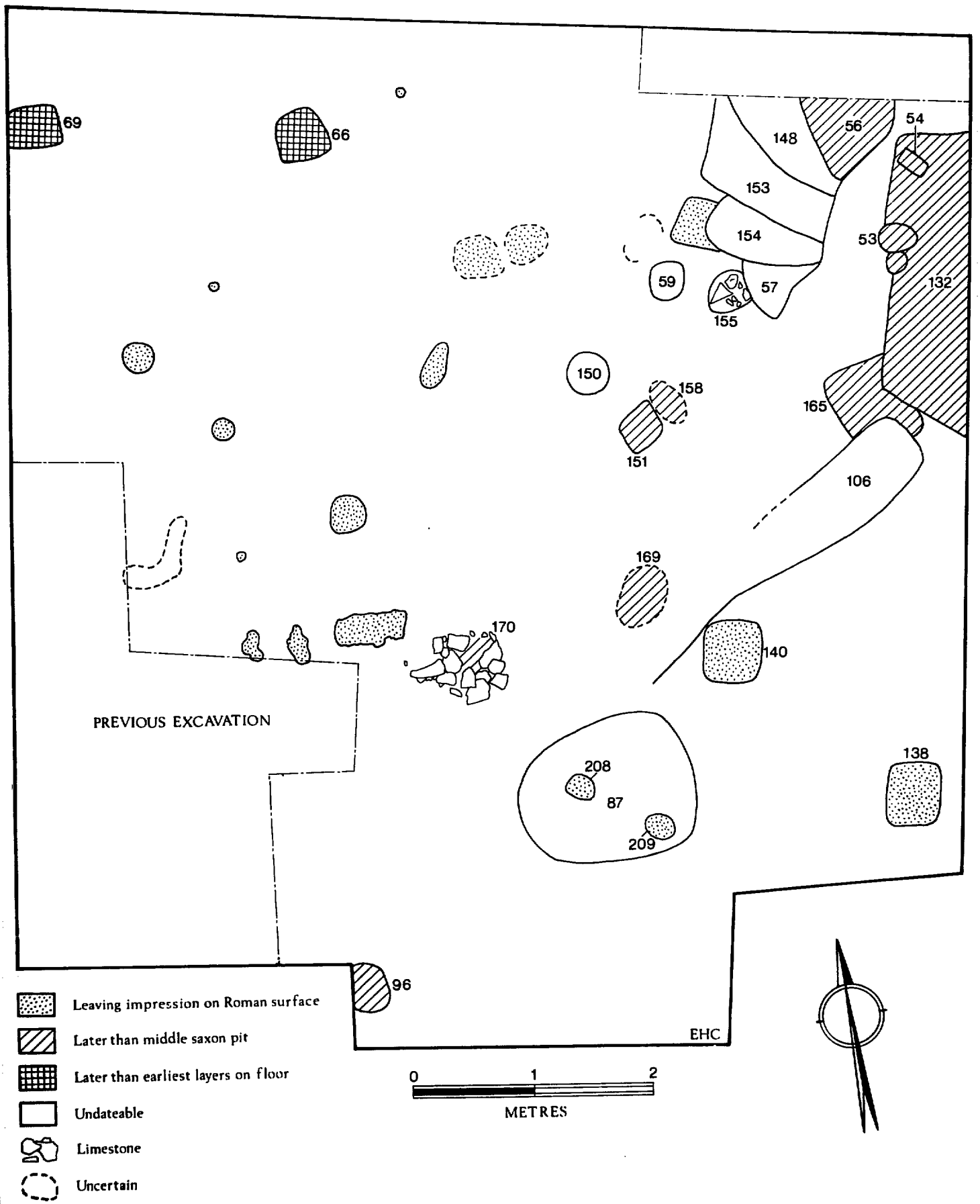
Pits

Features 176, 177, 147, 146, and 142 were cut into the Roman surface and may post-date its use.

Feature 177 was an irregular hollow, c 0.85 x 1.40 m filled with dirty clay. It was cut by the regular oval of Feature 176 which was c 1.50 x 0.85 m by 0.35 m deep and filled with dark brown gritty loam. Both features cut into a small sub-rectangular hollow, Feature 147, with a thin skim of light grey loam banked up against the northern edge shown on TEXT FIG 17. The relationship of Feature 147 to the loams to the south is not known as the southern end had been cut away, but it seems too small to be a *Grubenhaus*. All three of these features seemed to be cut into the 'dirty' loams, Layers 67, 125, 135 and 160, immediately over the Roman surface, but were sealed under the dark brown loams, such as Feature 72 (also undatable) which lay immediately beneath the medieval layers. Their functions are uncertain. The shallow oval feature, 72, over Features 176 and 147 may be a pit in its own right; it was definitely not part of Feature 176 which it overlapped to the north.

Feature 146 cut into the floor in the southern end of the trench and also penetrated the tile scatter. It was itself cut by medieval features 87 and 145. It appeared to be a small oval pit c 1.35 m east-west x 1 m, and 0.15 m deep on average. The two postholes at the bottom, 208 and 209, were of such similar filling that their relationship to Feature 146 is unknown.

Feature 142 formed a north-west to south-east gully c 0.40 m wide and $\leq$ 80 mm deep with lighter patches of filling c 0.55 m apart, suggesting the presence of postholes. The gully's relationship to Pit 146 was difficult to ascertain owing to the presence of a medieval pit (87), but the gully seemed to be cut by Feature 146. The upper part of Gully 142 was cut away by another, Feature 78, of the same size on almost exactly the same line; it too was cut by Pit 87 as well as structures 77 and 48, all of medieval date, and Posthole 138 (see below). Feature 78 itself cut the tile scatter and also the limestone surface of Feature 141.



Elmlea Trench L, Early Features Not Closely Dated

Postholes

The following postholes produced no material other than Roman pottery:

Postholes 138 and 140 cut into the tile scatter and were packed with stone and tile. Their individual size, dimensions, and general character may be compared with 161, which cut into the surface in the northern half of the trench.

Postholes 59 and 150 both cut into the Roman surface.

Postholes 66 and 69 lay beneath medieval rubble but were cut into the loams over the Roman surface; they did not penetrate to the Roman surface itself.

(b) Later than the Middle Saxon pit.

Gullies

Gullies 157 and 164 (TEXT FIG 17) cut into the Roman deposits, Layers 192-196, and also into the top of the filled-up Middle Saxon cess-pit. Both ran downhill in a south-west direction, following the slope of the ground. Each was about 0.70 m wide by 0.30 m deep on average with a steep-sided flat-bottomed profile. The fillings were dark brown gritty loams, that of Gully 164 being uniform while that in Gully 157 formed two distinct layers, 156 and 157. Gully 157 cut Gully 164 and each ran over the top of the Saxon pit; both cut the tile scatter and the loams immediately over the Roman surface. Gully 164 was sealed under 88 (see below) at its northern end and may be Anglo-Saxon. Gully 157 was not similarly sealed, but would seem to be a recut of Gully 164; it came to an end within the trench. The precise course of each gully in the 1971 excavations was not clear, but both seemed to bend towards the west in this area. Both gullies produced much pottery, but all of it was Roman except where the features cut the Middle Saxon pit. Two fragments of glass (nos 111 and 112, M36) came from the south end of Gully 164. They cannot be closely dated, although a post-Conquest date is perhaps most likely on present knowledge. It should be noted that the layer in which they were found (166) was different in character from the rest of Gully 164 and may be intrusive.

A separate gully, 182, was partially exposed against the southern edge of the trench. It was longitudinal, some 2.30 x 0.40 m, and varied from 0.15 m to 0.28 m deep. It seemed to cut just the top of the Middle Saxon pit fill at its western end, and was cut into the Roman surface, the tile scatter, and limestone surface 141. It seemed to be cut by structure 82 (TEXT FIG 19), of medieval date, but produced no independent dating evidence.

Postholes and other possible structural elements (M19)

Postholes 96, 151, 155, 158, 165, 169, and 170 were stratigraphically later than the Middle Saxon pit. Features 56, 57, 148, 153, and 154 may also have been structural and appear to represent successive recuts of a single feature which was long-lived. They cut Gully 157 and are therefore post-Roman.

Other structural features may include 88 which was separated from a medieval earthen floor (34: TEXT FIG 19, see below) by a build-up of loam (26 and 44). The feature comprised a round platform made up of an even mixture of clay lumps, sand, loam, gravel, mortar flecks, charcoal, and small chips of tile and limestone. It was not clear if it was intended to be a deliberately raised platform, or whether the surrounding material, possibly a continuation of that forming the feature, had been cut away by a medieval feature (48) and less well-defined medieval activity in the centre of the trench. On the feature four round stakeholes filled with brown loam were visible, each c 80 mm in diameter and 50-80 mm deep. They formed the arc of a circle running under the east baulk.

The full diameter of this feature, if it had been a complete circle, would have been about 2 m. It was as if cut by or formed round Postholes 53 and 54. There was no pottery from the feature other than a few Roman sherds, but it sealed Gully 164 and is, therefore, Middle Saxon or later.

A similar surface of mixed clay, sand and loam -132-, was sealed beneath 88. It appeared as a flat, rectangular feature which extended 0.60 m into the trench and was 2.5 m wide north-south. It contained only Roman pottery but, since it sealed Gully 164, must be Middle Saxon or later. If the feature was structural, it is possible that the shallow hollow 106 was an associated drip- or drainage gully on the downhill side.

MEDIEVAL
(TEXT FIG 19)

The earliest demonstrable medieval feature appears to be 145, a sausage-shaped slot some 2.26 m long by 0.52 m wide and 0.10 m deep, which had been cut into the Roman surface and also cut Pit 146. It contained pottery of the 11th to 12th centuries. No associated features were apparent.

The slot may be an earlier version of 82/85 as it was almost directly underneath its line. The latter appears to have carried a timber structure cut into the Roman surface. While the northern part was lost in medieval pit-digging, the south-east corner survived. It consisted of irregular gullies or beam slots varying from 0.32-0.42 m wide and 50-100 mm deep. A slight gap existed in what was probably the south wall, with both wall-slots ending in shallow post-pits. The feature cut across the top of the Middle Saxon pit, and produced Stamford ware of 11th-12th century type.

These traces of a structure appeared to be cut by another linear feature, Slot 48, at this south-east corner. Slot 48 also cut the Roman surface at the eastern edge of the trench. It seemed to be the western side of a building lying mainly outside Trench L. The slot was of regular shape with steep sides and a flat bottom; it was 0.39 m wide and 0.11 m deep. Some pieces of limestone in the filling indicate that it was either a robbed-out wall-footing or else that the structure consisted of individual posts in the gully; however, no regular post-system could be traced. Slot 48 produced an early medieval St Neots-type rim (TEXT FIG 26, no 100) and sherds of 11th-12th century Stamford ware.

Slot 48 was sealed by Layer 34, a thin spread of dark, compacted gravelly loam which may have formed a rectangular area lying mainly outside the excavation. It had been disturbed at the southern end. The surviving surface gave the impression of having been an earthern floor, and a group of stones, possibly packing an associated posthole, was found at the north-west corner. The surviving portion of Layer 34 was $\subseteq$ 1.80 m north-south x 1.70 m east-west. It produced Stamford ware of 11th-12th century type.

Layer 34 was partly overlain by Layer 29 which seemed to be demolition rubble and comprised a heavy limestone scatter with some loam mainly over the northern half of the trench. Layer 29 produced some early Stamford ware and a rim, TEXT FIG 26, no 98, which may be as late as the 14th to 15th centuries. The deposit certainly dates from at least the 13th century since it sealed Pit 87 which contained developed Stamford ware.

Wall 11 lay over a loam deposit, Layers 8, 18, 19, which in turn sealed Layer 29. The wall was disturbed at its east end, but could be seen in the west section of the 1971 trench. It was 0.50 m wide and consisted of two courses of unmortared local limestone pieces. The absence of mortar was also a feature of the medieval wall-footings found in the trial-trench dug by Dr Wild. A small posthole, 25, was built into the structure on the north side, and another small posthole, 20, to the north may also have been related to the wall. Against its south face was a spread of small stones of limited extent, Feature 24. No associated floor levels were found and the wall seemed to have been cut into the underlying late medieval loams and contained Lyveden-type ware.

THE NUNNERY OF ST CYNEBURGH AT CASTOR

Castor village church, in which a dedication inscribed with the date AD 1124 has been re-used, is dedicated to St Kyneburgha, and there is a strong tradition that the village is the site of the Middle Saxon nunnery of St Cyneburgh.

She is thought to be the Cyneburgh who was a daughter of Penda, the last of the pagan kings of Mercia, killed by Oswiu of Northumbria at the Battle of Winwaed in 654. Bede tells us that she was the wife of Oswiu's Christian son, Alhfrith, at the time of her brother Peada's conversion to the new faith in AD 653 (*Historia ecclesiastica*, III, 21).

Cyneburgh who is always associated with her sister Cyneswith, is mentioned in the Anglo-Saxon Chronicle (ASC.E, *sub annis* 656, 675, and 963) as well as by Hugh Candidus (Mellows 1949, 50-1, 89; 1966, 4, 27).

The Chronicle is written in the same hand down to 1122 (Whitelock *et al* 1961, xvi) and it is not possible to ascertain how much of the purely Peterborough material was based upon sound tradition, while Hugh Candidus is also 12th century (Mellows 1949, xvii). Cyneburgh is first mentioned in 664 (ASC.E *sub anno* 656) as being present at the granting of the Wulfhere Charter to Peterborough (Sawyer 1968, 68). The foundation charter quoted in the Anglo-Saxon Chronicle is almost certainly a 12th century document (Levison 1946, 200-1, 206-20). Although Bede knew of the monastery (*Historia Ecclesiastica*, IV 6) the precise date of its foundation is unknown. Stenton (1970, 179), followed by Whitelock (1972, 14) has said that a foundation as early as the middle of the 7th century was likely and could have been at any date prior to 673-5, when Seaxwulf, '*constructor*' and first abbot, became Bishop of the Mercians.

The earliest reasonably authentic association of Castor with Cyneburgh is a charter dated AD 948 which is thought to be genuine, although it is in a 12th century book-hand (Sawyer 1968, 533). It records a grant of land at Ailsworth, the parish immediately to the west of Castor, to the thane Aelfsi, and the eastern boundary of the estate is described as running to that of '*Cyneburga caestre*'.

In the *Chronicon ex Chronicis* of Florence of Worcester there is a similar reference to Cyneburgh in the genealogies which were probably added to the text after the death of Florentius himself in 1118. This tells us, in the Genealogy of Mercia, that Cyneburgh was wife of Alhfrith but left him and became a nun in the monastery founded by her brothers, Wulfhere and Ethelred, and which was called after her Cyneburg's castle (Forester 1854, 448). William of Malmesbury, in a passage probably written between 1125 and 1148, says the same in almost the same words, but omits the name of the house (*Gesta Regum Anglorum*, I 76).

The evidence, therefore, of the association of St Cyneburgh with Castor is quite strong. It is unfortunate that the sources are all in post-Conquest manuscripts and that the nunnery is not mentioned in Bede's history. If, however, one accepts the foundation of a nunnery at Castor by Cyneburgh, daughter of Penda, the date of its beginning seems most likely to have been during the third quarter of the 7th century. Cyneburgh was of marriageable age by 653 and may not have lived until the end of the century. Alhfrith her husband is described by Bede as being present at the Synod of Whitby in 664 (*Historia Ecclesiastica*, III, 25). Bede tells us, without giving a date or details, that Alhfrith rebelled against his father (ibid, III, 14), and when Oswiu died, in 670, he was succeeded by his second son Ecgfrith (ibid, IV, 5). Alhfrith therefore passes out of history sometime between 664 and 670.

The end of the nunnery is even less-well documented, but is assumed to have been destroyed by the Danes in 870 when the Peterborough monastery is reputed to have been sacked (ASC.E). The E manuscript tells us, in an interpolation *sub anno* 963, that in the time of Abbot Elfsinus (1006-55) the bodies of St Cyneburgh and St Cyneswith were exhumed and brought as relics to Peterborough where the feast of their translation was celebrated on March 6th (Atkins 1928, 233).

The Peterborough chronicler, Hugh Candidus, writing between c AD 1115-70 (Mellows 1949, xvi-xvii) also tells us that Cyneswith and Cyneburgh were buried at Castor and says that in the time of Abbot Elfsinus '*ecclesia Kyneburgensis castri valde destructa*' (Mellows 1949, 50; 1966, 27). Unfortunately, there is no knowing whether this refers to a church dedicated to Cyneburgh or the church that was built by Cyneburgh for her nunnery: any Middle Saxon dedication should not have been to Cyneburgh herself (Levison 1946, 33-6). Although the Middle Saxon sculpture in the present church may come from it, no trace of the original structure has yet been found.

EXCAVATIONS AT ELMLEA; FINDS OTHER THAN POTTERY

Note: Numbers preceded by Roman numerals refer to individual contexts in pre-1973 excavations, L to layers in the trench excavated in 1973. Smallfind numbers (SF) are given where appropriate.

COINS by A Challands

All dates are AD

1 From 2, topsoil, robber trench in Roman building.
SF 1. AE Abbey jeton, monastery token, or counter. Struck in Nuremburg and imported in great quantities into Britain for calculating church accounts on a counting board. Originally made for the French monasteries, hence the fleur-de-lys on the reverse. Emblem of the Holy Roman Empire? on obverse. The counters were employed on a local basis as unofficial small change. Later 16th-17th centuries.

2 From XLV, topsoil.
SF 21. AE Farthing. Forgery? of a Lennox type of James I (Type 3).
Obv: (IA)CO DG (M)AG (BRI), crown and crossed sceptres.
Rev: (FRA ET HIB) RE(X), harp.
Official issue minted between 1615 and 1624.

3 From L 2, topsoil.
SF 53. AE Token halfpenny, from Oakham, Rutland.
Obv: RICH MATHEW AND IOHN, coat of arms.
Rev: POTTERILL OF OAKHAM THEIR 1/2d.
Not dated on the token. They were, however, usually minted between 1660 and 1680, with the greater bulk between 1660 and 1670. Williamson (1887-91) no 8.

PERSONAL ORNAMENTS

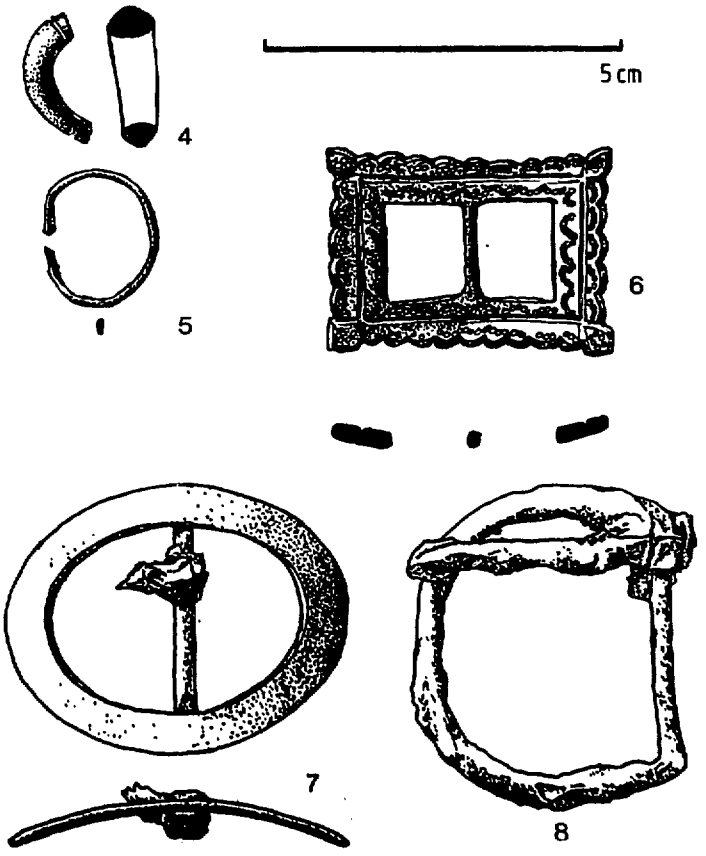
4 From L 73, undated loam.
SF 136. Fragment of a jet finger ring. Roman.

5 From L 164, gully.
SF 186. A flat copper alloy band with a tinned or silvered surface. Possibly a finger ring, with a break perhaps for a bezel. Probably Roman.

6 From L 2, topsoil.
SF 53. Buckle. Copper alloy, complete except for missing pin, of a rectangular shape with scalloped edge and incised line decoration. Probably 17th century.

7 From topsoil.
SF 80 Buckle, Copper alloy, plain oval with fragments of an iron pin mounted on a round-sectioned central bar which is supported by pierced lugs under the buckle plate. Probably 18th century.

8 From L 2, topsoil.
SF 55 Large D-shaped iron buckle with pin. Medieval or later.



9 From XLV 7, upper pit fill.
SF 34. Lace tag, copper alloy, with rounded point and split end with rivet intact. The function of these objects was recognised as early as 1931 (Lethbridge 1931, 65); they are usually found on the feet or shins of skeletons and seem to be lace tags for shoes,garters, or leggings. Where identifiable, the skeletons are female. They occur in 7th century graves, but not earlier, and are therefore likely to be Middle Saxon. There is as yet no distinction to be made in time or area between the rolled metal and solid metal types (Meaney and Hawkes 1970, 39).

10 From XLIV 7, an early medieval feature cut into the Middle Saxon pit.
SF 28. Fastener of Middle to Late Saxon type. Consists of a thin triangular piece of copper alloy sheet with a hook at the pointed end and two rivet holes at the other. This type of object has been discussed in the Shakenoak report (Brodribb *et al* 1972, 116-7; 141-5 and fig 3) and three were also found at Whitby (Peers and Radford 1943, 59, fig 12,10). Their function is clearly that of a fastener for some delicate substance such as a fine textile, and perhaps they replaced the wrist-clasps found so often in graves, but not as yet in later contexts. No examples earlier than the 7th century are known. Their relationship to the type of fastener which consists of a disc and projecting hook remains unknown.

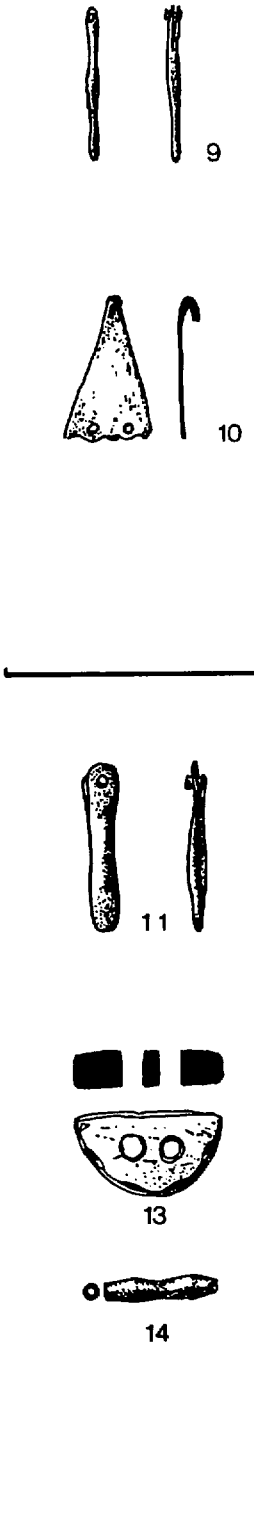
11 From L 2, topsoil.
SF 52. Lace tag, copper alloy, complete with rivet through the split end. See 9 above for comments on an Anglo-Saxon example, but this larger, flatter type is probably medieval.

12 From XXI 5.
SF 20. Lace tag of rolled copper alloy with an open side to hold the lace.It was associated with Stamford ware, but could be later.

13 From L 186, Middle Saxon pit lower fill.
SF 276. Jet bead, D-shaped with two holes. Similar examples exist among the Roman material in the Jewry Wall museum, Leicester, and the museum at *Letocetum* (Wall, Staffs). Possibly Roman.

14 From L 50, undated loam.
SF 92. Jet bead, round-sectioned and double biconical in shape. Probably Roman.

15 From L 156, gully.
SF 167. Part of a two-strand copper alloy wire bracelet with one strand looped and tucked in to form a terminal. Probably Roman.



PINS

TEXT FIG 20

16 From L 101, upper fill of Middle Saxon pit.
SF 102. Complete pin of copper alloy with a plain top and two cordons below. Pins of this type have been found at Southampton (Addyman and Hill 1969, fig 26) and Shakenoak, Oxon (Brodribb *et al* 1972, fig 31, 158-61 and 164-73) in 8th century contexts, and this dating is also likely at Castor. As has already been pointed out (*ibid*, 71-2), their undecorated heads appear to have been set in a head-plate to form a large comb for some industrial purpose, such as hackling.

17 From XLV 3, upper fill of Middle Saxon pit.
SF 231. As 16.

18 From L 2, topsoil.
SF 66. As 16.

19 From L 117, upper fill of Middle Saxon pit.
SF 113. Complete copper alloy pin with a flattened knob head over a faint cordon.The shank has a 'hipped' profile and is, therefore, possibly a Middle Saxon type although it may be Roman. It is similar to an example from Southampton (Addyman and Hill 1969, fig 26,2).

20 From L 184, upper fill of Middle Saxon pit.
SF 257. Bone pin with the point missing and with a crudely made head topped by a cone. Probably Roman.

21 From L 176, pit cut into the latest Roman surface.
SF 255. Bone pin with a roughly rounded knob head.Possibly Roman.

22 From L 38, loam with early medieval pottery.
SF 71. Bone pin fragment with a roughly rounded head with a conical top Possibly Roman.

23 From L 74, undated loam.
SF 97. Bone pin fragment with a roughly rounded head and facetted shaft. Possibly Roman.

24 From L 73, undated loam.
SF 109. Bone pin fragment with a large knob head. Possibly Roman.

25 From XLV 9, upper fill of the Saxon pit.
SF 38. Bone pin with a 'hipped' shank, the thickest part being near the bottom. The head is rounded and there is a ring just beneath. The pin is thin and well-finished. For comments, see after 27 below.

26 From XLV 9.
SF 39. As 25, but shorter, for comments, see after 27 below.

27 From XLV 9.
SF 40. As SF 25, but with a biconical head. All three of these pins are very fragile and were most probably used in hair rather than with textiles. Similarly sized pins have been found at Shakenoak, Oxon (Brodribb *et al* 1972, fig 64,111) and Whitby (Peers and Radford 1943, fig 21).

28 From the upper fill of the Middle Saxon pit, but, as it was found during the cleaning of the section, the precise layer is not known.
SF 134. Bone pin like the previous three, except that its head is decorated with a ring above which there are four knobs around the periphery and a further one on top.

29 From L 57, top of Gully 157.
SF 151. Fragment of a pin, jet. Probably Roman.

30 From XVIII 6.
SF 10. Copper alloy pin.This pin has a facetted head which, although there is no ring-and-dot decoration, may belong to the 9th or 10th centuries (cf Peers and Radford 1943, fig 14.3; Addyman and Hill 1969, fig 26).

31 From L 88, the made-up layer with a stakehole circle on top, over Gully 164.
SF 94. Bone pin. With an irregularly-shaped flat head and a facetted lower shaft. The uneven head on this pin, and also on the next two, suggests that the type may be Anglo-Saxon rather than Roman.

32 From L 149, a rectangular charcoal loam patch over the Roman surface.
SF 190. Bone pin with a flat, irregularly shaped head. See 31 above.

33 From L 63, undated loam spread.
SF 107. A fragment of a bone pin with a facetted shaft and a head like 31 and 32 above.

COMBS

TEXT FIG 21

34 From XLV 10, upper fill of Middle Saxon pit.
SF 47. Single-sided comb, composite bone (illustration also includes a reconstruction). Now 167 mm in length, originally c 185 mm. The toothed segments are held together between two ribs and fastened with iron rivets, six out of seven of which remain. Saw-cuts on the ribs show that the teeth were cut after the comb had been assembled. One rib has two panels of cross-hatching ending in vertical lines. The panels are separated from each other and from a band of vertical incised lines at each end by plain areas. No exact parallels are known, but the type is common from the 7th century onwards; York has provided a number of similar examples (Waterman 1959, 88-90).

35 From XLV 7, upper fill of the Middle Saxon pit.
SF 49. Fragment of a centre portion of a bone comb

36 From topsoil.
SF 50. Central piece of an Anglo-Saxon double-sided bone comb with part of one rivet hole; these central sections were often made in pieces.

UTILITARIAN IMPLEMENTS
Possibly connected with textile-production

TEXT FIG 22

37 From L 108, upper fill of Middle Saxon pit.
SF 115. Bone pin beater. These objects, used for packing the weft on the loom, are found in Roman, Pagan Saxon, and Middle Saxon contexts and are not closely dateable. Middle Saxon examples come from Shakenoak (Brodribb *et al* 1972, fig 62); Southampton (Addyman and Hill 1969, fig 29, 6); Maxey, Cambs (Addyman 1964, fig 16,21-2); Marston, Leics (Dunning 1952, fig 2,2); Normanby-le-Wold, Lincs (Addyman and Whitwell 1970, fig 2, 23); and Ipswich (West 1962-3, fig 55, 7-8). Although most of these examples are of the short and stubby variety, it is not possible to offer a typology of them.

38 From L 103, upper fill of Middle Saxon pit.
SF 189. The greater part of a bone pin beater, flattening towards one end, but with a round-sectioned point at the other.

