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BRONZE AGE ARTIFACTS IN AVON

L V Grinsell

The Bronze Age metalwork of southern England has been the subject of several recent studies (e.g. Rowlands 1976; Colquhoun 1978 for pre-1974 Somerset; Burgess 1980; Pearce 1983 and 1984), which have their own classifications and inevitably reveal inconsistencies in matters of detail in their treatment of the material from traditional north Somerset. No inventory of the material from Bristol and south Gloucestershire has yet been published, except for that held in the City of Bristol Museum up to 1967 (Grinsell 1968).

The following list provides a concordance between Rowlands 1976, Colquhoun 1978, and Pearce 1983 for the material from traditional north Somerset and Bristol south of the Avon, and supplies a comprehensive list of finds from south Gloucestershire and Bristol north of the Avon, thereby covering the whole of the present county of Avon. In the 'Other Details' column the numbers following C, P and R provide a key to the scale drawings in the publications by Colquhoun, Pearce, and Rowlands. Bronze Age stone implements of shaft-hole type are also included.

The lists of material of Early, Middle and Late Bronze Age form the basis for the text and maps comprising chapter 3 (Bronze Age) of *Archaeology in Avon* (1986). Objects from barrows and other grave-groups are omitted.

ABBREVIATIONS

The following abbreviations used in the Other Details column refer to items in the Bibliography:

B & G Burgess and Gerloff 1981
C Colquhoun 1979
P Pearce 1983
R Rowlands 1976

The barbed-and-tanged flint arrowheads are listed in volumes II and III of the PhD thesis on *Flint Missile Points of the British Isles* (1977), by H. Stephen Green, a copy of which is in the library of the University of Wales, Cardiff.

EARLY BRONZE AGE ARTIFACTS

SUBJECT	PHASE OR TYPE	N.G.R.	MUSEUM OR COLLECTION	OTHER DETAILS
Hoards				
Ashton Court	Arreton	550715	Private	2 tanged spearheads, 2 ogival daggers, and blade of flanged axe.
Westbury-on-Trym	Arreton	557774	BCM Cat 50 a-d	3 flanged axes (2 decorated) and chisel or tracer.
Flat axes				
Banner Down	Irish	7969	Kingswood School, Bath	P 587
Bristol Bridge	Irish	591729	BCM Cat 49a	P 592
Bristol/Totterdown		603714	BCM Cat 49b	P593
Clapton-in-Gordano (Cock-heap wood)		470733	Private 1979	Inf., BCM
Lansdown		7268	BM	P 691
Uphill	Burgess gp AB	315587	Woodspring	C 3; P 778-9 (both same implement?)
Worlebury Hill (Weston Woods)		328626	Woodspring (1981)	
Flanged axes				
Bath Bridge	Acton Pk	755655	BM	C 13; P 570; R 273

Stone axe-hammers and 'battle-axes'				
Bathampton	?	7766	BM (lost)	Roe 1966, 171.
Batheaston (Charmy Down)	Battle-axe (fragment)	755703	Blitzed 1941?	Roe 1966, 172.
Cromhall	Axe-hammer	6990	BCM Cat 45a	Group XII (Corndon).
Keynsham	Axe-hammer	674677	BCM Cat 45b	Group XII (Corndon).
Winscombe (Max Mills)	Axe-hammer	401578	Unknown	Knight 1951, 72.
Yatton (Stowey Rhyne)	Battle-axe	427665	Woodspring	Group XV (Southern Lake District). Roe 1979,24
Domestic and other sites				
Ben Bridge	Settlement?	554589	BCM	Gibson 1982, 110
Chew Park	Settlement?	569593	BCM	Gibson 1982, 132
Kenn Moor	Oak Stake	439693		Neolithic or Early Bronze Age?

MIDDLE BRONZE AGE ARTIFACTS

SUBJECT	PHASE OR TYPE	N.G.R.	MUSEUM OR COLLECTION	OTHER DETAILS
Hoards				
Bath (near)		7565 area	1 private 1 unknown	2 palstaves, P 567 a and b; R 109. Smith 1959, 186 (no. 29)
Batheaston (Monkswood)	Taunton	757710	Bath Pump Room	26 objects including quoit-headed pins, bracelets, torcs, two-edged knives, sickles, and part of spearhead with loops in socket. P 576 a-y; R 115. Smith 1959
Compton Martin (Park Mead)	Taunton	553575	Univ. Bristol Spelaeol Soc (Blitzed 1940)	About a dozen palstaves, one without loop. C 40; P 641 a & b.
Westbury-on-Trym	Acton Pk?	5777 (area)	1 BCM Cat 57c; 1 Staatliche Mus. für Vorgeschichte, Berlin	2 palstaves found 1885. R 110
Palstaves				
Banwell Hill		359 (area)	BCMC at 58a	C 29; P 565 R 863.
Bath (near)		7565 (area)	Bath Pump Room	C 42 (or 41?).
Bath	Acton Park	7565 (area)	Bath Pump Room	C 20 (text); C 19 (illustration); P 576.
Bath (near)	Acton Park	7565 (area)	BCM (ex Fawcett Colln)	P 572; R 866.
Bristol Bridge	Irish	590729	BCM Cat 57b	Irish type: Burgess B or C. P 596; R 275 as flanged axe; R 870 as palstave.
Bristol/Totterdown		603714	BCMC at 58c	Looped; shield with medial rib. P 595; R 899
Bristol/Bath St		590729	Ashmolean	P 597; R 864.
Radstock	Taunton	6754 (area)	Taunton	Formerly in Weston-s-Mare mus. C 30 (but illus. 29); P 696; R 888.
Solsbury Hill, Batheaston	Acton Park	768679	BCM at 57a	Shield decoration. C 17; P 589; R890.
Twerton near Bath		725648	Alnwick 205	P 571; R 898
Worlebury Hill	Acton Park	335632	Woodspring	Crack below stopridge. C 23 (text); C 22 (Illus.) P 776e.

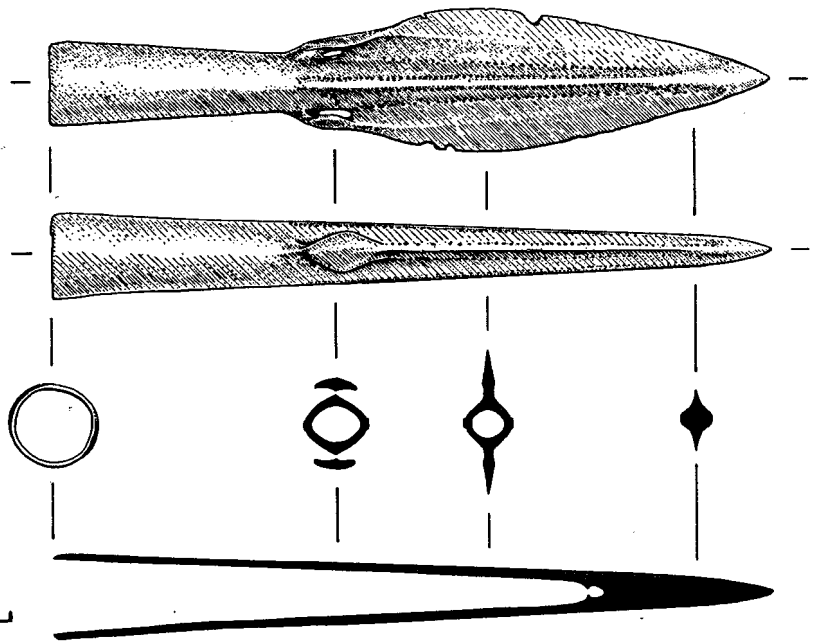

Fig 1

Socketed axe, early type				
Wrington/Lulsgate	Taunton	497658	BCM Cat 65c	Square mouth. C 59. P 791; R 1088.
Spearheads (loops in socket)				
Bristol		590729?	BCM Cat 60	P 600; R 1358.
Tormarton		767767	BCM	R 160.
Socketed spearheads (loops at base of blade)				
Bristol/Prince St.	Taunton	586726	BCM Cat 61b	P 601; R 1576
Bristol area	Taunton	5973 (area)	BCM Cat 61c	P 602; R 1577.
Loxton Hill	Taunton	3756 (area)	Woodspring	C 94; P 677; R 1580
South Stoke/Midford Viaduct	Acton Park/Taunton	762607	Ulster	Pointillé decorated blade. C 95; P 735; R 1581. Fig 1
Stoke Gifford	Taunton	623803	BCM F 6347	
Rapier				
Avonmouth Docks	Taunton	511786	BCM Cat 62	Two rivet-holes. Irish (Keelogue) type. B & G 124; P 599; R 1702.
Tanged chisel				
Camerton/Seven Acre Field	Taunton	691565	Taunton	C 128; P 612; R 1121.
Ornaments				
Winscombe/Sandford Hill	Taunton	424590	BCM Cat 65a	Bar-twisted. C 137; P 785; R 2016.
Worlebury Hill	Taunton	314625	Unknown	Ribbon-twisted. P 776a.

LATE BRONZE AGE ARTIFACTS

Hoards				
Bath	Ewart Park	7565 (area)	Bath (Pump Room)	4 Socketed axes of Irishtype. C 68-71; P 581-4.
Kings Weston Hill (Bristol)	Ewart Pk	553780	BCM (1980)	1 socketed axe (Sompting type). 19 axe-fragments (some also Sompting type), casting jets and various fragments.

SUBJECT	PHASE OR TYPE	N.G.R.	MUSEUM OR COLLECTION	OTHER DETAILS
Late Palstaves				
Peasedown St John	Penard	703574	Taunton	C 39; P 703; R 887.
Radstock	Penard	6954 area	Unknown, ex Herts County Mus.	C 51 (text), 50 (illus); P 697.
Socketed axes				
Bath (near)	Wilburton	7565 area	Salisbury	South-eastern type. C 63; P 579.
Bristol/Hotwells	Ewart Park	567726	BCM Cat 68a	Design of 3 pendulums (Sompting type)P 603.
Bristol/Prince St.	Ewart Park?	587726	BCM Cat 68b	P 605.
Camerton	?	6957 area	BM	Fragment only.
Claverton Down, Bath	Ewart Park	7763 area	Taunton, ex Alnwick 227	Breton type. C 84; P 580.
Loxton	Ewart Park	368570	Taunton	'South Welsh' (Stogursey type). C 75; P 678.
Saltford	Wilburton	685675	BCM Cat 68c	South-eastern type. C 64; P 723.
Sea Mills/Stoke Bishop		554768	BCM Cat 68e	Yorkshire type. P 604
Sodbury	Ewart Park	724830	Unknown	Davies 1925
Warmley/Oldland.	Ewart Park	663715	BCM Cat 68d	Three vertical ribs.
Worle Hill	Ewart Park	348633	Ashmolean (cast in Woodspring)	South-eastern type. C 81; P 776g.
Wraxall Hill	?	499722	Unknown	Fragment only. Dobson 1931, 259
Spearheads (peg-holes in socket)				
Tickenham/Cadbury hf	Ewart Park	454725	Taunton	3 bands of chevron decoration around base. P 757.
Worlebury Hill	Ewart Park ?	328623	Woodspring	Socket missing but blade of this type. P 776c.
Socketed adze				
Barrow Gurney	Ewart Park ?	519665	BCM Cat 67	C 138; P 566.
Socketed gouge				
Yatton	Ewart Park ?	430660	Taunton	C 133; P 792
Socketed knife				
Newton St Loe	?	707649	(Formerly) Bath Tech.	P 687.
Awl with stops (tanged leather-working knife?)				
Tickenham/Court Hill	Ewart Park ?	437722	BCM	In round barrow but not with an interment. P 758.
Rapier				
Bath/Walcot (garden of 4 Pera Place)	Taunton/Penard	751659	Bath Pump Room	B and G group IV, 661; hilt only. C 115; P 577.
Swards				
Bath/Twerton (nr gasometer)	Penard	737650 area	Alnwick Cas. 236	'Chelsea' type. C 125-6 (same weapon); P 569 and 850 (same); R 1984.
Bristol/Cumberland Basin	Ewart Park?	567724	BCM Cat 70	Blade only. P 606.
Midsomer Norton	Wilburton	663536	Taunton	C 116; P 698.

THE KEYNSHAM ROMAN VILLA AND ITS HEXAGONAL TRICLINIA

James Russell

This article falls into two parts. In the first the discovery of this large and important villa is briefly described and the limited evidence for its history reviewed. In the second the two hexagonal rooms, here regarded as **triclinia**, *which form the most striking architectural feature of the building, are described and discussed in detail, and parallels for them considered.*

THE VILLA & ITS HISTORY

The Roman villa at Keynsham, one of the largest and most remarkable structures of its type yet discovered in Britain, lies below the tree-shaded Victorian cemetery at Durley Hill, on the western outskirts of the modern town (ST 64506925). Our knowledge of the villa is almost wholly derived from the rescue excavations carried out between 1922 and 1924, in advance of grave-digging, by Arthur Bulleid and Dom Ethelbert Horne. These excavations, while published with commendable speed (Bulleid & Horne 1926; for interim reports see *Ant J* 2, 381; 3, 150-151; 4, 155-157 and *JRS* 11, 210-211; 12, 263-265; 14, 233-234), were not of a particularly high standard, little attention being paid to the recording of stratigraphy or the precise provenance of dateable finds. The work was furthermore confined to limited areas of the main, residential part of the villa, much of which was found to have been either already destroyed by graves or concealed below the massive embankment of the A4175 road from Bristol to Keynsham, which had been diverted diagonally across the site in the mid 19th century.

Since 1924 burials have extended over almost the whole of the excavated section of the villa, thus preventing further direct study of the main building for the foreseeable future. Considerable opportunities for excavation still exist, however, in peripheral parts of the site, both within and beyond the extended boundaries of the cemetery. At the time of writing (August 1985) exploratory work is in fact being carried out in the northern cemetery extension under the supervision of Rob Iles. Most of the finds from the site are housed in a small museum of the entrance to the Cadbury-Schweppes (formerly

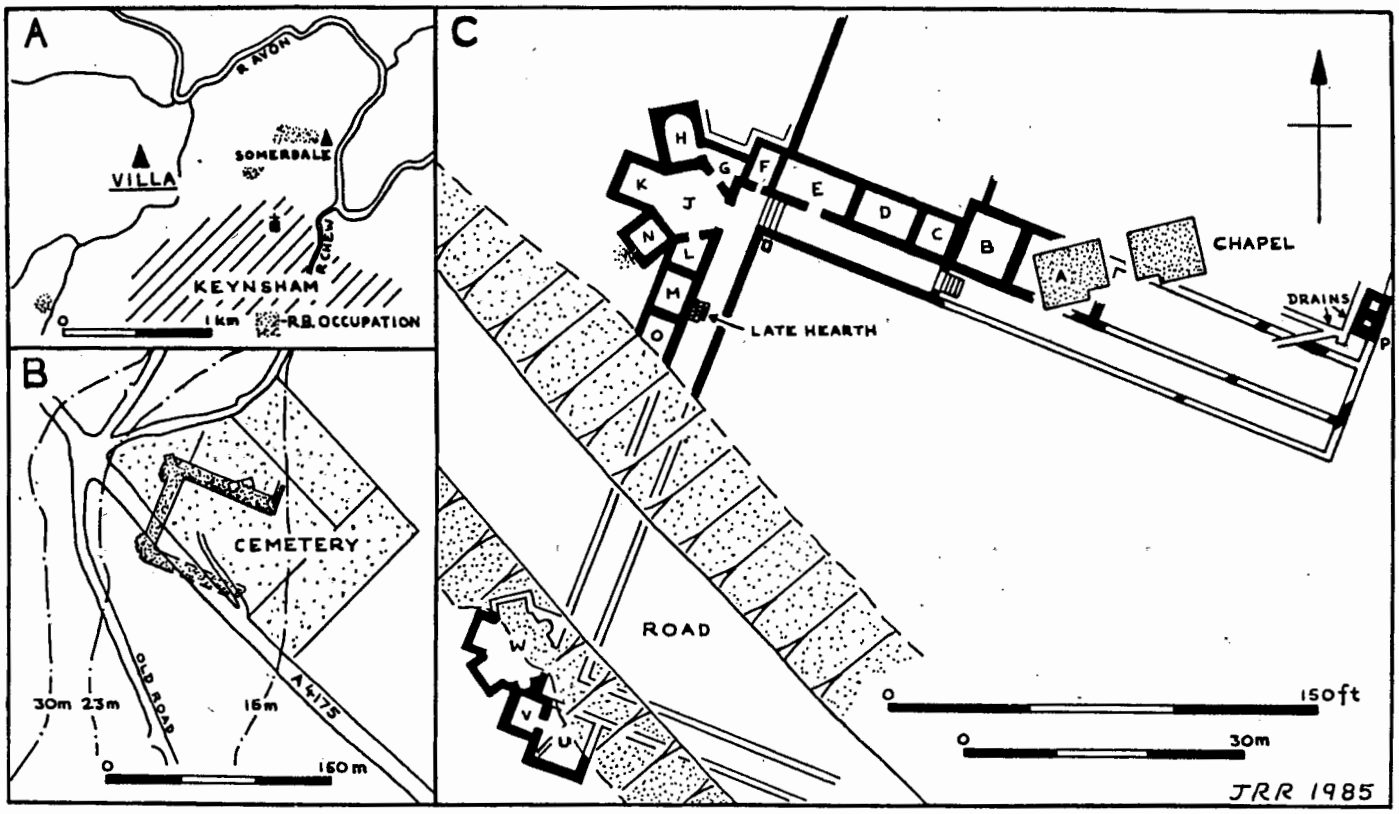

Fig 1. *The Keynsham villa; A & B location plans, C site plan (based on Bulleid & Home 1926, fig. 1)*

Frys) Chocolate Factory at Somerdale, immediately to the north of Keynsham town centre (ST 65656895; open during normal working hours). This material is currently being reexamined and recatalogued by the museum's Hon. Curator, Mr. Andrew Borgelin, whose considerable help in preparing this article is gratefully acknowledged. Objects in the Somerdale collection are here referred to by the revised catalogue numbers (prefix SM) assigned to them by Mr. Borgelin.

Despite their considerable limitations the excavations of 1922-24 were nevertheless successful in establishing the outline plan of the main villa building, which was shown to have been laid out around three sides of a colonnaded trapezoidal courtyard, measuring 51.81 m × 66.14 m internally and open to the east to allow views of the Avon valley and the Lansdown ridge beyond. Some 17 rooms, undoubtedly only a small fraction of the total, were partly examined, the most interesting being the two hexagonal halls (Rooms J and W) with which much of the present article is concerned. While it is probable that various additions and alterations, undetected by the excavators, took place during the history of the villa, there can be little doubt that the essential components of its plan, namely the central courtyard, its surrounding corridor and the two hexagons, were the product of a single building or campaign. It is this unity of plan which gives Keynsham its special place among Romano-British villas. Within Britain only the 1st century 'palace' at Fishbourne, the monumental courtyard villa at Woodchester and the enormous winged building recently reexamined at Castor near Peterborough (Mackreth 1984) can be said to equal or surpass Keynsham in scale and grandeur of conception.

The inadequate nature of the available evidence allows the history of this splendid building to be reconstructfed only in the broadest outlines. The earliest coins from the site are a small group of heavily worn 2nd century *sestertii* found in association with a well-preserved *antoninianus* of Gordian III (240-244 AD) during grave digging in the northern cemetery extension in 1975 (ST 64546930; inf A. Borgelin). The coin-list from the 1922-24 excavations commences with an issue of Victorinus (265-267 AD) (Bulleid & Horne 1926, 132). A small quantity of Samian ware was found during the excavations; this is however all of 2nd century date (inf A. Borgelin) and may well have remained in use long after its manufacture. On the basis of these dateable finds it seems likely that the Keynsham villa was constructed not earlier than the mid to late 3rd century AD, a period when numerous villas of varying size and degrees of opulence were being established along the valleys of the Bristol Avon and its tributaries. This apparent spate of villa-building has been plausibly interpreted as resulting from the disposal of a large imperial estate to private entrepreneurs, some of whom may have been immigrants from Gaul or Germany; epigraphic evidence from Bath, in the centre of the villa-cluster, points to the popularity of that great healing sanctuary with Gaulish civilians (c.f. *RIB* 140, 149, 163). In the case of Keynsham the size and architectural sophistication of the villa certainly suggests that it was commissioned by an extremely wealthy outsider, probably of equestrian or even senatorial rank, rather than by a member of the local native gentry. The unified plan of the building seems to point to a single proprietor rather than joint ownership by several interrelated families, of the type postulated for other British and Gaulish villas (c.f. Smith 1978).

Until the outer parts of the site are examined little can be usefully said regarding the economy of the Keynsham villa. It seems reasonable to assume that it formed the headquarters of a substantial agricultural estate, probably bounded on the north by the River Avon and to the west and east by the roughly contemporary villas at Brislington (ST 61647097; *TBGAS* 23, 289-308) and Newton St. Loe (ST 71206550; *JRS* 26, 43-46) both of which were sufficiently well-appointed to have been estate centres in their own right. More problematical is the relationship between Keynsham and the neighbouring settlement at Somerdale, partly examined in a piecemeal fashion during the construction of the chocolate factory there in the 1920's (ST 65746939; Bulleid & Horne 1926, 136-138; *JRS* 11, 210-11; 12, 265; 14, 232-34; 19, 203). The small 'villa' excavated at Somerdale in 1922-23 and subsequently 'reconstructed' (with singular lack of success) opposite the Somerdale Museum has generally been interpreted as a tenant farm of the Keynsham villa. While this assumption may be correct it is clear from numerous scattered finds of pottery, coins and metalwork made in the immediate vicinity that this building either formed part of, or superseded, a much more extensive settlement established not later than the mid-1st century AD.

The presence within this settlement of a shrine or temple is suggested by several finds of carved stonework including an uninscribed altar (SM 435), part of a probable *deae matres* relief (SM 299; Cunliffe & Fulford 1982, Cat. 142) and, most significantly, a statue base dedicated to Silvanus and the imperial *numen*, which has been dated, questionably, to 155 AD (SM 434; *RIB* 181; *SDNQ* 20, 169). The location of Somerdale, on a low ridge overlooking the confluence of the Rivers Chew and Avon, is a strategic one, and it is tempting to identify it, rather than Bitton across the Avon, with the enigmatic road-station of *Traiectus* ('ferry-crossing') referred to in the 2nd century Antonine Itinerary as lying between *Aquae Sulis* (Bath) and *Abone* (Sea Mills) (Rivet & Smith 1979, 176-178). It is possible that the size and character of the Somerdale settlement changed significantly with the building of the Keynsham villa, with much of its population being absorbed into the undoubtedly extensive villa household.

To judge from the style of some of the mosaic pavements, and in particular that of Room W, the embellishment of the Keynsham villa was not completed until well after 300 AD. The finished building would have provided a dignified setting for the elegant and formalised way of life of a late Roman aristocratic family. It seems, however, that it was destined to fulfil this function for only a few decades, since around the middle of the 4th century the principal rooms ceased to be properly cleaned and maintained, occupation layers of black charcoally soil being allowed to accumulate above the mosaic floors of the hexagonal room J and the adjacent western corridor. As time went on building materials from the decaying yet still inhabited structure were removed and reutilised, a hearth of old hypocaust tiles being constructed in the western corridor (Bulleid & Horne 1926, 118, 124, PI XIV(2)). Eventually the villa fell into complete ruin, probably as a result of sheer neglect, although destruction by fire cannot be ruled out, since stones showing signs of burning were noted by the excavators (*JRS* 11, 210); in room J the building debris incorporated a fragmentary human skeleton, perhaps that of someone caught in the final collapse of this part of the structure (Bulleid & Horne 1926, 118).

The dating of this sequence of events is at present very uncertain; the published coin-list (Bulleid & Horne 1926, 132-134) which ends with issues of Valentinian I (364-375 AD) is of limited value, since the stratigraphic contexts of the coins are not recorded. It should be noted moreover that no valid statistical inferences can be drawn from this list since of the sixty coins said to have been found only thirty are actually described (the

coins themselves appear to have been mislaid). It is possible, however, given the evident wealth and presumably high social status of the owners of Keynsham, to link the initial abandonment of the house with the brutal purge of prominent Britons which was carried out by the agents of Constantius II following the fall of the usurper Magnentius in 353 AD (Webster 1983). The coin list, for what it is worth, suggests that the final collapse of the main villa building took place not long after 370 AD, following what appears to have been a period of increasingly 'squalid' occupation by farm servants or bailiffs; if so, the end could well have been precipitated by the major barbarian raids of 367 AD (c.f. Branigan 1976, 93-96, where the events of 367 are postulated as a primary rather than a secondary cause of abandonment).