39 From XLV 3, silt layer in Middle Saxon pit.
SF 222. Bone pin beater. See 37 and 38 above.

40 From L 49, loam with early medieval pottery and Stamford ware.
SF 77. Half of a bone pin beater

41 From L 118, cess-fill of Middle Saxon pit.
SF 125. Part of a bone needle with a squared perforation for an eye. Such needles are not dateable and this one could be Roman or Saxon. The presence of three examples in the Middle Saxon pit when there are none from the rest of the site suggests that these may be Middle Saxon, although they resemble Roman needles far more closely than the perforated bone points found on Anglo-Saxon sites (West 1962-3, fig 55.7-8). See 42 below for comparison.

42 From L 118, cess-fill of Middle Saxon pit.
SF 128. Part of a bone needle similar to 41.

43 From L 184, upper fill of Middle Saxon pit.
SF 256. Bone needle fragment similar to 41.

44 From XLV 3.
SF 23. Fragment of bone point with a hole pierced through at the broad end. Such items are found on sites of all periods, including Middle Saxon (West 1962-3, fig 55,7-8).

45 From L 85, early medieval timber structure.
SF 93. Complete copper alloy thimble. The decorated band contains a series of eagles with outspread wings, each bird being inside a ring of raised pellets. Probably early Medieval.

46 From XLV 9, upper fill of the Middle Saxon pit.
SF 46. Spindle whorl of lathe-turned stone with incised concentric lines on the upper surface. Roman or Saxon.

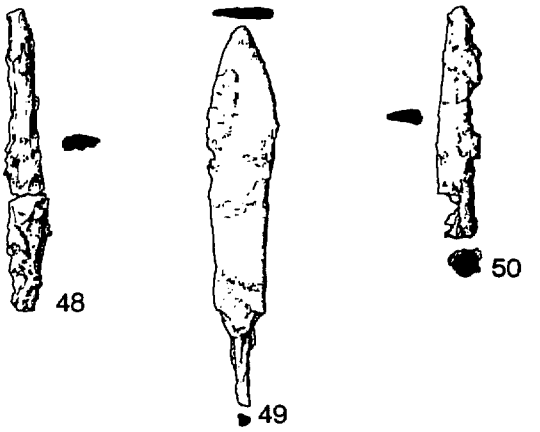
47 From XLV 9, upper fill of Middle Saxon pit.
SF 221. Baked clay, possibly a fragment of a loomweight, reduced to a black colour throughout, with some sand and grit tempering.

KNIVES, CLEAVERS, SHEARS, HONES

48 From XLV 7, upper fill of Middle Saxon pit.
SF 42. Fragment of a knife.

49 From XXIII 3. undated.
SF 16. Broad knife and tang.
Probably medieval or perhaps Roman.

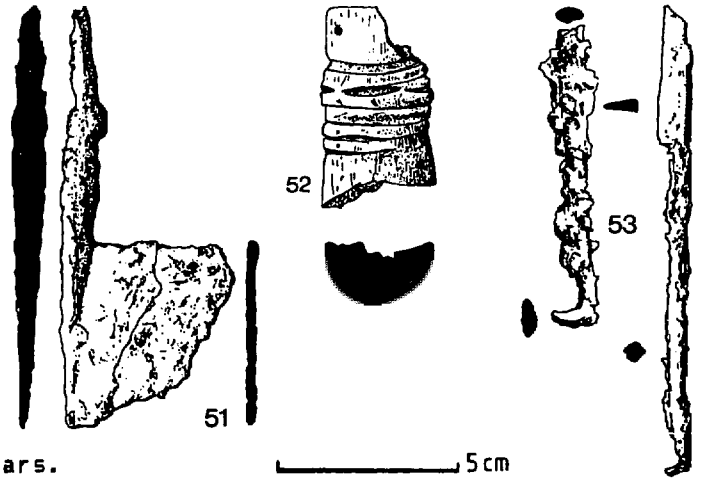
50 From topsoil.
SF 106. Part of knife blade and tang.



51 From L 38, loam spread with 12th century pottery.
SF 72. Iron object. Possibly a cleaver of Roman date (cf Manning 1976, fig 22,134-5; Neal 1974, fig 72,411).

52 From L 164, gully fill.
SF 180. Fragment of a bone cylinder with incised circumferential lines which could be part of a knife handle.

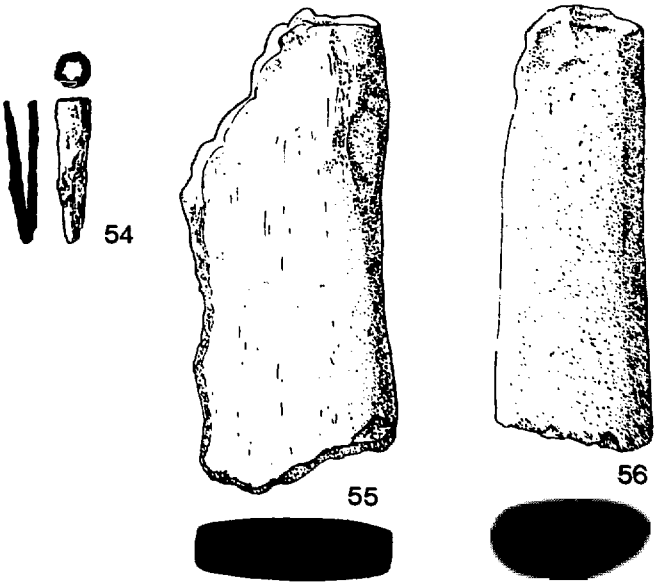
53 From XLV 9, Middle Saxon pit.
SF 35. Fragments of a pair of iron shears.
Not really dateable.



54 From L 18, loam build-up south of Wall 11 with late medieval pottery.
SF 87. Hollow iron point.Possibly a ferrule, or part of a candlestick, but more likely to be an arrowhead (Ward-Perkins *et al* 1940, 65-71, type 5).

55 From topsoil.
SF 81. Fragment of mica schist whetstone.

56 From L 87, 13th century pit.
SF 104. Fragment of whetstone.



KEYS AND BOOT CLEATS

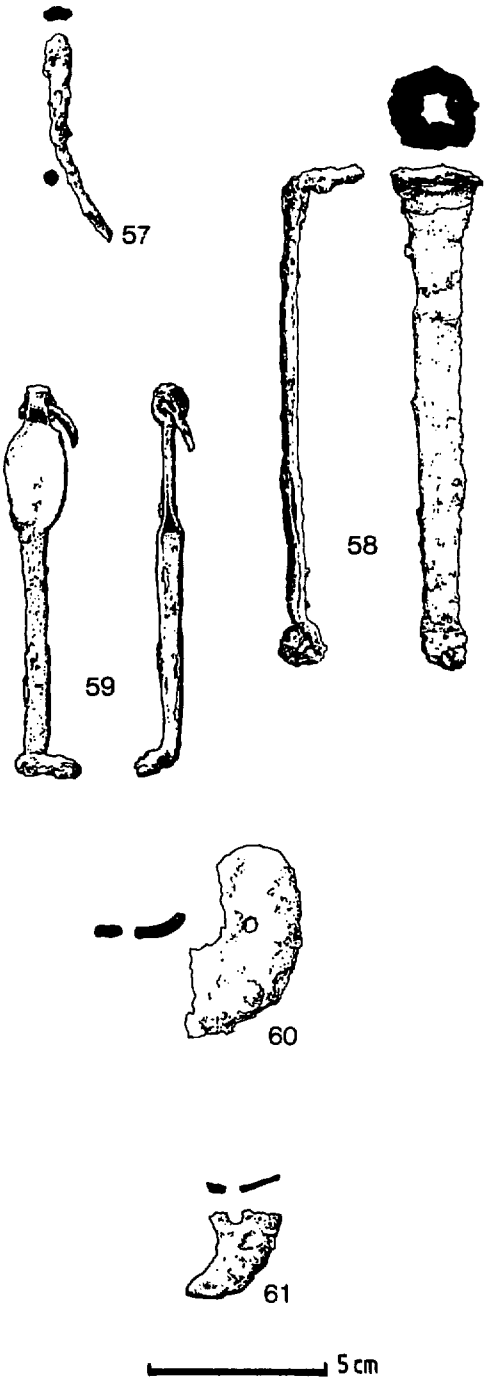
57 From L 166, possible intrusion into Gully 164.
SF 218. Round-sectioned iron object, 60 mm long with one end broadened and flattened. Possibly a spatula. Not dateable.

58 From L 73, undated loam.
SF 208. Iron barrel padlock key. Plain shank, rolled end and bit set laterally. Medieval or Roman.

59 From XLIV 7, with Stamford ware.
SF 48. Iron barrel padlock key. The shank is expanded below the ring end and the rest is rectangular in section; the bit is set laterally and was probably a loop. Probably medieval.

60 From XLV 7, upper fill of Middle Saxon pit.
SF 228. Part of a crescent-shaped iron object with a hole. Perhaps from a boot heel-plate, although rather sharply convex.

61 From L 18, loam build-up south of Wall 11 with late medieval pottery.
SF 82. As 60, but coming to a pointed end; there is part of a hole in the broken end. Perhaps a boot heel-plate.



BUILDING ITEMS

62 From 93, upper fill of Middle Saxon pit. SF 309. Flat-headed nail with a square-sectioned shank. The nails from the site are normally smaller than this.

63 From L 156, gully. SF 307. Iron object with rectangular-sectioned shaft and a flattened head. Probably a T-headed Roman nail.

64 From L 109, upper fill of Middle Saxon pit. SF 117. Iron bar with a rectangular section at one end and a triangular one at the other. Probably a knife, although rather thick.

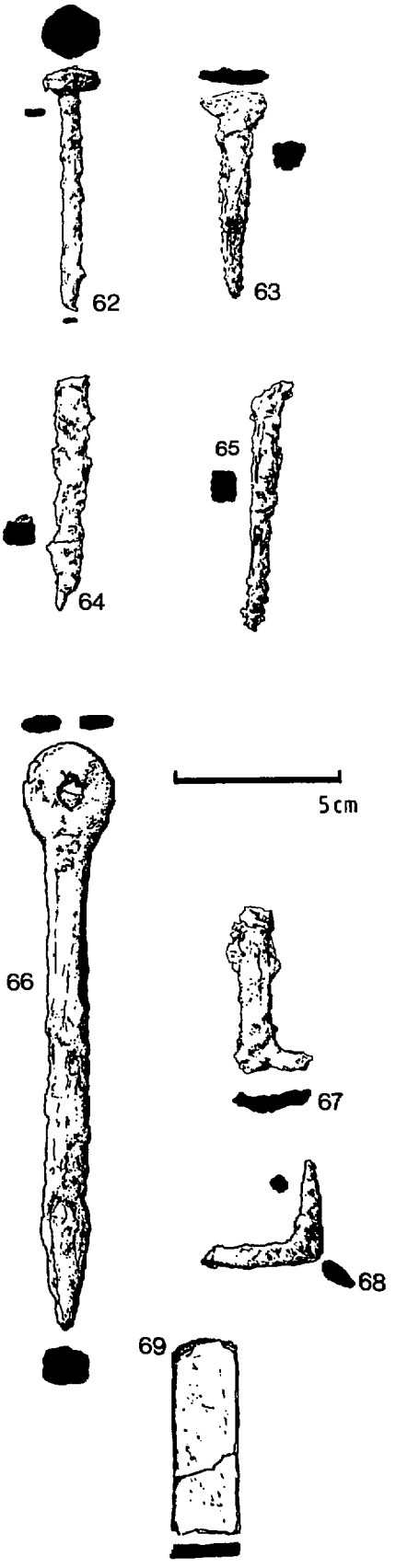
65 From L 67, loam in north-west of trench over Roman surface. SF 291. Iron bar, curving at one end but function not clear.

66 From XLV 10, upper fill of Middle Saxon pit. SF 224. Large iron spike, 174 mm long with a rectangular-sectioned shaft and a broad flattened head with a hole. Its function is unknown, but it may have been set into a wall or post. A similar but smaller example was found on a Roman site at Wangford, West Suffolk (Briscoe 1957-8, fig 5,d).

67 From L 157, gully. SF 156. L-shaped flat-sectioned iron object, probably a pintle.

68 From L 49, loam with early medieval pottery. SF 188. Iron pintle.

69 From L 101, upper fill of Middle Saxon pit. SF 200. Piece of slightly curved iron band, 19 mm long by 3 mm wide. Perhaps part of a bucket binding. The metal shows clear laminations in section.



MISCELLANEOUS

70 From L 189, in Gully 164. SF 274. Probably an iron chain link. Not dateable.

71 From L 47, undated clay bank in north of trench. SF 168. Part of a flat-sectioned iron ring.

72 From topsoil. SF 73. Iron object, 103 mm long, with one end flattened and expanded. Purpose and date obscure, but a similar object was found in the Anglo-Saxon cemetery at Winnal, Hants (Meaney and Hawkes 1970, fig 12, grave 49.2).

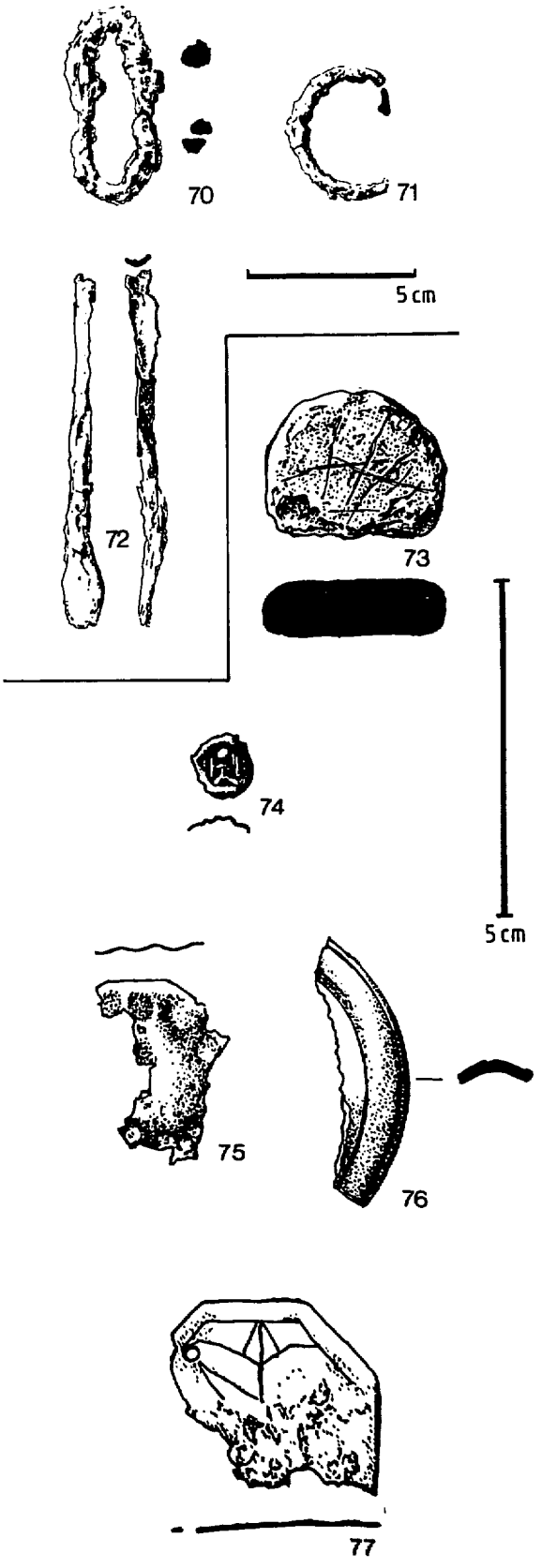
73 From L 73, undated loam. SF 135. Disc of shelly ware pottery. Probably a counter.

74 From L 164, gully. SF 172. Small disc, 10 mm in diameter, of repoussee copper alloy sheet, showing a 'stick' human figure with a short pole in each hand. This resembles figures on Roman coins holding standards as well as the Anglo-Saxon 'Finglesham Man' type of motif (Hawkes *et al* 1965, 17-32), and cannot safely be assigned to either period. The disc was obviously decorative.

75 From L 120, layer of charcoal-flecked loam immediately over the Roman surface. SF 203. Fragments of a sheet copper alloy plate, possibly originally rectangular in shape with remains of a rectangular hole in the centre. It presumably had a decorative function.

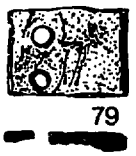
76 From L 18, loam build-up south of Wall 11 with late medieval pottery. SF 60. Part of the rim of a copper alloy vessel, perhaps part of a candlestick. Probably post-medieval.

77 From topsoil. SF 41. Fragments of corroded copper alloy sheet, probably originally an octagonal decorative mount; one rivet hole is visible and there is part of an incised line leaf pattern on one side.

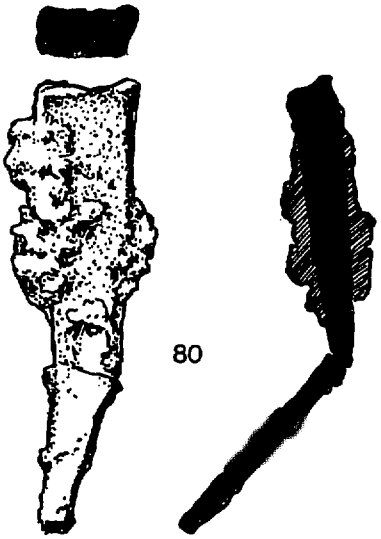


78 From L 50, undated loam.
SF 76. A copper alloy plate formed with two ogee curves and broken at each end. There is part of a hole at the wide end. it resembles part of the lid of a Roman seal-box.

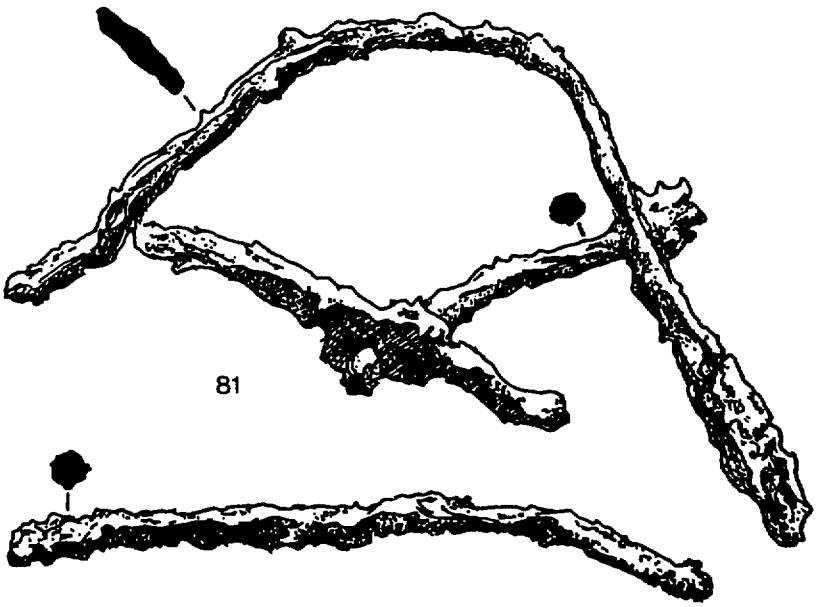
79 From L 135, undated loam over tile scatter.
SF 158. Small rectangular copper alloy plate with two rivet holes at one end, the other having been clipped off.



80 From L 10, 16th/17th century pit.
SF 85. Fragment of iron bar, rectangular section expanding gradually from one end to the other.



81 From L 72, undated loam.
SF 152. Iron object in several parts, consists basically of a flat, curved band pierced by two inter-connecting rods. Probably some kind of spring hinge (cf Frere 1972, fig 66,59).

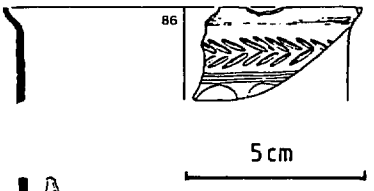


GLASS *by the late Miss Dorothy Charlesworth*

Roman

The glass is in small fragments and much of it is unidentifiable. There are about twice as many fragments of good colourless glass, representing some thirty vessels, as there are of natural green glass. This is unusual.

86 From L 18, medieval loam.
SF 83. Rim of beaker in colourless glass, everted and unworked; below it a double line of narrow diagonal facets forming a wreath decoration, double horizontal line beneath. Rhenish, 3rd century.



87 From L 142, gully cut into Roman floor.
SF 146. Small fragment of a similar vessel.

88 From L 73, undated loam.
SF 165. Small fragment from a similar, or even the same vessel as 86. The diagonal and horizontal cuts match exactly and the slightly different appearance of the two metals may be the result of their different weathering, a dull surface on 86 and an irridescent surface on 88.

89 From L 73, undated loam.
SF 214. Small fragment with part of a facet from a similar or the same vessel.

90 From general cleaning, with 13th century pottery.
SF 160. Fragment with part of a circular facet from a similar vessel.

91 From L 151, undated posthole.
SF 157. Rim fragment of thin colourless glass beaker, everted, unworked rim, two faint cut lines below, flaking irridescence. 2nd to 3rd centuries.

92 From L 142, gully cut into Roman floor.
SF 148. Fragment of thin colourless glass, some irridescence and white enamelly weathering, from a beaker. 2nd to 3rd centuries. Not illustrated.

93 From L 142, gully cut into Roman floor,
SF 147 Fragment of colourless glass with faint cut lines across it, probably from a tall beaker. 2nd century. Possible parallel at Housesteads (Charlesworth 1971, 34-7). Not illustrated.

94 From L 120, loam over Roman floor.
SF 181. Fragment of colourless glass with milky pitting and irridescent weathering, from a bulbous beaker. 2nd to 3rd centuries. No 99 below is possibly from the same vessel.
Not illustrated.

95 From L 164, gully cut into Roman floor and Anglo-Saxon pit. SF 194. Convex fragment of colourless glass with striations and pinhead bubbles. Possibly 4th century, but thicker than the typical later 4th century metals. Three other fragments, SF 191, 192, and 193, may be from the same vessel. Another five, SF 241, 242, 243, 246, and 248, are similar. All from same feature as SF 194. Not illustrated.

96 From L 138, undated posthole.
SF 197. Fragment of the upper part of a reeded handle in colourless glass, small piece of underside of rim attached. Probably from a 3rd century cylindrical flask. Rhenish.
Not illustrated.

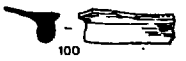
97 From L 73, undated loam.
SF 211. Shoulder and base of neck of a small flask in colourless glass, irridescent. 2nd to 3rd centuries.

98 From L 77, early medieval building 85.
SF 209. Fragment of colourless glass with faint cut lines, irridescent.
3rd to 4th centuries.

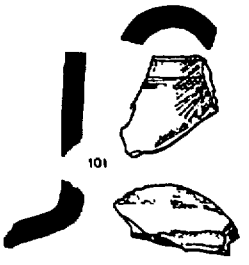
99 From L 121, loam over Roman floor, and XLIV 2, unstratified.
SFs 310, 313, and 314. Three pieces possibly from the same vessel, colourless with some enamelly weathering. No 94 above might be from the same vessel, but has weathered differently.
2nd to 3rd centuries.

5cm

100 From L 182, an undated feature cut into Roman floor.
SF 281.Part of the base ring of a beaker or small flask in good-quality colourless glass, flaking irridescence. 2nd to 3rd centuries.

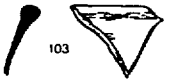


101 From L 164, gully, cut into Roman floor and Anglo-Saxon pit.
SFs 249 and 251. Two fragments of thick colourless glass with flaking irridescence, one the top of a cylindrical neck, knocked off and ground with two areas of faintly cut lines below, base of neck and part of shoulder of bulbous body, tooling mark at base of neck. 3rd to 4th centuries. A flat fragment, SF 242, might be from the base of this vessel.



102 From L 181, Gully 164 cut into Roman floor, and Anglo-Saxon pit.
SF 250. Small fragment of a rim, slightly everted, edge ground, two cut lines below, colourless glass with flaking irridescence.
2nd to 3rd centuries.

103 From L 118, Middle Saxon pit
SF 127. Rounded, thickened rim and part of straight side of a small beaker in colourless glass, irridescent.
2nd to mid-3rd centuries.

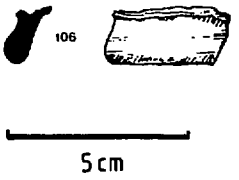


104 From XX 2, unstratified.
SF 14.Fragment of beaker with short pinched-up rib, in colourless glass.
Flaking irridescence. 3rd century.

The remaining pieces are all in a natural green or blue-green glass, the typical bottle glass of c AD 60 to the end of the 2nd century.

105 From Gullies 157 and 164, undated loams and the Middle Saxon pit.
SF 145, 124, 234, 240, 265, 112, 187, and 182.
Fragments from at least three square bottles.
c AD 60-130 (Charlesworth 1966).

106 From L 100, Middle Saxon pit.
SF 119. Fragment of a base-ring, formed by blowing a second bubble below the vessel and pushing it in on itself, faint diagonal tool marks on the outer edge of the ring. Probably from a hollow tubular-rimmed bowl-type, found in contexts c AD 70 to the 4th century, but not necessarily still produced as late as the 4th century.



The recovery of twelve more-or-less cube-shaped glass tesserae, three green and the rest blue, is evidence for a destroyed pavement or wall decoration. The use of coloured glass for detail in pavements, particularly eyes, is well-known and at Aldborough (*Isurium Brigantium*) blue glass tesserae were used for an inscription.

A small quantity of window-glass was also found. The pieces most easily identifiable are those made in a mould which leaves a slightly rough surface on one side of the pane. This is the normal method of manufacture in the 1st and 2nd centuries (SF 286, 284, 100, 174, and 283). Blown window-glass is represented by six fragments (SF 126, 101, 229, 236, 171, and 206). This is generally dated to the 3rd to 4th centuries. The techniques of manufacture have been discussed by D B Harden (1959; 1961) and by G C Boon (1966).

Only one bead was found, a long hexagonal drawn bead in opaque blue glass with 'enamelly' and milky weathering: SF 98, from L 90, surface of the Middle Saxon pit.

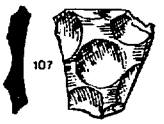
Three pieces of uncertain date appear to be waste from the manufacture of glass: an irregular trail or drip in poor quality colourless glass with black impurities (SF 84, from topsoil) and two chips of bluish opaline glass (SF 105 and 138: one unstratified and the other from L 86, loam over tile scatter).

Early Fifth-century

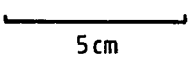
No distinction can easily be drawn between the glass of the late Roman and the early post-Roman periods. The clearest illustration of the continuity of the glass industry comes from graves in the Krefeld-Gellep cemetery. In Britain, 5th century glass is best illustrated on sites in the west at Cadbury Congresbury and Dinas Powys. One glass fragment from Castor shows similar characteristics, *viz* yellowish colour of the thin bubbly metal. SF 177, from L 162, primary fill of Gully 164, cut into Roman floor and Middle Saxon pit.

Post-Roman

107 From L 17, late medieval loam.
SF 88 Fragment of thick colourless glass with circular facets from a small bowl. This seems to be from a vessel similar to Harden *et al* 1968, 106 no 137. The heavy cutting suggests this date rather than a 2nd to 3rd century date, although a possible parallel exists in the Koln museum (Fremersdorf 1967, Tafel 33).



108 From XLV 3, Middle Saxon pit. Missing.
SF 37 Fragment of colourless glass with an opaque yellow trail found in Middle Saxon pit. Little is known of the glass of this period and the type of vessel cannot be determined. Not illustrated

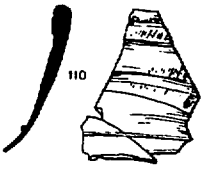


109 From XLV 10, Middle Saxon pit.
SF 36. Rim fragment of a bowl in green glass with an opaque yellow trail. The trail has been applied before the rim was formed, as can be seen under its fold.

Medieval

These are problem pieces as very little is known of the fine quality vessel glass of the 9th to 13th centuries. It seems advisable to assume that they are contemporary with the other material, ie 12th century, but it should be noted that good quality glass was made in the 9th and 10th centuries.

110 From L 38, loam with early medieval pottery.
SF 69. Rim fragment in good quality colourless glass, irridescent, the rim has been finished on a polishing wheel, the lower edge of the fragment has a trail of colourless metal.



111 From L 166, possible intrusion into Gully 164, see M20, cut through Roman floor and Anglo-Saxon pit.
SF 194. Convex fragment of colourless glass, some striations, irridescent. Not illustrated.

112 From L 166, possible intrusion into Gully 164, see above, cut through Roman floor and Middle Saxon pit.
SF 195. Fragment of colourless glass with striations, blown into a fluted mould, irridescent. This piece could possibly be a 16th to 17th century intrusion. Neither Mr R J Charleston nor Dr D B Harden, who kindly examined these three doubtful pieces (110, 111, and 112), felt able to identify this one with confidence to the 9th to 12 centuries.

113 From XLV 11, an early medieval intrusion into the Middle Saxon pit.
SF 44. Small fragment of dark green glass with an opaque white or yellow trail, irridescent.

114 From L 8, late medieval loam.
SF 86. Fragment of a neck with trails in colourless glass.Fifteenth century or later.

ANIMAL BONES FROM CHARLES GREEN'S SITE III, 1958, AND THE ELMLEA EXCAVATION, 1973, WITH SOME NOTES ON SAMPLING DISCREPANCIES ENCOUNTERED

by R T Jones

Introduction

The initial aim of the animal bone project was to study two groups of animal bones recovered from Castor with a view to amalgamating them later to increase the sample size and the report's validity. The smaller group was from C Green's excavation in 1958 and the other from C Dallas' excavation in 1973. It has not proved possible, due to entirely different sampling levels and lack of material, to do this.

Method

The two groups of animal bones were divided into 16 phases by C Dallas. Tables showing the total number of bones for each excavation and for all periods undifferentiated and for C Green's and C Dallas' post-Saxon phases are not published, but are available from The Ancient Monuments Laboratory, Report No 2689.

Bones were recorded using the method outlined by Jones (1978) to which some minor changes had been made. Full use was made of the semi-automatic recording device and comparative bone collections at the Ancient Monuments Laboratory.

The data in the form of punched paper tape was processed using the Honeywell Time Sharing Service and the animal bone processing package of Jones 1978. Two archival oriented catalogues, an amount of statistical information, and an 80-column punched card data dump were produced. The initial input tapes and all forms of output are held for archive purpose at the Ancient Monuments Laboratory, English Heritage (HDMCE).

Results

The following species were identified from the two groups: Cattle (*Bos* sp domestic), Sheep/goat (*Ovis* sp domestic/*Capra* sp domestic), Goat (*Capra* sp domestic), Pig (*Sus* sp domestic), Horse (*Equus* sp), Red Deer (*Cervus elaphus*), Roe Deer (*Capreolus capreolus*), Fallow Deer (*Dama Dama*), Dog (*Canis* sp), Cat (*Felis* sp), Brown Hare (*Lepus capensis*), Goose (*Anser* sp), Domestic Fowl (*Gallus* sp), and Crane (*Grus* sp). The results are tabulated in Tables 1-10 (M39-48) and in two archival catalogues which are not reproduced here. A small number of bone pathologies were found and they are described in detail below.

Discussion

The total number of bones (Table 1) from both sites was 3046 (Castor, Site III numbering 284 and Castor, Elmlea numbering 2762). The Site III assemblage is notable for its absence of fragmentary unidentifiable bone. The bones from this excavation were quite well preserved but unfortunately the numbers of bone elements are extremely low. At Elmlea much more bone was produced including a large amount of fragmentary material, but again the numbers are quite low. The maximum number (Table 1) of measured bones is extremely low for both sites, the highest number of any one bone was 13 Domestic Fowl humeri. A metric study would be statistically invalid. Tables 2-10 show the assemblages from the most important archaeological phases of the sites' histories. At this level the bone counts are much too low to be of any significance and no interpretation can be made of either assemblage.

A point worthy of further mention is the extreme difference between the two samples. Unidentifiable bone can be a good indicator to the post-excavation archaeozoologist of the Level of Sampling on the site. C Dallas' area has a mean percentage of identified bone of $\bar{x} = 50.1\%$, in comparison with Charles Green's area, which is much higher at $\bar{x}$ 99.0%. In actual numbers only one of C Green's phases has any unidentifiable material. Further the quality of the identified bone of Site III seems, from Table 1, to be better than that at Elmlea.

The mean percentage of measurable bone at Site III is x = 29.5%, in contrast with only x = 11.3% at Elmlea. A similar pattern is followed with the three types of butchery and fragmentation, particularly at the 25% level. This situation reflects the changes in sampling procedures that occurred between the two excavations. In the 1950s, only identifiable bones with epiphyses were retained. Subsequent developments in archaeology made it possible to extract useful information from other bone fragments, and material was retained in 1973 that would have been rejected in 1958. Direct comparison of bone from the two excavations is therefore invalid.

Conclusion

All the usual domestic species occur at Castor. Unfortunately, the amount of identified and usable bone is low in comparison with the number of important time divisions of the sites. At these extremely low sample sizes no conclusions can be drawn on the type and effects of husbandry or usage practices and their possible change through time. Equally, the number of wild species is too low for any comment to be made regarding the environmental conditions around the sites. Differential sampling has occurred between these two areas and it is possible that a similar situation will be found to have occurred with other materials recovered from the two sites.

Pathological bones from pre-medieval deposits

SITE III

Roman

A Horse left radius from bag number 178 with a porous exostosis on the posterior aspect of the midshaft.

ELMLEA

Roman

A cattle rib from bag number 115 with pitting on its medial surface.

Saxon

A rib fragment from small artiodactyla from bag number 62 with a porous exostosis on its medial surface.

The upper fill of the Middle Saxon Pit

A Goat right mandible from bag number 100 with a maloccluded fourth premolar with bone resorbtion around its roots.

A Sheep/Goat left radius from bag number 101 with a porous exostosis in the midshaft region.

A small artiodactyla rib fragment from bag number 98 which had a healed fracture.

A pig mandible from bag number 101 on which the canine had an antemortem break.

A Domestic Fowl tibiotarsus from bag number 91 which was porous and pitted at its distal end.

The lower fill of the Middle Saxon Pit

A small artiodactyla rib fracture from bag number 104 which had a healed fracture.

Ditch 164

A Pig left mandible from bag number 75 on which the bone was resorbed around the roots of the third molar.

Table 1.
A COMPARISON OF THE ANIMAL BONES FROM SITE III AND ELMLEA.

	Site III							Elmlea											
	Roman	Saxon	12th Cent	14th Cent	16th Cent	17th Cent	Total A	Roman	Post-Roman	Saxon	Anglo Saxon	11th Cent	16th Cent	Upr Pit	Lwr Pit	Ditches 156	Ditches 164	Unknown Phase	Total B	Total A + B
No. of measured bones	27	17	3	9	6	22	84	18	20	32	9	18	17	92	21	11	38	9	311	395
No. of unmeasured bones	64	34	16	14	9	63	200	112	176	217	86	204	57	469	377	247	426	108	2479	2679
Total no. of bones	91	51	19	23	15	85	284	130	196	249	95	222	74	559	398	258	464	117	2762	3046
% of bones measured/total	29.6	33.3	15.7	39.1	40	25.8	29.5	13.8	10.2	12.8	9.4	8.1	22.9	16.4	5.2	4.2	8.1	7.6	11.3	12.9
No. of chopped bones	3	0	0	2	0	7	12	4	8	9	4	14	1	2	2	0	6	0	50	62
No. of knifecut bones	1	0	0	0	0	0	1	8	4	3	1	2	1	4	2	0	6	0	31	32
No. of sawn bones	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	2	2
No. of pathological bones	1	0	0	0	0	1	2	1	0	1	1	0	0	5	1	0	1	1	11	13
Fragment size (25%	17	5	2	3	0	12	39	66	143	152	62	168	34	275	361	234	348	96	1939	1978
(25%	13	16	3	1	0	22	55	12	9	25	5	33	5	37	5	1	14	3	149	204
(50%	15	3	2	5	2	13	40	18	14	11	8	27	5	59	11	7	23	3	186	226
(75%	5	5	2	1	0	10	23	4	6	8	4	8	1	25	2	0	4	0	62	85
(75%	0	0	0	1	1	0	2	0	0	1	0	3	1	5	0	0	7	1	18	20
(100%	8	7	1	4	6	7	33	8	7	16	5	31	8	56	15	5	20	9	180	213
No. of unidentified bones	5	0	0	0	0	0	5	23	95	96	44	115	28	205	297	211	288	65	1467	1472
% of bones identifiable	94.5	100	100	100	100	100	x=99.0	82.3	51.5	61.4	53.6	48.1	62.1	63.3	25.3	18.2	41.7	44.4	x=50.1	x=67.4
Max. measured elements	2	2	1	2	2	6		2	2	4	2	3	2	13	6	2	3	3		

Table 2.
SITE III, ROMAN PHASE. ANIMAL BONES.

	Cattle	Sheep	Goat	Pig	Horse	Red Deer	Roe Deer	Goose	Fowl	Unknown Species	Total
Skull	3	1	–	–	–	–	–	–	–	–	4
Mandible	2	4	3	–	–	–	–	–	–	–	9
Scapula	5	1	–	4	–	–	2	–	–	–	12
Humerus	–	–	–	–	–	–	–	2	2	–	4
Radius	–	1	–	1	2	–	–	–	–	–	4
Ulna	–	–	–	1	–	–	–	–	–	–	1
Metacarpal	4	2	–	–	2	–	–	–	–	–	8
1st Phalanx	–	–	–	–	–	–	–	–	–	–	–
2nd Phalanx	–	–	–	–	–	–	–	–	–	–	–
3rd Phalanx	–	–	–	–	–	–	–	–	–	–	–
Pelvis	1	–	–	1	1	–	–	–	–	–	3
Femur	–	–	–	–	–	–	–	–	–	–	–
Tibia	–	2	–	–	–	–	–	–	–	–	2
Fibula	–	–	–	–	–	–	–	–	–	–	–
Metatarsal	2	–	–	–	–	–	–	–	–	–	2
Cervical Vert.	2	–	–	–	–	–	–	–	–	–	2
Thoracic Vert.	3	–	–	1	–	–	–	–	–	–	4
Lumbar Vert.	–	–	–	–	–	–	–	–	–	–	–
Sacral Vert.	–	–	–	–	–	–	–	–	–	–	–
Ribs	10	10	–	3	–	–	–	–	–	–	23
Unknown Anatomy	2	1	–	–	–	–	–	–	–	5	8
Calcaneum	–	–	–	2	–	–	–	–	–	–	2
Astragalus	–	–	–	–	–	–	–	–	–	–	–
Antler	–	–	–	–	–	1	–	–	–	–	1
Tibiotarsus	–	–	–	–	–	–	–	–	–	–	–
Carpometacarpus	–	–	–	–	–	–	–	–	–	–	–
Sternum	–	–	–	–	–	–	–	–	2	–	2
Coracoid	–	–	–	–	–	–	–	–	–	–	–
Furcula	–	–	–	–	–	–	–	–	–	–	–
Tarsometatarsus	–	–	–	–	–	–	–	–	–	–	–
Total	34	22	3	13	5	1	2	2	4	5	91

Table 3.
SITE III, SAXON. ANIMAL BONES.

	Cattle	Sheep	Pig	Horse	Fowl	Crane	Total
Skull	1	-	-	-	-	-	1
Mandible	-	-	-	-	-	-	-
Scapula	1	-	-	-	-	-	1
Humerus	-	-	1	-	2	-	3
Radius	-	-	-	2	-	-	2
Ulna	-	-	-	-	2	-	2
Metacarpal	2	-	-	-	-	-	2
1st Phalanx	2	-	-	-	-	-	2
2nd Phalanx	-	-	-	-	-	-	-
3rd Phalanx	-	-	-	-	-	-	-
Pelvis	-	-	-	1	-	-	1
Femur	-	3	-	-	-	-	3
Tibia	-	5	2	-	-	-	7
Fibula	2	-	-	-	-	-	2
Metatarsal	-	-	-	-	-	-	-
Cervical Vert.	3	-	-	-	-	-	3
Thoracic Vert.	-	2	-	-	-	-	2
Lumbar Vert.	-	-	-	-	-	-	-
Sacral Vert.	9	3	-	-	-	-	12
Ribs	-	-	-	-	-	-	-
Unknown Anatomy	-	1	-	-	-	-	1
Calcaneum	-	-	-	-	-	-	-
Astragalus	-	-	-	-	-	-	-
Antler	-	-	-	-	-	-	-
Tibiotarsus	-	-	-	-	-	-	-
Carpometacarpus	-	-	-	-	-	4	4
Sternum	-	-	-	-	-	-	-
Coracoid	-	-	-	-	-	-	-
Furcula	-	-	-	-	-	-	-
Tarsometatarsus	-	-	-	-	-	3	3
Total	20	14	3	3	4	7	51

Table 4.
ELMLEA, ROMAN. ANIMAL BONES.

	Cattle	Sheep	Pig	Brown Hare	Fowl	Unknown Species	Total
Skull	1	-	1	-	-	-	2
Mandible	-	-	-	-	-	-	-
Scapula	1	-	1	-	1	-	3
Humerus	-	2	-	2	4	-	8
Radius	2	-	2	-	8	-	12
Ulna	-	-	-	2	-	-	2
Metacarpal	-	-	-	-	-	-	-
1st Phalanx	4	-	-	-	-	-	4
2nd Phalanx	6	-	-	-	-	-	6
3rd Phalanx	-	-	-	-	-	-	-
Pelvis	-	-	-	-	-	-	-
Femur	-	-	-	-	5	-	5
Tibia	-	-	-	-	-	-	-
Fibula	-	-	-	-	-	-	-
Metatarsal	-	-	-	-	-	-	-
Cervical Vert.	4	-	-	-	-	-	4
Thoracic Vert.	3	1	-	-	-	-	4
Lumbar Vert.	-	-	-	-	-	-	-
Sacral Vert.	-	-	-	-	-	-	-
Ribs	19	14	-	-	-	-	33
Unknown Anatomy	10	-	-	-	-	23	33
Calcaneum	-	-	-	-	-	-	-
Astragalus	-	-	-	-	-	-	-
Antler	-	-	-	-	-	-	-
Tibiotarsus	-	-	-	-	5	-	5
Carpometacarpus	-	-	-	-	3	-	3
Sternum	-	-	-	-	2	-	2
Coracoid	-	-	-	-	-	-	-
Furcula	-	-	-	-	-	-	-
Tarsometatarsus	-	-	-	-	3	-	3
Total	50	17	4	4	31	23	129

Table 5.
ELMLEA,POST-ROMAN. ANIMAL BONES.

	Cattle	Goat	Sheep	Pig	Horse	Cat	Goose	Fowl	Unknown Species	Total
Skull	4	–	–	2	–	1	–	–	–	7
Mandible	–	–	–	1	–	–	2	–	–	3
Scapula	–	–	2	1	–	–	–	2	–	5
Humerus	2	3	1	2	–	–	–	–	–	8
Radius	–	–	–	–	–	–	–	4	–	4
Ulna	–	–	–	2	–	2	–	2	–	6
Metacarpal	2	–	–	3	–	–	–	–	–	5
1st Phalanx	4	–	–	–	2	–	–	–	–	6
2nd Phalanx	2	–	–	–	–	–	–	–	–	2
3rd Phalanx	–	–	–	–	–	–	–	–	–	–
Pelvis	–	–	–	–	–	–	–	–	–	–
Femur	–	–	–	–	–	–	–	2	–	2
Tibia	1	2	–	–	–	–	–	–	–	3
Fibula	–	–	–	–	–	–	–	–	–	–
Metatarsal	2	–	–	–	–	–	–	–	–	2
Cervical Vert.	–	–	–	–	–	–	–	–	–	–
Thoracic Vert.	2	–	1	–	–	–	–	–	–	3
Lumbar Vert.	–	–	–	–	–	–	–	–	–	–
Sacral Vert.	–	–	–	–	–	–	–	–	–	–
Ribs	28	–	10	–	–	–	–	–	–	38
Unknown Anatomy	–	–	–	–	–	–	–	–	95	95
Calcaneum	2	–	–	–	–	–	–	–	–	2
Astragalus	–	–	–	–	–	–	–	–	–	–
Antler	–	–	–	–	–	–	–	–	–	–
Tibiotarsus	–	–	–	–	–	–	2	–	–	2
Carpometacarpus	–	–	–	–	–	–	–	–	–	–
Sternum	–	–	–	–	–	–	–	–	–	–
Coracoid	–	–	–	–	–	–	–	2	–	2
Furcula	–	–	–	–	–	–	–	–	–	–
Tarsometatarsus	–	–	–	–	–	–	–	1	–	1
Total	49	5	14	11	2	3	4	13	95	196

Table 6.
ELMLEA, SAXON. ANIMAL BONES.

	Cattle	Sheep	Pig	Red Deer	Brown Hare	Dom. Fowl	Unknown Species	Total
Skull	-	-	3	-	-	-	-	3
Mandible	2	4	3	-	-	-	-	9
Scapula	1	-	1	-	-	-	-	2
Humerus	-	1	-	-	-	9	-	10
Radius	-	-	-	-	1	3	-	4
Ulna	-	-	-	-	-	4	-	4
Metacarpal	2	-	-	-	-	-	-	2
1st Phalanx	2	-	6	2	-	-	-	10
2nd Phalanx	4	-	4	-	-	-	-	8
3rd Phalanx	6	-	-	-	-	-	-	6
Pelvis	3	1	-	-	-	-	-	4
Femur	2	4	-	-	-	2	-	8
Tibia	-	2	-	-	-	-	-	2
Fibula	-	-	-	-	-	-	-	-
Metatarsal	3	-	-	-	-	-	-	3
Cervical Vert.	-	-	-	-	-	-	-	-
Thoracic Vert.	4	1	-	-	-	-	-	5
Lumbar Vert.	9	-	-	-	-	-	-	9
Sacral Vert.	-	-	-	-	-	-	-	-
Ribs	35	17	-	-	-	-	-	52
Unknown Anatomy	2	-	-	-	-	-	96	98
Calcaneum	-	-	-	-	-	-	-	-
Astragalus	-	-	-	-	-	-	-	-
Antler	-	-	-	-	-	-	-	-
Tibiotarsus	-	-	-	-	-	1	-	1
Carpometacarpus	-	-	-	-	-	2	-	2
Sternum	-	-	-	-	-	-	-	-
Coracoid	-	-	-	-	-	2	-	2
Furcula	-	-	-	-	-	-	-	-
Tarsometatarsus	-	-	-	-	-	5	-	5
Total	75	30	17	2	1	28	96	249

Table 7.
ELMLEA, UPPER FILL OF MIDDLE SAXON PIT. ANIMAL BONES.

	Cattle	Sheep	Goat	Pig	Horse	Dog	Cat	Goose	Fowl	Unknown Species	Total
Skull	1	3	–	5	–	–	–	–	–	–	9
Mandible	–	6	1	1	–	–	–	2	–	–	10
Scapula	1	2	–	2	–	–	–	3	11	–	19
Humerus	1	3	–	3	–	–	–	18	26	–	51
Radius	1	1	–	–	–	–	–	4	19	–	25
Ulna	–	–	–	1	–	1	1	5	9	–	17
Metacarpal	–	2	–	1	–	–	–	–	–	–	3
1st Phalanx	3	–	–	2	–	–	–	–	–	–	5
2nd Phalanx	2	–	–	–	–	–	–	–	–	–	2
3rd Phalanx	–	–	–	–	–	–	–	–	–	–	–
Pelvis	5	–	–	1	–	–	–	1	6	–	13
Femur	5	3	–	–	–	–	–	4	8	–	20
Tibia	–	3	–	4	–	–	2	–	–	–	9
Fibula	–	–	–	1	–	–	–	–	–	–	1
Metatarsal	2	1	–	1	–	–	–	–	–	–	4
Cervical Vert.	2	1	–	–	2	–	–	–	–	–	5
Thoracic Vert.	–	5	–	–	–	–	–	–	–	–	5
Lumbar Vert.	1	6	–	–	–	–	–	–	–	–	7
Sacral Vert.	–	–	–	–	–	–	–	–	–	–	–
Ribs	17	69	–	–	–	–	–	–	–	–	86
Unknown Anatomy	–	–	–	–	–	–	–	–	–	205	205
Calcaneum	1	4	–	–	–	2	–	–	–	–	7
Astragalus	–	3	–	–	–	–	–	–	–	–	3
Antler	–	–	–	–	–	–	–	–	–	–	–
Tibiotarsus	–	–	–	–	–	–	–	3	15	–	18
Carpometacarpus	–	–	–	–	–	–	–	–	2	–	2
Sternum	–	–	–	–	–	–	–	–	3	–	3
Coracoid	–	–	–	–	–	–	–	3	14	–	17
Furcula	–	–	–	–	–	–	–	–	7	–	7
Tarsometatarsus	–	–	–	–	–	–	–	4	2	–	6
Total	42	112	1	22	2	3	3	47	122	205	559

Table 8.
ELMLEA, LOWER FILL OF MIDDLE SAXON PIT. ANIMAL BONES.

	Cattle	Sheep	Pig	Roe Deer	Cat	Brown Hare	Goose	Fowl	Unknown Species	Total
Skull	2	–	–	–	–	–	–	–	1	3
Mandible	–	–	1	–	–	–	–	–	–	1
Scapula	–	–	2	–	–	2	–	3	–	7
Humerus	–	–	–	–	–	–	–	4	–	4
Radius	1	–	1	–	2	–	1	4	–	9
Ulna	1	–	1	–	–	–	–	1	–	3
Metacarpal	–	–	–	–	–	–	–	–	–	–
1st Phalanx	–	–	–	–	–	–	–	–	–	–
2nd Phalanx	2	–	2	–	–	–	–	–	–	4
3rd Phalanx	4	–	–	–	–	–	–	–	–	4
Pelvis	1	1	–	–	–	–	–	–	–	2
Femur	–	–	–	–	–	–	–	4	–	4
Tibia	–	–	–	–	–	–	–	–	–	–
Fibula	–	–	–	–	–	–	–	–	–	–
Metatarsal	–	–	–	–	–	–	–	–	–	–
Cervical Vert.	2	1	–	–	–	–	–	–	–	3
Thoracic Vert.	5	–	–	–	–	–	–	–	–	5
Lumbar Vert.	–	–	–	–	–	–	–	–	–	–
Sacral Vert.	–	–	–	–	–	–	–	–	–	–
Ribs	15	17	–	–	–	–	–	–	–	32
Unknown Anatomy	–	–	–	–	–	–	–	–	297	297
Calcaneum	–	–	–	–	–	–	–	–	–	–
Astragalus	–	–	–	–	–	–	–	–	–	–
Antler	–	–	–	1	–	–	–	–	–	1
Tibiotarsus	–	–	–	–	–	–	–	12	–	12
Carpometacarpus	–	–	–	–	–	–	–	–	–	–
Sternum	–	–	–	–	–	–	–	–	–	–
Coracoid	–	–	–	–	–	–	1	4	–	5
Furcula	–	–	–	–	–	–	–	–	–	–
Tarsometatarsus	–	–	–	–	–	–	–	2	–	2
Total	33	19	7	1	2	2	2	34	298	398.

Table 9.
ELMLEA, DITCH 156. ANIMAL BONES.

	Cattle	Sheep	Pig	Goose	Fowl	Unknown Species	Total
Skull	-	-	-	-	-	-	-
Mandible	2	-	2	-	-	-	4
Scapula	-	-	-	-	-	-	-
Humerus	1	-	-	-	1	-	2
Radius	-	-	2	-	-	-	2
Ulna	-	-	-	-	-	-	-
Metacarpal	2	-	-	-	-	-	2
1st Phalanx	2	-	-	-	-	-	2
2nd Phalanx	-	-	2	-	-	-	2
3rd Phalanx	-	-	-	-	-	-	-
Pelvis	1	1	-	-	-	-	2
Femur	-	-	-	-	2	-	2
Tibia	-	-	-	-	-	-	-
Fibula	-	-	-	-	-	-	-
Metatarsal	-	-	-	-	-	-	-
Cervical Vert.	-	-	-	-	-	-	-
Thoracic Vert.	-	-	-	-	-	-	-
Lumbar Vert.	-	-	-	-	-	-	-
Sacral Vert.	-	-	-	-	-	-	-
Ribs	15	2	-	-	-	-	17
Unknown Anatomy	-	-	-	-	-	211	211
Calcaneum	2	-	-	-	-	-	2
Astragalus	-	-	-	-	-	-	-
Antler	-	-	-	-	-	-	-
Tibiotarsus	-	-	-	-	4	-	4
Carpometacarpus	-	-	-	2	-	-	2
Sternum	-	-	-	-	-	-	-
Coracoid	-	-	-	-	-	-	-
Furcula	-	-	-	-	2	-	2
Tarsometatarsus	-	-	-	-	2	-	2
Total	25	3	6	2	11	211	258

Table 10.
ELMLEA, DITCH 164. ANIMAL BONES.

	Cattle	Sheep	Pig	Brown Hare	Goose	Fowl	Unknown Species	Total
Skull	1	-	-	-	-	-	-	1
Mandible	1	1	2	-	1	-	-	5
Scapula	4	-	1	-	-	2	-	7
Humerus	-	1	-	-	-	2	-	3
Radius	2	-	-	2	-	-	-	4
Ulna	2	-	2	-	2	9	-	15
Metacarpal	4	-	3	-	-	-	-	7
1st Phalanx	4	2	1	-	-	-	-	7
2nd Phalanx	2	-	-	-	-	-	-	2
3rd Phalanx	2	-	4	-	-	-	-	6
Pelvis	1	-	-	-	-	2	-	3
Femur	6	-	-	-	-	6	-	12
Tibia	-	3	3	-	-	-	-	6
Fibula	-	-	-	-	-	-	-	-
Metatarsal	2	2	1	-	-	-	-	5
Cervical Vert.	1	-	-	-	-	-	-	1
Thoracic Vert.	5	1	-	-	-	-	-	6
Lumbar Vert.	-	1	-	-	-	-	-	1
Sacral Vert.	-	-	-	-	-	-	-	-
Ribs	45	15	-	-	-	-	-	60
Unknown Anatomy	-	-	-	-	-	-	288	288
Calcaneum	2	1	4	-	-	-	-	7
Astragalus	4.	2	2	-	-	-	-	8
Antler	-	-	-	-	-	-	-	-
Tibiotarsus	-	-	-	-	-	2	-	2
Carpometacarpus	-	-	-	-	-	2	-	2
Sternum	-	-	-	-	-	-	-	-
Coracoid	-	-	-	-	-	4	-	4
Furcula	-	-	-	-	-	-	-	-
Tarsometatarsus	-	-	-	-	-	2	-	2
Total	88	29	23	2	3	31	288	464

EXCAVATIONS AT CASTOR

CAMBRIDGESHIRE IN 1957-8 AND 1973

by

Charles and Ida Green,

and Carolyn Dallas with John Peter Wild

FICHE 2
CERAMIC FINDS

CASTOR, SITE III: THE POTTERY

INTRODUCTION

The site was excavated in a series of grid squares using AI, BII, etc as the code, with the layers sequenced afresh in each square. The finds were additionally labelled with specific bag numbers which, being non-repeated, are used in conjunction with unique 'small find numbers' (SF) to provide exact details of individual findspots. Grid square references have been omitted as they have not been used in the main text and are therefore meaningless here.

Finds which are significant for dating are mentioned in the volume-printed text and a selection of Roman and Saxon pottery is shown in TEXT FIGS 9-11 and 14-15. The full range of ceramic evidence is catalogued and discussed below.

All published works to which references are made are cited in full in the printed Bibliography.

ROMAN POTTERY

Samian

Mr G B Dannell has contributed the following note on the decorated vessel from Pit 1, Bag 219, and joining sherd in Bag 130, Pit 6 (TEXT FIG 9):

1 Form 37. In the style of potter X-5. The ovolo is double-bordered with a central tongue of five beads which angles from the left into a five-pointed rosette. The top point is cut by the lowest bead, which has a triangular shape. Most of the detail appears in Stanfield and Simpson (1958): compare pl 67.1 for the astragalus, demi-medallion and striated rods; the arcade column is no 5 and the lozenge, as a leaf-tip, no 12; the portrait bust is similar to the large one, no 11. A similar compound ornament occurs on an X-5 style bowl from Caerhun (Baillie Reynolds 1931, 263, fig 8.S125). c AD125-145, Lezoux.

There was one stamped sherd from the site (not illustrated). Mr B R Hartley has kindly commented on this sherd from Layer 3, Bag 27. SF 29:

Form 33. Stamped MARTIANIM by Martianus of Lezoux. His work is distinctly rare, only three other examples of this particular stamp being known, all on cups of Form 33 from London. Other stamps are recorded at Lezoux however. There is no means of dating him closely within the Antonine period.

Mortaria by K F Hartley
TEXT FIG 10

2 From top of Pit 1. Bag 152.
A mortarium in drab cream fabric containing tiny gritty particles, with a yellowish brown slip which is almost a colour coat. There is very little trituration grit but this includes sandstone and opaque and quartz-like material. The potter's stamp reads FECIT/VIATOR in two lines. As is usual with this stamp, the top and middle bars of the E are not clear and there is an extraneous diagonal stroke between F and E. Stamps from the same die are now known from Bourne, Lincs; Castleford; Castor (2); and Water Newton. The fabric and the distribution associated with this die point to manufacture in the Castor region of the lower Nene Valley. There were at least nine, probably ten, other dies used on mortaria which give the name Viator in some form and they present considerable difficulty. It is possible that more than one potter with this common name is involved since there are something like seven different fabrics used. But some characteristics which occur in many of the stamps, namely the use of FECIT in full in the lower line of the stamp and a distinct tendency to use forked serifs, suggest that many could be the work of one man as both of these characteristics are very rare indeed. If this is so, he clearly moved about the country a lot and at some time worked in the north of England.
Such dating evidence as exists for all the dies is consistent with most, if not all, being used within the period c AD 100-40. This is true for the three other dies which give FECIT in full as in the Castor stamp. Stamps from these dies have been noted from the Hambleden Villa, Bucks, Lancaster and Ribchester, and Bainbridge and Ilkley. Samian evidence indicates that the forts at Ilkley and Bainbridge were unoccupied in the period c AD 120-60. The Castor Viator's work is certainly not likely to be later than AD 160 and could fit well with a date of c AD110-45. Whatever the precise details of this man's career, it seems that he worked during this period.

3 From loan under ash in Pit 1. Bag 220
An unstamped mortarium in similar fabric to the preceding item. The fabric and form of this mortarium are consistent with manufacture in the lower Nene Valley. The rim form can be matched by some used by Conrilus and Cunoarda who both worked there. A stamp of Cunoarda is recorded from South Shields, a site founded in AD 125. This rim profile would certainly be consistent with a date in the Trajanic-Hadrianic period.