Further work on the outer parts of the villa complex may well modify this somewhat bleak picture; the modern English landscape can after all furnish numerous examples of landed estates which continue to flourish as economic units long after the destruction of their principal residences. The villa estate may arguably have survived as a land unit into the late Saxon period, when the present town of Keynsham emerges into history as the site of an important minster church, where Bishop Healmund of Sherborne is said to have been buried in 871 AD and from which significant finds of carved stone and metalwork have come during recent excavations. The ruins of the villa itself almost certainly remained visible for many centuries as a local landmark and stone quarry, the site being respected by the alignment of the Keynsham—Bristol road until its archaeologically regrettable rerouting during the last century (Bulleid & Horne 1926, 110).

THE KEYNSHAM HEXAGONS

Design, Construction and Decoration

As has already been mentioned, the most remarkable sections of the Keynsham villa so far uncovered are the hexagonal rooms J and W. Parallels for these rooms will be considered in more detail later in this article. At this stage it is however necessary to point out that hexagonally planned structures are so rarely encountered in Roman architecture that their appearance at Keynsham is best attributed to the originality of either the designer or his patron. The only other Romano-British hexagons known to the writer are a shrine at Collyweston (Northants) (Knocker 1965, 58-60) and a baptistery at Richborough (Kent) of which only the central stone basin is recorded (Thomas 1981, 216-7). On the Continent hexagonal rooms, towers or pavilions are, it is true, to be found in a considerable number of villas and palaces, such as Chirigan (France) (Brogan 1953, 123-4), Loffelbach (Austria) (Alfoldy 1974, Fig. 14) or Hosszuheteny (Hungary) (Mocsy 1974, Fig. 49); these are however scattered so widely in time and space that they cannot in any real sense be regarded as 'sources' or 'parallels' for those at Keynsham. Of considerably greater relevance to the Keynsham hexagons are the elaborate octagonal structures which have now been found on several late Roman sites, both religious and secular, in the surrounding region. These include the central room, probably a shrine, in the villa at Great Witcombe (Glos) (Neal 1982, Fig. 9.2), the exquisite bathhouse or *nymphaeum* attached to the villa at Lufton (Sam) (Hayward 1952) and the temples at Nettleton (Wilts) (Wedlake 1982) and Pagans Hill (Avon) (Rahtz 1951), the last named being little more than 10 km from Keynsham.

Rooms J and W are situated at either end of the western range of the main villa building. Their position suggests that they were intended to provide strong vertical accents at the outer corners of the structure, rising like towers above the surrounding apartments (Neal 1982, fig. 9.9); a height of some 10 m from floor to eaves would have been necessary to achieve this effect. From within the central courtyard the visible upper portions of the hexagons would have appeared identical; at ground-floor level, however, their internal arrangements were completely different. The northern room, J, had a square annexe K opening directly from it to the west; flanking it to the north and south respectively were two other apartments, H and N, which seem to have been entered from J through trapezoidal anterooms, G and L. Room H was apsed while N was heated by a hypocaust, the only example fully examined during the excavations. Room W, at the southern end of the range, had rectangular recesses opening from the three walls facing the eastern entrance, and smaller semicircular niches in the two remaining sides.

Like the rest of the Keynsham villa Rooms J and W were solidly constructed of pennant sandstone, outcrops of which are to be found immediately to the north-west of the site; the walls were around 75 cm thick above ground level, with foundations up to 2.5 m deep and 1.1 m wide. Thickening of the foundations was observed in the external angles between rooms H, K and N, and between the rectangular recesses in room W. Doorways, windows and recesses were probably arched in oolitic limestone from Bath or Dundry, voussoirs of which were found in room W (Bulleid & Horne 1926, 125-6). The roofs would have been covered in hexagonal pennant sandstone tiles with oolitic limestone ridge-blocks. The underlying roof-structure of the hexagons, which each had a maximum internal width of 7.5 m, is more problematical. During the excavation of room J the building debris was found to contain a mass of roughly squared blocks of calcareous tufa; similar blocks were found in smaller quantities in room W (Bulleid & Horne 1926, 118, 125). Tufa, a light but strong material, was frequently used for the infilling of vaults during the Roman and Medieval periods (Clifton-Taylor 1962, 113-114). Locally, the octagonal temples at Pagans Hill and Nettleton, which as we have seen are comparable with the Keynsham hexagons in scale and architectural complexity, have both produced evidence for vaulting in tufa. At Pagans Hill, which is roughly contemporary with Keynsham, the extent of the vaulting was not determined; it may well have been confined to the ambulatory, as shown in a recent reconstruction (Rodwell 1980, 226-8). At Nettleton the temple as rebuilt around 250 AD is stated by the excavator to have been vaulted throughout, the vault of the central octagon being supported on limestone ribs buttressed by the dividing walls of the radiating side-chambers, which themselves seem to have been barrel-vaulted (Wedlake 1982, 48-9).

At Keynsham vaulting, at least in room J, was postulated by the excavators (*Ant J* 4, 157; *JRS* 12, 265). The construction of the hexagons was almost certainly strong enough to bear vaulting, the additional support given by the surrounding apartments being sufficient to compensate for the absence of systematic radial buttressing (compare the heavy secondary buttressing of the (unvaulted) octagon at Lufton (Hayward 1952, 99)). It is nevertheless difficult on the basis of the limited evidence available to offer a convincing reconstruction of these putative vaults, given the apparent need for them to incorporate some form of clerestory lighting. Surviving Roman vaulted buildings of similar shape and scale, such as the octagonal *tepidarium* of the 'Hunting Baths' at Lepcis Magna (Ward-Perkins 1981, fig. 251) do not provide a sure guide since their vaults, mostly of simple domical form, are generally, in the

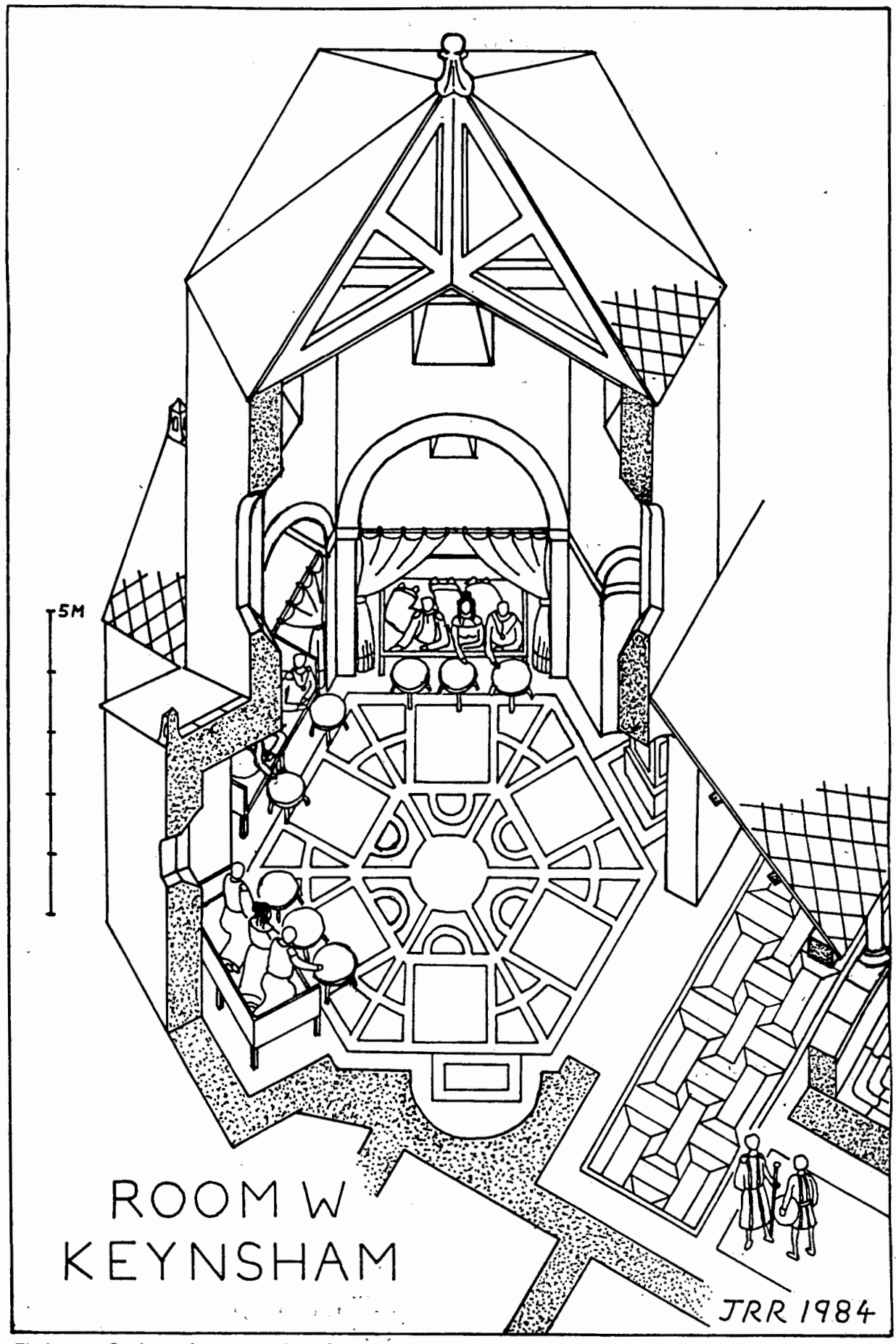

Fig 2. Conjectural reconstruction of room W.

western empire at least, of concrete rather than masonry construction. While some of the limestone voussoirs in room W may have come from vaulting-ribs, as at Nettleton, it should be noted that the tufa blocks from Keynsham do not appear to have displayed the wide variety of shapes (necessary for the construction of even the simplest vault) observable in the Nettleton material (Wedlake 1982, pl XXXIIc). It is of course possible that the Keynsham tufa was not used for vaulting at all but was employed merely to lighten the construction of the upper hexagon walls. In view of these uncertainties the reconstruction of room W given here (fig. 2) shows a simple timber roof structure with a flat ceiling below; for an alternative reconstruction, incorporating vaulting, see Walters 1982, pl 5.

The floors of the hexagons and their subsidiary apartments were wholly covered by tessellated pavements of varying degrees of refinement. In room J the much-damaged mosaic was subdivided into seven hexagons containing stylized foliage and geometrical motifs (Bulleid & Horne 1926, fig 3, pl XIII(1); SM 444-445). A foliage scroll separated this floor from that of room K, in which the central panel consisted of four interlacing 'hour-glass' motifs framing a central wreathed bust, possibly of Bacchus (Bulleid & Horne 1926, fig. 4, pl XIII(2)). Of the adjoining rooms H had a geometric mosaic subdivided into six octagonal panels (Bulleid & Horne 1926, fig. 2, pl XII(1)) while the floor of the anteroom L showed a wine cup (*cantharus*) flanked by two dolphins (Bulleid & Horne 1926, 122); the mosaics in room G and N had been entirely destroyed.

Fine though they are by normal Romano-British standards the mosaics of this northern group of rooms are eclipsed by that of room W, which had a highly elaborate wheel-like pattern incorporating six rectangular figured panels of which three have partially survived (Bulleid & Horne 1926, fig. 6, pls XVI-XVIII; SM 437-443). The most complete of these shows Europa seated on the back of Jupiter, disguised as a white bull, prior to her abduction by him. A second may depict the discovery of Achilles disguised as a girl at the court of Lykomedes on Skyros, while the third is believed to represent the invention of pipes (*tibiae*) by Minerva, the disembodied pipe-playing head at the foot of the panel being interpreted as the face of the goddess reflected in a pool (Stupperich 1980, 293-296; for an earlier interpretation see Toynbee 1964, 240-241). The subsidiary panels of the mosaic show birds (doves, (?) coots and peacocks) and stylized plant motifs. This splendid pavement is thought to have been produced by a group of early — mid 4th century mosaicists working mainly in south east Somerset and north Dorset, and probably based at Ilchester (*Lindinis*) (Johnson 1982, 41-47). The three rectangular recesses bordering it were, in significant contrast, paved only with plain white *tesserae*.

As far as can be ascertained the mosaics just described provided the principal decoration of the hexagons. In room W traces of red-painted wall-plaster survived (Bulleid & Horne 1926, 126); wall-plaster was also noted in rooms H, J,K, L and N, but was either plain white or too badly preserved to provide evidence of colour or pattern. Mention should also be made of two blocks from a cornice of oolitic limestone which were found in 1922 in the vicinity of room J and which may well have come from it (*Ant J* 3, 151; SM 308, 313). The fragments, which are in excess of 20 cm high, show a band of guilloche surmounted by a deeply incised and highly stylized lotus or palmette scroll. Architectural sculpture of this type is very rare on rural sites in Roman Britain, and its presence at Keynsham helps to emphasise the exceptional character of the villa.

Form and Function

Although it has recently been suggested that room W might have formed the dressing room (*apodyterium*) of the undiscovered villa baths (Walters 1982, 13), there can in fact be little doubt that both the Keynsham hexagons were designed as dining/reception rooms or *triclinia*. Room W itself provides the clearest evidence for this, since the three rectangular recesses with their plain white flooring are best interpreted as spaces for the three couches which give the *triclinium* its name. Each couch would have held up to three reclining diners, each group of guests having in front of them for contemplation and discussion one of the rectangular figured panels of the central mosaic. The two smaller semicircular recesses probably held statues or candelabra.

Room J seems also to have functioned as a *triclinium*, but of a somewhat different type, the main dining area being in the rectangular western annexe, room K. While room W was clearly designed as a setting for formal banquets at which the niceties of metropolitan etiquette would be rigorously observed, J and K are likely to have been intended for much more regular use by the proprietor and his household. The less pretentious character of their mosaics hints at the 'second-best' status of these rooms, as do the somewhat constricted dimensions (4.11 by 3.73 m) of room K; meals here may well have been taken seated on chairs, a practise considered undignified and unfashionable at Rome but widely accepted in the less fastidious northern provinces (Carcopino 1962, 289). The flanking rooms H and N, with their antechambers G and L, probably provided living or sleeping accommodation for the owner's family; a somewhat similar arrangement of a *triclinium* or 'living room' with smaller flanking apartments is to be found, on a larger scale, in the private south east wing of the great early 4th century villa at Piazza Armerina in Sicily (Wilson 1983, 26-27). In common with many other Romano-British *triclinia* the Keynsham hexagons lack underfloor heating, and must have been dependant for warmth on portable braziers; it is of course quite likely that the villa was used as a residence only during the summer months.

It has already been suggested that comparisons between rooms J and W and hexagonal structures elsewhere in the Empire are unlikely to be particularly profitable. If however we consider the Keynsham hexagons in their functional aspect, as *triclinia*, the search for outside influences may prove more fruitful. First, though, it is worth digressing briefly to examine the special role of the *triclinium* in late Roman domestic architecture. During the 1st and 2nd centuries AD the *triclinium* developed from a utilitarian dining-area into the principal room of the Roman house, providing a setting not only for banquets and receptions but also, on occasion, for the meetings of religious groups, both pagan and Christian, as well as for the regular audiences given by the proprietor (*patronus*) to his dependant clients (Lavin 1962, 5-6). Some *triclinia* were undoubtedly designed primarily for such religious or ceremonial functions, in which banqueting might nevertheless play a significant part. Probable examples of this in Britain include the putative 'house-churches' at Frampton and Hinton St. Mary (Dorset) (Thomas 1981, 181-3) and a remarkable room in the medium-sized villa complex at Littlecote (Wilts) which has been interpreted, controversially, as the meeting place of an esoteric cult dedicated to the worship of Orpheus as the prophet-priest of Apollo (Walters & Phillips 1981). Large houses could have two or more *triclinia*, for alternate use in winter and summer, as at Bignor (Sussex) or for formal and informal occasions, as seems to have been the case at Keynsham.

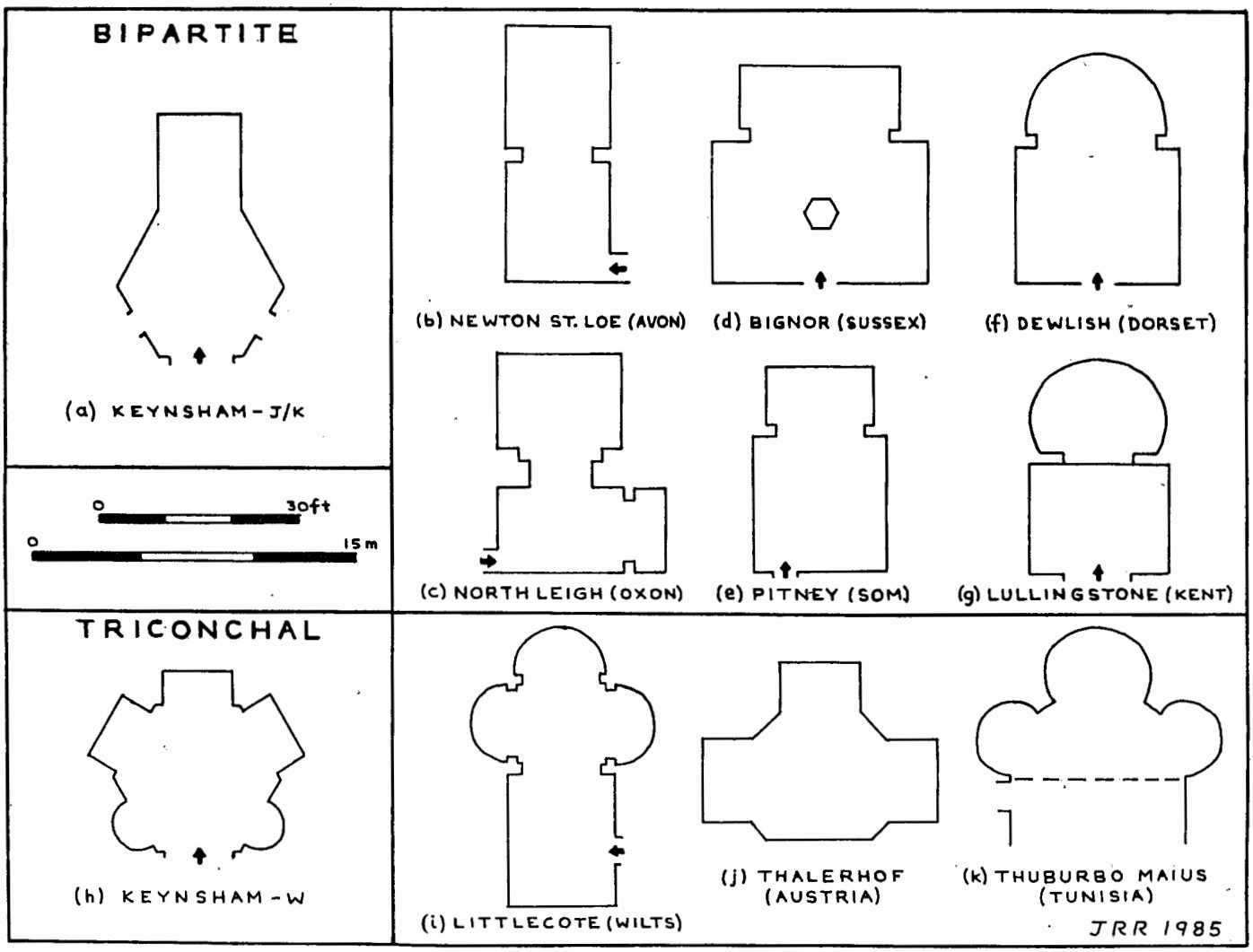

Fig 3. *The Keynsham hexagons compared with other late Roman triclinia.*

The enhanced social and ceremonial importance of the *triclinium* in late antiquity is reflected architecturally by increased elaboration both in plan and decoration. In Britain the commonest type of 'emphasised' *triclinium* is bipartite or two-roomed, consisting of an 'inner area' reserved for the proprietor and his principal guests, separated by a step or broad archway from an 'outer area' which may be a mere antechamber, as at North Leigh (Oxon) (fig.3(c)) or, more usually, a much larger space providing room for lesser guests or entertainers. The 'inner area' may be either rectangular, as in the nearby villa at Newton St. Loe (fig.3(b)), or apsed in order to accommodate a curved couch or '*stibadium*', as at Dewlish (Dorset) or Lullingstone (Kent) (fig. 3(f), (g)). Rooms J and K appear to constitute a variant of this widespread bipartite type. Room W, with its three dining-recesses, is more difficult to parallel exactly; it does however invite comparison with the 'triconchal' or three-apsed *triclinia* which have now been identified in a number of late Roman villas and town-houses scattered across the Empire, mainly in provinces bordering the Mediterranean but with isolated examples further north (Lavin 1962, 25-27; Wilson 1983, 78-82).

Apart from room W the only triconch known from Britain is the so-called 'Orphic hall' at Littlecote already referred to; dated to around 360 AD, and thus considerably later than Keynsham, this consists of a bipartite *triclinium* with apses projecting from three sides of its rectangular 'inner area' (fig 3 (i)). Room W differs from other triconches, including that at Littlecote, in that its dining-recesses are rectangular rather than apsed; in this it may be compared with a room in the large 3rd century villa at Thalerhof (Austria) (fig 3(j); Alfoldy 1974, fig. 30). It must also be noted that unlike room W nearly all undisputed triconches have their dining-recesses at right-angles to each other, although this is not an invariable rule, as an example in the 'Maison du Char de Venus' at Thuburbo Maius (Tunisia) indicated (fig. 3(k); Lavin 1962, fig.25). There are thus certain difficulties in accepting room W as a 'true' triconch. Its triconchal affinities are nevertheless sufficient to suggest that the architect of Keynsham had some familiarity, either at first-hand or through pattern-books, with contemporary developments in the planning of upper-class houses elsewhere in the Roman world. This might also be inferred from the symmetry and coherence of the villa plan as a whole, which contrasts with the piecemeal, poorly-integrated layouts of most other large Romano-British villas.

We may conclude this examination of the Keynsham hexagons by looking again at the imagery contained in their mosaics,

which at present provides the only evidence we have for the outlook and beliefs of the great family which once owned the villa. In some respects this iconographic evidence is of limited value. It tells us little, for instance, of the proprietor's religious position; while the doves and peacocks depicted in room W could be construed as indicators of Christian influence, as could the wine-cup flanked by dolphins in room L (Branigan 1976, 68), it must be pointed out that in the 4th century none of these particular symbolic motifs were the exclusive property of Christians, any more than were the spiritual concerns which lay behind them. Greater scope for inference is perhaps provided by the elaborate mythological scenes portrayed in room W. As we have seen three of the six figured panels seem to have been designed primarily for the edification of guests reclining in the adjacent dining recesses; this assumption seems to be borne out by the lack of any obvious narrative or thematic connection between the surviving scenes, suggesting that they were meant to be viewed singly rather than as a linked sequence or cycle by someone walking freely around the room.

It seems clear from the content of these scenes that the owners of Keynsham and their circle had more than a passing acquaintance with Greek mythology, and it is interesting to speculate on how far their appreciation of classical literature extended. In 4th and 5th century Gaul it is evident from the letters and poems of writers such as Ausonius or Sidonius Apollinaris that many landowners were thoroughly versed in the Greek and Latin classics, possessing extensive private libraries and devoting much of their time to literary activities. In Britain advanced literacy of this kind has left few traces; it is hinted at, however, by a mosaic in the apsidal *triclinium* at Lullingstone, where a depiction of the rape of Europa (an episode prefigured in one of the Keynsham panels) is accompanied by an original Latin couplet incorporating a Virgilian allusion, probably the work of the villa-owner himself (Meates 1955, 35-43). If Virgil was appreciated and imitated in a relatively modest villa such as Lullingstone, it seems likely that more esoteric authors were enjoyed and discussed in the much grander surroundings of Keynsham. As it is, however, the Keynsham site has so far produced only two inscribed objects other than coins and stamped samian. One is a gold ring, found near the villa in 1926, which is set with a sardonyx inscribed 'may you, the wearer, prosper' in Greek (BRSMG: F1251 *JRS* 38, 102; the other is a shallow dish of black burnished ware scratched with the name 'Unica', presumably that of a domestic servant (SM 276; Bulleid & Horne 1926, 132). It is perhaps a fitting irony that the servant-girl's name has been preserved for us, while the distinguished family upon whom she onced waited is now lost to history, restorable to a shadowy existence only by analogy and inference.

ABBREVIATIONS

Ant J - *Antiquaries Journal*
BRSMG - Bristol City Museum & Art Gallery
Inf - Information provided by
JRS - *Journal of Roman Studies*
PSAHNS - *Proceedings, Somerset Archaeological & Natural History Society*
RIB - *Roman Inscriptions of Britain, Vol 1* ed R. G. Collingwood & R. P. Wright, 1965.
SDNQ - *Somerset & Dorset Notes & Queries*
SM - Somerdale Museum
TBGAS - *Transactions, Bristol & Gloucestershire Archaeological Society.*

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APPLES IN THE LANDSCAPE:

THE PUXTON DOLMOORS

Keith Gardner

The clay levels west of Congresbury retain many features of the medieval open-field system including long narrow 'grounds' serviced by 'droveways'. West of these strip fields were two meadows extending into Puxton, known as the East and West Dolmoors. Divided by the Meer Wall, a ditched bank, these fields represented areas of common hay meadow 'doled-out' annually by lottery among local farmers, whose share would have arguably been in proportion to that held by their ancestors in the original open arable field.

The method and name are not unique; what is of interest, however, is that here the system and its attendant festivities are jealously maintained until the Enclosure of 1811 finally forced its termination. The first reference to the doling of these moors is a contemporary one by Collinson (1) (1791). The most detailed by a contemporary witness is that of Bennett (2) (1825).

It seems that whilst many of the original documents were present at Puxton until the 1930's or even much later, (3) they are now no longer to be found. Fortunately, however, sufficient isolated fragments have been located to clarify in some detail the method used, and to merit presenting this synopsis as a basis for future studies.

BENNETT'S MSS c 1825

"On the Saturday preceding Midsummer-day O.S. the several proprietors of the Estates having any right in these Moors, or their Tenants, were summoned by the ringing of the bells at Puxton, to repair to the Church in order to see the chain measured, the proper length was ascertained by placing one end at the foot of the Arch dividing the Chancel from the body of the church and extending it through the middle Aisle, to the foot of the Arch of the West Door at each of which places, marks are cut in the stones for that purpose. After the Chain had been properly measured, the Parties repaired to the Commons. A number of Apples, 24 in number, were previously prepared, bearing the following marks viz: Five marks called Pole-axes - Four ditto Cross's - Two do, Dung Forks or Dung-pikes - One mark called Four Oxen and a Mare - One do. Two Pits - One do. Three Pits - One do. Four Pits - One do. Five Pits - One do. Seven Pits - One Horn - One Hares-tail - One Duck-nest - One Oven - One Shell - One Evil and One Hand-reel . . . . .

Each of these Moors were divided into several Portions called Furlongs, which were marked out by strong Oak-posts placed at regular distances from each other; After the apples were properly prepared, they were put into a Bag and certain Persons began to measure with the Chain and proceeded 'till they had measured off one Acre of Ground; at the end of which the Boy who carried the Bag Containing the marks took out one of the Apples, and the mark which such Apple bore was immediately cut in the turf with a large knife, this knife was somewhat in the shape of a Cimeter with its edge reversed; In this manner they proceeded 'till the whole of the Commons were laid out, and each Proprietor knowing the mark and Furlong which belonged to his Estate, he took possession of his Allotment or Allotments accordingly, for the ensuing Year: An adjournment then took place to the house of one of the Overseers: (Two Overseers were annually elected from the proprietors of their tenants;) where (four) Acres reserved for the purpose of paying expenses and called the out-let or out-drift, were let by inch of candle:

A certain quantity of strong Ale or Brown stout was allowed for the Feast or Revel as it was called, also Bread, Butter and Cheese together with Pipes and Tobacco. The day was generally spent in sociality and mirth, but not unfrequently of a boisterous nature, from the exhilarating effects of the Brown-stout before alluded to.

In the Year 1779 an attempt was made to procure an Act of Parliament for alloting those Moors in perpetuity, but an opposition being made by a majority of the Proprietors the Plan was relinquished. I have now by me a Printed Copy of the Bill drawn up on that occasion.

It was however actually inclosed and allotted in the Year 1811 and the ancient mode of dividing it, and consequently the drunken festival and revel from that time discontinued."

Bennet states that the practice ended in 1811, The 1808 Act was amended in 1813 and enclosure effected in 1814.

THE PROBLEMS

THE METHOD

Bennett's detailed account clearly indicates that the marks belong to the "proprietors", and that it is the drawing of their personal symbol from the bag that decides that a particular plot is to be held by that person. In this way the most plots went to the

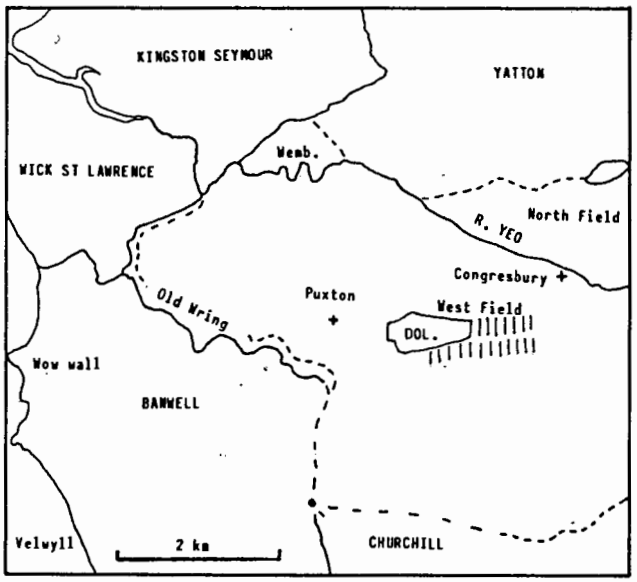

Fig 1 Location Map

larger tenants but in random positions, e.g. the proprietor of the "pole-axe" symbol had a right to the tenancy of 5 sets of plots whose scattered positions should vary year by year.

Bennett's list of marks consisted of 16 different symbols cut into 24 different apples. At first sight this simply meant that 16 tenants shared 24 plots, clearly referred to by Collinson & Bennett as 'acres', but the two moors together total well over 100 acres.

The discovery of the Symbols list in 1883 (4) (and its rediscovery in 1983) (5), complicated the matter even further. First under the heading "names of the marks of the apples that lays out the *2* Dolmoors" comes Bennett's list of 24 apples sharing 16 marks. This is followed by the "Names of the marks of the 12 apples that lays out the Scroves in the West Moor and the Sixes in the East Moor". These are 12 apples sharing 10 marks, presumably 10 of the 16 tenants with an additional 12 plots, one of the two extra plots each going to the largest shareholder in the main list. The comment that "The same apples that lays out the Scroves in the W. Moor lays out the Sixes in the E. Moor" did little to clarify the matter.

What did we have? Was it 16 men with 24 main shares, plus 10 of those men with 12 more shares, in each of the two moors making 72 divisions in all? How big were these divisions: Were they equal size? What were Scroves and Sixes? Come to that, what was the acre referred to by Collinson and more specifically by Bennett as being measured with the Puxrton Chain?

THE ACRE

An Acre, in terms of open-field farming, came to mean as large a strip as could be ploughed by a team of 8 oxen in a day, and subsequently the term was often applied to any individually-held strip in an arable field regardless of size. Edward I standardized it at one furrows' length of 220 yards by one Chain of 22 yards giving a statute acre of 4840 square yards. Even so, for a long time there were regional variations, and it seemed possible that Puxton had its own acre based on its own Puxton Chain.

PUXTON CHAIN

This Puxton Chain was said to stretch from the West Door of the Church to the foot of the Chancel Arch, with marks cut in the stone at each end. Knight adds that this length was "said to be 18 yards" (6). Now the distance from the West Door to the Chancel Arch is 20 yards and Victorian repairs have eradicated any sign of the marks cut in the stone; however, in the briefest of notes King (7) refers to the Chain which "hung under the tower" being measured from the "centre of the arch of the Rood Loft". The sawn-off ends of the Rood Beam can still be seen and the distance from the West Door to the line of the front of the Rood Loft is 18 yards. A pre-Reformation chain of 18 yards would have given a local furlong of 180 yards and a Puxton acre of 3240 square yards. That a small acre may have been in use locally is also suggested by comparing the lists of local fields names which contain nominal acreage with their statute values. Thus "Guys Five Acres" is recorded in the Tithe Awards against a statute value of 3a, 3r, 18p.

On the other hand, the de Wilstar Map (8) seems to indicate that the statute acre was in use by the early 18th century. When Collinson described Dolmoors as being "divided into single acres" did he then mean statute or Puxton acres or simply shares of land? Likewise, what interpretation are we to put on Bennett's description that "each of these moors was divided into several portions called furlongs" and that on the day and with the Chain they proceeded until they had measured out one acre of ground.

THE SOLUTION

Fortunately, the answer to many of these questions, at least for the late 18th century, lies on the few surviving pages of a Manorial Survey of Puxton of 1770 (9). Here, various tenants of the Wyndhams are credited with holdings referred to by Symbols but located not only in East or West Dolmoor, but in specific furlongs within those moors. "eg. In West Dolmoor - the second poleaxe in The North Furlong".

Final confirmation of the detail comes from a sheaf of original MSS worksheets recording the actual allocation of each plot from 1783 - 1795 (10). Each moor was divided into 4 sections, a North Furlong, a South Furlong and a Third Furlong called the Middle Furlong in the West moor and "the Twelves" in the east. In addition there were half furlongs called "the Scroves" in the west and "the Sixes" in the east.

Each furlong was divided notionally into 24 acres and the smaller piece into twelve acres, each Moor thus having 84 divisions of a nominal acre. (In actual fact the work sheets indicate that the North furlong in the east had one extra plot at the expense of the North furlong in the west.) To this we must add the four acres of "out-drift", let to offset expenses, and located in the east moor, giving a required total of 172 acres for the two moors.

Comparing the unenclosed Dolmoor on the de Wilstar Map with the Enclosure & Tithe Terriers (11), we can calculate the acres of common meadow held at the end of the 18th century. The sum total enclosed on West Dolmoor was 55 acres 3 roods 34 perches, and East Dolmoor 59 acres 1 rood 37 perches, together totalling 115 acres 1 rood 31 perches. This is obviously less than 172 *statute* acres but, using a Puxton Chain, it would divide conveniently into 172.45 *Puxton* acres so it does seem that at least we have solved the mathematical side of the problem.

Two small anomalies remain, the de Wilstar acreage for E. Dolmoor is clearly shown as 10 acres more than the Tithe Award survey, and the Wyndham lists generally equate the computed acreage with Statute acres. It would appear that even by the late

18th century the Puxton "acre" was a uniquely used anachronism.

Field	A.R.P.	Sq. yds	PA
West	55.3.34	=270858.50÷3240=	83.60
East	59.1.37	=287889.25÷3240=	88.95
Total	115.1.31	=558747.75÷3240=	172.45

A.R.P.= Acres, Rods, Perches
PA= Puxton Acres

THE NAMES

THE FURLONGS

We are now able to identify the main divisions by name. However these names themselves pose problems.

The Twelves could possibly be derived from a different measuring base, as the field is a peculiar shape and it might prove difficult to measure all acres on an 18 yard base.

The Sixes presumably refers to a half of "the Twelves".

The Scroves was possibly derived from the Latin "Scrobis", a ditch or trench. The south part of West Dolmoor and the grounds to the south of it appear from aerial photographs to overlie an earlier system of small rectangular enclosures associated with other features which could be commensurate with a Romano-British farm. The physical features visible on the ground consist of gripes - ditch like depressions in the grass, far less "sharp" than the usual functional gripe, (the first stage in the sequence of the drainage system) and are apparently earlier than the Dolmoor boundary ditches. An alternative interpretation may lie in the Gloucestershire field name Schrouing Doles (1275), Lez Shrevendoles (1540) there associated with OE 'Scrifan' = "to shrive" and E. Mod E. shroving = "merrymaking" but the context there is not clear. (12). However if at some earlier period the Scroves were let to cover the cost of the revel it may be a relevant parallel.

THE MARKS

The names given to the holdings and the hieroglyphs representing them are, to say the least, peculiar. The Pole-axe, Cross and Dung-Pick are straightforward simple implements and signs and are allocated to the largest shareholders, those with 24, 20 and 10 acres respectively.

The Pole-axe, itself a symbol of power, was presumably the demesne share of the Lord of the Manor both from its size and from the fact that even in the late 18th century it was in the personal letting of the Wyndhams.

The Cross possibly indicating an ecclesiastic interest as we know that Woodspring Priory held shares in the early 14th century (13) and that Puxton was held by Bruton Priory in the late 12th century (14).

The Dung-pick is paralleled by a similarly used sign in Oxon (15), and there called the *Cranes Foot*, but generally symbols representing basic agricultural implements seem to have been popular.

The Hand-Reel is also a simple instrument with an understandable symbol, whilst *Four Oxen and a Mare* may represent a development of half an Ox-gang and are simply illustrated.

The series of *"Pits"* marks may well be related to the adjacent fields named 'Pits'. The *'3 pits Brandierways'* symbol, three dots in a triangular plan, could be related to the three points on the dog-leg Brandeer Rhyne which bounds Dolmoor to the east. The O.E. name Brand is often associated with a fire or burnt place, and an interesting relationship may exist between the parallel Gloucestershire (16), Field-name Oven-Pits (= furnaces) and *the Oven,* Pits, and Brandier of the Dolmoors. Oxford provides a further interesting link with Brandy - corner - ham, a field where cattle were branded (17).

The *Ducks nest* (?with egg) seems recognizable but the *Hares tail* requires some imagination.

Knight says that the *EVIL* is a halter but it is more probably O.E. EAFUL = a fork, which the mark resembles.

The *SHELL* bears little resemblance to a mollusc but on the work-sheets at least, could represent a house or hall (O.E. SELE). The work-sheet marks differ in detail from that on the "official" mark-sheet where its similarity to a figure 4 is paralleled by runic house marks from Saxony (18).

This brings us to the possibility of a much deeper significance in the choice, origin and even the number of these 16 marks. There is evidence elsewhere of a so called "Court of the Sixteens", the 16 chosen from among the most influential of the yeomen class between whom the common meadows were primarily distributed (19). That these "prime shares" could be subdivided and sub-let is confirmed by the distribution of various acres, and indeed half acres, under the Wyndham's Pole Axe Mark, to his tenants (20).

The marks themselves, it is suggested (21), have their roots in early runic heiroglyphs and as similarly late surviving distributions of meadowland associated with such marks are reported from Denmark and Germany, as well as from elsewhere in England, much of the preserved detail of the Puxton system may well be Saxon in origin.

The existence of a system of hereditary marks as an early form of personal signature is well attested from Trades & Crafts such as Wool Staplers and Stone Masons, and it is evident that a sort of lower-grade heraldry existed whereby goods, tools, and animals as well as land-lots could be branded and identified by mark. The system still exists in agriculture today as witnessed by the need to brand or dye-mark sheep and cattle, but its use as a personal mark had obviously passed in 17th century Puxton as those who could not sign the stint-notice (22) affixed their mark, none of which equated with their land-mark which was by then presumably an anachronism.

There was one further anomalous development by the late 18th century. That the whole system of allocation by lottery should provide a fair and equable variation of holding was the obvious intention. What actually happened and how it was "fixed" is another matter. A close analysis of the year by year distribution of the acres allocated to the Pole axe symbol (that of the Lord of the Manor) suggests that some arrangement is to be suspected. For example in 1783, out of his holding of 17 acres in the west field, (5 in each of 3 furlongs + 2 in the scroves) 14 were in conjoining positions on the worksheets and only 3 were in "random" isolation! A similar situation prevailed in the east field.

THE ACCOUNTS (23)

The few years for which we have accounts reveal much about the administration and maintenance of the Dolmoors. The accounts themselves do not always add up, but obviously the letting of the out-drift had to be used to cover last year's expenses, much of which went on the preparations for the revel.

Administration. It seems that the Overseers could not always write their own names and that others were paid for "caring the

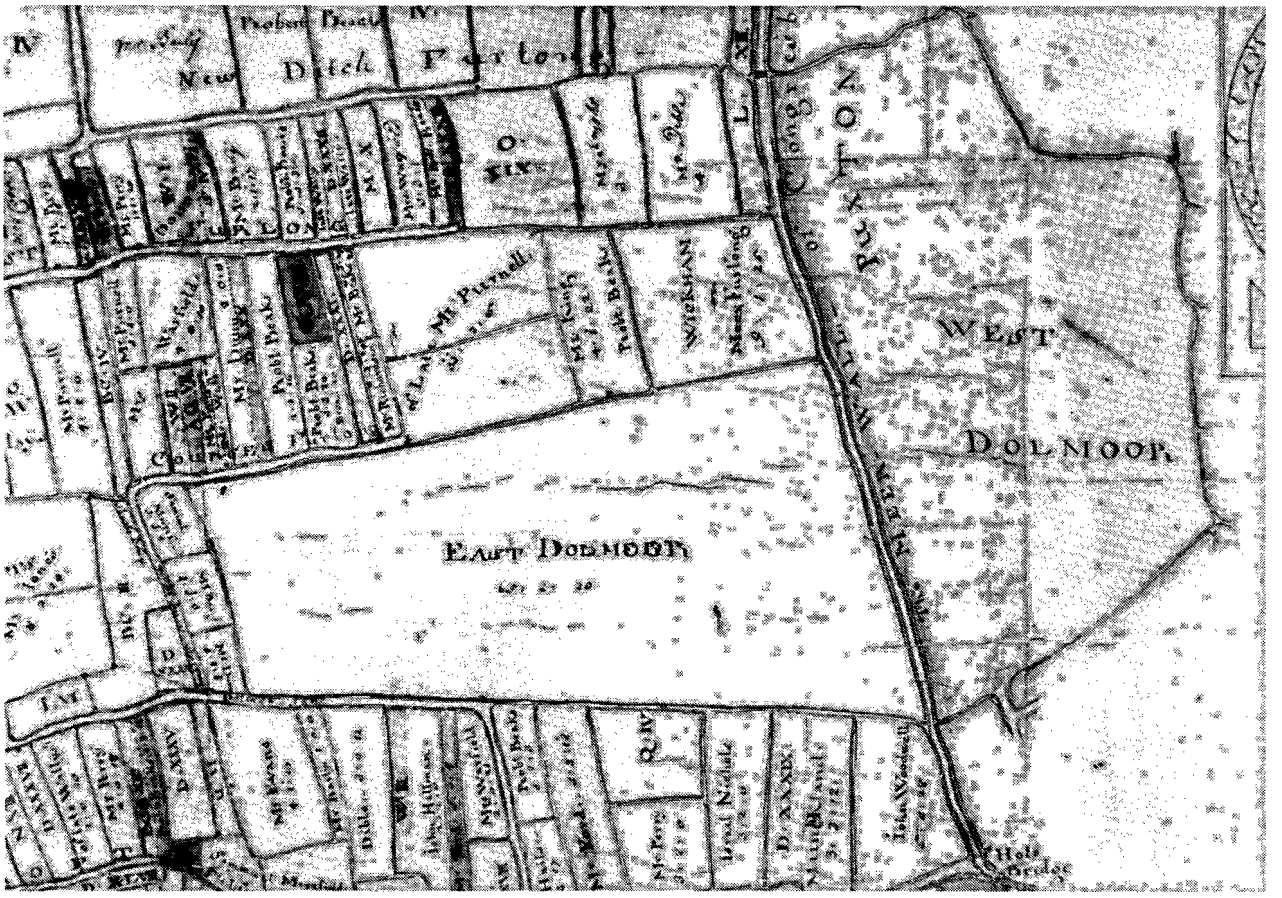

Fig 2 Section of De Wilstar's Map of Congresbury, 1736

book and engrossing ye account". On the day itself "the markers" were paid and in one year (1691) "writers" were referred to.

Maintenance The Iron Gare was sharpened once at a cost of 2d. but the timber work constantly required attention. New posts, presumably the "furlong posts", replaced old ones on an apparently regular basis. New rails might infer an enclosing cattle proof fence in conjunction with the gates and innumerable locks. An interesting item for "mending the wayes leading to Dolmoor" reveals that the surface, presumably rutted and hoof-marked, was ploughed, earth filled, "beare" swilled, and eventually "stons beaten".

A significant entry is "letting in the water and mending the waterings". The terms "watering" is used locally today to describe an access point for cattle to drink from a rhyne, and may well have had the same meaning in 1684. The letting in of the water on the other hand is a reminder that even today the rhynes are used not only for drainage but for irrigation as well. How far the Dolmoors were water-meadows in the strict sense of the word we cannot say, but this one entry is at least suggestive of the practice, and goes a long way to explaining the close association between the Dolmoors and the Meer Wall Rhyne and Liddy Yeo.

The Revel. Bennetts "boisterous sociality and mirth" seems to have absorbed much of the income with "to backo and pips" and a "chize" that "waid" 10lb "bred", "buter", and "fower bushels of malt" together with the "yows of the howse rome and attending". From the 18th century accounts noted by Jervis & Jones (1935) (24) there seems to have been a limit imposed on the Revel of 5/6d in 1753, whilst the chain was replaced in 1708 at a cost of 12/-.

Families. A full list of the proprietors for 1691 is appended to a "stint notice" threatening a "tryall at law" to any one who either trespassed or exceeded their stint of "one Oxe shutt for an Acar". The 16 families represented were Brock, Hoskins, Manning, Weekes, Knight, May, Reappan, Taylor, Merrifield, Whitting, Walker, Hammons, Bennett, Williams, Barrett, and Grace.

The two overseers were representatives of these families and seem to have served for twelve months, appointing their own successors. A further agreement was made in 1747(25) to take legal action against any who should "cast or throw any Erth, Dert, or Stones at any person" at the laying out of the meadows. This last presumably indicates some hostility towards the "proprietors" and indeed thirty two years later an unsuccessful attempt was made to obtain an enclosure order.

THE ENCLOSURE

The beginning of the end came on the 1st Feb. 1779, when the Commons Journals (26) record that a petition was presented to the House and leave granted to bring in a Bill to Enclose "certain Open Lot Meadows" in the Parishes of Congresbury, Puxton etc. Bennett notes that the majority of the Proprietors objected and the plan was relinquished. Whatever, the Bill was not subsequently presented and there is no further reference to it in the proceedings of either House.