4 From Layer 3. Bag 68
Mortarium in buff fabric with light orange surfaces. A local 3rd or 4th century product. (Not seen by Mrs Hartley)

Other Roman pottery *by* C G Dallas

The pottery has been divided into stratified and unstratified material, being considered firstly for its context and secondly for intrinsic interest. The only material from the site which falls completely into the first group are the sherds from Pit 1 and from Ditch I: the rims from these features have been presented virtually *in toto* as groups.

TEXT FIG 10, 5-8 are all of the rims from Ditch I where it was sealed by the Roman building. Catalogue nos 53-6, also seem to be from Ditch I at its northern end, but have been dealt with separately as their attribution is not certain and they are not sealed by the building.

Pit 1 represents an interesting group of mid-2nd century pottery with some earlier sherds. Catalogue nos 9-15 below, with no 2 above, are upper fill, nos 3 and 16-30 are from the middle of the pit, and 31-42 are from the lower layers (TEXT FIGS 10 and 11). However, as sherds from the top join those from the bottom, this is a somewhat academic arrangement. These coarse wares are tied to the samian in the pit, the latest of which is mid-2nd century AD (TEXT FIG 9 no 1 above) The absence of local mid-2nd century products, other than a small colour-coated sherd on the surface, provides a good *terminus ante quem*: it is most unfortunate that this feature is not relatable to the building.

The rest of the Roman pottery from Site III also does little to provide a date for the building. It can be divided into three groups:

(i) Material from the rubble over the building. The intense later activity and robbing made Mr Green hesitate to assign layers to the lifetime of the building, as levels which were definitely undisturbed could not be ascertained. The material from exposing the building is represented by nos 43-52, but some of these bags(as indicated in the commentary) contain post-Roman sherds and no contexts can thus safely be treated as Roman;

(ii) Material from apparently undisturbed Roman ground surfaces outside the building, eg 57-61. However, these are not stratigraphically tied in with the building and therefore cannot be used to date it. As both early and late Roman occupation is known on the hillside even negative arguments cannot be used here - that is, a Roman ground surface need not be necessarily be contemporary with this particular building;

(iii) Sherds illustrated for their own sake although they are residual in later features. Pit 6 of Middle Saxon date contained much material similar to that from Pit 1, and seems to have disturbed Pit 1 when dug. Unusual sherds have also been illustrated, eg 68, 69, 71 and also a few rims which are typical of the collection as a whole.

In considering the Roman pottery from Site III as a whole, several points are noticeable.

Firstly, the general character of the collection suggests a wealthy or refined living standard nearby. Tablewares abound, especially bowls, dishes and beakers, and although there are 'cooking pots' present (including many lids) storage jars are very rare. This is noticeably different from, for example, the assemblages from rural farmsteads and argues a presence in the area of settlements comparable to town life.

Secondly, there is a surprising lack of local later 2nd to early 3rd century products, such as the colour-coated 'hunt cups', and it is difficult to judge whether this in fact represents the date of the building's use, or abandonment at this period. More than half of the samian from the site is Antonine. The pottery otherwise thinly spans the period from the late 1st to the later 4th centuries. The excavations on the north wing of the major Roman building-range under the village indicates that this is later, at least in part, than the Site III bath- building and it is possible that the site was open space in the 4th century as sherds of this date, while present, are few in number. The high percentage of material dateable to the first half of the 2nd century AD suggests that this is the period of greatest activity on the site.

CATALOGUE

TEXT FIG 10

Ditch I

5 From filling of Ditch I under south end of Room 3. Bag 238.
Bowl in dark grey sandy fabric. The same type of vessel is classed as a 2nd century type at Bath (Cunliffe 1969, 178, fig 68.1) and a similar form from *Verulamium* (Frere 1972, 289, fig 109.326) is dated AD 85-105.

6 Context as 5.
Jar in orange sandy fabric with dark grey core. Some white inclusions (limestone or fossilized shell) visible. Faint external grooving.

7 Context as 5.
Jar in buff fabric with smoothed surfaces.

8 Context as 5.
Jar in dark grey smooth fabric.

Pit 1

9 From top of Pit 1. Bag 131.
Deep bowl in dark grey sandy fabric. This vessel is rather unusual in shape with its wide base and high shoulder. Related forms dating to the second half of the 1st century have been found at Verulamium (Wheeler & Wheeler 1936, fig 36.74) and Richborough (Bushe-Fox 1932, pl XXXIV.223).

10 Context as 9.
Reeded rim bowl in buff fabric. Late 1st or 2nd century in type.

11 Context as 9.
Bowl in partially reduced grey ware, decorated externally with slanting burnished lines.

12 Context as 9.
Roughcast beaker in buff fabric with dark brown colour coat. Probably imported into the area; if local must be an early example.

13 From upper part of Pit 1. Bags 131, 141, and 142.
Bowl in fine fabric with light orange surfaces and dark grey core. Decorated with rouletted bands between cordons. Early Roman with Belgic influence.

TEXT FIG 10

14 From top of Pit 1. Bag 152.
Jar in light grey smooth fabric. Some external burnishing.

15 Context as 14.
Jar in orange-brown shelly ware with some external sooting. Rilling on shoulder.

16 From general pit fill under Bag 131. Bag 132.
Jar in light grey smooth fabric. Decorated externally with three grooves and lines of faint rouletting.

17 Context as 16.
Bowl in black burnished ware with burnished acute latticing.

18 From ash layer under Bag 141. Bag 142.
Small cup with footring in smooth buff fabric with thick internal mica-dusting. Dr K Greene of Newcastle-upon-Tyne University has kindly examined this vessel and knows of no parallels among early Roman fine wares.

19 From central ash layer in Pit 1. Bag 153.
Rolled-rim jar in light grey fabric. Some external burnishing.

20 Context as 19.
Bowl in black burnished ware with acute burnished latticing.

21 From ash layer and Pit 1, bottom. Bags 153 and 144.
Lid in pink sandy fabric with buff core and sooting at edges.

22 Context as 19.
Jar in grey fabric. External broad cross-hatched decoration.

TEXT FIG 11

23 From ash layer in Pit 1. Bag 219.
Lid in buff fabric with some sooting at edges.

24 Context as 23.
White burnished jar.

25 Context as 23.
Jar in light grey, smooth fabric. Decorated with groove, cordon and wavy line. Probably a local product.

26 Context as 23.
Jar in medium grey smooth fabric. Orginally some burnishing.

27 From ash layer and underlying loam in Pit 1. Bags 219 and 220.
Jar in sandy fabric with black surfaces and a varying grey-and-orange core.

28 From loam under ash in Pit 1. Bag 143.
Wide-mouthed jar in medium grey smooth fabric.
Decorated with cordon and wavy line. A local product.

29 From loam under ash in Pit 1. Bag 156.
Ring-necked flagon with prominent top cordon in buff fabric with light pinkish orange exterior. A 2nd century type.

30 Context as 29.
Ring-necked flagon with prominent top cordon in buff fabric with light yellowish pink exterior surface. A 2nd century type.

31 From lower layer of Pit 1. Bag 144.
Storage jar in red shelly ware. A common type in the area. Perhaps a local product.

TEXT FIG 11

32 Context as 31.
Jar in shelly ware with dark red interior, black exterior, and red and black core. Decorated with three incised lines on shoulder.

33 Context as 31.
Ring-necked flagon in buff fabric with pinkish exterior. An early 2nd century type.

34 Context as 31.
Jar in black shelly ware.

35 From top and bottom of Pit 1. Bags 131 and 144.
Reeded-rim bowl in buff fabric. Two pale vertical streaks of light brown slip or paint on exterior, not shown.

36 Context as 31.
Bodysherd of dark grey-brown fine ware. Decorated with lozenge and linear roller-stamping and incised line. Imitation of samian form 30. Kilns making this 'London ware' type of vessel have been found at West Stow (West 1955). Mr West has kindly examined nos 36, 37, and 38 and does not accept them as products of the kilns at West Stow. They are, however, very similar and are likely to be of the same period. The West Stow Kilns are dated to AD 100-120. The type is fairly common in East Anglia and the East Midlands in the early 2nd century.

37 Context as 31.
Bodysherd of fine black ware. Decorated with cordon, groove, rollerstamp, and ring-and-dot stamps. Imitation of samian form 37. West Stow type, but see comments under 36.

38 Context as 31.
Rim and bodysherd of fine black ware. Decorated with grooves, cordon, lozenge stamp, and linear and circular incised lines. Imitation of samian form 37. West Stow type, but see comments under 36.

39 From Pit 1 bottom. Bag 157.
Lid in buff fabric.

40 Context as 39.
Bowl in shelly ware, with black exterior, red and black interior, and black core. Decorated externally with fine rilling.

41 Context as 39.
Small beaker in fine reddish orange fabric with mica-dusted surfaces. Probably early Roman.

42 From primary fill of Pit 1. Bag 221.
Large jug in buff fabric with pinkish orange external surface and rim. An unusual form of large size.

Other Contexts

43 From lower rubble in Room 1. Bag 46.
Indented beaker with reddish brown colour-coat over buff fabric.

44 Probably from cleaning out the north-eastern part of Room 1. Bag 60.
Beaker with light orange colour-coat over buff fabric. Decorated with underslip trailed vertical partitions of clay.

45 Context as 44.
Jar in buff fabric. Decorated cordons and grooves.

46 From flue between Rooms 1 and 2. Bag 247.from Room 2
Dish in medium grey ware with brown stacking mark on rim and upper part of external surface. There is a larger example, not illustrated .

47 From north end of Room 2. Bag 117.
Beaker in buff fabric under dark brown colour-coat with metallic sheen. Decorated with underslip line of barbotine dots. Early in the colour-coated series for the area.

48 Context as 47.
Narrow-necked flagon in pinkish-buff fabric. A later 2nd to early 3rd century type. Not common in the Nene Valley area.

49 From clearing out the ta... north of Room 2. Bag 159.
Beaker in buff fabric with red colour-coat. Late 2nd to early 3rd centuries.

50 Context as 47.
Jar in dark grey sandy fabric with buff core. Decorated with three incised lines on shoulder.
A local product.

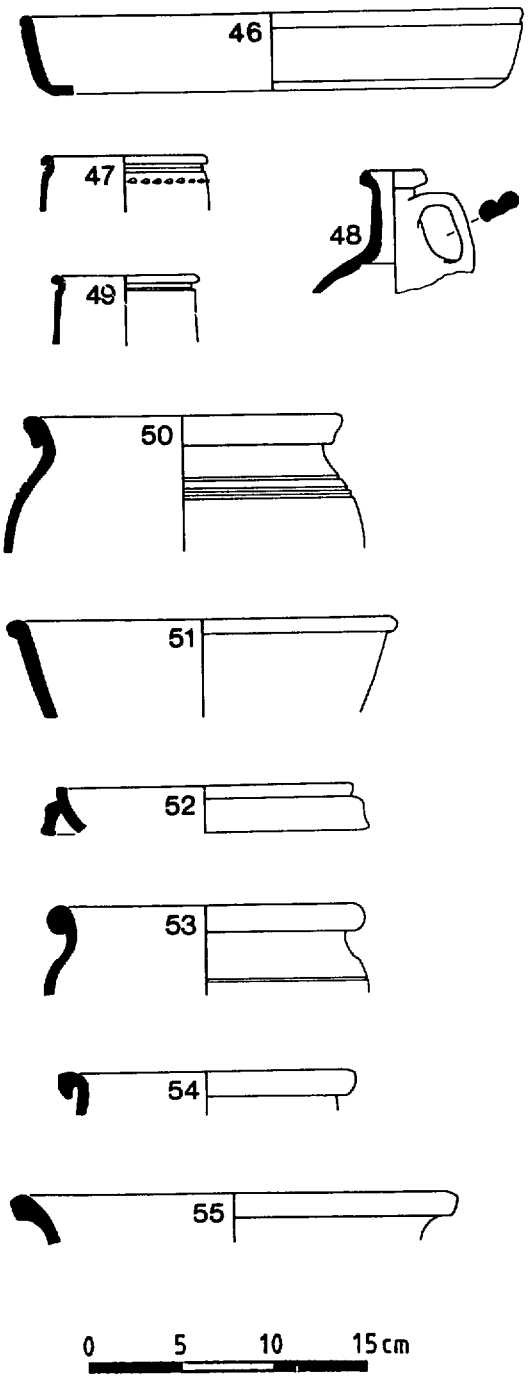
51 Context as 49.
Bowl with grey surfaces and buff core.

52 From over wall on north-west corner of Room 3. Bag 223.
Flanged bowl with dark grey surfaces and buff core, probably originally burnished. Perhaps an imitation of samian form 38.

53 From loam on east side of ditches but cut by them and under Layer 3 - possibly the top of Ditch I. Bag 253.
Rolled-rim jar in sandy fabric. Core and interior light brown, exterior dark grey. Decorated with incised line on shoulder.

54 As 53 in context, but located west of Ditches II and III between the ditches and the Roman building. Bag 246.
Jar in grey sandy ware.

55 Context as 54.
Jar in grey sandy fabric with burnishing on rim and external surface.



56 Context as 54 and 55. Bag 245.
Jar in dark grey shelly ware.
Decorated with two incised
lines on shoulder.

57 From loam and rubble to
south of building. Bag 67.
Jar in black burnished ware.

58 Context as 57.
Bowl with dark grey surfaces and
light grey core. Groove
under rim. Probably an
imitation of samian form 37.

59 From loams outside Roman building
to the north-west, cut by Pit 4
and Hut 1. Bag 147.
Bowl in black and dark reddish
brown shelly ware. Decorated
with two horizontal grooves.

60 From outside the Roman building
to the north-west, under Bag 147.
Bag 160.
Jar in smooth light grey fabric.
Decorated with diagonal burnished
lines. Early 2nd century.

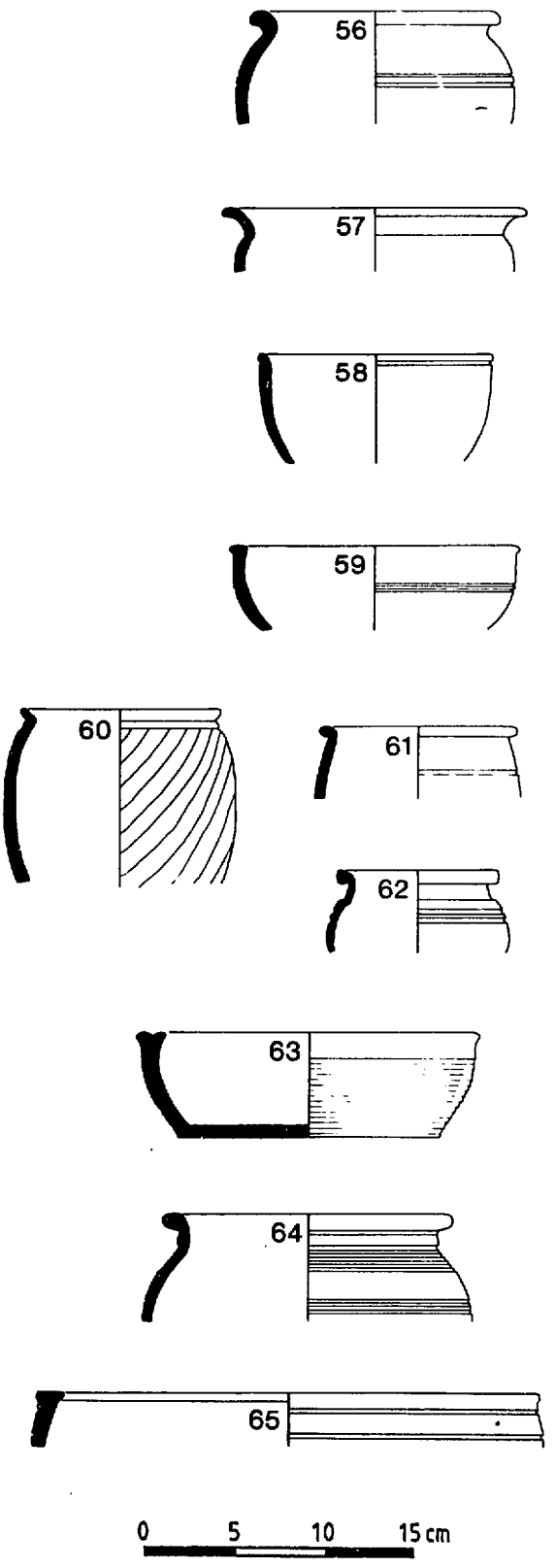
61 From outside Roman building to
the north-west as 59 and 60 but
bag possibly contaminated by Layer 3.
Bag 107.
Jar in light grey smooth fabric.
Decorated with one groove.

62 From Pit 6 of Middle Saxon date.
Bag 130.
Jar in light grey-brown fabric.
Decorated with horizontal lines
on shoulder.

63 Context as 62.
Bowl in mottled red-brown/dark
grey shelly ware with some external
sooting. Decorated with external
rilling. Other examples are known
locally in early 2nd century contexts
(author, unpublished information;
J A Hadman, personal comment).

64 Context as 62.
Jar in light orange-brown fabric
with some fine shell tempering.
Decorated with two groups of
incised horizontal lines.

65 From Pit 6 of Middle Saxon date.
Bag 115.
Bowl or jar in shelly ware with
red surfaces and a dark grey core.
Two incised lines. Probably a
2nd century type.



66 Context as 65.
Lid-seated jar in light pink fabric with some black sooting on rim and exterior. there is some grog present in the tempering. Decorated with fine rilling.

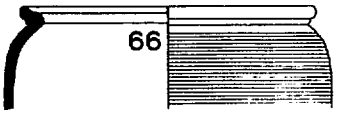
67 From Pit 4 of post medieval date. Bag 133.
Amphora rim, light brown sandy fabric with mica. A similar example at *Verulamium* is dated AD 140-50 (Frere 1972, 267, fig 99.15)

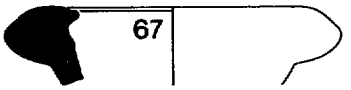
68 From Layer 3. Bag 27.
Bowl in buff fabric with pale red colour-coat. Not a local product but a 1st century imitation of Pompeian red ware. Another example has been found locally at the early Roman site at Longthorpe, (Dr J P Wild, personal comment).

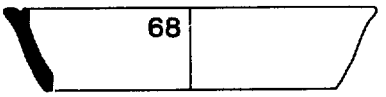
69 Context as 68.
Lid in light orange fabric with dark reddish brown colour-coat. Similar raised examples occurred in late 4th century deposits at Great Casterton in Rutland (Corder 1961, 67, fig 24.k9 and 10). Possibly a local product (Hartley 1972, fig 4.14)

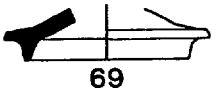
70 From a medieval layer under Layer 3 where it is cut by Ditches II and III. bag 19.
Dish in black burnished ware with vertical burnishing. Sherds of this same vessel were scattered over the Roman building in the rubble and it has been illustrated for this reason.

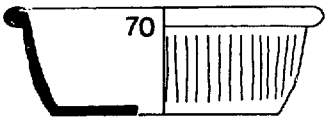
71 From Layer 3. Bag 111.
Fragment of colour-coated flagon in buff fabric with dark red slip-coat. Decorated with irregular white barbotine trailed decoration over slip. The handle is luted on and has been faintly combed at the base under the slip. It is not now determinable whether there was a spout or how many handles this example originally had. Later 4th century.

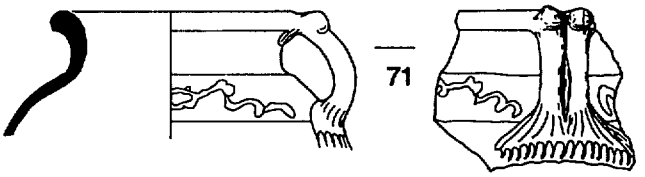


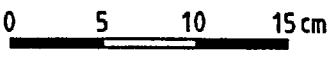












SAXON POTTERY *by* C G Dallas

Introduction

The total of Anglo-Saxon sherds from Site III is 110 with 8 more possible examples. Of this group, 29 (and 2 dubious) sherds are attributable to features and 2 more sherds are the latest pottery in two bags of material from the rubble over the Roman building, but these cannot be put into any meaningful layer sequence. The rest of the Saxon pottery is residual in later layers. Its distribution over the site shows a main scatter in, around, and over Hut 1, and also over the Roman building: there are only two sherds from the western edge of the site.

In discussion, the numerical count treats joining sherds as one, but the term 'sherd' is retained instead of vessel; such dissimilar pieces can belong to the same pot that the number of vessels cannot be worked out sufficiently accurately to be worthwhile for such a small group of material which is mainly residual in character. It is simpler if the reader can assume that the variable is not greater than plus or minus one or two unless otherwise stated: in most instances, one sherd equals one vessel.

The assemblage as a whole is quite varied, and can be divided into four basic groups, as well as stratified and unstratified sherds. These groups are:

i	Ipswich-type ware;
ii	shelly ware of Maxey Group III-type;
iii	grass-tempered wares;
iv	assorted gritty fabrics;

Groups ii -iv are handmade and group i is wheelmade. Each is further discussed below.

The context of the stratified sherds is given in the above table which also shows the distribution of the fabric-groups. Anglo-Saxon pottery is the latest material in Pits 2, 6, and 7, and in Hut 1. The total finds from Pits 2 and 7 seem to be only one sherd each. Pit 2 produced a grey bodysherd, which seems to be Intermediate Ipswich ware, and Pit 7 the sherd illustrated as TEXT FIG 15, 90. Pit 6 produced a total of 87 sherds, of which 76 are early Roman material comparable to Pit 1, 5 are miscellaneous shelly wares, 1 is unassignable, 4 are Anglo-Saxon and 1 is gritty ware, as shown in the table. This pit therefore gives evidence of Ipswich-type ware, Maxey Group III-type ware, grass-tempered pottery and gritty ware, stratified in the same context, although it is not yet possible to determine if any of these sherds are residual. Ipswich-type ware and Maxey Group III-type pottery were also found stratified together in the 1973 'Elmlea' excavations in Castor village, but grass-tempered pottery was lacking except for one small abraded sherd in the topsoil.

Hut 2 seems to have produced no Anglo-Saxon pottery. Hut 1 (represented by Bags 198 and 248 of which Bag 198 may be contaminated) produced a total of 22 Saxon sherds from two bags containing 66 sherds together. One of these is grass-tempered and the rest are gritted wares including sherds with calcareous inclusions (see iv below). Among this material there is a facetted angle sherd in a dark brown sandy fabric about 4 mm thick. This type of vessel occurs in 5th century contexts and suggests early Saxon occupation on the site or nearby. It must, however, be residual in its context as the group from Hut 1 is likely, on grounds of both form and fabric, to be later than 5th century in date. The absence of Ipswich-type ware and Maxey Group III-type pottery from this group may be significant, indicating that the group is earlier than these types, but this cannot be proven. A 7th century date seems most acceptable for this group at present.

Anglo-Saxon Pottery Occurrence

Context	Bag no	out of	i.	ii.	iii.	iv.
Pit 2	239	1/1	1	-	-	-
Pit 6	115	4/37	1	2	-	1
Pit 6	130	1/50	-	-	1	-
Pit 7	118	1/1	-	-	-	1
Hut 1	198	4/37	-	-	1	3
Hut 1	248	18/26	-	-	-	18

Fabric-groups

1. Ipswich-type ware

The presence of this hard, grey wheelmade pottery on the site was noted by Charles Green in 1958 (Dunning *et al* 1959, 18), but in fact none of this group is from the [illegible]s. Of the 20 sherds, 2 are stratified in two different pits (Pits 2 and 6, see above) and the rest are residual. No certain pitchers, or decorated, or burnished sherds exist (but cf TEXT FIG 14, 73) although the latter occur at Elmlea. The Site III material seems to be all small cooking pots.

Ipswich-type ware is difficult to group in detail, as innumerable variables exist as a result of the changing ratio of sand to grit temper and by treating the surface in different ways (Dunning *et al* 1959, 14). Here the description will relate mainly to the appearance in fracture. The site material is divided into three groups following the descriptions used in the 1973 Elmlea excavation report. Of the 16 Site III bodysherds, 5 may be described as fine sandy (fabric 1), and 7 have a harsh pimply fabric (fabric 3); the rest are intermediate (fabric 2). Thus, the fine sandy fabric is less well represented than the other fabrics and there is only one of the thick fine sandy sherds which are such a common type at Ipswich.

Only one base exists in the Castor Site III group, and this is of very dark grey, fine sandy fabric in a well-rounded form. Of the 4 rims in the group, shown as TEXT FIG 14, 72-75, 3 are harsh pimply fabric in a medium grey colour. They are all cooking pots of rim diameter range 150-200 mm. There is one example of West's Group I simple everted, and two of his Group II with internal hollow (West 1962-3, 248). One probable Ipswich-type ware rim, TEXT FIG 14, 73, is fine and sandy and is the only possible pitcher fragment. The Site III Ipswich-type ware sherds range in thickness from 4 mm to 13 mm, with a maximum variation of 6 mm present on the same sherd.

The presence of this distinctive pottery on the site is significant both for the distribution of Ipswich-type ware and for the site itself. When first found, it greatly expanded the area of Ipswich-type ware usage, and it also put the site occupation definitely in the Middle Saxon period, and perhaps onto a high social status.

ii. Maxey Group III-type shelly wares

Ceramic material characterised by quantities of fossilised shell with a noticeable absence of other kinds of inclusion, are directly comparable to Group III wares from Maxey, only 6 miles way (Addyman 1964, 48-50: fabric G). The principal forms consist of flat-bottomed bucket or barrel-shaped vessels with plain or flat-topped rims (TEXT FIG 14, 76-85). The rim diameters of the group range from 200 to 300 mm. The vessels are generally of mottled appearance, with dark red, red, and reddish brown the usual surface colours, often with a darker core. Most pieces occurred as residual material in later contexts, but the stratified association of two sherds with Ipswich-type ware in Pit 6 shows it to have been present at the site in the Middle Saxon period.

iii. Grass-tempered wares

There are eight sherds from Site III which have an organic tempering. All are bodysherds and at least two are from the same vessel. The sherds are invariably in a reduced black fabric, and they range from 60 mm to 110 mm in thickness. Sand and grit is also present in the fabric in varying quantities. This fabric is basically lacking from other sites in the area, except for a single abraded sherd found in topsoil at Elmlea and a few sherds from Tout Hill Close, Peterborough (information from Mr D F Mackreth). Therefore it is not currently possible to assess its position in the local sequence of Anglo-Saxon pottery, beyond noting that it is present on this site in small quantities.

The organic inlusiions in these sherds were most kindly examined by Dr M Hooper of the Monks Wood Experimental Station, Cambs. The results indicate that the particles are chaff.

iv. Gritty fabrics

These can be divided into two basic types

1. those with sand and grit temper, often including quartz or quartzite, which are comparable to Maxey Group I, Fabrics B and F (Addyman 1964, 47). They are usually reduced to a black or brown colour throughout and often have smoothed or burnished surfaces. Both bowls and cooking pot forms exist, with simple upright or slightly everted rims, eg TEXT FIG 15, 89 and 95;

2. those which may have sand or grit in the temper, but also obviously include calcareous or calcite particles. These white inclusions are usually round oolitic particles but can include some visible shell or small limestone pieces which react with dilute hydrochloric acid when tested (cf Peacock 1977, 30). Both bowls and cooking pot forms exist, also with simple rims, but some everted or lugged examples are present, eg. TEXT FIGS 14, 86-88, and 15, 90-94.

For discussion see main text.

CATALOGUE

For explanation of provenance descriptions, see M49.

Ipswich-type Ware

TEXT FIG 14

72 From Layer 2. Bag 34.
Dark grey, fabric 3, West's Group II. Cf West 1962-3, fig 44, Pit 8, Layer 4.2.

73 Context as 72.
May be Late Saxon, but probably Ipswich-type ware. The uneven diameter suggests that the sherd may be coming to a spout. Medium grey, fabric 1. Faint groove on top of rim. West's Group I, type C; numerous examples at Ipswich eg, West 1962-3, fig 52, Pit 17, Layer 4.4.

74 From Layer 2. Bag 58.
Medium grey-brown, fabric 3. West's Group II. Cf 72 above, and West 1962-3, fig 51, Pit 16, Layer 5.7.

75 Context as 74.
Dark grey, fabric 3. West's Group I, type C.

Maxey Group III-type Ware

76 From Pit 6 of Middle Saxon date. Bag 115.
Interior dark red, core and rim part of exterior dark grey, Cf Addyman and Whitwell 1970, 99, fig 2.6.

77 From Layer 3. Bag 28.
Interior sooted, dark grey core, exterior red. The sherd shows a partial edge on the upper part of one edge as indicated in the drawing, but as there is not enough room for a clay bridge over the top this is more likely to be some subsequent use of the sherd and not a suspension hole or lug. Cf Addyman 1964, 57, fig 14.33.

78 From Layer 2. Bag 33.
Dark grey core and red surfaces.

79 From Layer 2. Bag 34.
Interior dark grey, core dark grey and red, exterior dark red. Cf Addyman 1964, 57, fig 14.35.

80 From Layer 2. Bag 58.
Interior black, red, and dark brown, core light grey, exterior light and medium brownish red.

81 From general cleaning over Pits 3 and 5, and Hut 1. Bag 70.
Shelly ware, but with some fine grit visible which is unusual in this class of pottery; interior mottled red and black, core dark grey and red, exterior dark grey. An irregular rim which is possibly rising to a lug.