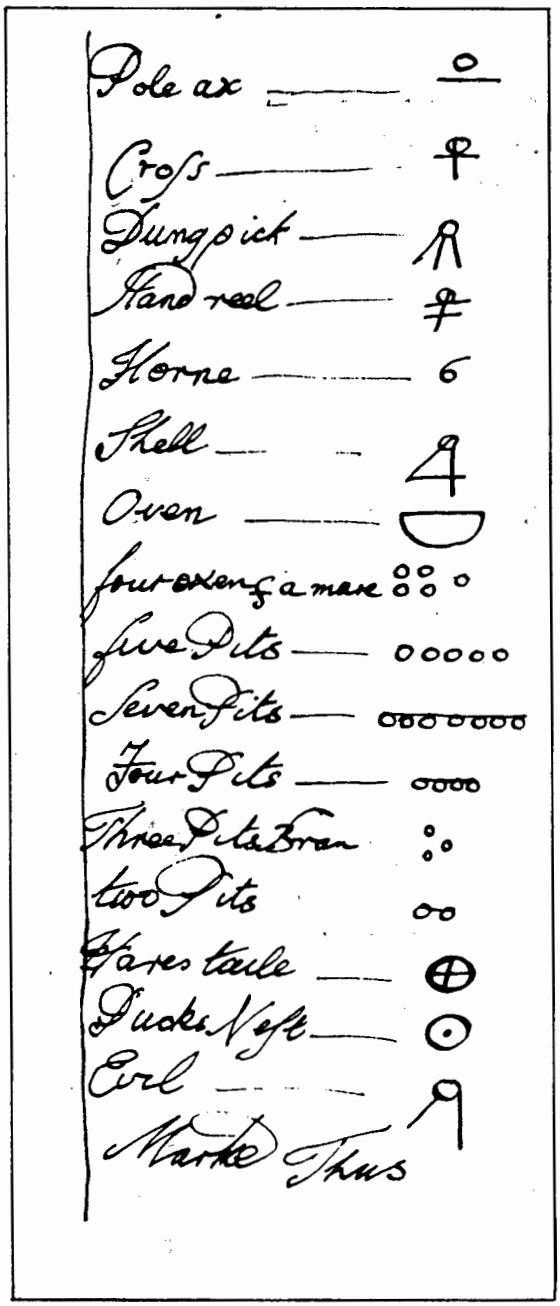

Fig 3 1883 Symbols List

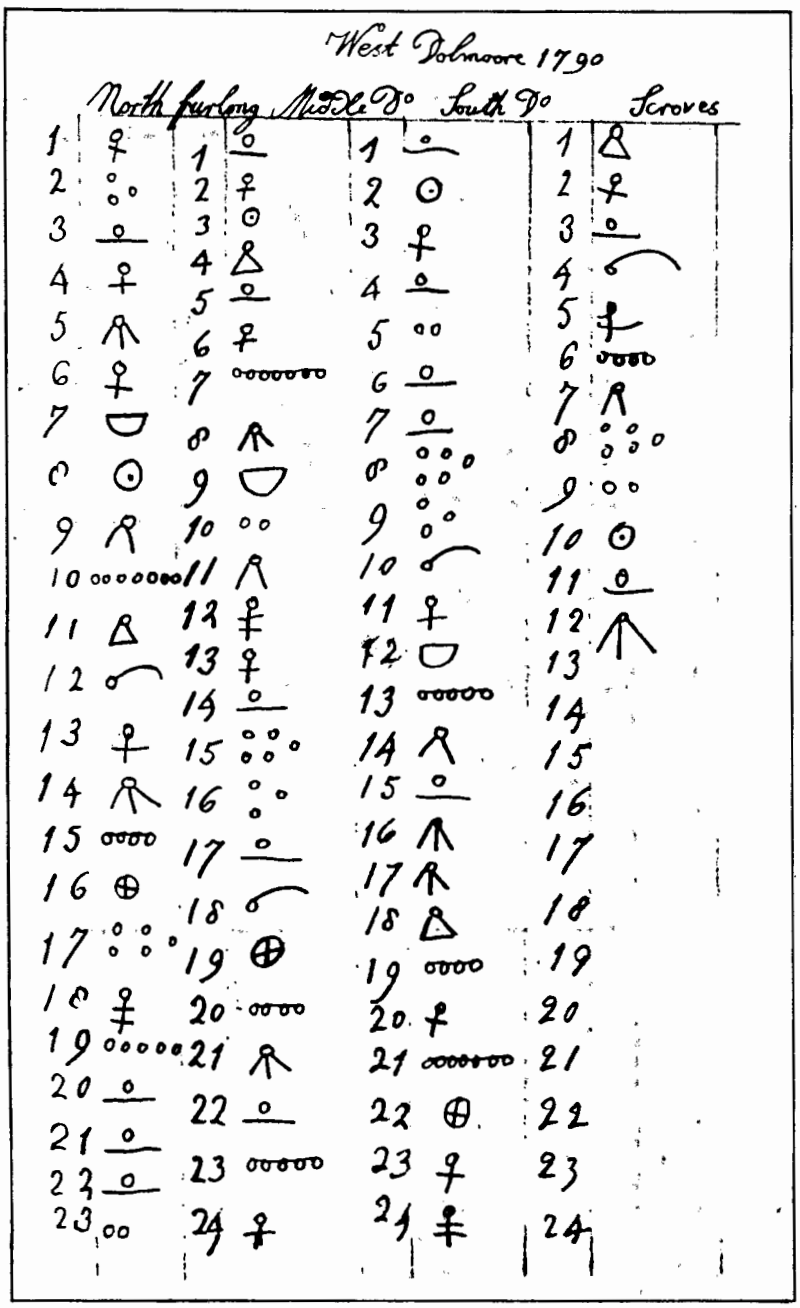

Fig 4 1790 Work Sheet

In 1808 an Act was passed (27) "for dividing, allotting and enclosing the Open and Commonable Lands in the Parishes of Congresbury, Wick St. Lawrence and Puxton in the County of Somerset", and in 1813 another Act was passed to "alter amend and render more effectual" the previous act. On 29th Sept. 1814 the local Commissioners, Sturges and Staples reported (28) that they had "ascertained, set out, determined and fixed the Boundaries" as instructed by the Act thus ending the ancient tradition of "Doling the Moors".

DISCUSSION

We have seen now in some detail the latter-day operation of a part of an agricultural tenurial system which must at some time have been practiced in many manors and parishes up and down the country. The economic and social reasons for the establishment of the open-field system in general has been amply discussed elsewhere, (29) but there remains the question - when did it begin here? It has often, and rather sweepingly, been said that this system, introduced by the Saxons, replaced the enclosed "Celtic fields" over much of the country. Even in this we are fortunate, for clearly discernable in the aerial photographs, taken for this study by John White, is the tell-tale chequer-board pattern of sub-rectangular plots of a possibly Romano-British field system underlying West Dolmoor. What time gap, if any, existed between the abandonment of tilled arable plots and their conversion to lush meadowland we do not know. It is, however, at least a further indication that the early levels were not necessarily the wasted marshland that they have too often been presumed to be.

Bearing in mind the Roman wet-land estate at Wemberham (31) and the pre-Saxon development of Cadbury (32) we have a fertile environment against which to consider the possible effect

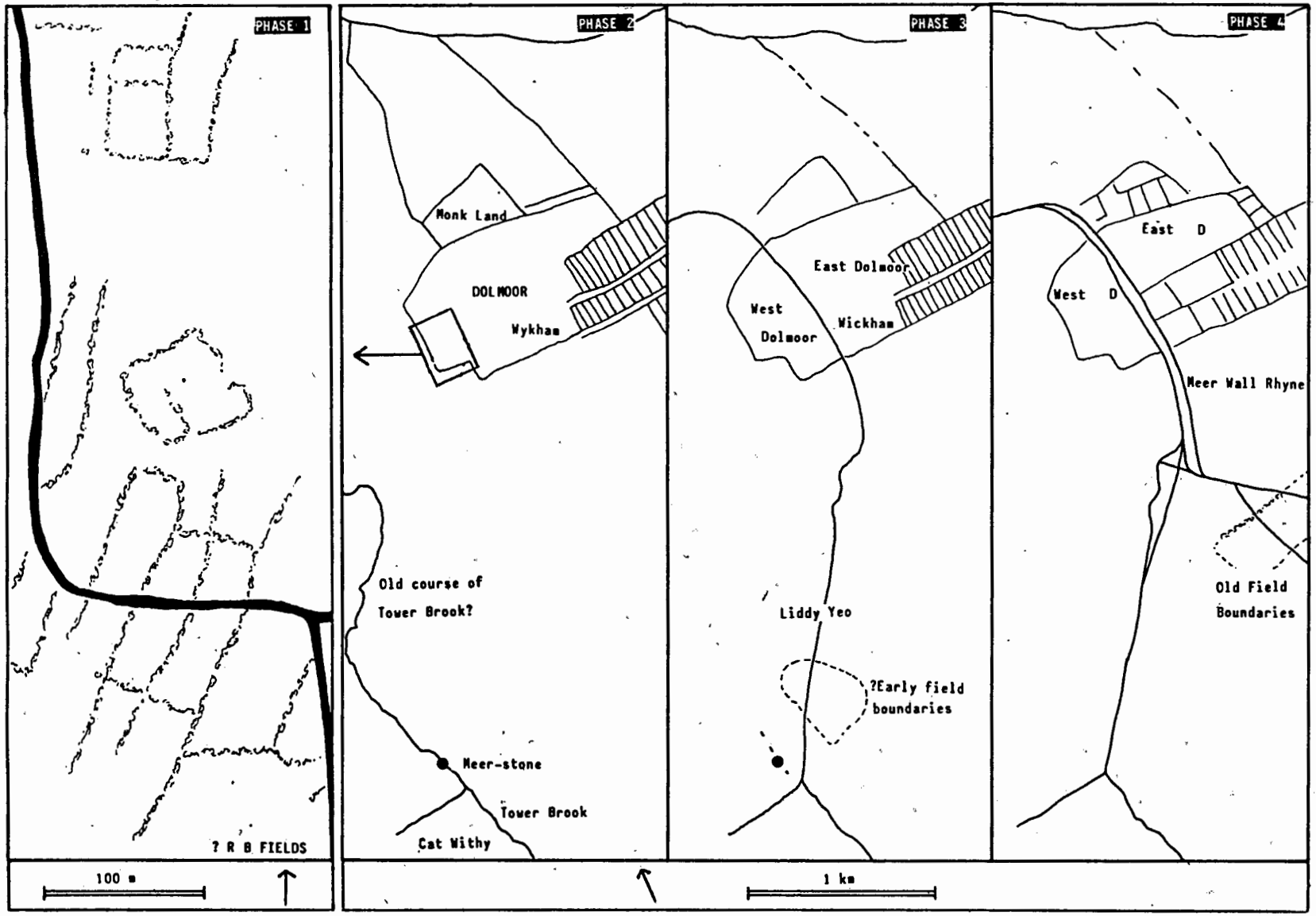

Fig 5 Landscape sequence

of the Early Christian Celtic Church represented by the albeit shadowy figure of St. Cyngar.

His medieval "Life" attributes to him, among other miracles, the ability to convert marshland into fields and flowering meadows! According to tradition King Ine (688 - 726) is supposed to have given "Cyngar" (i.e. his foundation) land, and replaced his wattle church with a stone Minster. (32)

What we may well have here then is the tradition of the early Church reclaiming land and developing its estate. On firmer ground, as it were, by 726 Ine had granted 20 hides of land at Congresbury to the See of Sherborne, (34) whilst Alfred (c.888) presented both the minsters of Banwell and Congresbury to Asser. (35)

In time, Canute gave them to his chaplain Dudoc, who subsequently became Bishop of Wells and, in his turn, bequeathed them to his successor Giso. Earl Harold then obstructed the inheritance and is found holding both manors in 1066. Giso complained to the new King William and was restored to his title of Banwell in 1068 (36). He had also, by 1086, received Yatton as well as enough of Congresbury (Hewish, Wemberham and possibly part of what is now Puxton) to make one vast continuous estate over 10,000 acres in extent. It is possible that the Yatton holding was a form of compensation for the King himself retaining Congresbury which, by this time, was obviously a desirable, productive Royal Manor. Surely, with 46½/50 plough teams in use and 250 acres of meadowland, we must already have a well developed open field system in which we should expect meadowland allottment.(37)

The subsequent medieval development of these two important Domesday holdings of Congresbury and Banwell has yet to be unravelled in terms of landscape archaeology but an interesting anomaly is that although both West and East Dolmoors are clearly included in de Wilstars Map of Congresbury Manor of 1736, the present Parish boundary cuts through them. The ceremony of the Chain, and the non-ecclesiastic records of the Dolmoors were both located in Puxton Church, itself historically a chapel of Banwell.

The Saxon boundaries of Wrington and of Banwell/Churchill are well documented (38) and one might reasonably expect to be able to reconstruct the bounds of much of Saxon Congresbury from them. Unfortunately two problems arise: first, the Banwell Charter boundary points in the marshland are not as clearly identifiable as they are on the higher land, secondly, the modern interface between Congresbury and Banwell, and particularly between Congresbury and Hewish/Puxton seems to be based on relatively late landscape features.

It seems quite probable however that Puxton and the western half of the Dolmoors were part of the pre-Domesday Congresbury (together with Wemberham) and that the original Congresbury - Banwell boundary as described in the 1068 Charter ran from King Road Churchill west around Nye to Catwithy on the Tower Brook where thre is a ? meerstone at ST405609. Thence north along a line of meandering rhynes (? the pre-Liddy Yeo course of the Tower Brook) to join the Ealden Wrinn (Old Wring) flowing north west into the Banwell River as it does today, still serving as Banwell's natural northern boundary. Puxton itself does not emerge as an identifiable settlement until the late 12th century with a reference (39) to a chapel in Wring Mareis being given to Bruton Priory by Henry Tortmanus (Ralph Tortmanus was a Domesday tenant of Banwell). An early 13th Century dispute (40) between one Theobald de Bucketot, vicar of Congresbury and the Prior of Bruton over the formers interference in the latter's chapel at POKERELSTON seems to confirm the identification. However the intriguing oval enclosure of the Church ground at Puxton could well indicate an early foundation perhaps as a satellite of Congresbury's primary phase.(41)

HYPOTHETICAL SEQUENCE

Work is in progress now in trying to unravel the sequence of development both of the drainage and of Congresbury's 3-field system. A purely working hypothesis at the moment is:-

PHASE 1. A small farmstead whose plan is commensurate with a Roman settlement (ST413628), and small rectangular fields.

PHASE 2. Congresbury's Marsh Field extending west of the village in parallel E-W rows of N-S strips serviced by droveways and drained by a network of ditches, established ? early Saxon period.

At the end of these arable strips was the Common Meadow which appears to have originated as one large single ground enclosed by a drainage rhyne which cuts obliquely across the gripes of Phase 1. (ST41416281). The 1567 Survey (42) refers to adjacent common meadowland as Wykham Furlong; (for the association between "Wickham" names and Roman sites see Gelling (43)). Other adjacent meadow to the north was referred to as Moncklande.

Vestiges of north flowing main rhynes draining directly from Dolmoor into the middle, tidal, stretches of the Yeo presumably date from this early phase.

PHASE 3. The cutting of the Liddy Yeo (ST405607-ST416636) now the main drain northwards from Sandford Moor (which has its own early field system,) appears to bisect several earlier enclosures including Dolmoor which could be referred to separately as East and West Dolmoor by 1325 (44). The Tower Brook is now diverted into the Liddy Yeo at Catwithy (ST405607) a named point in the Banwell Boundary Charter of 1068. Congresbury and Puxton were, ecclesiastically separated by c 1190 (45) and it is suggested that a date between 1068 and 1325 be considered for the cutting of this main drain and its out-throw bank the Meer Wall now Congresbury's western parish boundary.

PHASE 4. The Meer Wall rhyne (on the east of the bank) drains in from the Churchill and Sandford Boundary Rhynes with a complex of cuts at its southern end (ST415621). These works, which include the straightening of the Liddy Yeo, bisect earlier field boundaries including an extant hedge at ST41726185, which may well be of 16/17th century date to judge by its floral content. These new drains certainly pre-date the de Wilstar map of 1736, on which they appear in full detail. It is also evident that although the main Meadows were still identifiable they had, by 1736, been encroached by the enclosure at the east end of 3 separate "Dolmoor Acres", while both the Monklands and Wickham Furlong had been absorbed into the general field system.

Much remains to be done but the clues preserved by the very lateness of the Dolmoor survival may well help unravel the landscape of a complex of pre-Domesday ecclesiastic estates.

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EXCAVATIONS AT ST AUGUSTINE THE LESS, BRISTOL, 1983—84

Eric J Boore

A survey and excavations were undertaken between June 1983 and July 1984 on the site of the parish church of St. Augustine the Less (ST 58497272), in advance of redevelopment. The site lies in the western half of the city in the area known as College Green (figure 1).

The objectives of the excavation were: to survey and record the surviving remains of the church; to investigate its origins and development within the context of its parish, and also determine whether any earlier occupation, secular or ecclesiastical, preceded the parochial church. The site represented the first recent opportunity for large scale excavation in this area.

A further limited investigation took place in December 1984 for two weeks at the east end of the site. A watching brief during redevelopment will concentrate on the churchyard area to the south.

TOPOGRAPHY AND DOCUMENTARY EVIDENCE

The site lies at the east end of a knoll of Triassic red sandstone at 15.2 m (50 ft) OD. To the west and the north are Brandon Hill and St. Michael's Hill of Millstone Grit which rise to a height of 76 m (250 ft) OD. To the east is the confluence of the rivers Frome and Avon which encircled the Saxon and walled Norman town of 'Bricstow'. Bristol Castle was situated further to the east. On the south side lay the marsh in the floodplain of the river Avon. This area is still referred to as Canons' Marsh. The present area occupied by the church and churchyard is c.1760 sq m (2105 sq yds) at the east end of College Green, and is now in the combined parish of St. Michael with St. Augustine and St. George.

College Green has been suggested as a possible site for the historic meeting between St. Augustine and the British clergy in the 7th century (Britton 1830, 4). A chapel to St. Jordan, who Leland writing in the 16th century suggested was a contemporary of St. Augustine, is said to have been built there. In the present Cathedral is a late-Saxon sculpture which depicts the 'Harrowing of Hell'. This stone was found beneath the floor of the Chapter House in 1831 after the Bristol Riots. The sculpture, re-used as a coffin lid, must originally have come from a building of pre-Conquest date (Smith, 1976).

In the Norman period, College Green lay in the manor of Billeswick, an estate owned by Robert FitzHarding, the reeve or king's representative in the town of Bristol. In *c* 1140 FitzHarding founded the Abbey of St. Augustine in Billeswick and College Green became the Abbey's burial ground. After the Dissolution, in 1542, the Abbey church became the Cathedral for Henry VIII's new diocese of Bristol.

On the north side of the Green is the Lord Mayor's Chapel which was originally dedicated to St. Mark. This had formed part of Gaunt's Hospital which was founded by Maurice de Berkeley, grandson of Robert FitzHarding, in *c* 1220. The Hospital was dissolved in 1539 and the chapel sold to the Corporation in 1541. Further north, on the site of the Colston Hall, was the Carmelite Friary founded in *c* 1267.

College Green has then a long traditional association with religious affairs. This is supported in the 11th century with architectural sculpture and from the Norman period onwards with the foundation of several religious houses and hospitals. It is also suggested that the 'stow' in 'Bricstow' may have religious implications which reflect the College Green area tradition (Dickinson 1976, 122).

By the 13th century, the Norman town of Bristol began to spread beyond its walls. At this time, *c* 1240-1247, the river Frome was diverted to its present course to provide a 'new and broad quay' for an expanding trade. This major undertaking led to an increase in population around the new harbour in the College Green area. In order to meet the religious needs of this new community, the abbots of St. Augustine's Abbey endowed the parish church of St. Augustine the Less. The traditional date of foundation is *c* 1235 which is the year after work began for the new Quays. Further references also occur in 1240, with more specific reference to the parish church in the *Taxatio Ecclesiastica* in 1291 (Dawson 1981).

By the 15th century the church 'had fallen into great disrepair'. William Worcestre, writing at this time, described St. Augustine the Less as "newly built in this year 1480". He further most interestingly describes the church as 'the ancient and original church of the said abbey', that is St. Augustine's Abbey

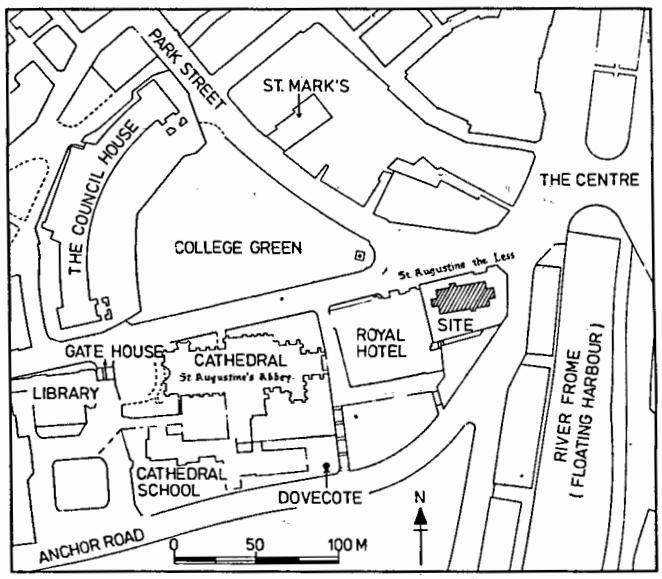

Fig 1 St Augustine-the-less — Site location.

(Dicksinson, 1976, 117). This point has been more recently and most persuasively argued by Rev. J. C. Dickinson, based on further documentary evidence. He has suggested the possibility of temporary structure for the monks on the present site of St. Augustine the Less while the main Abbey buildings further to the west were under construction *c* 1140-1170 (Dickinson, 1976).

In the 15th century church the arms of Abbot Newland (1481-1515) and Abbot Elyot (1515-1526) were depicted on some medieval glass suggesting that they contributed towards the rebuilding costs. The west tower was paid for by the parishioners. Many churches in Bristol were rebuilt or altered at this time, for example St. Peter's, St. Stephen's, St. Mary Redcliffe and St. Augustine's Abbey. The churches were rebuilt in the Perpendicular style and the amount and quality of work is a reflection of the wealth of the city which had accrued in part from their extensive overseas trade.

The basic 15th - century character of the church was maintained through its succeeding periods of building. Essentially the plan of the church comprised a nave with north and south aisles defined by arcades of five bays. At the west end was a tower containing an octagonal stair turret on the north-east corner. To the east was a projecting chancel. The main porch stood on the north side with the vestry, rood stair and a second doorway on the south. The burial ground surrounded the church. A watercolour by G. Delamotte, dated *c.* 1825 depicts a church of late 15th - century character with later embellishments (cover 1).

In the parish registers for the 17th century, the years 1603 and 1645 contain more than the usual number of burials. There were 85 in 1603 and 124 in 1645. The former entry states that it was 'the begininge of the pestilent plague in the parishe of Little Sainte Augustine in bristoll' (Sabin 1956, 22). This may refer to an outbreak of bubonic plague. The total number of recorded burials in the registers between 1577 and 1700 is 2660. Later documentary sources listing memorials inside the church describe two wall tablets in the south aisle and two inscribed floor slabs or ledger stones set in the chancel floor, of late 17th - century date. The latter were for Sarah Tie 1689 and Sir Hugh Owen 1698. Jacobus Millard's map of Bristol of 1673 shows a porch on the south although this is more likely to represent artistic convention.

ST. AUGUSTINE THE LESS, 1849 (after Marmont & Lloyd)

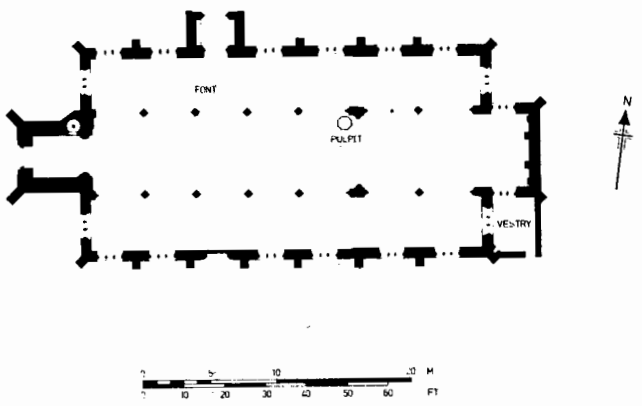

Fig 2

In the 18th century major rebuilding work was carried out. A faculty was obtained in 1708 to extend the chancel and the aisles. The south aisle extension necessitated pulling down the old vestry. Arcades with two bays were built on the original chancel walls. Internally the ceiling of the chancel was decorated with plaster which depicted the apostles within floral wreaths (Reece Winstone 1965, 44). Several Bristol churches contained decorated plaster ceilings of 18th - century date of which St. Paul's in Portland Square is a late survivor.

The Churchwarden's Book 1669-1739 lists further work in the 18th century including the building of a new vestry and repairs and new staircase for the gallery (Sabin 1956, 2139). The latter may have been originally constructed in the 16th/17th century.

The published parish registers 1577-1700, which include christenings, weddings and burials, are extensive and a mine of useful information. There is an interesting list of parishioners who voted in the elections of 1714-15 which gives their occupations. Many were tradesmen, particularly associated with shipping: Thomas Baily, Shipwright; William Baker, 'Marriner'; John Godfry, 'Hooper'. Other trades like 'Tyler', Baker and Pipe-maker, are mentioned as well as Merchants and a Surgeon (Sabin 1956, 256). It is also worth noting that College Green at this time was a most fashionable area with the Cathedral and the original medieval Brfistol High Cross, removed here in 1736, as the centre piece of the Green.

In the 19th century a series of internal alterations were carried out to the church. Faculty petitions are mentioned for 1842, 1849 and 1876. They refer to such items as removal of monuments, re-arranging of pews and moving the organ and the font. Plans of 1842 illustrate some of the alterations which include the 'stopping-up' of the south door. In 1849 more extensive alterations are described (figure 2). These list concreting the aisle floors, moving the pulpit from the south pier to the north pier of the chancel arch, demolition and rebuilding of the vestry, opening a doorway from the vestry in the south-east wall, the insertion of a window in the east chancel wall and removing the north and south galleries.

In 1876-77 further alterations revealed the foundations of the earlier vicarage/vestry below the south aisle of the chancel. The vestry contained two rooms. To the west adjoining the south aisle, was a room 10 ft (3.05 m) x 11 ft (3.55 m), a party wall 'nearly 3 ft (1.0 m) thick' and the second room to the east 8 ft (2.44 m) x 11 ft (3.55 m). The same source writing in 1881 states, 'In vaults beneath the floor of the church are about 800 leaden coffins, enclosing the remains of as many parishioners' (Nicholls and Taylor, 1881, 238). A later schedule of memorials, wall tablets and inscribed floor-slabs gives a total of 70 vaults with 126 names which include many family groups. The memorials range in date from the late 17th century to the early 19th century.

The practice of vault burial inside a church was subsequently discontinued because of considerations of health and hygiene. Many people at this time were victims of cholera and smallpox. Legislation was introduced in London in the Metropolitan Interments Act of 1855 which was reinforced elsewhere by local Pastorial Measures. The Ordnance Survey map 1:500 of 1885 shows three structures butting on to the church. One is built on to the north-east corner of the north aisle extension and the second is built on to the south aisle wall west of the rood stair. These structures are probably above-ground monuments for brick lined vaults. A third rectangular structure was built on to the south wall of the tower and also abuts the south aisle. This appears to be an ancillary churchyard building. The number of burial vaults may be seen as a reflection of the status of the

parish and church since this form of burial could only be afforded by the more wealthy parishioners.

The selling of burial plots for vault burial, particularly inside the church, would have provided income for the incumbent. Certain areas in the church were more desirable for the location of vaults. This is well illustrated by an epitaph in the church at Kingsbridge, Devon in 1795:

'Here lie I at the Chancel door,
Here lie I because I am poor.
The further in the more you'll pay,
Here lie I as warm as they.'
(Johnson, 1984, 54)

During the 19th century the population continued to increase in the parish. The incumbent in 1819, Dr. Luke Heslop, described the churchyard as being overcrowded. This situation contributed to the founding of St. George Brandon Hill as a chapel of ease to St. Augustine the Less. St. George was consecrated in 1823.

Later in the Victorian period however various encroachments on the churchyard of St. Augustine the Less began to occur (figure 3). To the west the Royal Hotel was built in 1868. Plumley and Ashmead's map of Bristol of 1833 shows a building east of the church and describe it as St. Augustine's School. The same building is shown in a plan of 1892 when it is then called the Sexton's Cottage. This building was demolished and 360 sq m (430 sq yds) of the south-east corner of the churchyard were removed to make way for Anchor Road. This involved the exhumation of 1,184 burials which was completed in 1892. Many of the numbered graves, 113 in all, were of the 18th century. In 1894 a further 147 graves in the northern churchyard were removed, presumably as part of road widening at the east end of College Green. This encroachment involved the removal of another 1,340 burials. Many of these graves were 19th century and included burials of military and naval officers (B.R.O, P/St. Aug/R/6).

The original area of churchyard prior to 1892 was 2, 045 sq m (2445 sq yds). After the two grave clearances the churchyard area was 1,190 sq m (1423 sq yds) which was a reduction of 42%. The total number of burials removed was 2,524 from just under half the area of the churchyard.

After these encroachments, two new entrances to the churchyard were constructed on the north. At the east end of College Green a new High Cross designed by John Norton, was raised in 1851. This was subsequently replaced by a statue of Queen Victoria to celebrate her Jubilee in 1887. The new cross was re-erected in the centre of the Green in 1889 where it stood until the Green was levelled in 1950. The medieval High Cross now resides at Stourhead in Wiltshire while the remains of the 19th century cross can be found in Berkeley Square, Clifton.

This century the church and parish began to decline as the inner city population decreased. To the south of the churchyard, warehouses were built. Minor repairs are recorded on the tower in 1911. The church was still able to raise its own choir in the early 1930s. The incumbent at this time was the Rev. R. D. Grange-Bennett. However, in 1938, due to falling congregations,

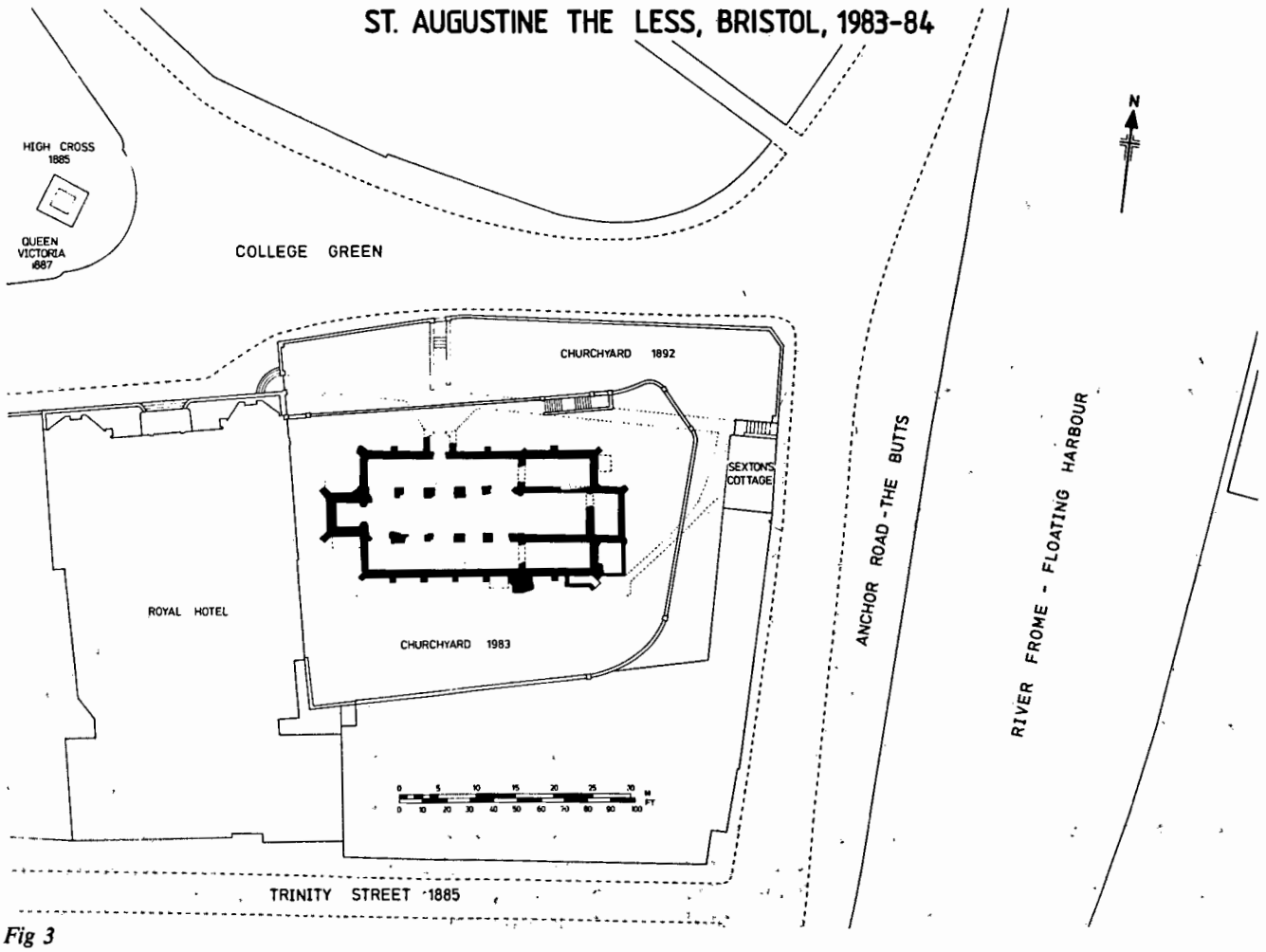

Fig 3

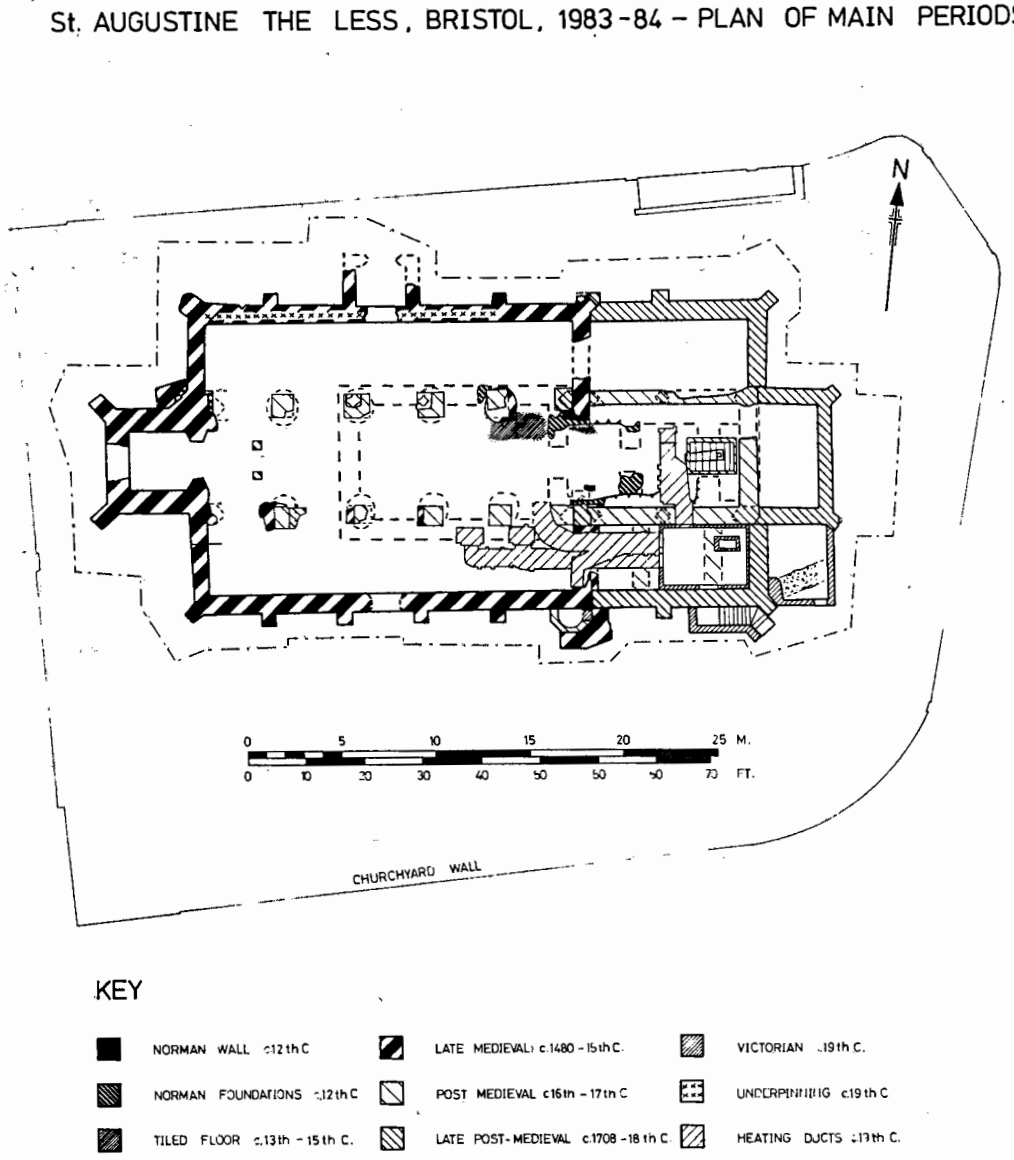

Fig 4

the parish of St. Augustine the Less was united with St. George Brandon Hill which was served by Canon P. Gay. Worship still continued at St. Augustine the Less and a marriage was duly solemnised in the summer of 1939. Unfortunately the church was damaged by fire in the blitz of 1940. In 1956 the church was closed and in 1962 demolition followed. Finally in 1971 the external churchyard was cleared of its remaining graves. The site then lay neglected and became covered with undergrowth.

Prior to demolition the internal vaults had been cleared and some of the church furnishings, memorial tablets and church bells were transferred to St. George Brandon Hill. In 1984 the church of St. George was closed for regular worship and leased by St. George's Music Trust. The church of St. Michael the Archangel (ST 58517329) has now assumed parochial responsibility for the combined parish of St. Michael with St. Augustine and St. George.

EXCAVATIONS AND STRUCTURAL PERIODS

The churchyard area was totally destroyed in 1971 during the grave clearance which was undertaken with earth-moving machinery. This disturbance had penetrated well into the natural sandstone and the surviving soil consisted of redeposited mixed red sand, clay and humic soil. The site was covered with grass, wild blackberry and buddleia. This undergrowth was kindly cleared by the developers prior to excavation.

The church had been demolished to external ground level. A plinth course survived in the south aisle and south wall of the tower. The north porch foundations were half demolished. The surviving wall foundations were located a few centimetres below the scrub exposing an area of 570 sq m (figure 3). In order to clarify the main walls, to make possible detailed recording of their construction and to facilitate safety on site, an external trench was established around the main church walls giving a total area of 966 sq m (figure 4). This exercise confirmed the complete archaeological destruction of the area outside the church. The whole of the interior of the church was investigated to the level of the natural Triassic red sandstone which occurred at between 2 and 3 m depth.

The structural sequence was further complicated by the limited survival of associated contexts such as floors and foundation trenches. Radio-carbon dates for the burials will affect the dating of the structural sequence of the church development, in

particular with regard to the earliest stone church discovered. The following summary and plans are provisional.

1. Saxo-Norman c.11th century

The earliest occupation was represented by six adult burials which presumably form part of a cemetery (figure 5.1). They were found in the south-east corner of the site and with one exception were outside the area of the subsequent church building. Two were contained in cist graves and another within a body-shaped grave with a head and shoulders profile at its west end.

An intriguing aspect was the alignment of this group which was NW-SE. This alignment moreover was ignored by subsequent church buildings discovered. The existence and alignment of this group may have been influenced by a contemporary building, boundary, route or other feature in the area which has either not survived or lay beyond the area of investigation. These burials pre-dated all the subsequent excavated structures and are provisionally dated to the Saxo-Norman period. Similar head and shoulders' graves of this date were found at St. Mary, Rivenhall in Essex (Rodwell and Rodwell, 1973).

2. Norman c.12th century

The foundations of a rectangular stone-built structure were found below the post-medieval chancel walls (figure 5.2). In the north-west were the remains of a corner. A robber trench continued east for 2.7m from the north wall. In the south-west there were the remains of a doorway built of oolitic limestone blocks. A parallel robber trench to that north continued east from the doorway for 7.2m. The door jambs survived to a height of 0.6m from the wall foundations. The latter were constructed with roughly dressed facing blocks of Brandon Hill Grit with a rubble core interleaved with shallow spreads of red sand and clay. Both surviving sections of wall were built with internally projecting footings. A similar method of construction was found on a domestic stone building of Norman date at Tower Lane, Bristol (Boore 1984). The foundations measured 2m × 1.1m × 0.75m. The doorway with a south rebate was 0.96m × 0.85m. The upper courses of the north-west wall and the base of the south-west door jambs were bonded in a pale yellow-brown sandy mortar.

The foundations of a N-S partition wall were found 0.82m east of the doorway. A further 3m east of this wall were ephemeral traces of a possible second internal wall. The southern robber trench projected internally *c.*60 cm forming a triangular shape between these two features. The north-east corner of this building and the east end were destroyed by later chancel walls and post-medieval burial vaults. The surviving internal dimensions of this stone-built structure were 9.2m × 3.8m with its western bay measuring 2.9m × 3.8m. The potential two bay construction may have been similar to the surviving Norman, vaulted chancel at the church of St. Michael at Compton Martin, Avon (Pevsner 1958, 174).

The remains of the lower halves of two coarse ware jars were found *in situ* in a contemporary context 0.45m and 1.3m west of the north-west stone foundations. The upper halves of the jars had been truncated by later medieval floor make-up deposits. The jars were decorated with applied strips and associated rim sherds with wavy combing. A shallow beam slot and two post-holes aligned west-east, were contemporary features. The pots are thought to be acoustic jars set in the floor possibly below timber stalls and reflect a western extension to the church. They are provisionally dated to the late 12th century. The disturbed remains of possible wall foundations were found north-west of the acoustic jars.

This Norman structure may have been a chapel or a temporary church built for the canons while St. Augustine's Abbey was under construction further to the west.

3. Medieval c.13th — 14th centuries

Evidence for the phase when the parochial church is first mentioned in documents is extremely limited. The later medieval rebuilding and excavations of post-medieval burial vaults effectively destroyed most of the layout of the 13th century parish church. In a few areas isolated islands of stratigraphy survived, in particular in the north-east corner of the nave (figure 5.3). The reason for this remarkable survival is unclear at present.

Overlying the acoustic jar remains were lens deposits of ash and mortar. Similar deposits were also found further west in the nave and in the tower area. This may indicate building activity. This occupation in the north-east nave area served as a make-up deposit for a tiled floor which extended into the chancel. The area measured 6m × 1.1m. A few decorated tiles survived *in situ* around the north chancel arch base. The floor area to the west was defined by tile impressions left from their setting in a bed of pale brown mortar. The impressions consisted of the outline of the tile with two or four raised convex dimples left by the concave key depressions on the underside of the tiles. The pattern of the tile impressions was recorded by using a PVC moulding compound.

The tiles measured *c.*13 cm square. A north-south line of narrow tiles, 13 cm × 7cm presumably represented a sub-dividing border. The tile impressions suggest that the floor was divided into patterned areas with narrow plain tile borders. The survival of the impressions may suggest that the tiles themselves were deliberately and carefully removed. The few *in situ* contained heraldic and floral decoration and are dated to the late 13th - early 14th century. A considerable number of decorated medieval floor tiles were recovered from unstratified contexts.

Evidence for the western extent of the nave had not survived. The distribution and dating of the medieval burials inside the later church may provide indirect evidence to suggest a conjectural plan for the 13th-century church. Later walls associated with the tower construction imply that the nave was smaller in length at this period.

The main chancel walls continued in use. A coffin made of oolitic limestone was found at the east end of the chancel. Although the coffin was found in a disturbed context, it is provisionally dated to the 14th century. It was discovered immediately below a 17th-century burial vault lying in a rectangular-shaped, flat-bottomed hollow which was cut into the natural clay and sandstone. The coffin was tapered and measured 2.08 m × 0.63 m × 0.37 m (externally). At its widest end it contained a raised niche internally to contain the skull, similar to two examples found in 1821 in the crypt of St. Nicholas' Church (Nicholls 1879). The coffin was found with its head to the east. It was broken midway and contained the disarticulated remains of at least three individuals. Originally the stone coffin would have possessed a lid, possibly decorated, which would have been set at floor level. The coffin, allowing for a lid, was over 1 m below the surviving tiled floor area. It must originally have been the burial for someone of importance, possibly a priest or a major benefactor of the parish church. This point is reinforced by its position even allowing for its disturbed context.

The stone coffin may have become buried below later medieval

Plate 1 St Augustine the Less

floor levels and was rediscovered during excavation for the later 17th-century vault. At this time it was disturbed and broken and its contents were removed. Its importance however, was recognised since it was subsequently relocated at a greater depth; when further human remains were discovered during excavation for the later vault they too were redeposited inside the coffin as charnel deposit. This may have been thought to add greater sanctity to the occupants of the 17th-century vault immediately above and certainly influenced its construction (see below 5, Vault 32).

Although little evidence has survived to indicate the greater part of the layout and plan of the 13th-century parish church, what there is suggests a church not without embellishments and a parish of some status.

4. Later Medieval c.14th — late 15th century

The surviving foundations of the western half of the church date to the rebuilding of the church by 1480 as described by William Worcestre (figure 5.4). The main wall foundations revealed a rectangular plan *c.*21.5 m × 16 m including north and south aisles. The nave measured 19 m × 4.5 m. The aisles were defined by arcades containing five bays, the columns set on piers *c.*1.4 m square. At the west end a tower 5.5 m square with north-west and south-west diagonal buttresses, was built. An octagonal stair turret was inserted into the north-east corner. The incomplete main porch *c.* 4 m × 4 m was situated on the north side. A smaller doorway was built into the south wall with a rood stair at the east end of the south aisle.

The nave and aisles of the later church were separately gabled structures with the nave roof rising higher than the two aisles. A straight butt joint was found in the west wall of the south aisle and a more disturbed junction in the west wall of the north aisle. The south aisle west wall butted on to a wall of massive dimensions which was faced south and continued eastwards for 1.8 m. This wall had been subsequently almost completely destroyed by the insertion of a pier base and brick-built burial vaults. The surviving dimensions measured 2.1 m × 1.8 m × 1.5 m and it may have extended east for 4.6 m. The south-east corner and south wall of the tower were constructed over this massive structural wall. A similar structural feature was found below the north-east corner of the tower where the north aisle joined the tower. This feature was, however, faced on four sides and measured 2.1 m ×1.5 m ×1.7 m. The mortar suggested that it had been rebuilt in a later period.

The mortar in the north aisle wall, the tower walls, the massive south-west wall and the south aisle walls was identical. This suggests a late 15th-century rebuilding sequence of the body of the church rather than different periods of construction. The dimensions of the south-west wall are too generous to represent the foundations of the earlier church nave wall or even an earlier tower. It is possible that they may represent an extension to an earlier nave and strengthening for the south-east and north-east corners of the tower at their junction with the aisles and the eastern, internal tower arch. The other possibility, though unlikely, is that they represent the remains of foundations from an earlier west front. The sequence of rebuilding would then suggest that the nave was extended west, followed by the construction of the tower and then the aisles. A similar sequence occurred in the 18th century at the east end of the church when the chancel was extended first followed by the aisle extensions. The aisle extension east walls sealed the butt joint between the chancel extension and the former chancel.

The later reconstruction of the north-east foundations may have been necessary because of problems with the tower stair turret in that corner and was possibly contemporary with the underpinning of the north wall (see below 7).

At the east end, the earlier chancel was retained temporarily though the rebuilding work involved the blocking of the south-west door. Internally very little evidence survived. A small area of floor tile immpressions survived in the south-west corner of the chancel. These impressions were of large tiles, 14cm × 15cm. Tiles of this size are usually of late 15th-century date in Bristol.

In the tower area floor levels of mortar and crushed oolite overlay post-holes which were probably associated with the tower construction. The crushed oolite was no doubt the material left over from dressing and carving stonework for the rebuilt church. In the external north-east corner of the tower, below the newel stair, were the remains of a wall stub running NW-SE, partly destroyed by the external churchyard grave clearance. It may represent the remains of the foundations of the newel stair.

The later rood stair was found to be constructed on very extensive foundations with massive blocks of Pennant Sandstone used at its base. The foundations measured 2.8 m × 2.2 m × 0.9 m with a well-defined face on the west side. The east face was disturbed when the south aisle was extended in the early 18th century. The surviving later rood stair base was moreover off-set from these foundations by 0.9 m to the west. The earlier foundations may indicate the presence of an earlier stair or possibly a small tower on the south-east corner of the church, perhaps a curfew tower or bellcote.

The remains of a rubble-built oval foundation were discovered below the square, east pier base in the north aisle. These foundations are the only remains of the medieval arcades. The building materials used in the west half of the church were predominantly Pennant Sandstone and Brandon Hill Millstone Grit with some Carboniferous Limestone and reused oolitic limestone. A medieval grave-slab was found re-used in the south wall. A plinth course of oolitic limestone survived on the south wall of the tower and the west wall of the south aisle. The lower blocks of the internal door jambs of the north porch were also of oolitic limestone as was the base of the rood stair. The earlier surviving chancel walls were entirely constructed of Brandon Hill Millstone Grit.

5. Post-Medieval c.16th — 17th centuries

The former chancel was demolished and a new rectangular chancel constructed in this period (figure 5.5). It measured 9.12 m × 7.12 m (externally). The foundations of the west end of the old chancel and chancel arch had been built over by the late 15th-century aisle construction. The new chancel was 1.12 m wider. At the same time, the arcades were also altered presumably to conform with the new chancel arch. The pier bases, *c.*1.4 m × 1.3 m × 1.6 m, were rebuilt only with rubble foundation to suggest remains of the earlier bases. The remains of two column base mouldings survived in the north aisle. Both were located in the north-west corner of their piers. They were built of oolitic limestone and consisted of a square plinth with a simple design of four attached circular shafts separated by a double wave moulding in the late Perpendicular style. Such major structural works are not unusual at this period, for example in the church of St. Philip and St. Jacob, Bristol, alternate piers were removed to enlarge the openings of the arcade.