82 From Pit 10. Bag 177.
Small, badly made sherd, dark grey core, mottled dark grey and brown surfaces.

83 From Layer 3. Bag 56.
Interior and core dark grey, exterior red. Thumb-impressed decoration below the rim. Probably Anglo-Saxon and Maxey Group III-type as this decoration does occur at Maxey and all other characteristics of the pot agree with this dating. Cf Addyman 1964, fig 14.47.

ii. Maxey Group III-type Ware cont.

TEXT FIG 14

84 From Layer 3. Bag 59.
Base of Maxey Group III-type, exterior red, rest dark grey with much blackening and pitting on exterior. Decorated with marks which resemble thumb-impressions, but which appear to have been made when the pot was leather-hard and after the rest of the surface was smoothed. The notches seem to have been cut out of the clay with a tool or fingernail. Other marks, as shown on the drawing, also seem to be deliberately made.

85 From rubble with medieval pottery over the Roman building. Bag 37.
Typical base. Reddish surfaces and dark grey core. Interior surface is beginning to flake away.

Gritty fabrics

86 From Hut 1. Bag 248.
Jar in dark grey fabric with sand and grit temper, some calcite present, fabric 2. Most of interior now missing, exterior dark brown and grey, Burnished horizontally, so producing a smooth leather-like appearance with little or no temper visible. As 87 and 88.

87 From Hut 1. Bag 248.
Rim in dark grey/black sandy fabric with some fine shell, fabric 2. Surfaces wiped smooth. Although plain, slightly everted, rims are common in the Anglo-Saxon period, this small cooking pot with slight internal hollowing is best paralleled in Ipswich-type ware. It is not likely to be earlier than the 7th century, and may be an Ipswich-type ware imitation. As 86 and 88.

88 From Hut 1. Bag 248.
Body and base of cooking pot. Fabric has a black core, the interior is black over a red margin, and the exterior is black and brown and burnished horizontally to give a smooth surface. Tempered with much oolite, shell, and fine sand, fabric 2. Interior pitted where the temper has come out, probably during usage. As 86 and 87.

iv. Gritty Fabrics cont.

TEXT FIG 15

89 From surface of southern part of Hut 1. Bag 198.
Bowl in black fabric with fine sand and grit temper, fabric 1. Surfaces smoothed by horizontal wiping. The fabric is similar to those in 5th century cortexts at Orton Hall Farm, but the form can also be paralleled in Middle Saxon contexts such as Whitby (Peers and Radford 1943, fig 25.17) and Maxey (Addyman 1964, 53, fig 12.12).

90 From Pit 7; this is the only sherd from this pit. Bag 118.
An unusual rim in a fabric resembling pimply Ipswich-type ware with grey and light brown surfaces and a dark grey core. Upon closer inspection, however, the temper is not the quartz sand typical of Ipswich ware but is mainly oolites, fine shell, and sand with some fine grits, fabric 2. Although the vessel could be interpreted as being slightly deeper, it definitely has a small diameter. It may be a small bowl or even a crucible like the vessel from Canterbury, Kent (Frere 1954, 125, fig 12, 116) which has been attributed to a 11th century context. As there are no accretions in the Castor vessel and the fabric is rather soft it seems more likely that it is a lid as shown here, although no Middle Saxon examples are yet known. Lids have occurred on several pagan cemetery sites including those which were in use in the 7th century: eg, Lackford in Suffolk (Lethbridge 1951, 18, fig 15), Baston in Lincs (Myres 1976, 44, fig 10.42), Spong Hill in Norfolk(Carr *et al* 1970-3, 496) and Drayton in Norfolk (Myres 1941, 185-214).

91 From Layer 3. Bag 56.
Bowl or cooking pot in black and dark brown fabric tempered with much sand, oolite, and fine shell, fabric 2. The surfaces are smoothed, the exterior one so that little temper is visible. The interior shows signs that the vessel is coil-made. Related to Whitby types (Peers and Radford 1943, fig 25) and examples also occur at Bulmer Tye in Essex (Blake 1959, 284, fig 99.3), Hanwell in Middlesex (Wheeler 1935, 138, fig 21.7 and 8), and Salmonby in Lincs (Everson 1973, 71.5).

92 From Layer 3. Bag 35.
Cooking pot rim in black fabric with some light brown patches on surface; tempered with much oolite and some shell, fabric 2. Surfaces smoothed. A fairly common form; cf Addyman 1964, 55, fig 13.27.

93 From Layer 3. Bag 35. SF39.
Bodysherd with applied horizontal lug with pierced hole *c* 2 mm in diameter. Fabric dark grey to black with brownish patches on external surface and lug. Temper: sand and grit with some calcite, fabric 2. Surfaces smoothed, with some fine tool-marks visible on exterior. Lugs often occur in pagan cemetery material (Myres 1969, 170, fig 12), but horizontal lugs are very rare. It is unlikely to be Middle Saxon because such lugs are even more unusual in this period.

94 With early medieval material from over Hut 1 area. Bag 73.
Rim of bowl, rising to form a lug. The diameter is not determinable, but is probably about 160 mm. Fabric is dark grey to brown, tempered with sand, grit, oolite and some fine shell, fabric 2. Surfaces smoothed. For bowls with raised lugs, see shelly ware examples in Lincs (Addyman and Whitwell 1970, 99, fig 2, especially 15).

95 From Pit 4 of post medieval date. Bag 121.
Miniature vessel in black gritty fabric, fabric 1. Although these very small vessels, usually called thumb-pots, occur in Early Saxon contexts their real purpose is not clear.

SAXO-NORMAN AND MEDIEVAL POTTERY *by* C G Dallas

A selection of medieval pottery from Site III is illustrated in M65-9. The collection is overall somewhat disappointing, as the pit groups are small and comprise mainly bodysherds. In addition to the shelly wares which occur in quantity in the Peterborough area, the products of potteries at Stamford, Lyveden-Stanion, Grimston, and Bourne are at present recognisable.

There are less than half a dozen pits on Site III which are medieval in date. Of these, Pit 3 contained the most pottery - a total of 25 sherds, of which 11 are definitely medieval. The latest of these sherds seem to be Lyveden-Stanion ware of the 13th and 14th centuries. Only five sherds are now extant from Pit 5, as a bag apparently containing some Lyveden ware is now missing. The remaining sherds include St Neots-type ware and a sparse glaze fragment, which, resembling the Nottingham area material, is likely to be about 14th century in date. Pit 8 cuts Anglo-Saxon Pit 7 and, although it only contains three sherds, one of these is Lyveden-type ware. The Pit 10 complex may also date from this period. The material from Pit 10a is now missing but, according to the site notebooks, it was Roman only. Pit 10b has produced one sherd of early medieval shelly ware. Pit 10 itself contained six sherds of which one is Lyveden-type ware and another is Bourne Fabric B which gives the pit an approximately 14th century date.

Until the much larger stratified groups of medieval pottery from recent excavations in Peterborough have been processed, a small quantity of material such as that from Castor can only make a very minor contribution to the ceramic studies of the area. The datings offered in this report are therefore tentative, and unless stated otherwise the terms 'early' and 'late' refer to half centuries.

A few comments may, however, be made about the material from Castor village which will doubtless apply to the sequence in Peterborough itself. In the early medieval period, that is *c* 1050-1250, the ceramic scene is dominated by shelly wares of St Neots-type, and Stamford wares. These seem to be gradually superseded during the 13th century by green-glazed wares including full medieval decorated jugs, of which the Lyveden area in Northamptonshire seems to have been a main supplier (cf Steane 1967; Bryant *et al* 1969; Bryant and Steane 1971). The Bourne products which are being studied by Miss R H Healey (1969) in South Lincolnshire seem present throughout the period, and increase considerably on the site at least in the early post-medieval centuries (see M71). The quality of the Castor medieval assemblage is not high, nor does it seem to be wide-ranging in origins, and the village context doubtless accounts for this.

The material is divided into four groups:

(i) Saxo-Norman

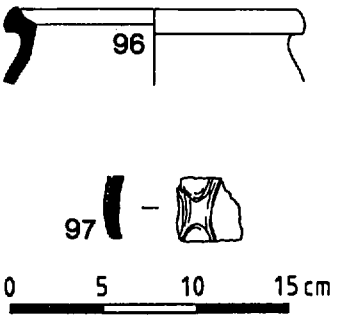
Late Saxon material is represented by a few sherds in grey sandy fabric of Thetford-type (Hurst 1957). All are residual in later layers, and no features of this date were excavated. So far, virtually no pottery of this period has been found in excavations in Peterborough but these sandy fabrics are perhaps to be expected. The rim and bodysherd illustrated have been included with the medieval pottery as they may post-date the Norman Conquest: compare with the Stamford ware rims for form.

CATALOGUE

(see M49 for explanation of provenance details)

96 Bag 19 , with medieval pottery. Thetford-type ware rim. Dark grey, sandy fabric with light grey core and dark grey surfaces.

97 From Layer 3. Bag 68. Bodysherd with wide, thumb-impressed, applied strip. Medium grey, sandy fabric with slightly lighter core.



(ii) St Neots-type Ware

The origin of these shelly wares is not known, but they are likely to be highly local as:

(a) similar fabrics occur in the Peterborough region at all archaeological periods and fossilised shell is present both in local clays and local limestones; and

(b)the Peterborough material does not match closely with similar wares from Lincolnshire, South Huntingdonshire or Northamptonshire.

The term St Neots-type ware has been retained here, however, as the pottery belongs to this style and date range (Hurst 1956).

The local wares are mainly represented by cooking pots of diameters varying from 160 mm to 300 mm with everted rims of several types. One or two inturned bowl fragments exist from Castor, but no large shallow dishes, and any bowl forms are of the deeper 'developed' variety. Jugs with strap handles are also present late in the series. Decoration is very rare. The date-range is not determinable from this small group, but no obviously pre-Conquest sherds are present. The jugs seem to co-exist with the glazed Lyveden-types, but are probably ousted by the latter by the beginning of the 14th century.

The local fabrics are usually firm but not soft or soapy to the touch. The amount of white inclusions is usually quite high, but the fabric is less shell-filled than the North Lincolnshire types and it resembles fabrics in the Huntingdonshire area far more closely. Many of the local sherds have had the temper burnt out, leaving a light harsh fabric. Surface colouring is usually red or a reddish brown, although some dark brown or purplish sherds do exist. There is nearly always a dark grey core and all the illustrated sherds have this and red surfaces unless stated otherwise.

CATALOGUE

98 From Pit 4 of post-medieval date. Bag 205
Rim. Temper burnt out.

99 From Layer 3. Bag 96.
Rim

100 From Layer 2. Bag 18.
Rim.

101 From rubble in Room 2.
Bag 49.
Rim.

102 From Layer 2. Bag 58.
Rim.

103 From Layer 2. Bag 33.
Rim.

104 From Ditch III of post-medieval date. Bag 20.
Rim. Lip is inturned with finger-tip impressions on the inside edge.

105 From Layer 2. Bag 27.
Rim.

106 Context as 105.
Rim.

107 From Layer 3. Bag 56.
Rim.

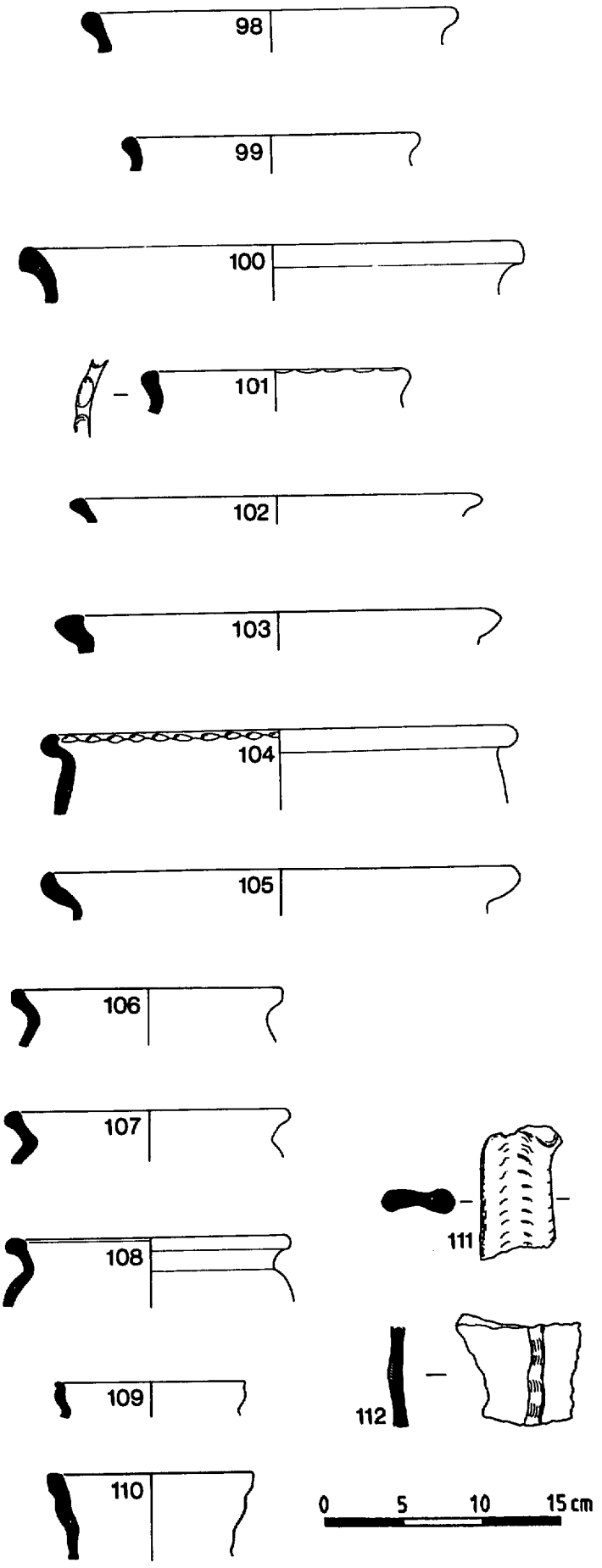
108 From Pit 3, 13th -14th centuries. Bag 71.
Rim. Temper burnt out.

109 From Layer 3. Bag 56.
Rim.

110 From Layer 2. Bag 61.
Rim.

111 From Layer 3. Bag 28.
Handle. Surfaces red, dark grey core as other sherds.

112 From Layer 2. Bag 92.
Bodysherd decorated with applied strip with thumb-impressions. The fabric is different from the above sherds as the temper has much smaller and finer inclusions and the fabric is harder. Dark grey core and interior, grey-brown exterior. May be Bourne Fabric C or a Lyveden product.



(iii) Stamford Ware

This, as might be expected, is extremely common in the Peterborough area. The forms represented on the Castor site are cooking pots, bowls, or pitchers. Thirteenth century developed Stamford ware is present as well as earlier varieties. Several different fabrics are represented, and it is noticeable that the Castor assemblage contains a high percentage of unglazed sherds. Except for a glazed pitcher with multiple strap handles from Site II (not illustrated) the material is not of a high quality. As most of the sherds are unstratified, there is no need for a detailed discussion here and readers are referred to J G Hurst's article (1958) for general comments. All of the sherds illustrated are unglazed, except for nos 128, 131 and 132.

CATALOGUE

113 From Layer 2. Bag 186
Rim in pinkish red surfaces.
Dark grey core with buff margins.

114 From Layer 1. Bag 16.
Buff throughout.
Black streak on rim.

115 From Layer 3. Bag 27.
Rim. Light grey core.
Buff margins. Light brown or grey surfaces, some external sooting.

116 From Layer 2. 195.
Buff core with dark pink interior. Rim black.
Exterior dark pink and black.

117 From Layer 2. Bag 44.
Buff fabric with some black on rim.

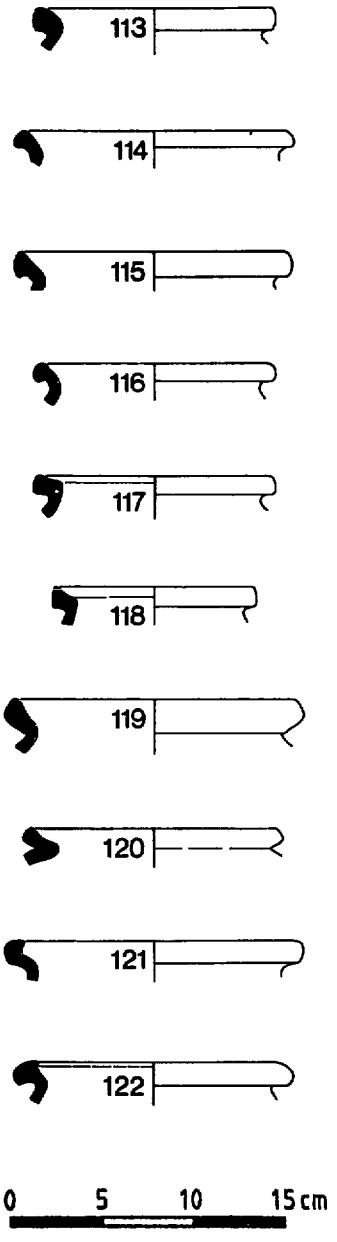
118 From Layer 2. Bag 34.
Buff core, interior pink, rim and exterior black.

119 From Layer 3. Bag 56.
Rim with dark grey core, light brown surfaces.

120 From Layer 3. Bag 27.
Rim with dark grey core.
Surfaces, light grey/buff with black patches.

121 From Layer 2. Bag 58.
Rim with light grey core and buff surfaces.

122 From Layer 2. Bag 25.
Rim. Buff throughout.



123 From Layer 2. Bag 34.
Rim with buff core and pink surfaces.

124 From Layer 3. Bag 56.
Buff with some black on rim.
Diameter not certain.

125 From Layer 2. Bag 61.
Rim with dark grey core and grey surfaces, ie fully reduced.

126 From Layer 2. Bag 58.
Medium grey core, rest buff with bluish tinge in parts.
There is a small blob of clay adhering to the rim and this vessel is perhaps a 'second'.

127 From Layer 3. Bag 68.
Flat-topped rim with rouletting.
Dark grey core at rim, otherwise buff throughout.

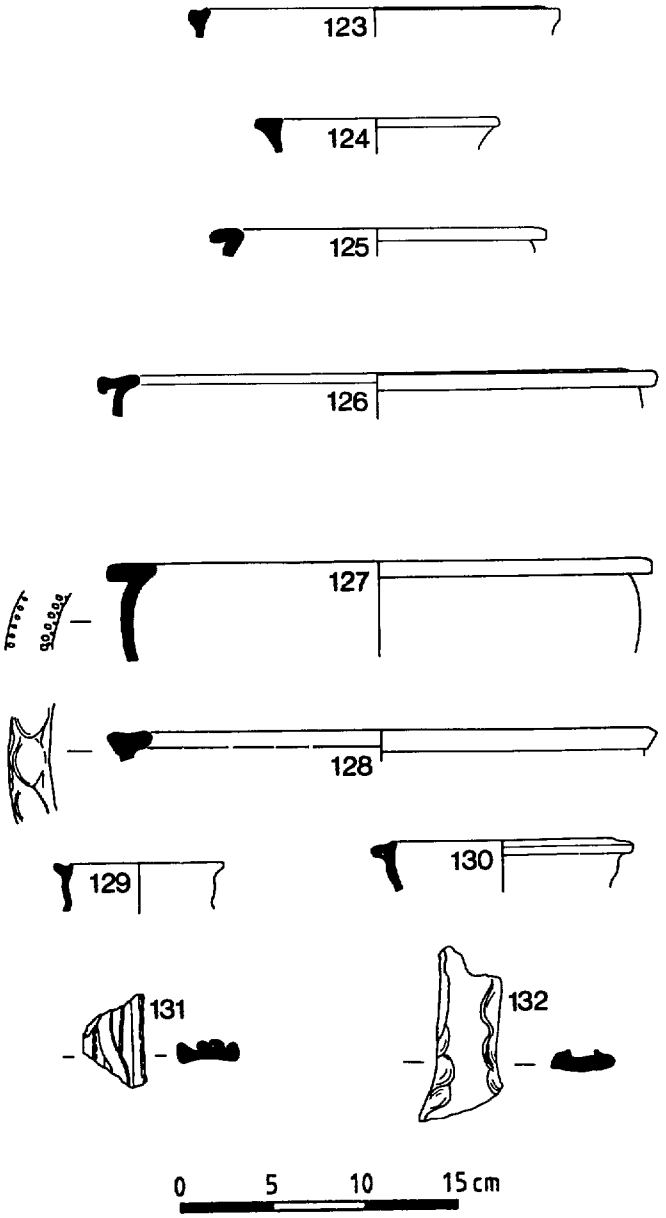
128 From Ditch III of post-medieval date. Bag 20.
Inturned bowl with thumbed decoration on rim. Buff fabric, blue glaze with yellow spots.

129 From Layer 3. Bag 127.
Buff-yellow fabric with some black on rim.

130 Modern topsoil. Bag 26.
Rim. White-buff fabric.

131 From Pit 11, Layer 4 of post- medieval date. Bag 163.
Handle with two plaited bands in longitudinal hollow. Buff fabric with yellow glaze with green spots. Of 12th century type.

132 From Pit 11, Layer 8 of post-medieval date. Bag 174.
Handle with thumbed decoration along edges. Buff fabric with yellow surface and sparse green glaze.

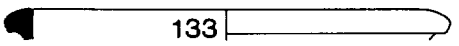


(iv) Other Medieval Sherds.

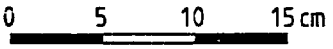
As mentioned previously (M64), this covers a variety of wares from the period c 1250-1500 which are mainly green-glazed. On this site, 14th to 15th century pottery seems less abundant than the earlier medieval wares, but there is no reason to think that occupation was not continuous, especially as several pits fall into this date bracket. Only nine sherds have been illustrated and they cannot all be allocated to a kiln source or area.

CATALOGUE

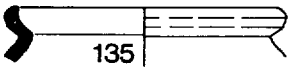
133 From Layer 3. Bag 27.
Rim, possibly of Stamford ware. Sandy fabric with dark grey core, buff margins and dark grey surfaces. A Saxo-Norman type of vessel.



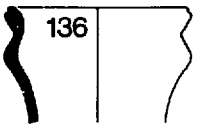
134 From Layer 3. Bag 111.
Bodysherd decorated with applied strip with finger-impressions. Sandy fabric, core dark grey, interior pink, exterior dark grey over pink margin. Early medieval.



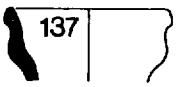
135 From Layer 3. Bag 27.
Cooking pot rim in a harsh sandy fabric with sand and calcite temper including visible stone fragments. Dark grey core and orange surfaces.



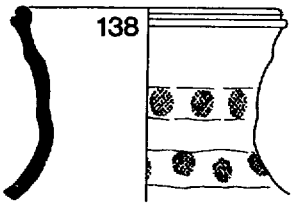
136 From Ditch III of post-medieval date. Bag 234.
Lyveden-type ware jug. Dark grey core. Interior orange with green glaze splashes. Exterior green glaze pattern in two colours below cordon with some green glaze on rim.



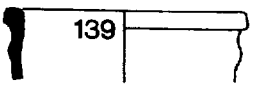
137 From modern topsoil. Bag 40.
Rim of Lyveden-type ware jug. Fabric colours as 136 with sparse green glaze on exterior in two colours but now damaged.



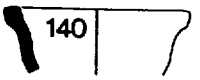
138 From Layer 2. Bag 195
Lyveden-type ware jug. Fabric as 136. Exterior dark green glaze with bands of yellow glaze with round stamps bearing criss-cross pattern.



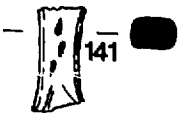
139 From Layer 3. Bag 28
Rim of jug. Sandy fabric. Dark grey core and orange surfaces. Sparse light green glaze on exterior. Bourne Fabric B, probably 14th century.



140 From Layer 2. Bag 58
Rim of jug. Sandy fabric with occasional calcareous inclusions. Core dark grey, interior light yellowish brown, exterior thick even green glaze. Perhaps a product from Bourn



141 From Layer 3. Bag 28.
Handle. Dark grey sandy fabric, co ! in slightly mottled green glaze with stabbed decoration. Perhaps Grimston ware.



POST-MEDIEVAL POTTERY *by* C G Dallas

The site III pottery includes a high percentage of post-medieval wares of the 16th - 18th centuries, and one pit group is almost entirely of this period, Pit 11 (cf catalogue nos 143-58). A selection of vessel-types is illustrated below. Post-medieval material was produced in the modern topsoil, Layer 1 and also in the 19th century topsoil, Layer 2.

Layer 3 also seems to be post-medieval in date. Charles Green reports (M4) that this layer covered the site but differed in character between its eastern and western parts. The pottery attributed to it also shows a distinct change, especially in the area on the western side of the trench near Pits 9, 10 etc, and 11. Here there is a sudden increase in post-medieval material comparable to that from Pit 11 and a decrease in earlier residual sherds. It seems likely that Pit 11 involved a major disturbance (as the disturbance is not confined only to the area right beside the pit) and was most probably cut through Green's Layer 3. There are, however, some post-medieval sherds in this layer on other parts of the site and its deposition must belong to the 16th or 17th centuries.

Layer 3 sealed the medieval pits, eg Pits 3 and 5, but unfortunately the relationship with Pit 4 is not certain although it seems likely that Pit 4 cut into Layer 3. The material from Pit 4 consists of two pits mixed together (cf M10, Section Q-R), and is not worth a statistical approach: the latest material is 17th century in date (eg rim 142 below) and it is therefore put with this section of the report. Nothing survives from Pit 9 except animal bones.

Although Ditches II and III (which seem to be related) produced no pottery which need be later than the 14th century, they definitely cut into Layer 3 and must be 16th century or later. Ditch II produced 25 sherds (surface cleaning material has been excluded) of which 6 are definitely medieval; and Ditch III produced 74 sherds of which 19 are certainly medieval. The function of these ditches may well have been to form part of a property boundary, but they do not seem to have been used to dispose of contemporary rubbish.

Pit 11, the large feature on the western side of the site, produced a good group of post-medieval pottery. It is noticeable that here there are very few residual sherds from other periods - only 8 out of a total of 65 sherds from this pit. All the post-medieval types mentioned below are present in Pit 11, although the local wares form the majority of the group. The latest sherds in Pit 11 are 18th century in date, but probably not later than the middle of the century (nos 143-58). The pit group is presented by layers, although the latest material is present in the lower layers and no real sequence can be offered. Green notes in his records that Pit 9 produced Tudor and 17th century pottery as well as earlier material. Unfortunately, the sherds can no longer be located and therefore discussed, but the later date conforms with the change mentioned above.

The post-medieval material from Site III can be divided into four basic groups, mainly on fabric distinctions:

1 Stonewares and imported stonewares. Only a few sherds. See nos 158 and 165;

2 Cistercian wares (Le Patourel 1965, 116-19; Brears 1967, 19-22; Woodrow 1971) Both early and developed types are present, but none are in a significant context. Attention should be drawn to an unusual sherd, no 179.

3 Wares with thick, dark brown glazes, including lead and manganese glazes. These include both local and Staffordshire products, as well as 'Midlands Purple'. The forms can include jars, but are normally pancheons with an internal glaze. An 18th century date seems likely for most examples of the pancheons, although their large numbers in the Peterborough area suggest both a wider date range (not yet established) and perhaps a local manufacture. See nos 148 and 170;

4 The products of local country potters in forms which are widespread but which are probably made close at hand. This can be further sub-divided:

a. Products of the Bourne kilns (Healey 1969). Bourne Fabric D, provisionally dated by Miss R H Healey to the 16th and 17th centuries, is present in quantity. It consists of a dense fine-grained fabric, with occasional white inclusions, which is usually orange with a grey core, but some reduced examples are present. Most sherds have a slip-coat or a glaze over a slip. The Castor group includes cooking pots, jugs, and pancheons. See nos 147, 166, 167, and 173;

b. Wares resembling those recently found in an early 17th century kiln at Boston, Lincolnshire (Miss R H Healey, person comment). As these wares are widely distributed over the Lincolnshire and Cambridgeshire area, no kiln source can be postulated for the Castor examples. Various jars, bowls and pancheons are represented in the collection. The fabric is sandy and normally of a red colour. The vessels will be referred to as 'Boston type' in the catalogue for convenience. Cf nos 144, 145, 150, and 152.

There are of course many sherds which do not fit into any of the above categories in detail and for which sources have not yet been found. Moorhouse's East Midlands Late Medieval Reduced Ware (Moorhouse 1973-4) might be expected in the Peterborough area but has not yet been identified.

As with the medieval wares, the post-medieval pottery sequence for the area is best unravelled by a study of the large body of material from the Peterborough town sites. Other than the identification of various types of fabric, the Castor material is too limited in the number and range of its stratified sherds to be of much use. It seems that occupation on or near the site was continuous through the medieval and post-medieval periods, but there is little of significance that can be said about the site once the Roman and Anglo-Saxon phases have passed.

CATALOGUE

(cf comments on M49)

142 From Pit 4, the latest shero from this pit and therefore likely to be in context. Bag 193.
Jar rim in orange fabric with dark and light yellow glaze. Bourne Fabric D; 16th -17th centuries.

Pit 11

143 From Pit 11, Layer 4. Bag 163.
Base in brick-red sandy fabric with purplish surfaces and dark brownish-black glaze. Midlands Purple type.