At the same time a vicarage was built on to the south side of the chancel. This building containing two rooms also probably served as the vestry. The only evidence which survived of this structure was a wall rob scar in the south face of the new chancel

south wallk. This scar presumably represented the remains of the partition wall described in the later documentary evidence (Nicholls and Taylor 1881, 238). The reconstruction of the vestry based on the partition wall has reversed the dimensions of the two rooms described in the documentary reference.

The remains of a cobbled path made of Pennant Sandstone, *c.*1 m wide, were found below the later vestry. The path was aligned SW-NE and presumably was a route between the vicarage and an entrance to the churchyard on the east.

In the 17th-century, burial in brick-built vaults occurs within the church. Although there are several recorded ledger stones and wall tablets of late 17th-century date, only one vault of this date has so far been recognised. This is thought to be of Sir Hugh Owen of Orielton, Pembroke in South Wales, who died in 1698.

Vault V.32 was situated at the east end of the chancel, centrally placed and was built up against the chancel east wall. Vault 32 mentioned above had disturbed the medieval stone coffin below. The walls were constructed of narrow red bricks which measured 0.25 m × 0.12 m × 0.05 m and were bonded in white/pale grey mortar. The internal faces of the vault were painted with a red ochre wash. The vault measured 2.76 m × 1.90 m and was probably originally sealed with a ledger stone. The broken remains of a black marble ledger to Sir Hugh Owen and Anne Lloyd and bearing his coat of arms, were discovered amongst the demolition material in the chancel area.

Internally, in the bottom of the vault, there were set six rows of evenly-spaced, upright narrow slabs of Pennant Sandstone aligned N-S. These spacing stones were set immediately above the stone coffin. Their purpose was not only to support the intended coffins for Vault 32 but also to separate them from the stone coffin below. The relationship between Vault 32 and the medieval stone coffin has already been described. The upright Pennant slabs served to separate the imporant charnel deposit from the no doubt equally important occupants of Vault 32 while also managing to maintain a certain spiritual relationship between the two groups of burials in death and beyond.

6. Later Post-Medieval c.18th century

In the early 18th century the chancel was extended eastward by 4 m (figure 5.6). The extension was constructed mainly of Pennant Sandstone bonded in an orange-red sandy mortar. The width of the earlier chancel, 7 m, was maintained. The extension walls were built over the diagonal buttresses of the earlier chancel.

In the Churchwarden's Book under 'Items of Expenditure, Church Repairs and Embellishments', the work on enlarging the chancel began in July 1708 and on 3 May 1709 the entry reads 'work nearly finished'. The former entry states 'and that there be noe light or windowe made at ye East Ende of sd Chancell' (Sabin, 1956, 238). The east window was not inserted until after 1849. Later illustrations show that the extension had windows north, south and east. Subsequently a large vault known as the 'Vicar's Vault', was constructed beneath the extension. This vault measured 4.23 m × 3.20 m × 1.63 m and contained its own stepped entrance in the south wall (figure 5.8).

The north and south aisles were also extended for 9.50 m, slightly longer than the 16/17th-century chancel in order to seal the butt joint of the chancel extension. Diagonal buttresses were constructed on their north-east and south-east corners. The south aisle extension involved the complete removal of the former vestry and also cut through the pathway south-east of the former chancel. The aisle extensions in particular were very solidly built and contained many pieces of re-used stone probably from the earlier chancel and vestry. Many fragments of decorated moulded plaster were found from the chancel ceiling.

Many more brick-built vaults were constructed inside the church in the chancel, nave and aisles. One of the vaults situated in the north-east corner of the chancel cut through the 17th-century chancel east wall which was 1 m thick. Brick-built burial vaults also occurred in the churchyard.

Towards the west end of the nave were found two square piers built mainly of brick. The piers measured 0.5 m × 0.5 m × 2.2 m. They were constructed in three stages with a single Pennant Sandstone slab separating each stage. They were located either side of a contemporary rectangular vault. The piers may have been constructed to support the organ which is still shown in this position in a plan of 1842.

7. Victorian c.19th century

A new single-storey vestry was constructed in the south-east corner of the church between the chancel extension and the south aisle extension (figure 5.7). The vestry measured 4.72 m × 3.62 m. It contained a doorway in the south-east corner and an internal entrance west into the south aisle. The south door into the Vicar's Vault below the chancel extension had been blocked. Victorian ceramic coloured tiles were found in the tower, north porch and south aisle areas.

The two main below ground activities at this time were the continued construction and proliferation of burial vaults which eventually consumed virtually the entire internal area of the church excepting the vestry, the tower and the north-east corner of the nave where by this date the pulpit was situated. Secondly and later was the installation of central heating (plate 1).

At the east end of the south aisle extension, a boiler house was constructed below the floor. It had its own external stepped entrance cut through the south wall. The boiler house was roofed by a brick-built barrel-vault on walls of brick and reused stone. This area probably originally contained burial vaults. The heating system worked on a series of channels feeding out from the boiler house, below the floors, through which hot air circulated. The ducting channels opened up into rectangular chimney type structures, covered with cast-iron grilles. The ducts led into the chancel and west along the south aisle as far as the east end of the nave. The channels and chimneys of this hypocaust-type system were constructed with brick walls. The base and cap stones of the ducts were made from re-used ledger stones and headstones from the churchyard. This heating system cut through many burial vaults.

This form of central heating was subsequently replaced by a pipe-fed hot-water system. The steel pipes followed the course of the ready-made ducts and also extended to the east end of the nave and north aisle. A rectangular brick plinth in the north-east corner of the boiler house was a base for the boiler with flues cut through the east wall leading to a chimney stack incorporated into the south-west corner of the vestry.

A substantial length of the lower foundations of the north wall of the church and the north-east corner of the tower were found to have been completely rebuilt. This activity along the north wall must have taken place from the outside, that is from the churchyard. This work also entailed the rebuilding and strengthening of the buttress east of the porch. This underpinning may have been necessary due to settling and the removal of much of the northern churchyard in the late 19th century, (see figure 3). The intensity of burial vaults both inside and out may have contributed to the weakening of the foundations and remedial work had to be carried out to some

of the aisle pier bases. Similar underpinning was undertaken at York Minster and more recently at St. Nicholas' church in Bristol. The external doorway on the east side of the rood stair was blocked in.

8. 20th century

After the internal burial vaults were cleared, they were backfilled during demolition in 1962 with architectural remains. The remains of modern services were found beneath the threshold step, a large slab of Pennant Sandstone, at the west entrance to the tower.

THE VAULTS c.17TH — 19TH CENTURIES

This aspect of church archaeology, particularly in the urban situation, has until recently been unfortunately neglected with certain notable exceptions. In total 116 brick-built vaults were recorded (figure 5.8). They comprised 107 inside the church and nine outside (plate 1). The vaults were individually recorded and planned. More intensive recording including drawings of elevations was undertaken on a representative sample. The vaults were provisionally sub-divided into three basic types:

1) the rectangular family vault sometimes with its own stepped entrance — these were wide enough to take several coffins side by side,

2) the rectangular single vault, of only a single coffin width,

3) the coffin-shaped vault of single width with its head to the west.

There were several variations including an oval shape with parallel ends, odd shapes produced when two vaults were knocked into one and one example where the gap between existing vaults was joined up to create a new vault.

There were several examples of vaults cutting vaults and subdivision of larger vaults. The Vicar's Vault below the 18th-century chancel extension was subdivided on two subsequent occasions. Space inside the church was to be at such a premium that at least two of the aisle pier bases were partly cut away by the insertion of vaults.

Interpretation of the sequence of vault construction was enormously complicated and aggravated by their earlier clearance. The earliest vault (V.32 described above) was located in the chancel. Vaults of types (1) and (2), provisionally dated to the 18th century, are located in the north aisle extension, the chancel, nave and south aisle areas. Vaults of all three types, provisionally dated to the 19th century, occur throughout the church. The vaults were literally crammed in. There does, however, appear to be a clear pattern of vault construction in groups, particularly in pairs. This is understandable from the point of view of the time and presumable expense incurred and the disturbance in the church while excavation and construction of a vault was in progress. Construction in pairs would also help alleviate the problem of roofing and capping.

The method and standards of construction varied from vault to vault. Walls were of both single and double brick construction. Their bonding was mainly stretcher bond though English Cross, Flemish and Monk bonds were all found. A unique vault contained one face with alternate niches giving a 'dovecote' effect. This may have resulted from a shortage of bricks. A few vaults (type 1) contained brick floors which were bedded in sand either in parallel rows of herring bone pattern. Others may have possessed a thin skim of mortar while many contained no trace of a floor other than the natural clay and sandstone. One vault contained a floor of Pennant Sandstone flags.

Later vaults were sometimes painted internally with a plain lime wash which was also used to disguise pier base foundations when a vault was inserted below an arcade. Rectangular family vaults were often covered by barrel-vaulted brick roofs while others were sealed with Pennant Sandstone flags. The vaults were identified in some cases by ledger stones, that is inscribed floor slabs, and/or by nearby wall tablets which were often in white marble.

The dimensions of the vaults varied considerably. One of the rectangular family vaults measured 2.6 m × 1.86 m × 1.59 m, a rectangular single vault was 2.5 m × 1.14 m × 1.8 m and a coffin-shaped vault 2.5 m × 1.04 m × 1.92 m (externally). In the rectangular single and coffin-shaped vaults the coffins may have been simply stacked one on top of the other. However, in some of these vaults niches were left in the wall faces to accommodate iron separation bars which would have supported subsequent coffins. In the Vicar's Vault, laid above the brick floor, were the remains of two separate lines of single brick courses which presumably acted as coffin supports.

The internal vaults would have contained single coffin (with either single or double lids) and triple coffin burials. A triple coffin contained a plain coffin of oak or elm, placed inside a sealed lead coffin. These were sometimes decorated with cross-hatching. The lead coffin was then placed inside a third, wooden coffin. The outer wooden coffin was often covered in red velvet which was fixed to the coffin with circular-headed upholstery pins. These were sometimes arranged in various patterns. Metal grips were placed at either end and along the sides, usually eight in all, and fixed to grip-plates. On the top of the coffin was the coffin — or breast-plate which was inscribed with the name and date of the deceased. Other metal fittings such as false hinges, metal straps and escutcheons may hav e been either decorative or functional. Pewter, lead, tin, copper alloy and iron were used for the coffin furniture which was sometimes gilded or silver-plated. Many of the grips were very ornate and heavy. The metalwork can provide vital information, not only in relation to the deceased and the art of funerary practices, but also social, economic and industrial information about the life of the parish and its relationship with the wider community. It is possible that some of this coffin furniture was made in the city as Bristol was a manufacturer in the 19th century (Church and Smith, 1966).

The 19th-century documentary reference to '800 leaden coffins' below the church floor may not be an unrealistic number. Such a volume of interments inside the church could create, with the passage of time and the absence of the nullifying effects of earth, particularly unpleasant conditions. There was also the problem that many of the deceased at this time were victims of cholera, smallpox and other infectious diseases. However, the practice of internal burial in vaults declined after the middle of the 19th century, not the least reason being that the churches were literally full up. Similar vaults to those found at St. Augustine the Less were discovered at the church of St. Mary le Port in 1962-3, St. Peter and more recently at St. Nicholas, All Saints and St. James' churches.

Many of the vaults cut through earlier inhumations within the church. The earlier burials were either ignored or occasionally the remains were collected together and re-deposited elsewhere as a group. This occurred at the west end of the nave. Between a contemporary group of 19th-century rectangular single vaults and the tower were crammed a large, mixed quantity of human remains in a form of charnel deposit. A similar practice may have been adopted in the chancel area when the central heating ducts were inserted.

The remains of five triple coffin burials in varying degrees

St. AUGUSTINE THE LESS, BRISTOL, 1983-84.

CHURCH DEVELOPMENT PLAN

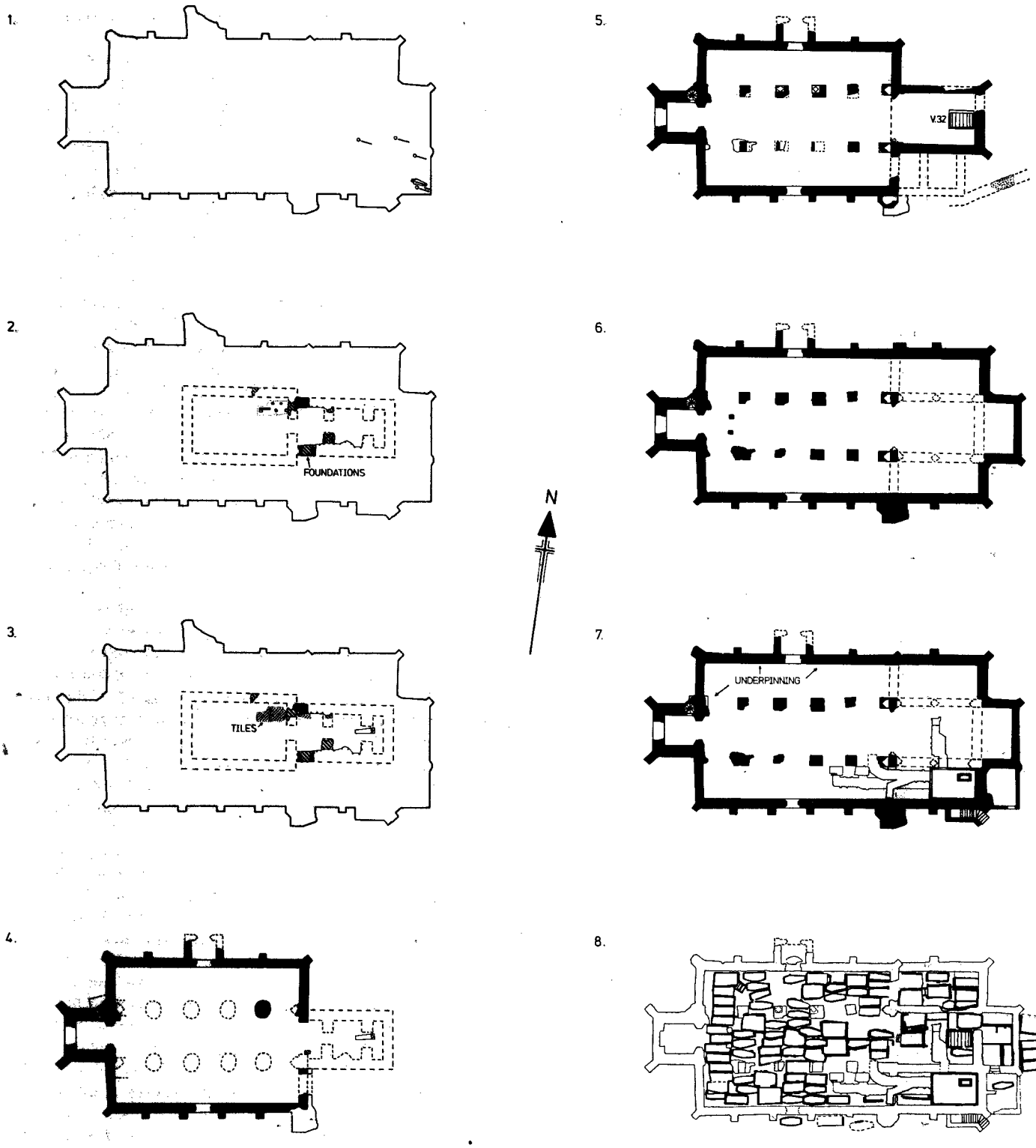

Fig 5 0 5 10 15 20 M. / 0 10 20 30 40 50 60 FT.

of preservation were found relatively undisturbed. Four were located beneath the central heating ducts in the chancel area and one in the chancel extension north of the Vicar's Vault. These burials were extensively recorded *in situ* and subsequently re-interred at South Bristol Cemetery.

All three types of vault were also found in the churchyard where presumably the costs were less than for inside the church. However, there was evidence to suggest that brick-built vaults were located throughout the churchyard. During the grave clearance in 1894 of the northern area of the churchyard, fourteen lead coffins were recorded which must have been the remains of triple coffins from burial vaults. A rectangular single vault was found beneath the 19th-century vestry, an area originally part of the churchyard. This vault contained the remains of two adults who had been interred in single wooden coffins. The surviving external brick vault remains were constructed immediately against the foundations of the church walls. A rectangular family vault with a barrel-vaulted brick roof was even constructed beneath the north porch.

Brick-built burial vaults, coffins and coffin furniture have been reported from St. Dunstan's church, Canterbury (Tatton-Brown 1980) and Llangar church in North Wales (Shoesmith 1981) whilst a major study is currently under way at Christchurch in Spitalfields, London (Julian Litter personal communications).

BURIALS AND THE CHURCHYARD

The earliest burials have already been discussed and the latest five triple coffin burials. Considerable quantities of disturbed remains from vault burials were also found and all were recorded *in situ* along with coffin remans and coffin furniture. A vast amount of disarticulated human remains were also found both inside and outside the church, all from disturbed contexts. This included the remains of a skull which had undergone *post mortem* examination, found in the south aisle.

In total, 136 stratified burials were recorded (figure 6). Ths included several groups within the confines of the latest church walls. Medieval cist burials constructed with Brandon Hill Grit were found in the south aisle, the vestry and chancel areas. One cist burial was cut by the north wall of the tower. These burials are provisionally dated to the earlier medieval period prior to the late 15th-century rebuilding of the church.

An interesting burial group was found towards the west end of the nave. They appear to be of medieval date and were buried in wooden coffins. They are provisionally thought to represent churchyard burials and if so, would indicate the west extent of the 13th — 14th century church. Another group lay within and pre-dated the west tower in a restricted area. They were a contemporary group consisting of five adults and three infants and may suggest a family group. They are provisionally dated to the 14th century. A third group lay below the chancel arch and included one burial in an elaborate cist structure which was bonded in pink mortar. These were all medieval. All the above burials lay with their heads to the west and on the alignment of the church axis. The medieval stone coffin and two of the post-medieval triple coffin burials found in the chancel lay with their heads to the east.

Burials of post-medieval date but pre-dating the vaults period were also discovered, particularly in the north aisle area. All were cut or disturbed, like the medieval burfials, by vaults. Further work is required on the detailed analysis of the human remains in addition to radiocarbon dating in order to establish a chronology for the burials.

In the churchyard one surviving medieval inhumation was found cut by the rood stair foundations. An empty grave found below the 18th-century north aisle extension at the east end suggests this area was 'cleansed' of burials prior to the building of the aisle extension. However, the area below the 19th-century vestry on the south-east corner of the church, which was originally churchyard, revealed an intense sequence of burials. These ranged from the very earliest inhumations to an intact vault burial which was capped with Pennant Sandstone flags. The area concerned measured 3.75 m × 3.25 m × 1.22 m. In total 40 burials were recovered from this area. The density of burial was such that it was impossible in most cases to detect actual grave outlines as the earth had been disturbed so often, with graves often cutting graves.

A considerable variety of human remains were recovered from this area. Further analysis should provide detailed information, not only on the individuals but also in regard to the greater churchyard area and also perhaps details concerning the health and character of the parish. Evidence of osteo-mylitis and arthritis has been recognised on some of the skeletal remains. After study, the human remains will be re-interred.

THE FINDS

After the human remains, architectural fragments were the most prolific finds. These consisted of architectural details and sculpture including voussoirs, mouldings, window tracery, pulpit fragments, wall tablets, ledger stones and other sepulchural remains. The architectural remains were mainly in the Perpendicular style of late medieval date. Over 100 pieces were drawn, photographed and recorded and some were kept for further study. The remains of the 19th century pulpit were kept. To date, 119 headstones, 34 wall tablets, 22 inscribed floor slabs or ledger stones and a benefaction stone of oolitic limestone were recorded. The ledgers were made of oolite, Carboniferous Limestone, marble and Pennant Sandstone. Most of the headstones were of Pennant Sandstone as was a possible footstone dated 1702 with the initials G.M. Rubbins were taken of many of the inscriptions, decoration and tooling marks. Wooden coffin remains found in the south churchyard and in the church will give an insight into coffin construction techniques.

ST AUGUSTINE THE LESS - SKETCH PLAN OF BURIALS

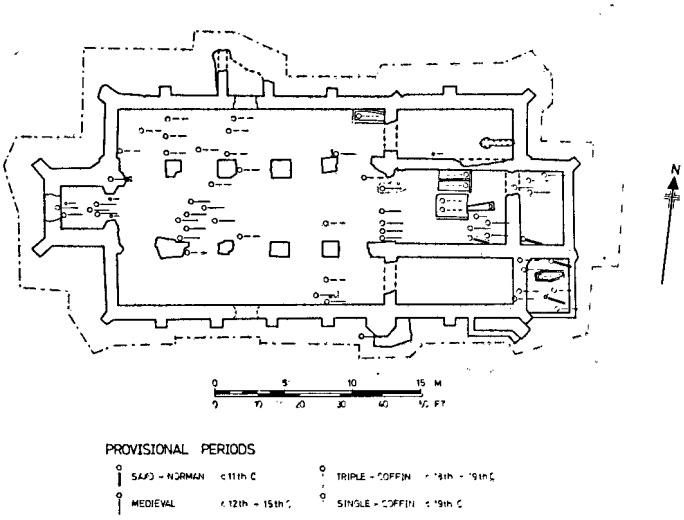

Fig 6

A most interesting find was an oval, white marble tablet which was set in a large rectangular slab of Pennant Sandstone, possibly a ledger or wall monument. The preparatory layout for the epitaph had survived in charcoal on the tablet and is a rare example of the stone mason's art. This unfinished piece had been re-used in the construction of the earlier central heating ducts.

A number of coins were found, some of which were stratified in the churchyard area below the vestry. The earliest was a French jetton of *c.*15th — 16th century date. Several Bristol farthings dated 1662 and later coins dating up to the 20th century were found. An interesting lead token depicted a man smoking a clay-pipe and may be an advertising token. Clay-pipes were recovered, some bearing their maker's marks.

Large quantities of decorated medieval floor-tiles were found, as were some Victorian tiles and sherds of medieval ceramic roof-tiles and tiles in slate and Pennant Sandstone. A small amount of pottery dating from the Norman period to the 20th century was found. This included the acoustic jar remains and sherds of Ham Green and Redcliffe ware dated *c.*13th — 15th centuries, and post-medieval slipwares. A considerable quantity of decorated window glass, mainly of post-medieval date, was recovered.

Many iron nails, including coffin nails and other iron objects, were recorded as well as the heating grilles, monument railings and coffin separation bars. Fragments of plaster from the chancel ceiling murals were found depicting flowers, faces and angel-cherub wings. A selection of bricks from the vaults were also kept. Mortar and stone samples, soil samples, burnt layer samples and geological samples from the natural were taken.

The most prodigious quantities of finds were post-medieval coffin furniture in addition to fragments of inner and outer and lead coffins. A few minute fragments of possible shrouds were also recovered. The coffin furniture itself, dating from the 17th century to the 19th century produced a mass of useful and interesting material which varied considerably in form and decoration. Cherubs and floral patterns frequently occurred. Similar coffin furniture was recovered from the excavations at St. Mary-le-Port Church (Watts and Rahtz 1986).

CONCLUSIONS

The traditional religious associations of Billeswick were in part supported by the excavations. A cemetery seems to have been established at or earlier than the time of the Norman period and a church, possibly of stone and timber, was subsequently built.

This may have originally served the monks of St. Augustine's Abbey as a temporary church. The Norman evidence lends support to Dickinson's views concerning the foundation of St. Augustine's Abbey. In the 13th century the church, with embellishments, became the parish church of St. Augustine the Less, its name reflecting its relationship with the Abbey.

By the late 15th century the church after a period of decline had been rebuilt and enlarged. This process was continued in the post-medieval period until, by the early 18th century, the church stood in its full splendour with an enlarged chancel and extended aisles. The church at this time was no doubt a reflection and focal point of the life of the parish and the fashionable area of College Green. The numbers of internal burial vaults and graves of this date in the churchyard are ample evidence for the popularity of the church.

In the 19th century building work continued though in the main it was concerned with internal improvements including the provision of heating. Towards the end of the 19th century, the church begins to decline, a fact dramatically illustrated by the loss of nearly half of its churchyard. The march of progress in the form of road-building and the decline of the inner city population continued throughout the 20th century with its consequent falling congregations. This led to the uniting of St. Augustine the Less with St. George in 1938. The war left its mark and effectively witnessed the end of the church as a place of regular worship. However, the site and church had served the community well for many centuries and this is best expressed by the recollections of a past member of the congregation who was also married in the church in 1939: 'The choir was small, four to six men and six to ten boys, some very small, but they conducted themselves well and gave of their best' (W. H. Phillips, personal communication).

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MEDIEVAL FISHPONDS IN AVON

E Dennison & R Iles

This paper examines the field evidence for medieval fishponds in Avon and falls into two parts. The fist section is a descriptive and analytical summary while the second is a brief gazetteer with appendices.

Fishpond remains are one of the commonest earthwork forms in Avon. Although they are often quite large, little attention has been paid to them until recently (Iles 1979; Dennison 1983). Earthworks associated with water systems such as fishponds and mills are a particularly fascinating subject as it is often possible to suggest, albeit tentatively, how they might have worked from looking at the physical remains alone.

Fish were an immportant source of food in the medieval period not only to the religious community but also to the secular population. The main fishery resource would have been from the coastal waters, rivers and the levels and all these were exploited in this area throughout the medieval period (Matthews 1933; Darby & Welldon-Finn 1967, 187-188; Williams 1970, 26-29). However, the keeping and rearing of fish in ponds seems to have been restricted to the wealthier members of society and the ownership of fishponds probably carried the same sort of social status as having your own deerpark and dovecote. Like most other features of the medieval rural economy, they would not have been maintained in isolation but only as a part of the manorial demense. In many cases fish would have been caught in river fisheries to be kept in ponds either to fatten or be kept alive until required for the table.

DOCUMENTARY EVIDENCE

As yet, little attempt has been made to systematically search the medieval documents for evidence of fishponds, but there do not appear to be any large well documented examples such as those found on some royal or monastic estates. The earliest reference to fishponds in Avon is in 1256 when nets are mentioned at Siston (Cal Close Rolls) but no ponds are yet known in the area. In the late thirteenth century Burnell, the Bishop of Bath and Wells, gave Bath Priory £10 to build some fishponds at Bath (VCH Somerset vol 2, 79) and in 1328 John de Acton complained that people broke into his house and fished his ponds (Cal Patent Rolls). References to *vivarium* and "three fishponds" in deeds of 1430 and 1664 at Hutton probably refer to the three ponds near Hutton Court (BRO AC/M8/11). There are several references to fishponds at Hill in the sixteenth and early seventeenth centuries, including one recording illegal fishing (GRO D908 Box 23, p177). There is a detailed description of a concerted attack in 1537 on a fishpond and mill at Charnocks Pool, Mangotsfield, as a result of a family feud. Then, more than 60 people broke down the mill wall, let all the fish out and took tench, bream and carp to the value of £20 or more and "destroyed fry of the same to the value of 20 marks" (Jones 1899, 111-2). Despite these instances the documentary record is on the whole poor, especially for inland fisheries, with most references dealing with isolated incidents and events (eg Healey 1897, 144 & 146; Kimball 1940, 237 & 243).

The keeping of fish in ponds for consumption carried on throughout the seventeenth century and into the early eighteenth century, even using ornamental and garden ponds. A good example of this is at Dyrham Park, where the medieval ponds, depicted on a map of 1689, were transformed into a magnificent water garden with canals, cascades and fountains as well as ordinary ponds. A list of fish kept in 1710 shows that not only were all these ornamental ponds well stocked for immediate consumption but also when the fish would be ready for eating. The list also mentions that some of the fish had been brought in from other places to replenish stocks (see appendix 1). There is a magnificent bird's eye view of Dyrham Park with its water garden drawn by Kip in the early eighteenth century in the county history by Atkyns (1712).

Kip also depicts many other large houses in Gloucestershire with ponds, either as part of a formal garden layout or adjacent to old manorial complexes. At Over Court in Almondsbury Kip shows two long pools, which were part of the garden, and two smaller store ponds. Other ponds, often in considerable numbers, are shown at Badminton, Hill Court, Cleeve Hill, Tortworth Court and Henbury House.

Estate maps from the late seventeenth century onwards provide a further reference source. The earliest example in Avon is a 1659 map of Hill Park (GRO D908). A particularly complex group of eight stew ponds at Thornbury are shown on a map of 1716 (GRO D1556) which conform almost exactly to the present earthwork remains (see below). Ponds are also shown at Kenn Court on maps of 1780 and 1811 (see below) and on a pre-enclosure map (c1800) at Hutton (BRO 31965/45). A painting of c1700 hanging in Clevedon Court shows three fishponds to the south of the house, helping to explain the vague earthworks that survive there (see below).

DISTRIBUTION

When the County Sites and Monuments Record was set up in the late 1970's only four fishponds were recognised and previous research was virtually non-existent. The Revd. E. Horne writing in 1919 mentions only a few in Somerset and only three in the present County of Avon, commenting that ". . . nearly all the fishponds . . . are destroyed, and in a very few time scarcely any will be left" (Horne 1919, 162). Since the 1970's as a result of searching old maps, fieldwork and aerial photography, some sixty individual or sets of ponds have been identified (including five which are probably eighteenth or nineteenth century creations), sixteen of which have been destroyed and thirteen landscaped in later centuries (Dennison 1983). Over half of the ponds wee first locat ed from checking

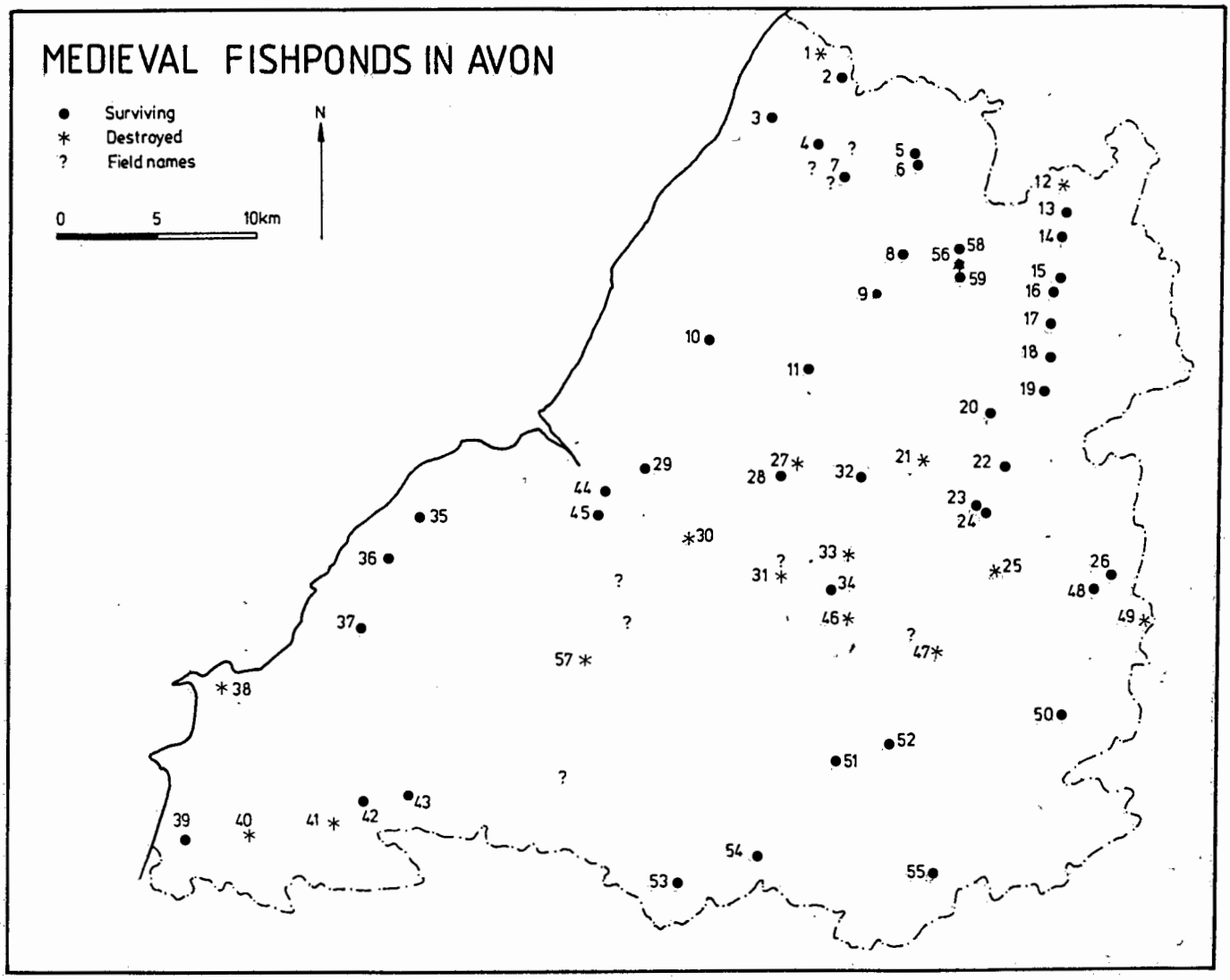

Fig 1 - Medieval Fishponds in Avon.

maps, especially the tithe maps and their apportionments. "Fishpond" field names (or variants) are quite common with many stll having some earthwork remains although six examples (three in Thornbury parish, two n Long Ashton parish and one in Butcombe parish) have no field evidence despite being suitable locations.

The distribution of fishponds in Avon is shown in figure 1. It shows a particular concentration in the northeast of the county along the scarp of the Cotswolds, on or slightly below the spring line which occurs at the junction of the liassic clays and the inferior oolitic limestone (Iles 1984b). Where known, some 85% of the ponds are situated on clayey soils lying at a variety of altitudes. Most are fed by springs or small streams although there are some which appear to be filled by seepage. There do not appear to be any examples on the low lying Avon claylands presumably because these areas were abundant with existing natural streams, rhynes and ponds which contained ample supplies of fish.

While some parishes have only a single set of ponds, others have several, for example Cromhall, Abbots Leigh and Hawkesbury (see gazetteer below). Where these are all medieval this duplicity reflects the distribution of manors. Doynton is perhaps the most complex parish in terms of combined water management. As well as having two sets of fishponds there are at least three mills which, if they were all operating at the same time, shows the extent to which water resources were used in the medieval period (see figure 2).

LOCATION, SIZE AND LAYOUT

Virtually all of the smaller fishponds in Avon and many of the larger ones were built close to the manor house which they served. This was presumably not only for convenience but also security. As we have already noted, they often formed a part of the manorial economy and some were alongside warrens (for example at Horton, Cromhall, Iron Acton, Barr's Court and Little Sodbury) while others were constructed in deerparks (Thornbury, Almondsbury, Hill, Prior Park in Bath, Sneed Park in Bristol, and Abbots Leigh) which would have afforded additonal security. There are also three examples of ponds adjoining parish boundaries, presumably such boundaries were often formed by streams providing a fresh water supply. These are Churchill, The Hackett in Thornbury parish and Cold Ashton.

The majority of the ponds in Avon show a surprising uniformity. Of the total of sixty so far discovered, most were of simple construction with one, two or three ponds formed by

damming existing water courses (see figure 3). They all appear to be of roughly equal dimensions (between 75-100m long and 20-40m wide) and of rectangular shape. Typical are those at Upper Chalkey and Clevedon. Only three of the ponds are attached to moats (Barr's Court, Pucklechurch and Kenn) and there are only three sites forming complexes which contain small as well as large ponds — at Doynton, Thornbury and Kenn with seven, eight and six ponds respectively.

There are several treatises that survive from the sixteenth and seventeenth centuries which explain how fishponds should be constructed (Dubravius 1552; Taverner 1600; Markham 1614; North 1715). There are two basic methods. The first is to build a dam across a stream in a valley, ponding the water back. The second is to dig out and/or embank an area of land and bring water to it. The manuals detail the best time to build the dam, how long it should take, what materials to use and so on (Aston 1982; Dennison 1983, 8-21).

The keeping and breeding of fish are also dealt with. Of vital importance is to have a considerable supply of fresh running water able to pass through the ponds to maintain the oxygen levels. In addition, there must be a bypass system which allows water to be drawn off from the ponds and pass round them in times of flood. The size of the pond was also important. It is now generally agreed that the smaller, often very shallow, rectangular ponds called stews or store ponds would have been used for breeding and/or holding small quantities of fish for immediate consumption "in store" while the larger deeper ponds could have held greater numbers ready for a future use.

Although the treatises date from the sixteenth century, it is likely that they are re-iterating medieval practises. This is borne out by the few medieval documents that survive. One of the best known is the set of accounts belonging to Prior More who between 1518 and 1536 provides details of the management of his 17 fishponds and the fish caught in them (Fegan 1914). These have been studied by later writers and the ponds located (Hickling 1971; Aston 1982). It is possible to calculate that he spent £61 on his ponds and, despite the obvious problems with medieval documents, it seems that about 1740 large fish of several species were caught which averages out at approximately 1d per fish, which was excellent value and well below the market prices (Dennison 1983, 32).

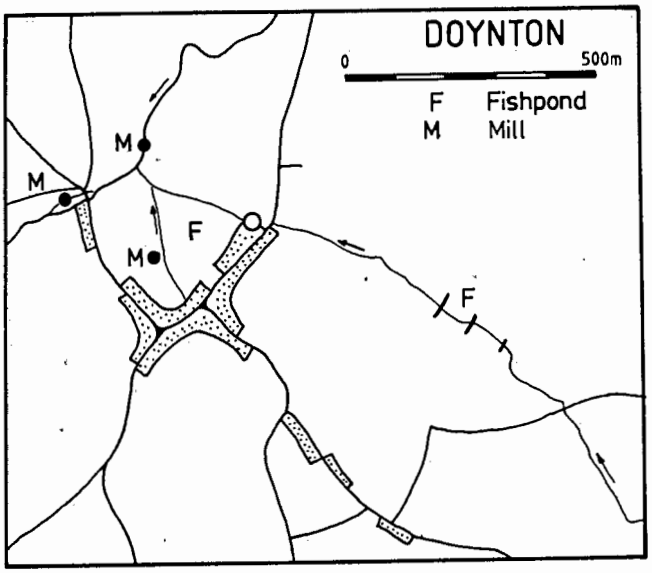

Fig 2 - Water management in Doynton.

Throughout the country there is a great variety of pond types and sizes (Aston 1986). From extrensive fieldwork in Northamptonshire, Taylor has produced a fairly comprehensive classification in which he divides ponds into seven groups (RCHM Northants vol 2, lvii-lviii):

A — a dam across a steep sided narrow valley, usually of considerable size

B — a dam across a steep sided valley with the base made flatter and deeper and the sides steepened by making scarps

C — a pond dug into the valley side (eg on a spring line)

D — a pond on level ground, surrounded by embankments from the interior spoil. In this, the water level is higher than the surrounding land surface.

E — a simple sunken rectangular pond or ponds which are often small

F — groups of small rectangular ponds called stews, usually used for breeding

G — small depressions associated with other larger ponds which may be used as holding or transfer tanks.

As can be seen from figure 3, most Avon examples are either small and rectangular, comprising two or three ponds in a valley, formed by a dam and scooped out at the sides (type B), or are simple sunken isolated affairs (type E). Where known, these accounted for 43% and 21% respectively of the total. The next most common type was type A (8%). One example in a small narrow valley at Cromhall actually has large side embankments, although they do not appear to be necessary and they make the pond very narrow. One characteristic associated with several local ponds is a smaller moat-like feature containing a small rectangular island. This could almost be regarded as another type in the classification. There are examples in Winscombe, Oldbury and Churchill, the latter being only part of larger complex.

Taylor's classification is based mainly on the physical character of the land surrounding the pond - whether it is dammed in a valley, sunk into the ground or embanked above ground level. Of more significance should be the size, number and layout of the ponds, which is especially important when trying to ascertain how they worked, who they belonged to and how productive they were. One interesting feature in Avon is the close proximity of different types of ponds as at Doynton, Iron Acton, Rangeworthy and Cameley. It is possible that these different ponds were constructed and in use at differing times but if they were contemporary it would imply an extremely sophisticated system of fish management.

FISHPOND FEATURES

Careful examination of the remains of fishponds throughout England has shown that many have particular features such as ridge and furrow and islands in them (Aston 1986). In Avon, ridge and furrow has only been noted in two sets of ponds at Oldland and Mangotsfield. In both cases it appears to be slight, straight, narrow and not very extensive. Also there are relatively few ponds with islands in them, apart from the three small moat-like features. The three largest ponds in the county (Churchill, Iron Acton and Rangeworthy), do have small islands but generally local ponds are too small to accommodate one.

Other features can be seen from field evidence, in particular leats and sluices (see figure 3). Leats running along valley sides and skirting around the fishponds are common with good examples at Almondsbury, Hill, Horton, St. Catherine's, Cromhall and Upper Chalkley Farm in Hawkesbury. There are also examples of long leats feeding certain groups of ponds as

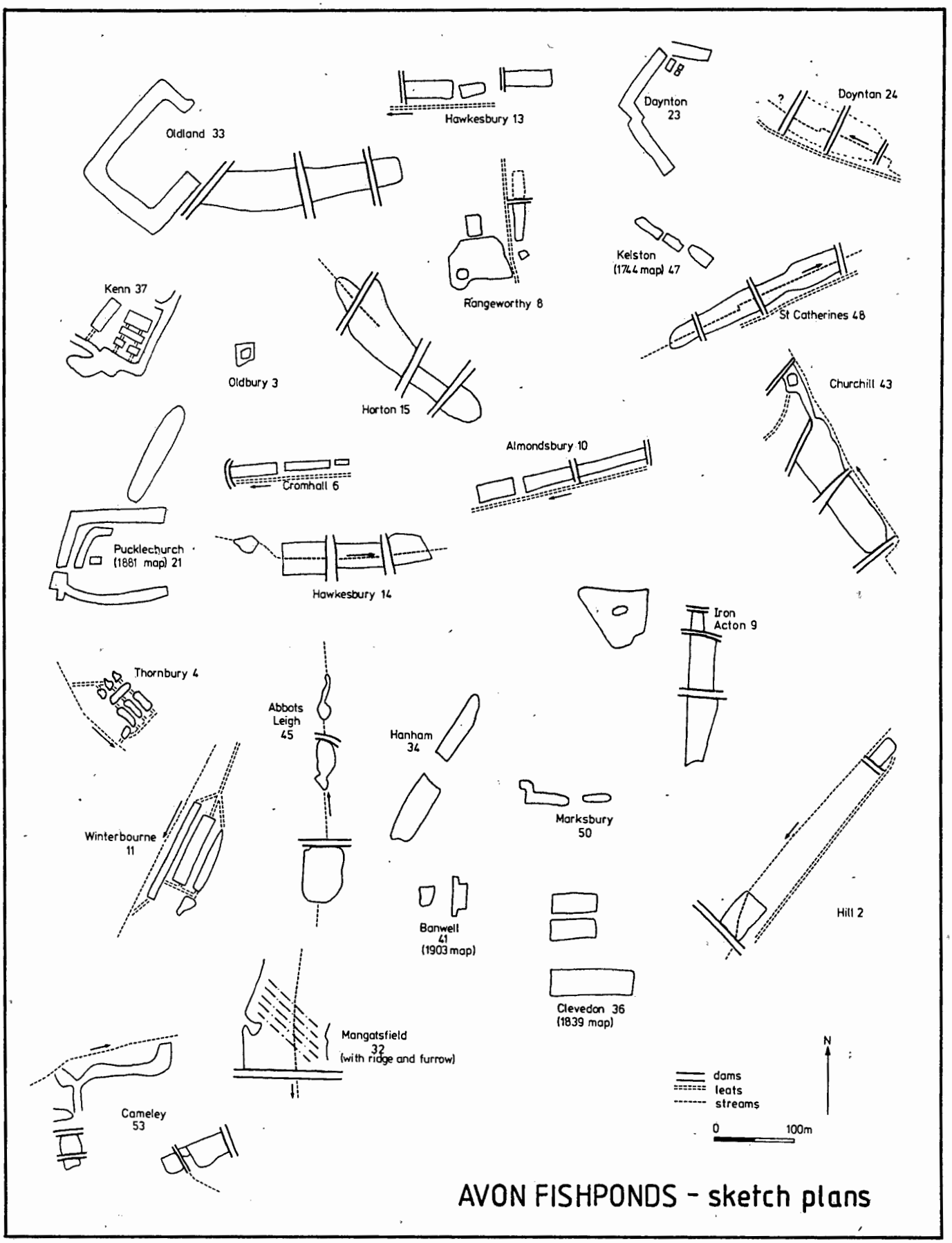

Fig 3 - Avon fishponds - sketch plans.

at Winterbourne where the leat between the water supply (a river) and the pond is over 450m long.

Where fishponds were grouped together there would have been a need for a series of sluices to control the flow of water between the supplying leat or stream to the ponds, between the individual ponds and to control the outflow. The fishponds at Kenn have slight "notches" between adjoining pools which are probably the sites of the sluices. There are similar features on two small ponds at Doynton. The position of sluices between individual ponds at Thornbury are clear and some of them are still in situ, formed of wooden planks and hollowed out tree trunks acting as pipes. Between the series of valley ponds at Over Court at Almondsbury there are stone-lined water channels, although these ponds may have been remodelled in the seventeenth century when a formal garden was laid out. There was also a stone-lined channel and possible wooden sluice under the main dam of the fishponds at St. Catherine's (see below). As yet, no fishponds in Avon have been excavated.

Other water-related features such as moats and mills were often sited close to fishponds and appear to have been constructed together as part of an overall water management scheme. At Kenn and Pucklechurch the small rectangular stew ponds form part of a moat layout and the water flowing out of Barr's Court moat fed directly into a series of valley ponds (Russell 1980). The lower fishpond of the groups at Dryham, Hawkesbury, Horton and Mangotsfield all appear to have been used as millponds at some time. In other places, such as Doynton, there are water mills adjacent to a group of ponds suggesting there must have been at least some agreement over the use of the available water resource (see figure 2).

The most complex water scheme known in Avon was constructed in the mid to late sixteenth century at Kelston. A flight of three fishponds lay at the end of a chain of uses which included serving the manor house of Kelston Court and its garden fountain. The water was collected in a large reservoir on the hill above the house from three separate springs. From there it flowed downhill under the ground in a small stone-lined channel to a garden fountain and then underground a short distance to the house. From the house it passed under the churchyard and farmbuildings through a long tunnel about 1.5m high before coming to serve the fishponds (Edgar & Iles 1981, fig 1; Iles 1984a, 62). The most remarkable aspect of the whole system was the use of the water in the earliest known water closet, invented by the owner of the Kelston Court, John Harrington. The closet was built in the Court (now demolished), a house said to have been visited by Elizabeth I.

CONCLUSION

As the county has been thoroughly searched for medieval earthworks it is unlikely that there are many more fishponds to be discovered in the field. Others must have been destroyed and it is only through documentary research that they will come to light.

The lack of documentary evidence makes it hard to date the ponds but by judging from the construction details and the shape of the ponds, together with analogy from elsewhere in the country, it seems likely that many of the Avon fishponds originated in the late medieval period.