144 From Pit 11, Layer 6. Bag 172.
Rim of bowl in red and grey sandy fabric with glaze on both surfaces. Boston-type.

145 Context as 144.
Rim of bowl or jar in red sandy fabric with orange-brown glaze on both surfaces. Boston-type.

146 Context as 144.
Rim of jar in red fabric with orange-brown glaze on all surfaces. Boston-type.

147 Context as 144.
Cooking pot rim in orange fabric with grey-brown slip on all surfaces. Bourne Fabric D.

148 From Pit 11, Layer 7. Bag 173.
Pancheon rim in pale orange gritty fabric with internal thick black glaze. Very common local type, especially in the 18th century. Cf 171.

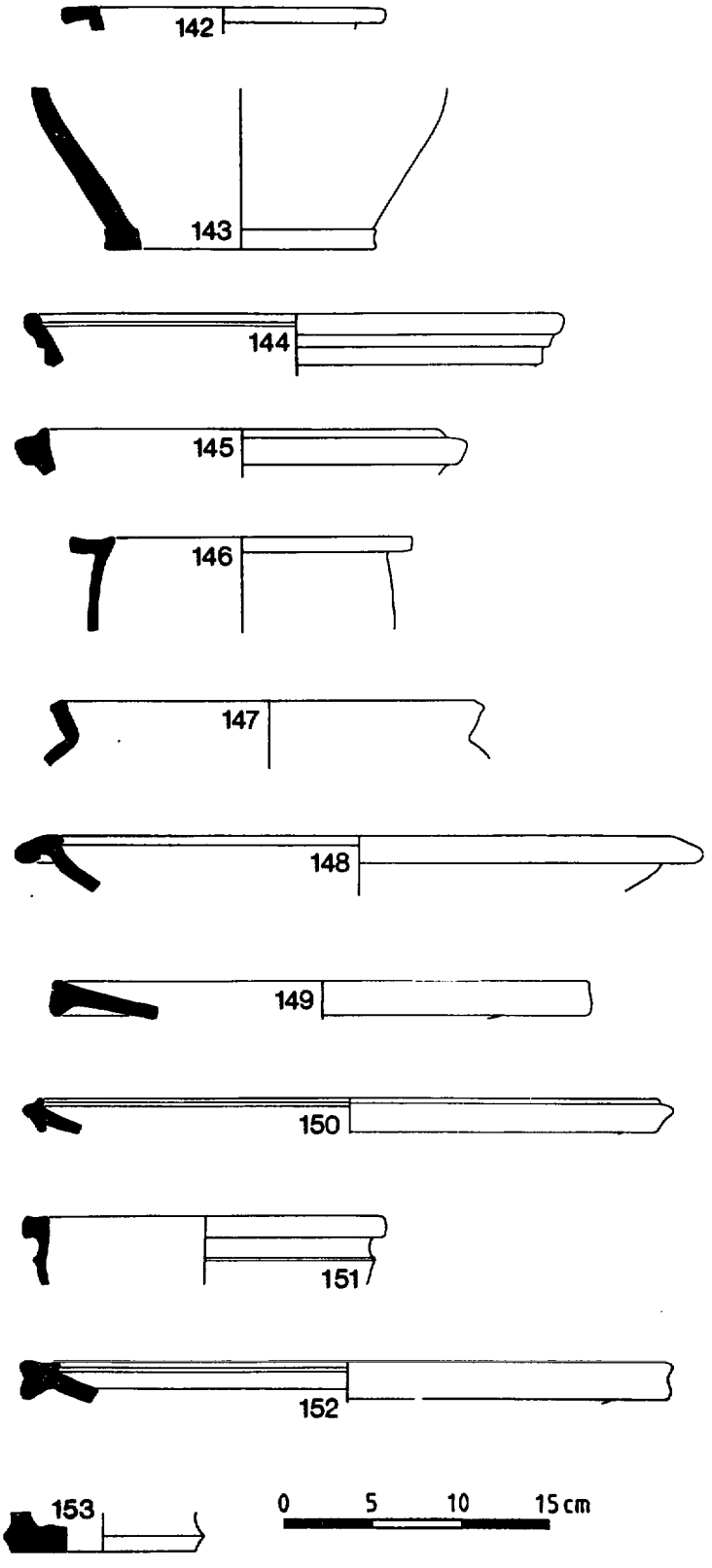
149 Context as 148.
Dish in orange fabric with some spots of yellow glaze on exterior. Rim shows traces of pale yellow slip. Interior has lines of bright brown glaze in yellow glaze over slip. Later 17th century type.

150 Context as 148.
Pancheon rim in red fabric with internal orange-brown glaze. Boston-type.

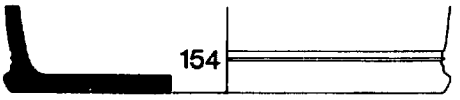
151 Context as 148.
Jar rim in red fabric with orange-brown glaze on all surfaces. Boston-type.

152 Context as 148.
Pancheon in red fabric with internal yellowish brown glaze and a glazed band on the perimeter of the rim. Boston-type.

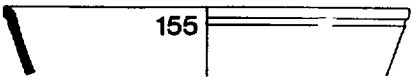
153 Context as 148.
Base in red fabric with orange-brown glaze on both surfaces, except for a reduced area of grey fabric and green glaze inside vessel. Boston-type.



154 Context as 148.
Base in red fabric with orange -brown glaze on both surfaces and an accidental glaze splash underneath the base.
Boston-type.



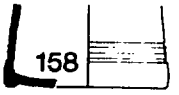
155 From Pit 11, Layer 8. Bag 174.
Rim of bowl in sandy, dark purplish red fabric with a dark purplish brown slip on both surfaces. This fabric looks like a Cistercian ware development.

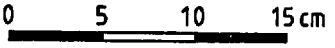


156 Context as 155.
Rim of bowl or dish in red fabric with internal yellowish brown glaze, external dark olive-green glaze. Wavy line decoration incised under glaze. Boston-type.

157 From Pit 11, Layer 7. Bag 213.
Base in orange fabric, surfaces covered in thick orange-brown glaze, with the external glaze divided by yellow glazed bands over a whitish slip. A 17th century type.

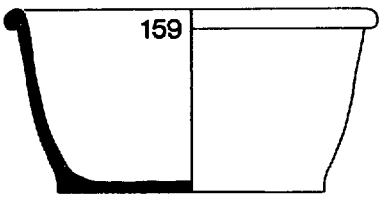
158 Context as 157.
Salt-glazed stoneware base. Whitish buff throughout except for a dark brown band at the top of the sherd externally.
Dateable to c AD 1730-50 (M McCarthy, personal comment).





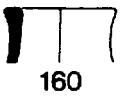
Other Contexts

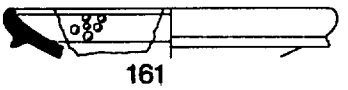
159 From soil over Pit 11. Bag 139.
Stewpot in buff sandy fabric with thick internal dark brown glaze.
A Staffordshire product.



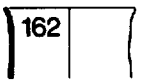
160 Bag 162, which seems to be the same layer as Bag 161, see 161 below.
Cup in reduced stoneware with light grey fabric and mottled dark green glaze on exterior and rim.

161 Bag 161, which seems to come from a feature cut into Pit 11.
Bowl in red sandy fabric with a dark grey exterior. Interior covered in brown glaze with yellow bulbous clay blobs applied under the glaze. This resembles Dutch vessels imported into East Anglia and may be Dutch (Miss R H Healey, personal comment).

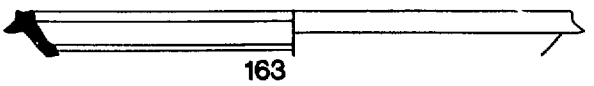




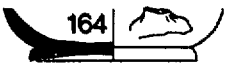
162 From Layer 3. Bag 199.
Cup in Cistercian ware. A narrow cup of the developed type, probably 17th century (cf Brears 1967, fig 11.2).



163 Context as 161.
Pancheon in red fabric with bright yellowish-brown glaze on both surfaces and interior of rim.



164 Context as 162.
Cistercian ware base. Part of one handle visible. Probably Cup Type I (Le Patourel 1965, 116-19, fig 38).



165 Context as 162.
Rim of jug in imported German stoneware. Probably Raeren.

166 Context as 162.
Pancheon in grey fabric with green glazed interior. Bourne Fabric D; 16th-17th centuries.

167 Context as 162.
Pancheon in orange fabric with grey core, pale slip-coat. Interior mottled green and dark yellow glaze with dark green spots. Bourne fabric D; 16th-17th centuries.

168 Context as 162.
Cooking pot with grey core and light orange and grey surfaces. Some spots of green glaze splashed on rim. Bourne Fabric D.

169 From Layer 3. Bag 169.
Cooking pot rim in a sandy fabric which may include some grog. Light orange core, interior orange, exterior orange-brown. Possibly Bourne Fabric A.

170 From Layer 3. Bag 183.
Serving platter or 'fish dish' in a sandy fabric with a dark grey core. Exterior dark red, interior covered in thick dark green glaze. A 17th century type, perhaps made locally.

171 Context as 170.
Pancheon rim in light orange fabric with a dark brown glaze on all surfaces, cf no 148 for fabric group. This vessel is a 'second' or even a waster, as the glaze has bubbled and burst, and part of the rim had obviously adhered to another vessel during firing.

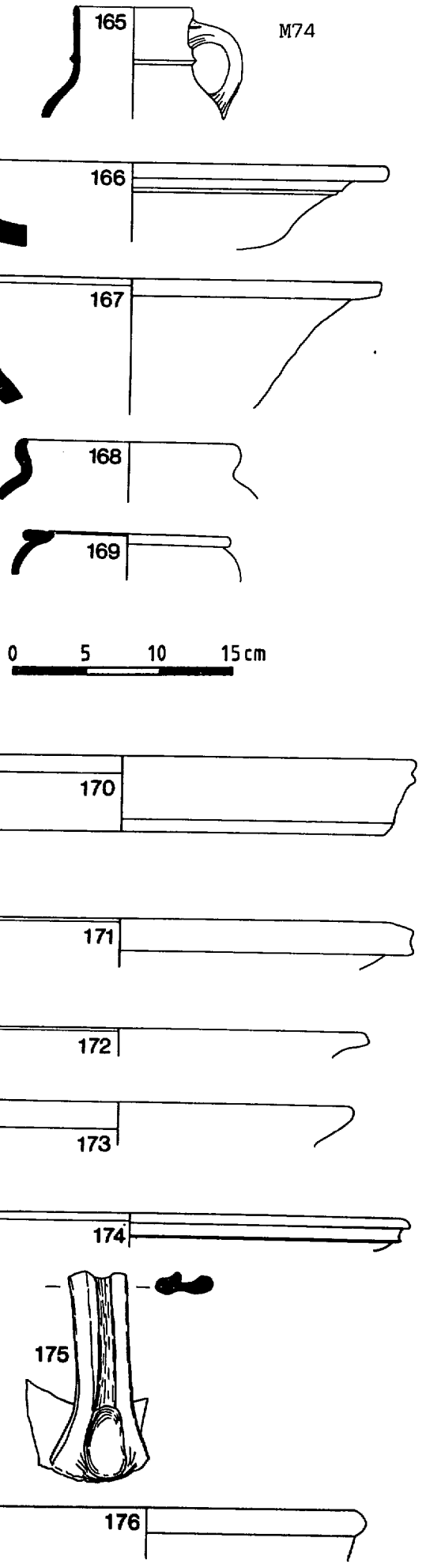
172 Context as 170.
Bowl in sandy fabric with some white inclusions. Grey core, orange surfaces and some trace of internal grey slip. Perhaps Bourne Fabric D.

173 From Layer 2. Bag 166.
Bowl in dark red fabric with dark grey surfaces. Bourne Fabric D.

174 From Layer 2. Bag 195.
Dish in sandy fabric with many small white calcareous inclusions. Orange or reddish orange core and exterior and rim. Interior dark grey slip under spots of yellow glaze.

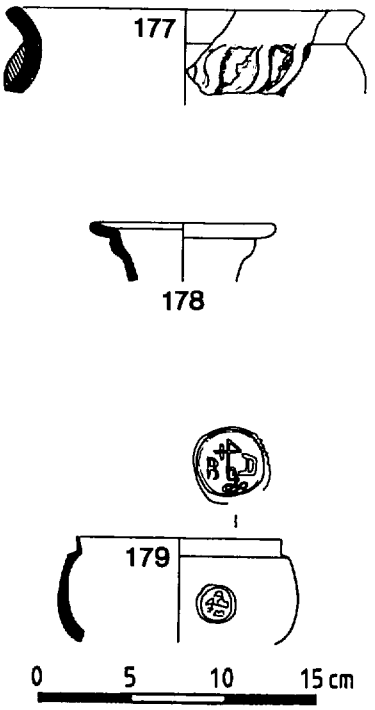
175 Context as 173.
Handle in light orange fabric with dark grey core. Buff slip on surfaces. Bourne Fabric D.

176 From Layer 2. Bag 168.
Plain rim in orange slightly sandy fabric.



177 From Layer 2. Bag 44.
Jar in light orange fabric with dark grey core. Patchy green and yellow glaze over a buff slip on the exterior. The extra clay at the neck of the vessel must have affinities with the thumb-impressed decoration on late medieval/early post-medieval pots. It seems to be formed by making raised vertical ridges around the neck of the vessel and then adding some extra clay to the ridges so that the hollows are left with jagged overhanging edges: this was done before applying slip and glaze although neither have been deliberately put inside the hollows. Bourne Fabric D and therefore 16th to 17th century.

178 From Layer 2. Bag 25.
Small vessel in sandy fabric, dark grey core, orange surfaces, orange -brown glaze on exterior and rim.



179 Bag 200. The only sherd in this bag, which seems to be a loam deposit under Layer 3, but over Pits 9, 10, 10a, and 10b. Reversed Cistercian ware, Cup Type Ia (Le Patourel 1965, 116-19, fig 38) with dark grey body and dark green glaze on both surfaces thinning towards the base externally; dateable to the 16th century. The sherd has a yellow glazed clay pad applied to one edge of the fragment which has a very unusual stamp on it. This consists of a personal seal with the initials 'R D' around a merchant's mark. Signet rings of this period are known with the same type of design (Guildhall Museum 1903, pl LXXXVI.7 and 10) and they even have the initials reversed so that they will come out the right way round when impressed into wax. It must have been one of these finger rings which was pressed into the clay pad on this potsherd. Unfortunately, it is not possible to trace the identity of this person without the survival of a pictorial record such as the depiction or the impression of a seal on a document. Known 16th century tradesman in the area include a Roger Dyconson of Peterborough and a Richard Deane who was a a lessee at Castor in 1564 (*Fitzwilliam Charter* 624). It is also possible that the seal could belong to one of the Dove family from the estate at Upton to the north-west of Castor. Perhaps it represents the name of 'Richard'. In the latter case, a Richard, Earl Fitzwilliam of Milton was recorded in 1515, and a Richard Wingfield at Upton in 1545. It seems more likely, however, to be someone engaged in commerce, although of a sufficient status to have his own mark. Unfortunately, no local potters are known from documentary evidence who could have put their own mark on their wares. The prospect of a commissioned vessel seems not to be impossible. The commercial implications of this sherd are most interesting.

180 From rubble over Pit 11. Bag unnumbered.
Fine white earthenware mug with blue horizontal bands and with a raised decoration consisting of an imperial crown over a panel bearing the words 'IMPERIAL GR.IV'.

THE ANGLO-SAXON POTTERY FROM ELMLEA

CATALOGUE

Note: Numbers preceded by a Roman numerals refer to individual contexts in pre-1973 excavations, L to layers in the trenches excavated in 1973.

The Pit Group

Ipswich-type ware

TEXT FIG 23

1 From XLV 9.
Dark grey. Intermediate. West Type I, C (cf West 1962-3, fig 51, P16, L5.8)

2 From XLV 10.
Dark grey. Intermediate to pimply. West Type I, C (cf ibid fig 51, P16, L5.10).

3 From L 118 and XLV 2.
Dark grey. Pimply. West Type I, C (cf ibid P 17, L2.6).

4 From XLV 9 and L 179.
Dark grey. Pimply. West Type I, C.

5 From L 103 and 109.
Core and interior light grey, exterior dark grey. Fabric intermediate to pimply.

6 From L 103 and XLV 9.
Reddish core, interior light grey, exterior dark grey. Pimply. Some sooting on exterior and just inside the rim. Similar to West Group I, C, but with a slight internal hollow (cf West 1962-3, fig 64, P1, L2.3).

7 From L 99.
Exterior dark grey, core and interior light grey. Pimply. West Group II, G.

8 From XLV 3.
Probably a pitcher, the rim is coming round to a plain pulled-out spout; exterior medium to dark grey, core light grey, interior medium to light grey. This vessel seems to be an intermediate fabric Ipswich ware, although the form is rather unusual. It is smaller than similar Ipswich vessels and is probably to be compared with West Group III, H, in a narrow-mouthed form (West 1962-3, fig 42, P2, L4.7, or fig 46, P11, L4.5; fig 45, P9, L3.1 is very similar).

9 From L 101.
Core light grey, interior greyish brown, exterior medium grey. Pimply.

10 From XLV 9.
Core and interior light grey, exterior dark grey. Fabric intermediate to pimply. An exceptionally thin-walled vessel.

Maxey Group III-type ware

11 From XLV 7.
Pink surfaces, core varying from dark grey to pink. An unusually thin vessel, included in this section because of the shelly fabric and shape of the rim, but which is not easily paralleled elsewhere in this fabric.

12 From L 98
Mixed red and brown colours. Cf Addyman and Whitwell 1970, fig 2.5.

13 From XLV 9.
Exterior surface damaged, core red, interior dark grey. Includes shell fragments up to 8 mm. Cf Addyman 1964, fig 14,33.

Other Handmade Pottery

14 From XLV 9.
Medium grey core and light brown surfaces. Originally externally burnished. Fabric 2 with dense oolite tempering with occasional larger white particles (of limestone?). Similar fabric to Maxey Fabric D.

15 From L 108 and 49.
Various shades of grey. Fabric 2 with mainly calcite temper. Irregularly made. Occasional vegetable-impression on internal surface.

16 From L 93.
Medium grey, exterior surface originally burnished. Fabric 2 with occasional white calcite inclusion and some fine grit. Interior surface wiped with organic material.

17 From L 108.
Black and brown with many small white inclusions, mainly oolites; fabric 2. Interior surfaces organically wiped. Exterior some burnishing or tooling.

18 From L 99.
Core and exterior black, interior red. Fabric 1 with harsh sand and plenty of fine grit tempering. Exterior sooting and black inside top of rim, finishing on an even line.

19 From L 108.
Exterior black over red margins, interior red-brown, core dark grey. Fabric 1 with harsh sand and fine grit. Form: cf Hurst 1961, fig 66,1; Everson 1973, no 11 (a 7th century pottery group); and Cunliffe 1976, fig 104, 8, for examples in mid-8th century contexts from Northolt Manor, Middlesex, Salmonby, Lincs, and Portchester, Sussex respectively. Neutron activation analysis sample no 41 (cf M92).

20 From L 99.
Interior light grey, exterior reddish brown and grey mottled. Fabric 1 with a tempering of harsh sand, and occasional grit with some calcareous particles. Internally, the temper has been washed out up to a line about 25 mm below the rim top. The form can be paralleled in Ipswich-type ware (West 1962-3, fig 47, P11, L4.6) and also in earlier contexts, as at Linford, Essex (see Barton 1961-5, fig VI, 3). Parallels also exist in the Maxey material stored in the British Museum and in local material in Peterborough Museum; they are unstratified and unpublished.

21 From XLV 9.
Red core, surfaces red with some black on rim. Fabric 1 with harsh sand, grit and some calcite particles.

22 From L 99 and 105.
Basically red, with some grey patches inside the top of the rim. Fabric 1.

23 From XLV 9.
Black. Fabric 2, a harsh fabric of mixed calcite and fine grit, with slightly more of the former. There is some internal pitting. A similar vessel occurs at Bulmer Tye in Essex (Blake 1959, fig 99,3) and dated examples occur at West Stow, Suffolk, in 5th to 6th century contexts (West 1969, fig 3, 11) and at Portchester, Sussex, in late 5th to early 7th century contexts (Cunliffe 1976, fig 104,1). These parallels may mean that the vessel is residual, but it could also be a form which continued in the Middle Saxon period.

Middle Saxon Pottery From Other Contexts

Ipswich-type ware

TEXT FIG 24

24 From L +.
Light grey core and interior, medium grey exterior. Intermediate to pimply. Some sooting internally and externally. Internal edge of rim abraded, perhaps from secondary usage or from a lid? As West Group I,A, with a hollow on top of rim.

25 From XXVII 27.
Dark red core, dark grey surfaces. Intermediate to pimply. A hole for suspension has been punched through from the inside. West Group I, C. Similar pot from site (West 1962-3, fig 51, P16, L6.1).

26 From L 20.
Medium to light grey, sandy fabric. West Group I, A. Neutron activation analysis sample 22 (see M92).

27 From XXVIII 2.
Dark grey core, exterior brown, white and grey, interior grey turning brown about 25 mm below the top of the rim. West Group I, C or A. Cf West 1962-3, fig 47, P11, L5.2 for a similar sherd.

28 From XXXVIII +.
Light grey core, dark grey surfaces. Intermediate to pimply. West Group II, F (cf West 1962-3, fig 45, P11, L3.25).

29 From L 30.
Medium grey throughout. Intermediate to pimply. West Group I type, but more flared than usual.

30 From I 1.
Light grey core and interior, exterior dark grey. Intermediate to pimply. Type as 29, but cf West 1962-3, fig 51, P16, L5.8 for a similar vessel.

31 From XXIII 1.
Core light grey, interior reddish brown, exterior dark grey. Fine sandy fabric, hard-fired with some air cracks in section. Some sooting externally.

32 From XXVII 20.
Core and interior light reddish-brown, exterior dark grey. Pimply. West Group I, C. Cf West 1962-3, fig 47, P11, L6.4 for similar internal thickening.

33 From II 1.
Dark grey core, interior light grey, exterior medium grey. Pimply. Some sooting inside top of rim. West Group I, C.

34 From XXVII 2.
Core and interior light grey, exterior dark grey. Pimply. West Group I, C.

35 From XXIX 2.
Medium grey throughout. Intermediate to pimply. West Group I, C.

36 From L 2.
Dark grey. Intermediate fabric. Some traces of external burnishing at neck. West Group I, C. Neutron activation analysis sample 40 (see M92).

37 From XLV 5.
Light grey core, medium grey surfaces. Intermediate to pimply. Some internal sooting. West Group I, C, with a hollow at the top of the rim. Cf West 1962-3, fig 46, P11, L3.33.

38 From L 19.
Medium grey with light brown margins. Pimply. Surfaces heavily sooted except for a narrow band around the inside of the top of the rim. West Group I, C.

39 From L +.
Core and interior except for the rim area light grey, exterior and rim dark to medium grey. Intermediate to pimply. West Group I, E.

40 From L 30.
Light and medium grey. Intermediate to pimply. West Group I, E with hollow.

41 From XLV 1.
Light grey core, interior light brown below rim, exterior and rim dark grey. Pimply. West Group II, G (cf West 1962-3, fig 46, P11, L3.30).

42 From XXX 2.
Light grey core, interior light brown, exterior and inside of rim dark grey. Perhaps a bowl, does not fit into West groups (cf West 1962-3, fig 42, P2, L2.16).

43 From XXXVIII +.
Interior and part of core light grey, rest dark grey, and medium grey at bottom of base. Pimply.

44 From XX 1.
Core light grey, interior medium grey over light brown margins, exterior dark grey. Fine sandy fabric, hard-fired so that it has split in section.

Maxey Group III-type ware

45 From XLV +.
Core dark grey, exterior black, interior brown. Slight thumb-impressions at neck, but this cannot be deliberate decoration as it is not readily visible. Cf Addyman and Whitwell 1970, fig 2, 7, from Normanby-le-Wold.

46 From L 39.
Medium grey core and reddish brown surfaces. Uneven rim.

47 From XLV +.
Dark grey core, exterior reddish-brown, interior brown with black inside rim on a level horizontal line. Cf Addyman 1964, fig 14, 45.

48 From II 2.
Dark grey core, surfaces mottled red, brown and black. Cf ibid, fig 14, 38.

49 From XLVI 1.
Dark grey throughout. External sooting. Dark band inside top of rim. Rim uneven.

TEXT FIG 25

50 From II 1.
Dark grey core, red surfaces.

51 From L 7.
Core red and black, exterior and rim black, interior red with some sooting. Cf Addyman and Whitwell 1970, fig 2, 18.

52 From XLIV.
Light reddish brown throughout. For form, cf 51.

53 From L 90.
Dark grey core and reddish brown surfaces.
From the surface of Middle Saxon pit and could be contaminated so therefore not necessarily to be regarded as part of the group.

54 From L 8.
Dark grey core, red surfaces.

55 From L 17.
Dark grey core, exterior mottled grey and brown, interior red and black. Some external sooting. There are no published parallels for this sherd.

56 From L 46.
Mainly dark grey with some red on interior. Some external sooting.

57 From L 38.
Dark grey core, exterior mottled grey and brown, interior black sooted band inside top of rim, rest of interior red with patches of lime accretion.

58 From XX 1.
Dark grey core, red exterior, interior red and black. The rim is uneven, perhaps coming up to a lug. Cf Addyman and Whitwell 1970, fig 2, 6.

59 From XLVI.
Dark grey core, exterior black, interior red with some black around inside top of rim. There are parallels for such plain upright rims in the unpublished Maxey material in the British Museum.

60 From XXVII 20.
Dark grey core, exterior brown and black, interior black band inside the top of the rim and the rest dark red surface with lime accretion.

61 From I+.
Dark grey core, reddish brown surfaces.

62 From L 2.
Dark grey throughout.

63 From XXXXIII +.
Medium grey core, exterior red and brown, interior brown. The form is similar to the lugged vessels from Lincolnshire (cf Addyman and Whitwell 1970, fig 2, 8).

64 From XXXVII +.
Dark grey core, surfaces red with some grey patches externally.

65 From L 30.
Basically medium grey, black band inside top of rim.

66 From XLV 2.
Dark grey core and interior, exterior reddish brown.

67 From XXVIII 2.
Dark grey core, exterior red and black, interior brown.

68 From XXVII 55.
Dark grey core, exterior mottled light brown and grey, interior dark red. The incised lines appear to have been made when the clay was wet. To date (1976), this is the only known decoration on this type of vessel, although incised line decoration does occur on other Middle Saxon pottery (eg, Ipswich ware (West 1962-3) and in southern England: Cunliffe 1974).

69 From VIII +.
Light grey and red core, interior red, exterior light brown and grey.

70 From L 30.
Dark grey core and interior, exterior light orange-brown. Cf 45 above.

71 From L 30.
Dark grey to black core and exterior, interior black band inside top of rim, rest of interior dark red.

72 From XVI 1.
Dark grey core, exterior reddish brown and black at rim, interior black band inside top of rim and rest red.

73 From L 10.
Mottled dark grey and red throughout.

74 From LI +.
Dark grey core, interior black, exterior red and brown. Perhaps like Addyman and Whitwell 1970, fig 2, 4.

75 From XXVII +.
Dark grey core and interior, exterior light brown.

76 From L 26.
Dark grey core, exterior dark grey-brown, interior black band inside top of the rim and the rest dark red.

77 From XLV 2.
Dark grey to black throughout. Diameter uncertain. Cf Addyman and Whitwell 1970, fig 2, 5 and 19.

Other Handmade Pottery

TEXT FIG 26

78 From XXXV 5.
Black shelly ware. This sherd was stratified in a feature cut through the Roman floor.

79 From XXVII 5.
Black throughout. Fabric 2 with much shell. For form, cf Addyman and Whitwell 1970, 13, 22.

80 From XXVII 5.
Dark grey with brown burnished? surface. Fabric 2, but shell is not visible on the surface.

81 From L 113.
Medium grey except for a smooth light grey interior. Fabric 1. From an intrusion into the Middle Saxon pit in Trench L.

82 From L 2.
Medium greyish brown with red interior. Fabric type 1 with more white inclusions than usual.

83 From L 30.
Black, basically fabric type 2, but with very fine particles.

84 From L 49.
Dark grey sandy fabric with some fine grit visible in fracture. The external surface is brown and has been tooled to give a leathery appearance. Cf Maxey Fabric C.

85 From XXXVI +.
Black core and dark grey interior, exterior dark grey over brown margin. Both surfaces have been smoothed with a small tool. The fabric is unusual for this site, as the temper consists of only a small amount of sand including fine quartz or quartzite grits. Although a fairly simple shape, it is not an easy form to parallel; the nearest published piece is a vessel from Kirby Bellars (Hurst 1967-8, fig 1, 2). There are similar forms in Ipswich-type ware and the vessel is likely to be Middle Saxon (eg, West 1962-3, fig 45, P11, L3.17).

86 From XXVII 27.
Dark grey core, interior brownish red, exterior brownish red over black margin. The external top of the rim is smooth and shiny, but it is not clear whether the exterior was originally burnished. The temper is nearly all calcareous and there is very little grit.Almost a Maxey Group III-type vessel.

87 From XLV 5.
Dark grey core and interior, exterior mottled grey, brown, and black. Exterior surface originally burnished. Fabric type 2 with shell particles. Similar vessels occur at Portchester in a 9th century context (Cunliffe 1976, fig 6, 8-9), at Southampton at a similar date (Addyman and Hill 1969, fig 35, 9), and in the unpublished Maxey material in the British Museum. The sherd is from a medieval intrusion into the Middle Saxon pit in Trench L.

88 From XLI 1.
Dark grey core, interior purplish red, with a grey band inside the top of the rim, exterior dark grey-brown. Fabric 1 with white inclusions. The form is fairly common, eg West Stow, Suffolk (West 1969, fig 2, 4).

89 From XLV 2.
Black core, exterior mottled black, pink, and grey, interior dark grey with sooting inside top of rim and some patches of lime accretion. Fabric type 2 with much shell. A similarly shaped vessel was found at Bourton-on-the-Water, Gloucestershire (Dunning 1932, fig 5, 3).

90 From XLV 3.
Grey and brown core, exterior mainly brown but with some dark grey and black patches, interior dark grey. The interior has been wiped with some organic material such as grass. There is possibly some incised line decoration on the lower part of the exterior surface, but the sherd is too narrow at that point to be certain. Fabric 2 with shell, oolites and grit. Cf Maxey (Addyman 1964, fig 13, 30); Whitby (Peers and Radford 1943, fig 25, 10); and Whittington Court (O'Neil 1952, fig 5,9).

91 From L +.
Light to dark grey throughout, with a dark band inside the top of the rim. Fabric 2 with occasional organic inclusions. This is an unusual shape, but can be paralleled in Ipswich ware (eg, West 1962-3, fig 47, P11, L7.1)

92 From XXVII 20.
Dark grey core and interior, black exterior. Fabric 2 shelly. Cf Addyman 1964, fig 13, 31.

93 From XX 5.
Base in fabric type 1. Black core, interior light grey-brown, exterior reddish brown and black. Stratified in a feature cut into the Roman floor in the 1970 excavations.

94 From L 8.
Dark grey core and black surfaces over red margins. The exterior surface is well burnished. The fabric is fine, with an even scatter of very small inclusions and the occasional larger grit. This sherd closely resembles the possible imported Continental pottery bodysherds (Group iv), and has been included in the Anglo-Saxon pottery section for this reason. The sherd is uneven and seems to be handmade. Although presented here as a rim, this sherd may well be part of a handle, although if so it would be uneven and extremely broad.

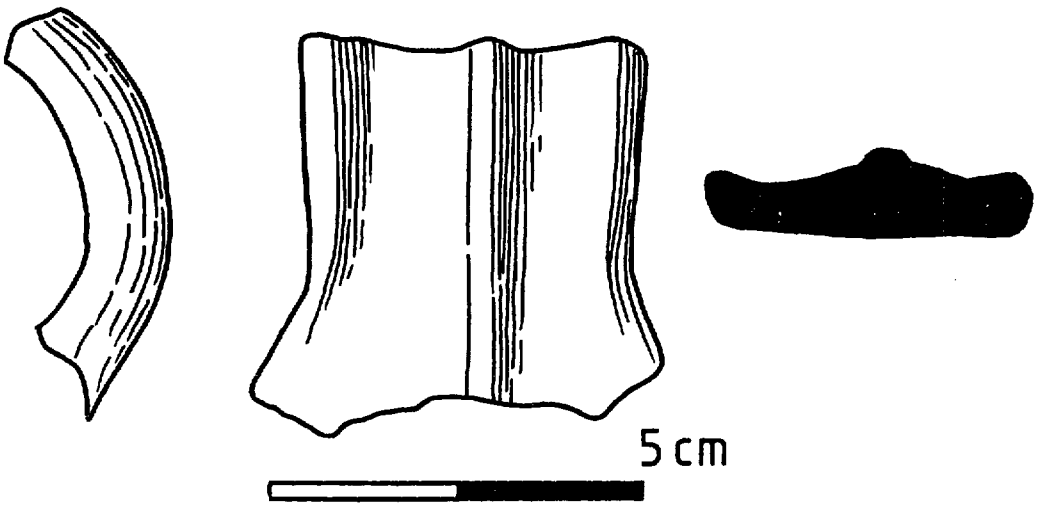
95 From L 113.
A handle decorated with three parallel longitudinal incised lines. The centre of the core is light grey surrounded by a light red band, the rest of the core is light brown, the surfaces are dark grey. The fabric is sandy with only small inclusions visible, including some calcite particles. Although no direct parallel can be cited at present, this sherd may well be Anglo-Saxon. From the same intrusion into the Middle Saxon pit as 81.

96 From XXXIII
Small bowl in black shelly fabric with some grit. Roughly made, it seems to be handmade and has wiped surfaces. Thumbed decoration on rim. This could be medieval or Anglo-Saxon.

97 From XLIV 6.
Handle in a sandy fabric, core dark red with light grey centre, dark grey surfaces. This is very roughly made, and may be Anglo-Saxon but it comes from the medieval feature cut into the Middle Saxon pit in Trench L and could equally be Saxo-Norman.

A STRAP HANDLE FROM ELMLEA (XLV, LAYER 9)

by Dr Richard Hodges



This strap handle has a central rib and has smooth black surfaces partly burnished on the top. The fabric is tempered with a large number of quartz-sand inclusions of up to 5 mm across; a grain of limestone is also visible. In thin section it has an anisotropic brown clay matrix with a scatter of sub-angular to sub-rounded quartz-sand ranging from 0.03 to 2.00 mm across; there are also several grains of quartzite, muscovite, black iron-ore and single grains of flint or chert and fine-grained limestone.

It now seems likely that this might be a 7th century black ware which probably originated from northern France or even Belgium. typologically and petrologically, it is rather different from the large number of black wares from Hamwih, Saxon Southampton, which date to the 8th and 9th centuries. However, there is a black ware vessel, recently discovered in Ipswich, which has a similar crude, thick handle. Mr Charles Green also discovered a black ware pitcher from what he considered a 7th century context at Caister-on-Sea (Norfolk) which seems to be similar; it has the central rib and is thick in contrast to the many Hamwih handles. Unfortunately, I have not been able to compare the fabrics for only a drawing survives of this Caister-on Sea example.

In conclusion, this must be tenatively regarded as an imported black ware but we cannot be certain until further examples have been examined from English contexts as well as from cemeteries of this period on the Continent.

(This report was originally written in 1976. It seems possible that the Castor sherds are 'Imitation' Class 14 Black Ware: see further, Hodges 1981, 41 and 43.)

NEUTRON ACTIVATION ANALYSIS OF MIDDLE SAXON POTTERY FROM ELMLEA

by Richard Hunter

Introduction

At the request of Carolyn Dallas of the Nene Valley Research Committee, a small-scale project of neutron activation analysis was carried out during 1976 on Middle Saxon pottery from the 1971 and 1973 Castor Elmlea excavations and on other comparative material. The primary aim of these analyses was to compare possible Ipswich ware from Elmlea with known Ipswich ware sherds manufactured in Ipswich itself. Castor is approximately 75 miles from Ipswich and the trading of pottery over such a distance, if proven, would be of socio-economic significance in the Middle Saxon period. Trace element analyses were therefore undertaken towards examining the above hypothesis.

Sherd Selection

A total of 41 samples were analysed from 29 sherds. Of these, 17 sherds from Castor possessed the visual characteristics of Ipswich ware (samples 22-40) and were compared with three Ipswich ware wasters from Ipswich kilns (2 sherds from Cox Lane, samples 1-6; 1 sherd from Carr Street, samples 7 and 8). In addition, analyses were carried out on a further Saxon sherd from Castor of presumed local origin (sample 41), two sherds of Thetford-type ware from the Cox Lane kiln (samples 9-12), and three other sherds of Ipswich ware from the non-kiln sites of St Helen's Street, Vernon Street, and Lower Brook Street, all in Ipswich (samples 19-21). Finally, a sherd each was analysed from the Roman kilns at Stanground, Longthorpe, and Stibbington (samples 13-18). These latter sherds were all visually distinctive and were selected on the grounds of their geographical proximity to Castor as all three kilns are within 5 miles.

Five sherds of the selected Ipswich ware, represented by samples 4-6, 7 and 8, 19, 20 and 21, were also examined in thin section by Dr D F Williams of the Department of Archaeology, University of Southampton.

Archaeological background and preliminary visual examination

The material selected for analysis falls into four groups which are discussed below. The physical and contextual details of the individual sherds are set out in Table 1 on M92.

(i) Ipswich ware from Ipswich and possible Ipswich ware from Castor
23 sherds; samples 1-8, 19-40.

Middle Saxon Ipswich ware was first effectively recognised in the 1950s (Hurst 1957; Dunning *et al* 1959; West 1962-3) and the present state of knowledge regarding this pottery has been summarised by Hurst (1976, 299-303). Ipswich ware is usually regarded as being made, or at least finished, on a turntable and traces of single flue kilns manufacturing this ware have been located in the Cox Lane/Carr Street area of Ipswich (Hurst 1957; Smedley and Owles 1962-3). Ipswich ware is in evidence from the mid-7th century to the second half of the 9th century when the same Cox Lane/Carr Street area can be seen manufacturing the finer quality, wheelthrown Thetford-type ware. The distribution of this pottery is chiefly in East Anglia with occasional finds further west along the river valleys draining into the Wash.

The predominant form is the cooking pot, usually small and squat, and characterised by a sagging base and knife-trimming. Other vessels include bowls, bottles, lamps, and distinctive lugged and spouted pitchers. The fabrics encountered cover a wide range of grey, sand-tempered textures often with burnished or 'pimply' surfaces (where inclusions protrude from the surface) and girth grooves. A twofold division into 'pimply' and 'sandy' wares is common and has in part been adopted below, although a preliminary petrological examination suggests at least three groups based chiefly on the quartz grain characteristics of the sand temper (Williams 1976).

The sherds selected for analysis are predominantly grey or dark grey in colour, although a small number display a brown or reddish brown tinge. On grounds of colour alone there are no obvious distinctions within this group.

On textural grounds, however, this material can be divided into two broad groups which can be centred around the sherds from Cox Lane and Carr Street. The two Cox Lane Ipswich ware sherds, both from large cooking pots (1-3, 4-6) are of a coarse, relatively soft and poorly prepared fabric. Both sherds are pitted with small voids but while one sherd (1-3) has the characteristic 'pimply' surfaces, the other (4-6) has a smoothed outer surface. The thickness, inconsistency of the fabric and the girth grooves of the former vessel suggest that it was handmade and finished on a turntable. This particular vessel has been published previously (Hurst in Smedley and Owles 1962-3, 314, fig 69c).

The Carr Street sherd (7 and 8) is finer in texture, clearly better prepared and has a hard sandy feel. Possibly this pot was wheelthrown, as evidenced by the thin vessel wall, and indeed this sherd is close to the Thetford-type fabric. The sherd is from a cooking pot that has also been previously published (Hurst 1957, 32-4, fig 1,5).

This initial distinction between the Ipswich ware kiln material has been confirmed by the thin section examination carried out by Dr Williams (1976). One of the Cox Lane sherds (4-6; thin section no 755627, Williams 1976) is characterised by a sand temper with quartz grains usually well-rounded and less than 0.05 mm in size. However, there are also a significant number of large quartz grains ranging in size up to 1.3 mm (perhaps a deliberate admixture of coarse material) and a considerable quantity of quartzite and muscovite. Flint and plagioclase are also present in small amounts. The Carr Street sherd (7 and 8; thin section no 755626, Williams 1976) is also sand-tempered, but the quartz grains are of a uniform size, about 0.15 mm. There are moderate amounts of muscovite and flint, and small quantities of plagioclase, microcline and rutile.

This fabric distinction can be extended to the other Ipswich ware sherds from Ipswich (19, 20 and 21) and is again confirmed by petrological examination (thin section nos 755628-30, Williams 1976). Two sherds (19 and 21) closely resemble the Carr Street sherds while the third (20) displays the coarse body, pimply surfaces and girth grooves, and is similar to the Cox Lane material.

The possible Ipswich ware from Castor can be tentatively linked on visual grounds with one or other of the fabric groups recognised above. 14 sherds (23-25, 27-35, 37-40) possess the coarse texture of the Cox Lane sherds and exhibit some of the characteristics outlined above: girth grooves are visible on the outer surfaces of 7 sherds (23, 27, 31, 32, 38-40); all but two (29-30, and 33-34) have pimply surfaces. Where the method of manufacture can be inferred, in every case it would appear that the vessels are made or finished on a turntable. One of these sherds (35) has traces of knife-trimming, and another (40) is burnished.

Of the three remaining possible Ipswich ware sherds from Castor, two (22 and 26) resemble the Carr Street sherd, having the finer, denser fabric, but neither appear to have been wheelthrown. One of these sherds (26) displays girth grooves. The third sherd (36) stands out as having a highly burnished outer surface and a marginally different core colour; this sherd does not fall clearly into either of the established groups.

(ii) Thetford-type ware from Ipswich.
2 sherds; samples 9-12

Thetford itself soon emerges as the major centre of production for Thetford-type ware, but the tradition may originate in the Cox Lane/Carr Street area of Ipswich in the early 9th century. Other kilns are known in Norwich, Grimston, and Langhale, all in Norfolk, the latter two (both rural sites) probably only beginning production in the 11th century. The date-range of this ware covers the period from the 9th to the 12th centuries and it should be pointed out that Thetford-type ware forms but part of a widespread tradition of wheelthrown Saxo-Norman pottery that includes products from Leicester, Northampton, Lincoln, Torksey, Derby, and Chester.

Cooking pots, bowls, spouted pitchers, and storage jars are the chief forms and the fabric is almost exclusively hard, well-fired, sandy, dark grey and wheelthrown. Technologically, Thetford-type ware represents an improved potting technique as compared with its predecessor Ipswich ware. For a more detailed treatment of Thetford-type ware, the reader is referred again to Hurst (1976, 314-20).

Two sherds of Thetford-type ware were analysed (9-12), both flat basal cooking pots sherds from Kiln 1 at Cox Lane, which has been dated by its thermoremnant magnetism to c 950-1000. An extensive programme of neutron activation analysis has been carried out on Thetford-type ware kiln material (Hawkin 1977) and this provides a considerable background against which these two sherds, and indeed the Ipswich ware, can be viewed.

(iii)Roman kilns from Stanground, Longthorpe and Stibbington
3 sherds; samples 13-18

Three sherds from excavated Roman kilns within five miles of Castor (Wild 1974) were selected for their proximity and because of the probability of clays from the Lower or Middle Nene being utilised in their manufacture. All three sherds are visually distinct. The Stanground sherd is of a standard Romano-British coarse grey ware fabric; it has a few calcareous inclusions (perhaps native to the clay) and is possibly handmade and wheel-finished. The Stanground kilns were operational in the 3rd century AD. The Longthorpe sherd is from the mid-1st century AD military kilns. It is wheelmade in a fine, pale brown to pink fabric with a sandy feel (Longthorpe fabric 1). The sherd from the later 3rd/early 4th century kilns at Stibbington is typical of the Nene Valley 'colour-coated' pottery industry displaying a finely mixed,light coloured core with a brown slip. The vessel is wheelmade.

(iv)Probably local Saxon sherd from Castor
1 sherd; sample 41

As with the Roman material, this sherd was selected because of its presumed local origin. It is extremely coarse and densely gritted with calcareous material, sand, and other inclusions. Its rough and ready nature suggests that it is unlikely to be found far from its kiln origin or from the source of the raw materials used in its manufacture.

The Neutron Activation Analysis: Experimental Method

The trace element compositions for the 41 samples were established using the facilities of the Postgraduate School of Physics at the University of Bradford. Samples were obtained by drilling quantities of up to 200 mg from each sherd. The resultant powders were packed in polythene tubes and wrapped in aluminium foil; they were then sent for irradiation to the Herald reactor at Aldermaston. 'Standard' pottery samples of known composition - through which the unknown sample compositions were ultimately derived - were packed among the 41 samples and irradiated also.

The irradiation process involves neutron bombardment of the samples for 48 hours at a thermal neutron flux density of 1.8 x 10^12 neutron per square cm per second. The gamma ray activity of each sample was then examined twice - firstly, a week after irradiation to identify the short-lived, fast-decaying isotopes, and secondly, a month later, to determine the long-lived isotopes. These spectral analyses were carried out at Bradford using Hewlett Packard and Laben multi-channel analysers and the trace element compositions established using the computer facilities available there. The average error in these experiments is approximately 1.5E where E is the error determined from Poisson statistics, here appropriate in dealing with the phenomenon of radioactive decay.

For the basic principle of neutron activation analysis, the reader is referred to summaries published elsewhere (eg, Perlman and Asaro 1969; Tite 1972, 273-8). For greater detail of the methods currently adopted at the University of Bradford for the neutron activation analysis of pottery, see the unpublished dissertations of St Neots-type ware (Hunter 1975; Coleman 1976) and Thetford-type ware (Hawkin 1977). Applications of the neutron activation technique and other scientific methods in the study of pottery fabrics are given in Blake and Davey 1983, chapter 3.

The Neutron Activation Analysis; Results

Absolute parts per million values were determined for five short-lived (Na 24, K 42, Sc 46, La 140, and Sm 153) and nine long-lived isotopes (Sc 46, Cr 51, Fe 59, Co 60, Rb 86, Cs 134, Ce 141, Hf 181, and Pa 233). This data is presented in Tables 2 and 3 (M94); Table 2 relates to the kiln site material, Table 3 to the non-kiln site material. Tables 4 and 5 (kiln site and non-kiln site sherds respectively: M95) show the data normalised to Sc 46, an element that is usually accurately determined and does not vary greatly between samples. Normalisation of the data to a single element can ease the problems of dilution and enrichment caused by gritting materials and the leaching out or deposition of soluble salts; it can also remove any inter-irradiation anomalies caused by variations in the reactor conditions. In this instance it was found that the overall sample to sample variation was much clarified by normalisation procedures.

Initially, it was felt necessary to establish whether a single sherd analysed more than once would give adequately homogeneous results. Samples 1-3 and 4-6, from the two Cox Lane Ipswich ware sherds, showed that this was indeed the case for most elements analysed (Table 4, M95) and the project proceeded.

In the following discussion of the results of the neutron activation analysis, the normalised data in Tables 4 and 5 is chiefly used. M93 shows the Fe/Sc ratio plotted against the Cs/Sc ratio and it is fair to say that plotting of most other ratios would result in a broadly similar pattern and separation. Examination of the trace element concentrations can be carried out as two separate operations. Firstly, it is necessary to establish how distinctive the kiln site material is and secondly, assuming that some degree of distinction is evident, is it possible to relate the non-kiln site to the kiln site material in any meaningful fashion?

Inspection of Table 4 and M93 shows most clearly that the Roman kiln material differs greatly from the Ipswich ware and Thetford-type ware from the Ipswich kilns. The La/Sc, Fe/Sc, Co/Sc, Cs/Sc and Pa/Sc ratios demonstrate this and show also the considerable difference within the Roman kiln site material itself. The Stanground, Longthorpe, and Stibbington sherds are each distinguished by their own trace element patterns although obviously on the basis of so few analyses one dare not draw general conclusions about products from these kilns. It is also noticeable that all the Roman sherds have low Na and K values as compared with the Saxon and Saxo-Norman material. These elements are frequently present in pottery in the form of soluble salts, so these results may perhaps be due to the prolonged burial conditions of the Roman sherds leading to more extensive leaching out of these salts or, possibly, they might reflect a difference in the methods of clay preparation (eg, prolonged 'souring' or puddling). Alternatively, these results may of course be due to a fundamental difference in clay sources which is already suggested by the other trace element data.

In examining the results for the Ipswich ware and Thetford-type ware from the Ipswich kilns it is apparent first that there are no substantial trace element differences within this material; all the sherds, both Thetford-type and Ipswich ware, appear to belong to a single large group. This is perhaps to be expected when analysing kiln products of a broadly similar fabric appearance from a single town. However, in support of the petrological distinction already noted between the Cox Lane and Carr Street sherds (4-6 v 7 and 8), the Sm/Sc and Hf/Sc ratios may prove to be significant, but, again, too few analyses have been carried out to permit a categorical statement to this effect. It is interesting that the Thetford-type ware samples (9-12) closely resemble the Carr Street sherd in terms of their Sm/Sc and Hf/Sc ratios, perhaps confirming the close fabric links evident in the preliminary visual examination. It is significant in this context that additional analyses recently carried out on Thetford-type kiln material from Cox Lane (Hawkin 1977, 89, 93-4, 114-16) confirm the overall compositional similarity between Ipswich and Thetford-type ware from Ipswich, although it is suggested that iron may be a potential discriminator between the two.

Comparison of the non-kiln site sherds with those from kiln contexts stresses firstly that all the Saxon and late Saxon material from both Castor and Ipswich bears little trace element resemblances to the Roman sherds from the immediate Castor area. However, the non-kiln site results effectively submerge any distinction between the two types of Ipswich ware fabric that may be sought on the basis of the Sm/Sc and Hf/Sc ratios. All the Castor material, including the supposed locally manufactured sherd (41), and the three Ipswich ware sherds from St Helen's Street, Vernon Street, and Lower Brook Street (19-21), resemble the overall trace element pattern of the Cox Lane and Carr Street products. M93 in which the Fe/Sc and Cs/Sc ratios are plotted, illustrates this situation where it can be seen that the non-kiln site results almost encompass within their spread the results determined for the Ipswich kiln products.

Discussion

In summary, therefore, in terms of trace element composition, the Castor Middle Saxon pottery is broadly similar to the Ipswich ware and Thetford-type ware from Ipswich, and clearly dissimilar from the locally produced Roman pottery analysed in this project. From the results in Tables 2-5, nine of the elements analysed (scandium, iron, cobalt, rubidium, cesium, lanthanum, samarium, hafnium and protactinium) can be regarded as suitable for use in fabric comparison in this project, while four (sodium, potassium, chromium and cerium) appear less appropriate.

With the proviso that only a small number of samples have been examined, the following tentative conclusions and comments may be put forward. Initially, it can reasonably be suggested that the Castor Middle Saxon sherds were not using the same clays as those employed by the three nearby Roman kilns in their manufacture of the fabrics exhibited in samples 12-17. This assumes that any radical difference in Roman as against Saxon ceramic technology is not significantly affecting trace element composition. However, this does not necessarily rule out the possibility that the Castor Middle Saxon pottery could have been locally manufactured from local clays. The clay geology of the Lower Nene Valley is both complex and varied, while it is conceivable that the Roman pottery industry in this area ventured some distance and depth in search of specific clay deposits. Moreover, the advanced state of Roman technology and economy, ceramic and otherwise, causes one to emphasise that the location of ceramic industry may not be governed by the site of clay sources alone but perhaps also by a number of other facilities, market locations, and consumer demand. Such factors were perhaps less important in the Middle Saxon period, if indeed it is realistic to speak in terms of Middle Saxon pottery manufacture in England as being anything more than a series of local, or possibly regional, industries. Certainly, from the evidence of the results determinded for the Stanground, Longthorpe, and Stibbington sherds, it would be informative to conduct a larger scale project of compositional analysis of the Lower Nene Roman kiln products together with analysis of the clays available in that area.

It is probable but by no means certain that the Castor Middle Saxon pottery represented by samples 22-40 is correctly designated as Ipswich 'type' ware, but it would be premature to suggest that it was manufactured in Ipswich itself in the Cox Lane/Carr Street area or even that it was made using clays from the immediate Ipswich area. More extensive examination of the Ipswich ware fabrics is required using both elemental and mineralogical methods of ceramic analysis allied with statistical treatment of the results. Equally necessary is an examination of the potential clay sources, not just the Eocene, Pleistocene and Recent clays, but also the boulder and alluvial clays. It is disturbing, also, that the results for the single Castor sherd of presumed local origin (41) are indistinguishable from the Ipswich ware results and further examination of this fabric is clearly required.

However, in the context of other applications of the neutron activation technique to Saxo-Norman pottery of eastern England, it is encouraging that Ipswich products as a whole are distinguishable on a trace element basis. Hawkin (1977, 113 and fig 9) has shown convincingly that Ipswich and Thetford-type ware from Ipswich can be separated from Thetford-type ware produced in Thetford and Norwich, and from Stamford ware, while samarium, hafnium and protactinium satisfactorily distinguish Ipswich products from recent analyses carried out on calcite-gritted St Neots-type ware (Hunter 1975; Coleman 1976; Hunter 1979). The fact that the Castor analyses similarly differ from these other wares could perhaps be construed as a point in favour of classifying these sherds as Ipswich products, but ideally more extensive trace element 'fingerprinting' of kiln products and raw materials is still required.

Characterisation of medieval kiln products has in fact been carried out with some success (Aspinall *et al* 1968; Hawkin 1977) and this approach is indeed inherent in this particular project. In theory, by concentrating on kiln product characterisation, the task of chemically analysing potential geological sources can to a great extent be avoided; this would be a significant and practical advantage as the clay sources themselves will probably be subject to internal variation in trace element composition and additional analytical problems would be encountered in trying to assess the effect of clay preparation methods (eg, blending of clays, addition of tempering materials, etc). However, in using the kiln product characterisation approach it should always be borne in mind that a number of kilns of unknown location are likely to exist, so that difficulty can be expected in attempting to attribute non-kiln site potsherds to specific kiln sources. For this reason one can only safely conclude from this particular project that Castor probably possesses *bona fide* Ipswich 'type' ware and that, in the present state of knowledge, one cannot declare that this has been imported from the only known kilns for this ware located in Ipswich itself.

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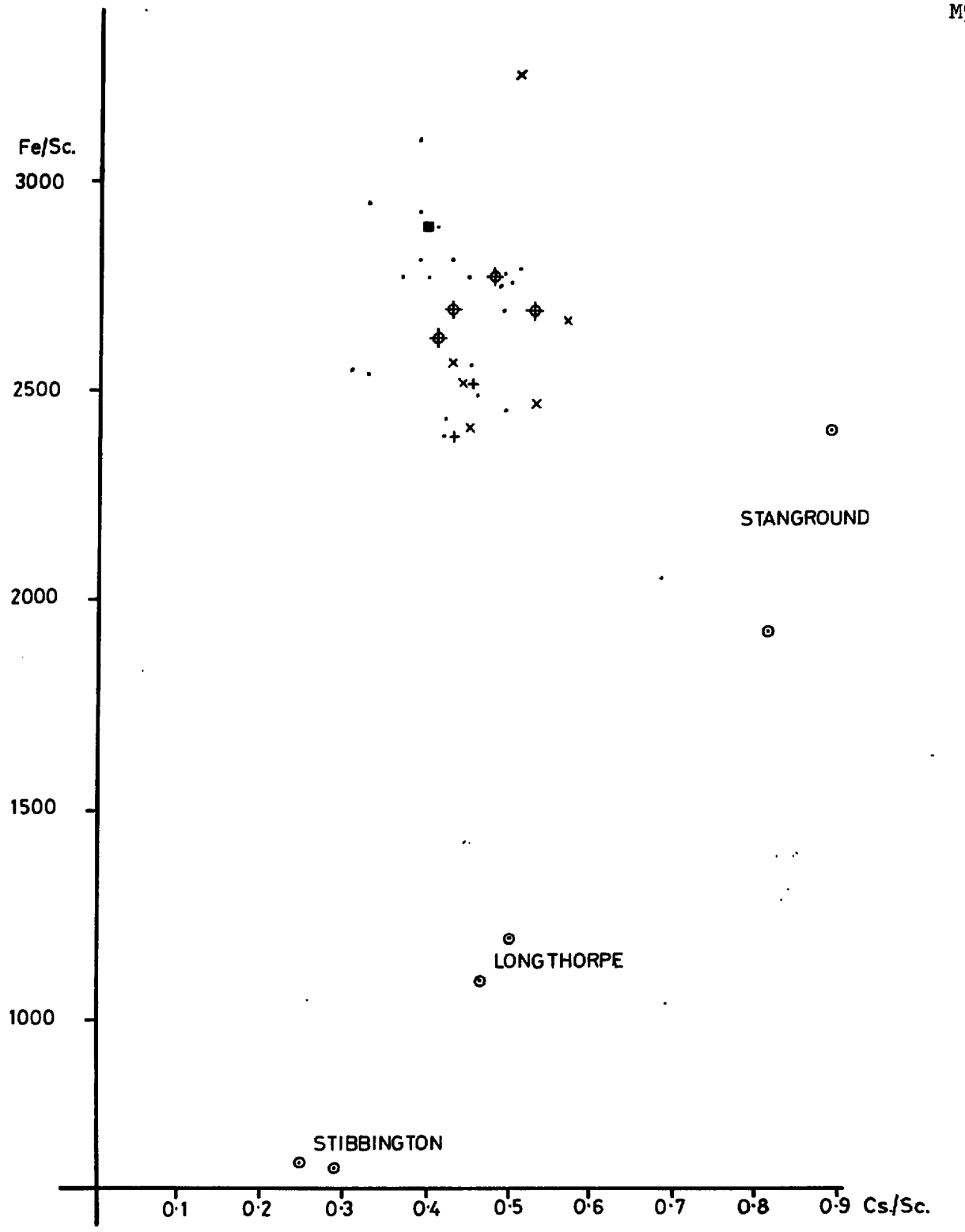
Table 1. Sherds selected for analysis
(An asterisk denotes additional examination in thin section)

Sample No	Sherd Details
1-3	Rim, waster, Ipswich ware cooking pot. Coarse grey fabric with voids, pimply surfaces, girth grooves. Cox Lane, Ipswich, kiln V. IBM 961.20.
4-6*	Rim, waster, Ipswich ware cooking pot. coarse grey fabric with voids, smooth outer surface. Cox Lane, Ipswich, kiln V. IBM 961.5D.
7-8*	Rim, waster, Ipswich ware cooking pot. Fine hard sandy fabric. Carr Street kiln, Ipswich. IBM 1935.74A.
9-10	Base, Thetford-type ware cooking pot. Fine hard sandy grey fabric. Cox Lane, Ipswich, kiln I.
11-12	Base, Thetford-type ware cooking pot. Fine hard sandy grey fabric. Cox Lane, Ipswich, kiln I.
13-14	Base, Romano-British grey ware. Hard sandy grey fabric with a few calcareous inclusions. Stanground kilns. SPF 66. BC6 I (i).
15-16	Body sherd, Romano-British Longthorpe Fabric 1. Fine sandy pale brown to pink fabric. Longthorpe military kilns. LHR 7. F4 (6).
17-18	Body sherd, Romano-British colour-coated ware. Fine sandy light grey to white fabric with brown slip. Stibbington kilns. SB 69A VII (M).
19*	Body sherd, Ipswich ware cooking pot. Fine hard sandy grey fabric. St. Helen's Street. Ipswich. Unstratified. IAS 36010003.
20*	Body sherd, Ipswich ware. Coarse grey fabric, pimply surfaces, girth grooves. Vernon St Ipswich. Unstratified. IAS 74020090.
21*	Body sherd, Ipswich ware. Fine hard sandy fabric. Lower Brook Street, Ipswich. Unstratified. IAS 45020001.
22	Rim, ?Ipswich ware. Fine hard sandy grey fabric. Castor. CASP 73 L (20) /3. This report TEXT FIG 24 no 26.
23	Body sherd, ?Ipswich ware. Coarse grey fabric, pimply surfaces, girth grooves, Castor. CASP 74 (+) /4.
24	Body sherd, ?Ipswich ware. Coarse grey fabric, pimply surfaces, Castor. CASP 73 L (101) /5.
26	Body sherd, ?Ipswich ware. Fine hard sandy grey fabric, girth grooves, ?burnished. Castor, CASP 73 L (2) /7.
27	Body sherd, ?Ipswich ware. Coarse grey fabric, pimply surfaces, girth grooves. Castor. CASP 71 XLV (9) /8.
28	Body sherd, ?Ipswich ware. Coarse grey fabric, pimply surfaces. Castor, CASP 73 L (32) /9.
29-30	Body sherd, ?Ipswich ware. Coarse grey fabric. Castor. CASP 73 L (18) /10.
31	Body sherd, ?Ipswich ware. Coarse grey fabric, pimply surfaces, girth grooves. Castor. CASP 73 L (98) /11.
32	Body sherd, ?Ipswich ware. Coarse grey fabric, pimply surfaces, girth grooves. Castor, CASP 73 L (30) /12.
33-34	Body sherd, ?Ipswich ware. Coarse grey fabric. Castor. CASP 73 L (18) /13.
35	Body sherd, ?Ipswich ware. Coarse grey fabric, pimply surfaces, knife-trimming. Castor. 73 L (2) /14.
36	Body sherd, ?Ipswich ware. Fine hard sandy reddish-brown to grey fabric, burnished. Castor. CASP 73 (32) /15.
37	Body sherd, ?Ipswich ware. Coarse grey fabric, pimply surfaces. Castor. CASP 73 L (75) /16.
38	Body sherd, ?Ipswich ware. Coarse grey fabric, pimply surfaces, girth grooves. Castor. CASP 73 L (39) /17.
39	Body sherd, ?Ipswich ware. Coarse grey fabric, pimply surfaces, girth grooves. Castor. CASP 73 L (94) /18.
40	Rim, ?Ipswich ware. Coarse grey fabric, pimply surfaces, girth grooves, burnished. Castor. CASP 73 L (2) /20. This report, TEXT FIG 24 no 36.
41	Body sherd, ?local ware. Coarse-gritted reddish-brown to grey fabric. Castor. CASP 73 L (108) /1. This report TEXT FIG 23, no 19.



⊙ Roman kiln site sherds. × Ipswich ware, Cox Lane kilns.

\+ Ipswich ware, Carr St. kilns. ⌖ Thetford ware, Cox Lane kilns.

■ Castor Saxon sherd · Ipswich ware (and ?), non kiln sites.

Table 2. Kiln Site Sherds. Parts per million. Absolute Values

	Element	Na	K	Sc	La	Sm	Sc	Cr	Fe	Co	Rb	Cs	Ce	Hf	Th
	Sample														
(1	Ipswich ware	3310	29200	21.0	52.6	10.3	22.2	152	57110	29.0	167	9.61	108	7.48	14.23
(2	Cox Lane	3430	30800	21.3	58.0	10.5	22.3	151	56320	30.5	113	9.90	115	7.38	16.28
(3		2310	23500	16.4	42.2	7.7	15.8	106	42490	20.7	111	9.05	79	5.32	12.32
(4	Ipswich ware	2460	21800	16.4	39.8	7.2	16.8	143	40700	34.5	85	7.53	79	6.28	11.60
(5	Cox Lane	2210	18500	14.9	35.2	7.3	14.7	1986	48000	21.0	80	7.56	68	5.62	5.27
(6		2220	20200	14.4	36.6	7.5	15.2	348	37700	18.2	114	8.05	81	5.77	5.35
(7	Ipswich ware	2670	20400	12.4	28.8	4.2	13.2	140	33400	17.3	86	5.91	62	8.82	5.58
(8	Carr Street	2890	19800	12.8	30.1	4.2	12.3	115	29500	16.0	76	5.25	52	8.1	8.01
(9	Thetford ware	3050	19000	14.6	32.2	5.0	14.3	105	37800	22.3	71	5.87	56	7.20	7.87
(10	Cox Lane	3640	26000	17.7	39.5	6.4	15.1	124	40100	18.2	80	6.43	60	7.00	11.50
(11	Thetford ware	2890	22000	17.7	41.7	6.8	14.2	96	38600	17.2	85	7.63	62	5.99	9.04
(12	Cox Lane	3200	21900	19.6	44.9	7.1	20.2	159	56200	26.8	120	9.78	83	9.13	10.82
(13	Roman	2200	18200	15.0	36.1	5.2	11.2	941	27100	13.6	86	9.94	50	3.79	-
(14	Stanground	2620	24800	17.1	39.0	5.9	18.0	171	34900	15.4	171	14.50	75	5.23	14.54
(15	Roman	1370	12100	18.2	44.0	6.6	14.5	170	16000	11.2	65	6.77	68	6.27	12.55
(16	Longthorpe	1270	12000	16.9	41.1	6.1	13.0	91	15400	7.3	47	6.49	58	5.35	14.05
(17	Roman	1590	6330	21.9	66.1	9.9	22.2	158	14400	13.2	17	6.33	149	13.63	26.14
(18	Stibbington	1760	5380	25.2	75.3	11.3	25.6	176	16800	17.9	31	6.47	171	15.00	32.69

Bracketed samples refer to single sherds analysed more than once.

Note: elemental concentrations derived from the following radioisotopes:
short-lived - Na (Na24), K (K42), Sc (Sc46), La (La140), Sm (Sm153)
long-lived - Sc (Sc46), Cr (Cr51), Fe (Fe59), Co (Co60), Rb (Rb86), Cs (Cs134), Ce (Ce141), Hf (Hf181), Th (Pa233)

Table 3. Non-kiln Site Sherds. Parts per million. Absolute Values

	Element	Na	K	Sc	La	Sm	Sc	Cr	Fe	Co	Rb	Cs	Ce	Hf	Th
	Sample														
19	Ipswich ware	2830	18000	11.8	31.7	7.6	12.3	164	31500	23.6	80	3.85	65	15.85	8.26
20	Ipswich ware	2700	21200	16.7	39.9	7.3	16.8	171	49000	18.9	114	6.94	70	6.32	11.02
21	Ipswich ware	3330	19200	12.5	34.6	6.4	12.7	129	30100	18.8	82	5.38	72	9.71	9.05
22?	Ipswich ware	3040	19300	14.0	36.0	5.4	14.2	116	38370	13.6	81	6.17	70	8.44	8.53
23?	Ipswich ware	1840	15700	11.9	32.2	6.4	12.9	84	36430	15.1	85	5.59	68	4.70	6.75
24?	Ipswich ware	2920	21400	18.0	43.9	7.1	18.5	113	51490	24.3	-	8.25	91	5.91	10.06
25?	Ipswich ware	3320	21200	15.7	38.5	6.5	16.4	105	41920	19.4	115	5.35	75	5.76	9.82
26?	Ipswich ware	2810	21800	16.2	37.0	6.2	16.5	109	46520	16.2	101	6.41	71	8.09	7.32
27?	Ipswich ware	2820	27500	19.7	50.1	9.8	19.6	130	54540	20.2	64	9.47	90	5.42	11.11
28?	Ipswich ware	2960	24500	20.3	52.4	9.7	20.5	122	56840	21.3	83	8.25	79	6.26	10.69
(29?	Ipswich ware	not analysed					24.4	145	59300	26.7	113	10.26	112	7.18	12.33
(30?		3600	28900	22.1	50.9	8.3	21.2	761	57500	29.3	150	10.41	103	6.88	13.32
31?	Ipswich ware	2080	20100	14.0	35.5	6.2	14.3	95	39940	14.6	92	7.33	71	4.47	7.88
32?	Ipswich ware	2840	22800	15.8	36.0	6.0	16.1	111	41530	15.9	131	7.22	70	5.97	8.44
(33?	Ipswich ware	3090	22000	15.9	37.0	5.9	16.1	113	39520	16.6	118	7.87	66	6.02	9.03
(34?		2780	21200	15.9	37.8	6.7	15.7	125	39200	18.5	78	7.15	57	5.49	10.18
35?	Ipswich ware	3360	29400	19.8	51.1	10.0	17.2	125	47540	22.9	81	8.61	87	6.02	8.80
36?	Ipswich ware	3030	23900	18.2	44.0	8.3	18.3	132	50750	21.3	101	6.79	77	6.49	9.97
37?	Ipswich ware	2650	22400	18.1	46.8	9.2	17.7	121	49410	19.5	98	8.68	90	7.07	10.83
38?	Ipswich ware	2880	21300	16.0	41.6	6.7	16.6	123	51420	17.6	133	6.41	76	8.40	9.18
39?	Ipswich ware	2540	21900	17.0	43.2	6.5	17.2	112	50540	20.4	111	6.76	80	6.90	8.16
40?	Ipswich ware	1990	24500	16.7	42.5	7.3	16.8	120	49740	22.1	193	5.50	80	7.49	9.53
41?	Local Castor	1710	14200	12.1	30.3	4.2	11.9	102	34500	12.2	99	4.71	47	4.38	9.01

Bracketed samples refer to single sherds analysed more than once.

Table 4. Kiln Site Sherds. Parts per million normalised to Scandium

	Element / Sample	Na	K	La	Sm	Cr	Fe	Co	Rb	Cs	Ce	Hf	Th
(1	Ipswich ware Cox Lane	160	1400	2.5	0.49	7	2580	1.3	8	0.43	4.9	0.34	0.64
(2		160	1400	2.7	0.49	7	2530	1.4	5	0.44	5.2	0.33	0.73
(3		140	1400	2.6	0.47	7	2680	1.3	7	0.57	5.0	0.34	0.78
(4	Ipswich ware Cox Lane	150	1300	2.4	0.44	9	2420	2.1	5	0.45	4.7	0.37	0.69
(5		150	1200	2.4	0.49	135	3270	1.4	5	0.51	4.6	0.38	0.36
(6		150	1400	2.5	0.52	23	2480	1.2	8	0.53	5.3	0.38	0.35
(7	Ipswich ware	220	1600	2.3	0.34	11	2530	1.3	7	0.45	4.7	0.67	0.42
(8	Carr Street	230	1500	2.4	0.33	9	2400	1.3	6	0.43	4.3	0.66	0.65
(9	Thetford ware	210	1300	2.2	0.34	7	2640	1.6	5	0.41	3.9	0.50	0.55
(10	Cox Lane	200	1500	2.2	0.36	8	2700	1.2	5	0.43	4.0	0.46	0.76
(11	Thetford ware	160	1200	2.4	0.38	7	2700	1.2	6	0.53	4.3	0.42	0.64
(12	Cox Lane	160	1100	2.3	0.36	8	2780	1.3	6	0.48	4.1	0.45	0.54
(13	Roman	150	1200	2.4	0.35	84	2420	1.2	8	0.89	4.5	0.34	-
(14	Stanground	150	1450	2.3	0.34	10	1940	0.9	10	0.81	4.2	0.29	0.81
(15	Roman	75	660	2.4	0.36	12	1100	0.8	4	0.47	4.7	0.43	0.87
(16	Longthorpe	75	710	2.4	0.36	7	1200	0.6	4	0.50	4.4	0.41	1.08
(17	Roman	75	290	3.0	0.45	7	650	0.6	1	0.29	6.7	0.61	1.18
(18	Stibbington	70	210	3.0	0.45	7	660	0.7	1	0.25	6.6	0.59	1.28

Bracketed samples refer to single sherds analysed more than once

Table 5. Non-kiln Site Sherds. Parts per million normalised to Scandium

	Element / Sample	Na	K	La	Sm	Cr	Fe	Co	Rb	Cs	Ce	Hf	Th
19	Ipswich ware	240	1500	2.7	0.64	13	2560	1.9	7	0.31	5.3	1.29	0.67
20	Ipswich ware	160	1300	2.4	0.44	10	2900	1.1	7	0.41	4.1	0.38	0.67
21	Ipswich ware	270	1500	2.8	0.51	10	2400	1.5	7	0.42	5.6	0.76	0.71
22?	Ipswich ware	220	1400	2.6	0.39	8	2710	1.0	6	0.44	4.9	0.60	0.60
23?	Ipswich ware	150	1300	2.7	0.54	7	2820	1.2	7	0.43	5.3	0.36	0.52
24?	Ipswich ware	160	1200	2.4	0.39	6	2780	1.3	-	0.45	4.9	0.32	0.54
25?	Ipswich ware	210	1350	2.5	0.41	6	2550	1.2	7	0.33	4.6	0.35	0.60
26?	Ipswich ware	170	1340	2.3	0.38	7	2820	1.0	6	0.39	4.3	0.49	0.44
27?	Ipswich ware	140	1400	2.5	0.50	7	2780	1.0	3	0.48	4.6	0.28	0.57
28?	Ipswich ware	150	1210	2.6	0.48	6	2780	1.0	4	0.40	3.9	0.31	0.52
(29	Ipswich ware	not analysed				6	2440	1.1	5	0.42	4.6	0.30	0.51
(30?		160	1300	2.3	0.40	36	2700	1.4	7	0.49	4.9	0.32	0.63
31?	Ipswich ware	150	1440	2.6	0.44	7	2800	1.0	6	0.51	5.0	0.31	0.55
32?	Ipswich ware	180	1440	2.3	0.38	7	2570	1.0	8	0.45	4.4	0.37	0.52
(33	Ipswich ware	190	1380	2.3	0.37	7	2460	1.0	7	0.49	4.1	0.38	0.56
(34?		170	1300	2.4	0.40	8	2500	1.2	5	0.46	3.6	0.35	0.65
35?	Ipswich ware	170	1490	2.6	0.51	7	2770	1.3	5	0.50	5.1	0.35	0.51
36?	Ipswich ware	170	1310	2.4	0.46	7	2780	1.2	6	0.37	4.2	0.36	0.55
37?	Ipswich ware	150	1240	2.6	0.51	7	2790	1.1	6	0.49	5.1	0.40	0.61
38?	Ipswich ware	180	1340	2.6	0.42	7	3100	1.1	8	0.39	4.6	0.51	0.55
39?	Ipswich ware	150	1290	2.6	0.38	7	2940	1.2	7	0.39	4.7	0.40	0.47
40?	Ipswich ware	120	1470	2.6	0.44	7	2960	1.3	12	0.33	4.8	0.45	0.58
41?	Local Castor	140	1200	2.6	0.30	9	2900	1.0	8	0.40	3.9	0.37	0.76

Bracketed samples refer to single sherds analysed more than once

MEDIEVAL POTTERY

A selection of the medieval pottery from the Elmlea excavation is illustrated in TEXT FIG 26, 98-101 and below. Overall, there was little pottery from the site dated to the period AD 1066-1500 and it was mainly in contexts which were not usefully stratified. The information supplements that from Charles Green's excavations at Castor described previously in M64-9.

The Elmlea medieval pottery consists of less than 200 sherds out of a total of over 7600 from the site. The features in Trench L produced only a few sherds each. The rims found are illustrated here as no 100 from Trench L 48 and no 114 from Trench L 85. The most conspicuous feature of the Elmlea assemblage as a whole is the absence of definite Late Saxon material, and it seems that this area of the village was not occupied in Late Anglo-Saxon times. The sequence begins in the mid-11th century and, other than two pieces of grey gritty Saxo-Norman wares, Stamford and St Neots-type wares are dominant. Pottery of full medieval date occurs in very small quantities and is (Steane 1967; Bryant *et al* 1969; Bryant and Steane 1971). Also present are products from the kilns at Bourne; Bourne fabrics B, C, and D are certainly present, ranging in date from the 14th to the 17th centuries. There are a few sherds of a Grimston-type and some sherds resembling fabrics from the Nottingham area.

The Wares

(i)St Neots-type ware

The origin of St Neots-type wares is unknown, but they are likely to be local since

a. the fabric occurs in the Peterborough region at all archaeological periods and fossilised shell is present both in local clays and local limestones; and

b. the Peterborough material does not match very closely with similar wares from Lincolnshire, North Cambridgeshire or Northamptonshire.

The term 'St Neots-type ware' has been used here, however, as the pottery belongs to that style and date range (see Hurst 1956).

The forms on the Elmlea site are mainly jars or cooking pots, usually having a rim with an internal hollow, although there are some examples of simple everted rims,eg 100. Also represented are storage jars, 100; large bowls, 112 and 113; inturned bowls (two examples, one illustrated, 101); and jugs 103. Many of the vessels have thumbed decoration at the rim, 106, 108 and 113, and some sherds have strip decoration on the body, 102. There is one bodysherd with square rouletted decoration (not illustrated). All have sagging bases.

The local fabrics are usually firm but not soft or soapy to the touch, although there are a few sherds like this. The amount of white inclusions is usually quite high, but the types of fabric are less shell-filled than the north Lincolnshire types and resemble those found in Cambridgeshire far more closely. It is common for the tempering to be burnt out, leaving a pitted sherd which is harsh to the touch and light in weight. Surface colouring is usually red or reddish brown, although some dark brown, grey, or purplish sherds exist. There is nearly always a dark grey core, and all the illustrated sherds, 100-13, have a dark grey core and red surfaces, unless stated otherwise.

(ii)Stamford ware

Stamford ware (Hurst 1958; Kilmurry 1980) forms a high percentage of any local early medieval group and is frequently present residually in later contexts. Both the 13th century 'developed' wares, with a white fabric and dark green glaze, and the 11th to 12th century types, with buff or pink fabrics and light yellow and green glazes, are present; there are also some reduced sherds in the collection. Forms include jars, 117; 118-121; and pitchers 114 and 115. Some sherds have thumb-pressed decoration. A high percentage of the Elmlea Stamford ware is unglazed, and the illustrated sherds are unglazed except for 116,118,120 and121. These few sherds are not in a stratified sequence and can therefore make no significant contribution to our present knowlege.

CATALOGUE

For explanation of provenance details see M76.

TEXT FIG 26

98 From L 29.
Dark grey sandy fabric with slightly pimply surface. Source and date uncertain, but probably later medieval.

99 From XI 2.
Pinkish brown with some darker areas in core. Temper basically sandy, with grey particles and the occasional calcite inclusion. Surfaces smoothed. Date and source not clear.

St Neots-type ware

100 From L 48
Some blackening externally on rim.

101 From L 7.
Inturned bowl. Residual with early post-medieval pottery.

102 From XI 2.
Handle with thumbed decoration on raised edges. There are also plain strap handles in the collection. In typical colours.

103 From XXIX + 1.
Jug rim with very faint thumbing at the top of the rim.

104 From XXIX 1.
Typical.

105 From L 8.
Temper burnt out.

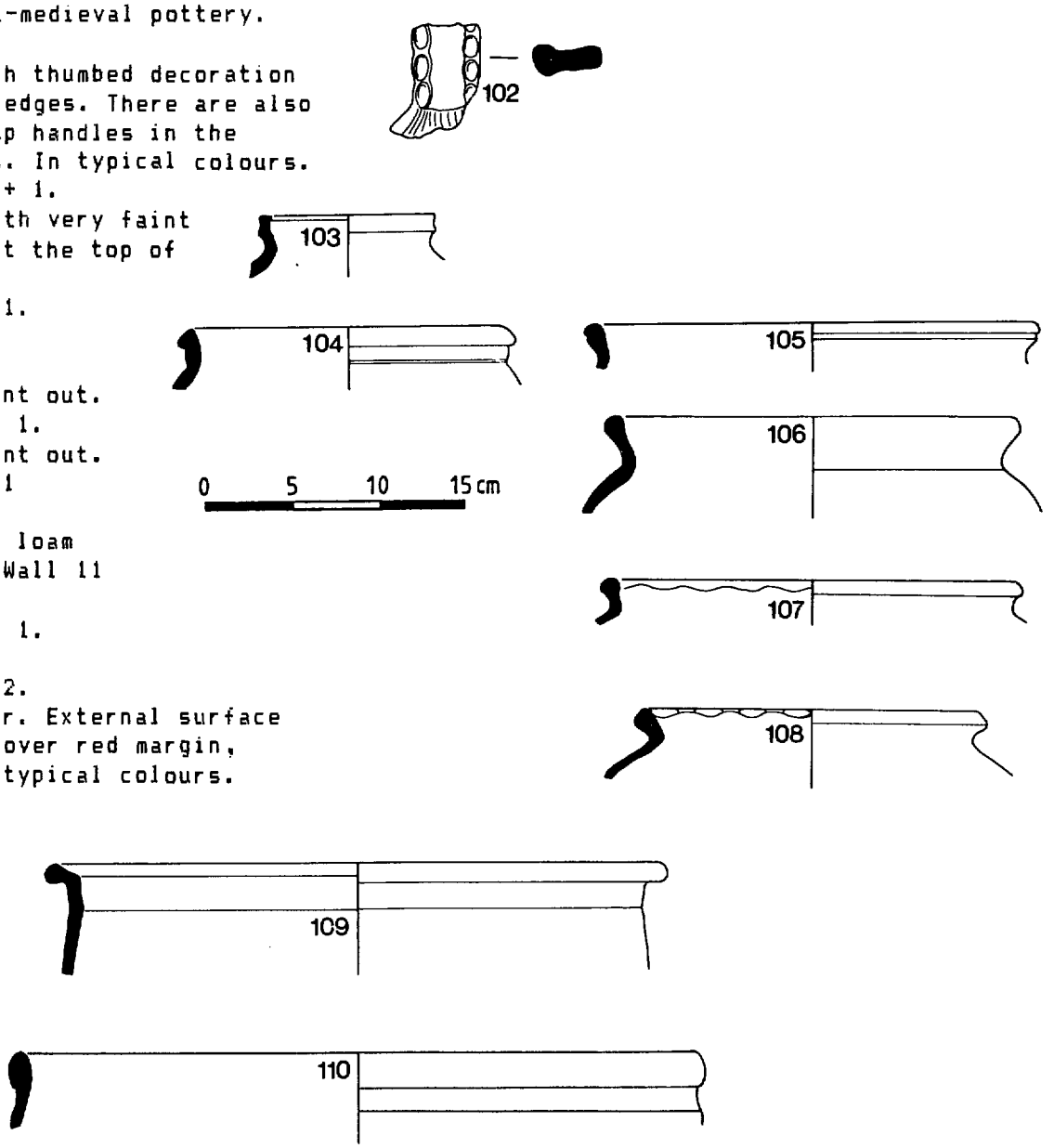
106 From XXIII 1.
Temper burnt out.

107 From XXXV 1
Typical.

108 From L 19, loam north of Wall 11
Typical.

109 From XXIII 1.
Typical.

110 From XXIX 2.
Storage jar. External surface dark grey over red margin, otherwise typical colours.



111 From IX 1.
Typical.

112. From XIX 1.
Large bowl. Mottled black patches on interior and exterior, otherwise typical.

113 From XXXIX 6.
Large bowl. Exterior dark grey, interior red, grey core.

Stamford ware

114 From L 77, stratified in the east wall of 85.
Pitcher. Buff, some blackening on rim externally.

115 From XXXVIII 2.
Pitcher. Yellow-buff, some external sooting.

116 From XXXVIII 2.
Buff fabric, exterior reduced to bluish colour with large patches of light green glaze; spots of yellow glaze on rim.

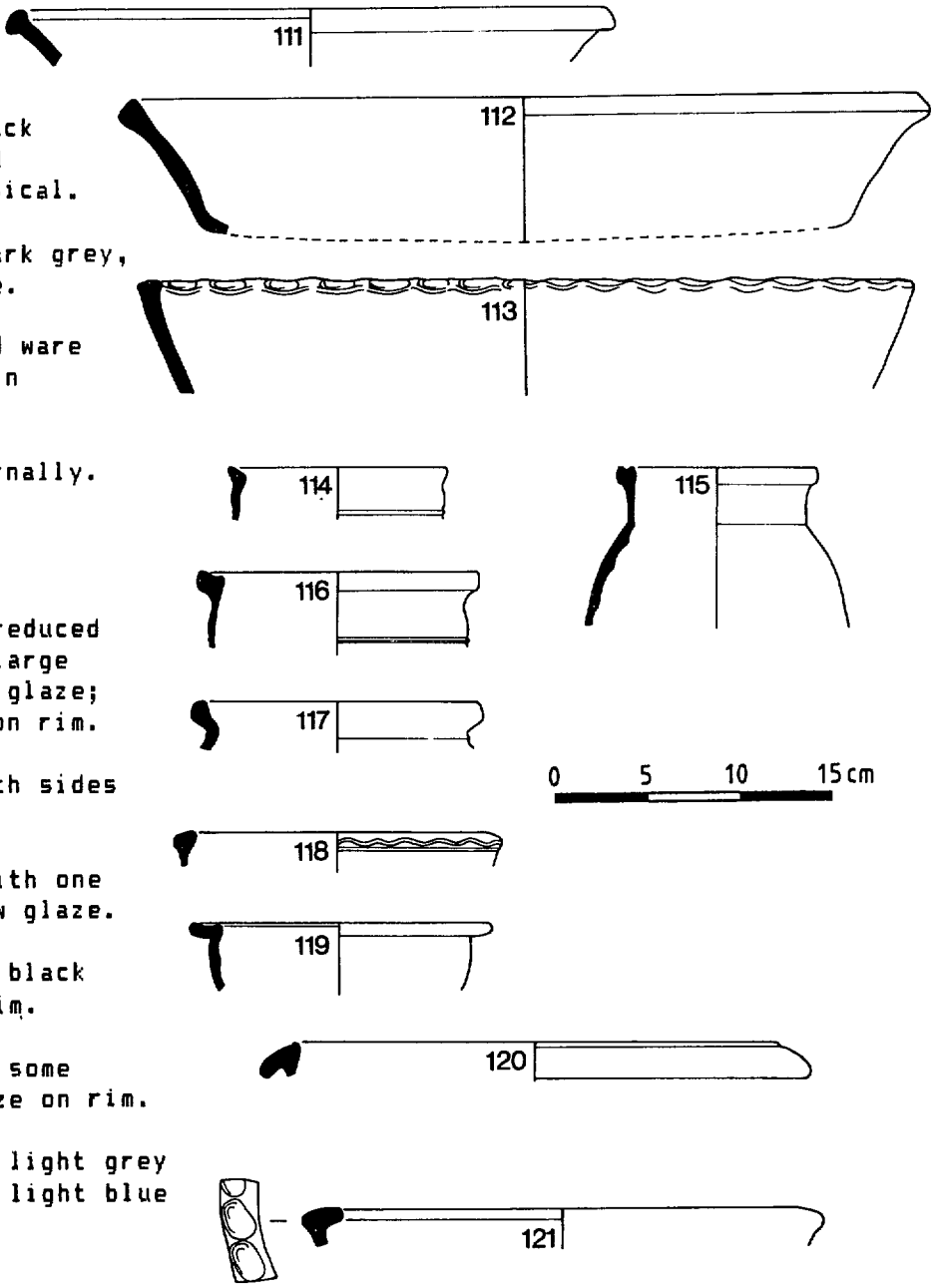
117 From XXIII 1.
Jar. Buff, black on both sides of rim.

118. From XXVII 3.
Bowl. Yellowish buff with one external spot of yellow glaze.

119. From XXI 5.
Bowl. Buff fabric with black exterior surface and rim.

120. From L 19.
Bowl. Buff fabric with some thin sparse yellow glaze on rim.

121. From L 19.
Bowl. Buff fabric with light grey core. Exterior mottled light blue and yellow glaze.



The Post Medieval Pottery

No post-medieval pottery has been illustrated, as the quantity and quality of the material was poor and the sherds have no bearing on the site sequence. Other than noting the presence of Cistercian ware, a Bellarmine face jug (the mask fragment is not complete), Bourne Fabric D (Healey 1969, 109), and the later brown lead-manganese glazed wares of the 18th century, little can be usefully said as the material is nearly all from the topsoil. Readers are referred to the material from Charles Green's site III for some stratified post-medieval pottery: M70-5.

SCRAFFITI

82 From L 62, undated layer.
SF 153 Sherd from the shoulder of a shelly ware cooking pot with lines incised after firing.

83 From L 38, with early medieval pottery.
SF 29 Roman colour-coated bodysherd with lines incised after firing.

84 From L 38, with early medieval pottery.
SF 317 Sherd of a Roman mortarium with incised lines just above the base of the pot.

85 From L 30, general cleaning.
SF 312 Rim from a black-burnished pot with lines incised on the inside surface after firing.