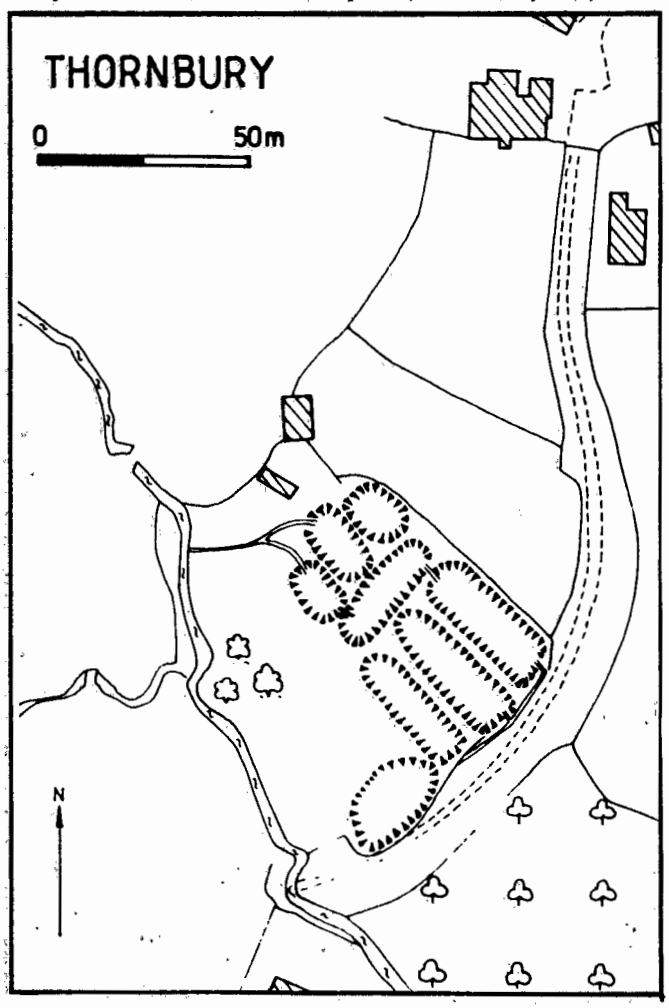

Fig 4 - Fishponds at Park Farm, Thornbury - earthwork plan.

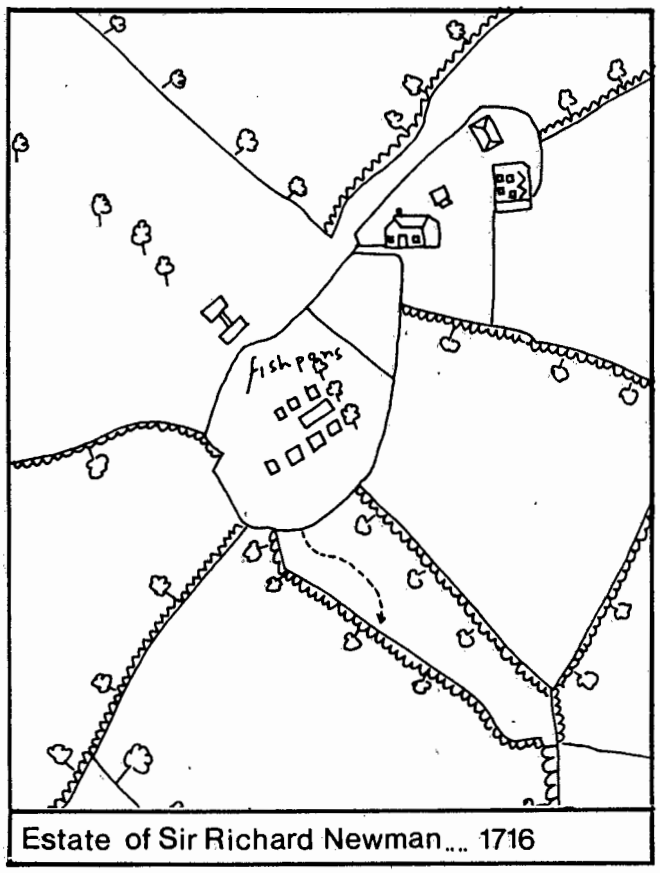

Fig 5 - Fishponds at Park Farm, Thornbury - 1716 map.

GAZETTEER

The following list of ponds probably includes a few examples that are not medieval in origin; where that is suspected it is mentioned. The list is not exhaustive but should be regarded as a fair guide to typical remains. Information is set out in the following order in this gazetteer:

line 1 - number (referring to the distribution map in figure 1), PARISH, locality and grid reference

line 2 - letter (referring to Taylor's classification), geology and water source.

The rest of the entry is taken up by a brief description, known documentary references and the condition of the ponds. Many of the ponds have been surveyed and plans are held with the Avon SMR. Some of the more interesting ones are produced here and others appear as sketches in figure 3.

1. HILL, ST650953
?F, Triassic clay, ?Stream.
Single pond within the grounds of Hill Court is shown in Kip's engraving (Atkins 1712).

2. HILL, Fishpond Wood, ST658951
B. Triassic clay. Spring.
Two ponds lie in a wooded valley some 300m apart. One is much larger than the other with a dam 3.5m high and 80m long. A leat at a higher elevation on the east side of the valley allows water to be diverted around them. Both ponds and the leat are situated just inside the pale of a medieval deerpark. The wood is called "Fishpond Wood" and the adjoining field "Poole leaze" on the tithe map (GRO). At least one of these ponds is shown on a map of 1659 (GRO). Fishponds at Hill are mentioned in 1542, 1609 and 1621 when "14 men and boys were fined for fishing in the Lord's pool called de Man" (GRO D908, Box 23, p177; GRO Jenner-Fust notes). There was a fishery on the River Severn belonging to the manor of Hill from at least 1596 (Jenner-Fust 1931).

3. OLDBURY, NW of Kington, ST614909
Keuper Marl, ?Stream
A small roughly 25m square pond with an oval island. The surrounding fields are called "Fishponds Orchard" and "Fishpond Lease" on the tithe map (GRO).

4. THORNBURY, Park Farm, ST638913
F, Dolomitic Conglomerate, Stream.
Eight small rectangular ponds lie in a marshy wood (figure 4). They are up to 2m deep, the largest being 34m by 10m and the smallest 15m by 7m. It was until recently possible to see wood-lined channels connecting the ponds. The ponds are shown on a map of 1716 (GRO D1556) (figure 5) in the enclosure which may date back to the sixteenth century as they were within Holm Park which was attached to Thornbury Castle. They may have been used as store ponds for the castle.

5. CROMHALL, Leyhill, ST692920
B, Sandstone/Shale, Large stream.
One pond, probably a post medieval creation.

6. CROMHALL, NE of the church, ST692907
B, Sandstone/Shale, Spring.
Two, or possibly three, ponds in a small steep valley (figure 6). They have substantial dams and side embankments with a leat around the southern side. There are traces of masonry along this leat and in channels under the main dams. The adjoining field is called "Fishpond Conygree" on the tithe map (GRO).

7. THORNBURY, The Hacket, ST655897
A/B, Old Red Sandstone, Stream.
South of the road is a funnel-like depression in the ground surface which could be a fishpond but the site is too heavily overgrown for closer inspection. There is a concrete pond further to the S. The area is called "Fishpool at the bottom of Home Ground" on the tithe map (GRO). To the north of the road is a leat which leads to the site of a tannery near Hacket House, together with other earthworks.

8. RANGEWORTHY, SW of the Court, ST684861
B+D, Keuper Marl, Stream.
Two sets of fishponds adjoin a small stream. On the eastern side is a large amorphous pond with an island and a smaller pond on its northern edge. Both these ponds are shown as one on a map of 1811 (BRO 37959/28). On the western side of the stream is a more conventional rectangular pond with a dam 1.5m high. Two other ponds may lie immediately downstream as there are vague earthworks but it appears that they have been infilled. The larger pond is called "Fishpond" on the tithe map (GRO) with the surrounding fields called "Fishpond Paddock" and "Fishpond Gratton".

9. IRON ACTON, Acton Court, ST677840
D, Shales/Sandstone, Stream.
Two sets of fishponds lie to the south of the Court, but on different sides of the road. To the west and south of the Court is a large amorphous pond containing a small island, very similar to the one at Rangeworthy (8). The area is now a marshy wood and some infilling has taken place on the east side. To the east of the road and behind "Squatters Cottages" is a long narrow field stretching south to the bypass which air photographs show contained three long embanked ponds (RAF 1946). They are called "Fishpools" on the tithe map (BRO). They were completely infilled in the 1970's and nothing now remains. There are also traces of other ponds and one arm of a possible moat or garden feature nearer the Court.

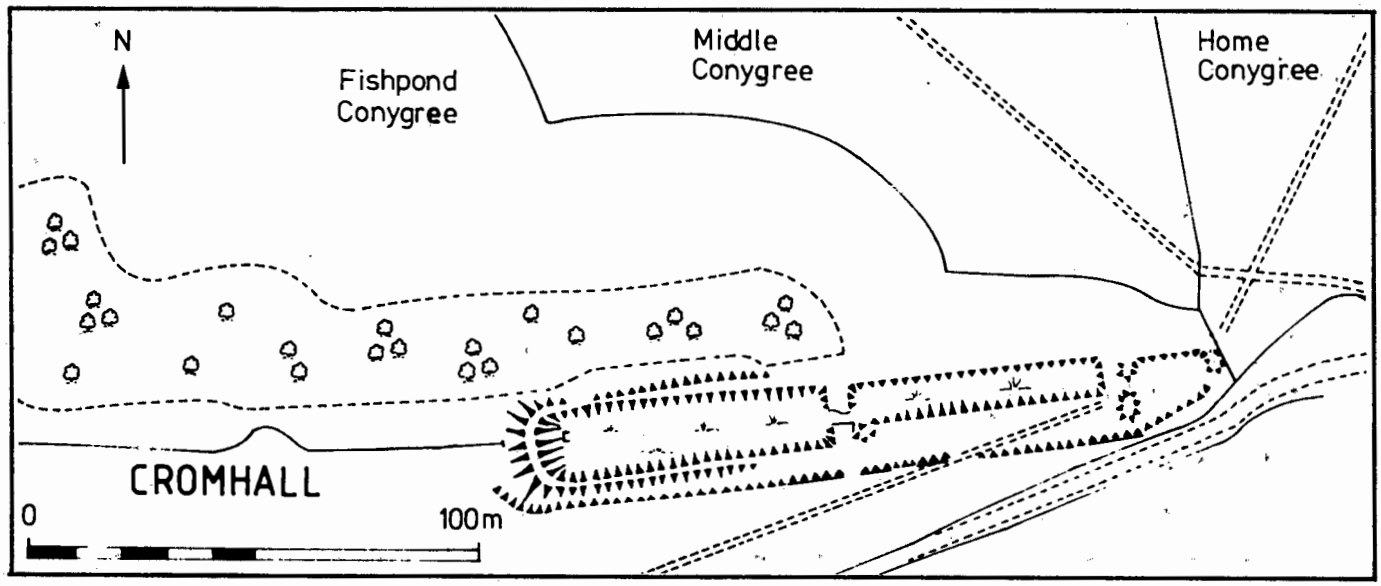

Fig 6 - Fishponds at Cromhall.

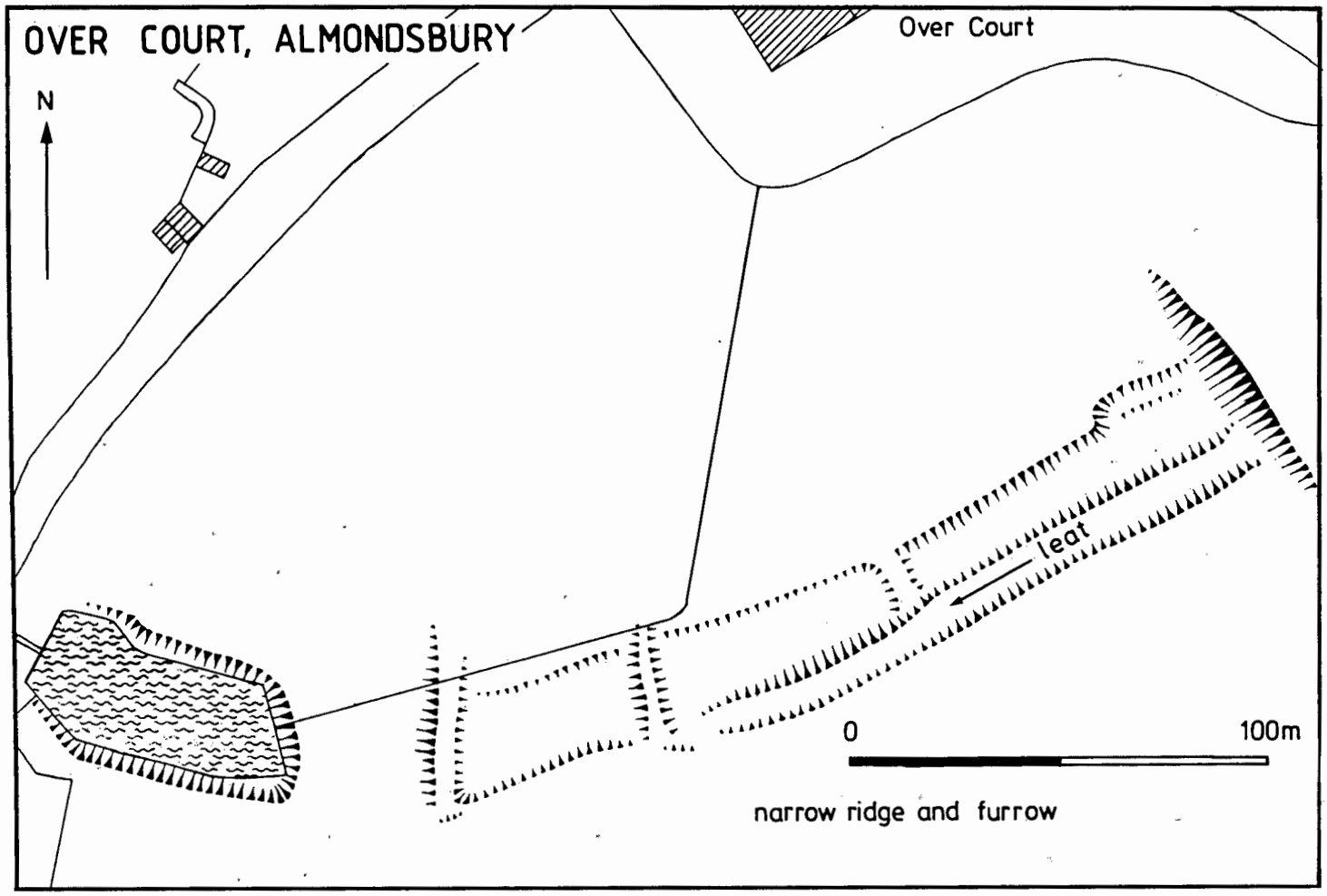

Fig 7 - Fishponds at Over Court, Almondsbury.

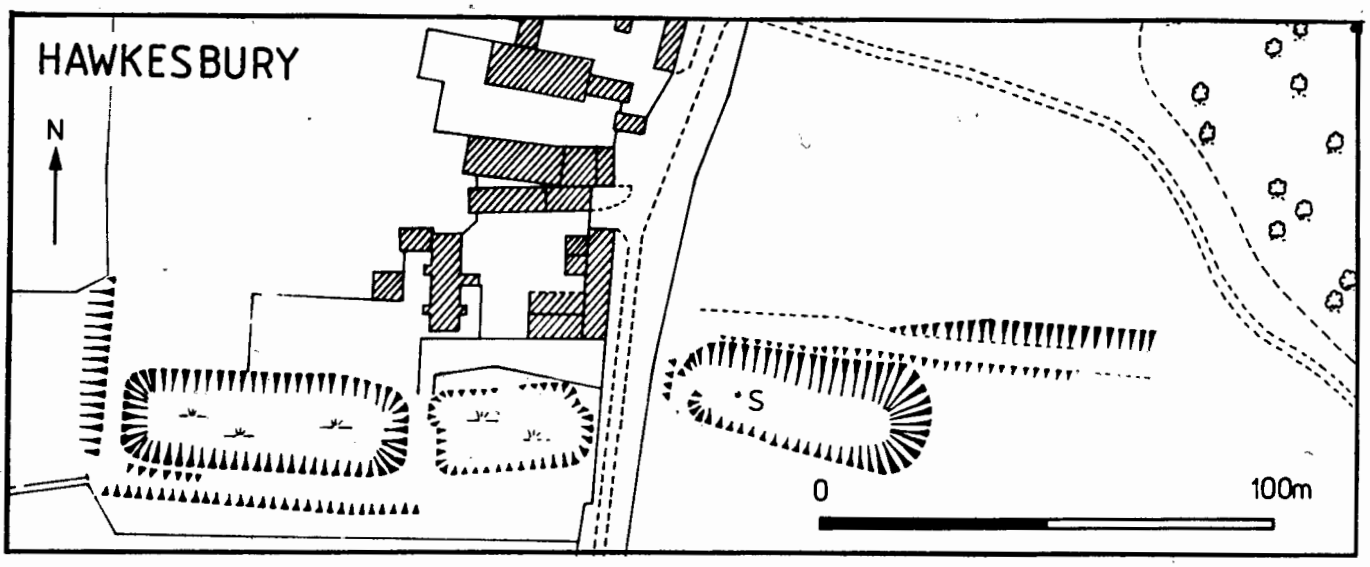

Fig 8 - Fishponds at Upper Chalkley Farm, Hawkesbury.

10. ALMONDSBURY, Over Court, ST586823
B, Keuper Marl, Spring.
Three long rectangular ponds lie in a series in a shallow valley with a fourth pond further to the west (figure 7). This latter pond is stone-lined and still filled with water and may be nineteenth century in origin. The largest pond is 80m by 10m and there is a leat to and around the upper two ponds. Traces of stone-lined channels are apparent on the north side of some of the dams. The ponds formerly lay within the medieval park of Over and are shown on Kip's engraving (Atkyins 1712). Only the lower of the ponds is shown on the tithe map (BRO).

11. WINTERBOURNE, Court Farm, ST638810
E/F, Keuper Marl, Large stream.
Four (or more) long ponds have been created by cutting into the bottom of a valley and altering the course of a stream. The ponds have interconnecting channels and are all fed by a leat over 450m in length. Although the leat is now infilled, the ponds still contain water. However, their original outline is not clear as they have been infilled and more recently partially cleared out to make a nature reserve. In the nearby church there is an effigy of Robert de Bradeston who has a badge containing a leaping salmon on his shoulder. It has been suggested that he was a river warden protecting the weirs on the River Severn (Roper 1925) and so may have been connected with the ponds in some way.

12. HAWKESBURY, Day House Farm, ST763897
?C, Lower Lias clay, Spring.
The tithe map shows one pond in a field called "Fishpond Leaze" with the field immediately to the south called "Fishpond Orchard" (GRO). The pond was infilled some time ago.

13. HAWKESBURY, Court Farm, ST767870
B, Lower Lias clay, Spring.
A chain of three or four rectangular ponds lie in a combe which is now lightly wooded. The lowest pond may have also been a mill pond. Estate papers mention the carriage of fish in 1738 from Hawkesbury to Walcot (information from Sir G. White).

14. HAWKESBURY, Upper Chalkley Farm, ST766858
B, Lower Lias clay, Spring.
Three rectangular ponds lie in a series, the easternmost separated from the others by a road (figure 8). They are shown on the tithe map (GRO). The water source is a spring (S on figure 8) which rises in the highest (eastern) pond and there is a bypass leat taking water round the lower two. The lower dam has a flattened appearance which suggests it was used as a trackway. Another trackway runs up the scarp by the side of one of the ponds.

15. HORTON, Horton Court, ST766850
B, Liassic clay, Spring.
Three or four ponds lie in a deep valley adjoining the Court. They have been surveyed and are described elsewhere (Iles 1984b). The upper pond has been widened and lined with bricks and still contains water. The lower ponds are drained and now wooded. They are mentioned in a survey of 1717 (GRO Q/RNc).

16. HORTON, Horton Hall, ST759840
A, Liassic clay, Stream.
To the southwest of Horton Hall is a large pond which is also shown on the tithe map (GRO). Further up the narrow combe to the south is another large dam with a trackway running across it. The area of these two ponds is heavily wooded. Further south again is the site of a water mill, just below the massive dam of a modern fish farm. It is unclear what purpose these ponds originally served although the lower one has been incorporated into a naturalistic garden.

17. LITTLE SODBURY, The Manor House, ST758829
B, Liassic clay, Spring.
A series of ?three fishponds lie directly below the formal gardens of Little Sodbury manor, the lowest on the opposite side of the village street while to the north and south are numerous pillowmounds. A survey of these earthworks is at present being carried out. The upper ponds have been landscaped in the grounds of the manor and the area is now very overgrown.

18. OLD SODBURY, NW of the church, ST754819
?C, Liassic clay, Spring.
To the northwest of the church is a single pond and to the south of that is a series of slight rectangular depressions which may be connected with the keeping of fish. The area has a number of other earthwork features which are currently being surveyed.

19. DODDINGTON, , ST753803
B, Liassic clay, Spring.

20. DODDINGTON, Codrington Court, ST727784
B, Liassic clay, Spring.
The old 6" maps and the tithe map (BRO) show two rectangular ponds in a series. They were partially infilled about twenty years ago during quarrying work for the nearby M4 but their outline is clear on vertical air photographs (RAF 1945/6). A recent conservation grant was provided to dig out the ponds, but not to their original dimensions. The dredging was observed but the only feature of note was some stone walling which lay on either side of the dams.

21. PUCKLECHURCH, Moat House Farm, ST695767
E, Lower Lias clay, ?
Much of the moat and associated ponds have been infilled but the outline of some of this complex can be seen on the tithe (BROEP/A/32/30) and the first edition (1881) OS 25" maps. They show three sides of an irregular moat with two ponds inside (one L-shaped) and a large long pond to the north of the moat.

22. DYRHAM, Dyrham Park, ST744758
B, Lower Lias clay, Spring.
A map of 1689 shows at least five ponds in a series adjoining the old manor house to the east and southwest. The lowest pond is thought to have been a mill pond. At first sight it would appear that all of these fishponds were swept away shortly after the making of that map when the house was rebuilt and a very elaborate formal water garden laid out (Mitchell 1978). In reality the medieval fishponds were only altered, in some cases only slightly, to create the magnificent water garden. The formal garden itself disappeared within a century and the only two ponds that survived were, ironically, the two least altered of the original medieval fishponds which lay to the southwest of the house.

Of equal importance is the survival of an 1710 account of the fish kept in the ponds (see appendix 1). This names six ponds, all of which are visible on the Kip engraving of 1712, with the number and types of fish kept in each. A note written in the margin states when they will be ready for the table in periods ranging from that year to ten years in the future. This clearly shows that fish were not only kept in the ponds of formal gardens for consumption but were being carefully bred and reared. The document also refers to fish coming from "Barrows Court". This could be Barrow Court in Barrow Gurney, or more likely to be a corruption of Barr's Court (see 33 below).

23. DOYNTON, Court Farm, ST720741
F, Lower Lias clay, Stream.
A group of at least eight ponds lie in the triangular field to the north of the church, bounded by two streams (figure 9). There appear to have been three rectangular ponds (a, b and c), four stew ponds (d, e, f and g) and one intermediate pond (h). It is likely that there would have been others but they have probably been lost due to infilling, which also accounts for the unusual shape of pond h. The largest pond (a - 100m by 15m) is only known from a 1960's air photograph. Although these ponds have been described elsewhere (Dennison & Iles 1986), several features are worth noting here. Pond d has a low shelf projecting from it which would have only been covered with 15-20cm of water and could have been used as a spawning area (a practise seen elsewhere in the country) while the northern sides of ponds d and e both have notches indicating that some form of sluice arrangement existed here to control the water flow between them. The system is further complicated by an abandoned mill site and there may have been further ponds to the west.

24. DOYNTON, Bond Farm, ST726740
B. Lower Lias clay, Stream.
A series of large ponds, and possibly a third smaller one, were made in a simple fashion by building two large dams across a valley and slightly scooping out the sides (Iles 1979, 35) (figure 10). The area was called "Fishpools" on the tithe map (GRO). Although the earthworks were levelled in the 1970's, the outline of the ponds can still be seen faintly.

25. COLD ASHTON, Lilliput Farm, ST731711
E/C Lower Lias clay, Spring.
A rectangular pond is shown on a map of 1741 (GRO D1779/P1).

However, nothing is shown on the tithe map (BRO) and nothing now exists on the ground.

26. MARSHFIELD, ST785706-ST786708
B, Liassic clays, Stream.
A series of three large ponds lie in a deep valley, some in woody undergrowth. A local tradition says that they were created in the nineteenth century. They are not shown on the tithe map (BRO) but do look like medieval examples. The lower ones were dug out and reshaped in 1984.

27. BRISTOL, Fishponds, ST638761
?, Coal Measures, Stream.
These two ponds gave the Fishponds district its name but were destroyed long ago. They are however marked on the tithe map.

28. MANGOTSFIELD, Downend, ST644771
B, Sandstone, Stream/spring.
There are two or three ponds shown on the tithe map. There are now a series of concrete-lined ponds in a small narrow valley (BRO).

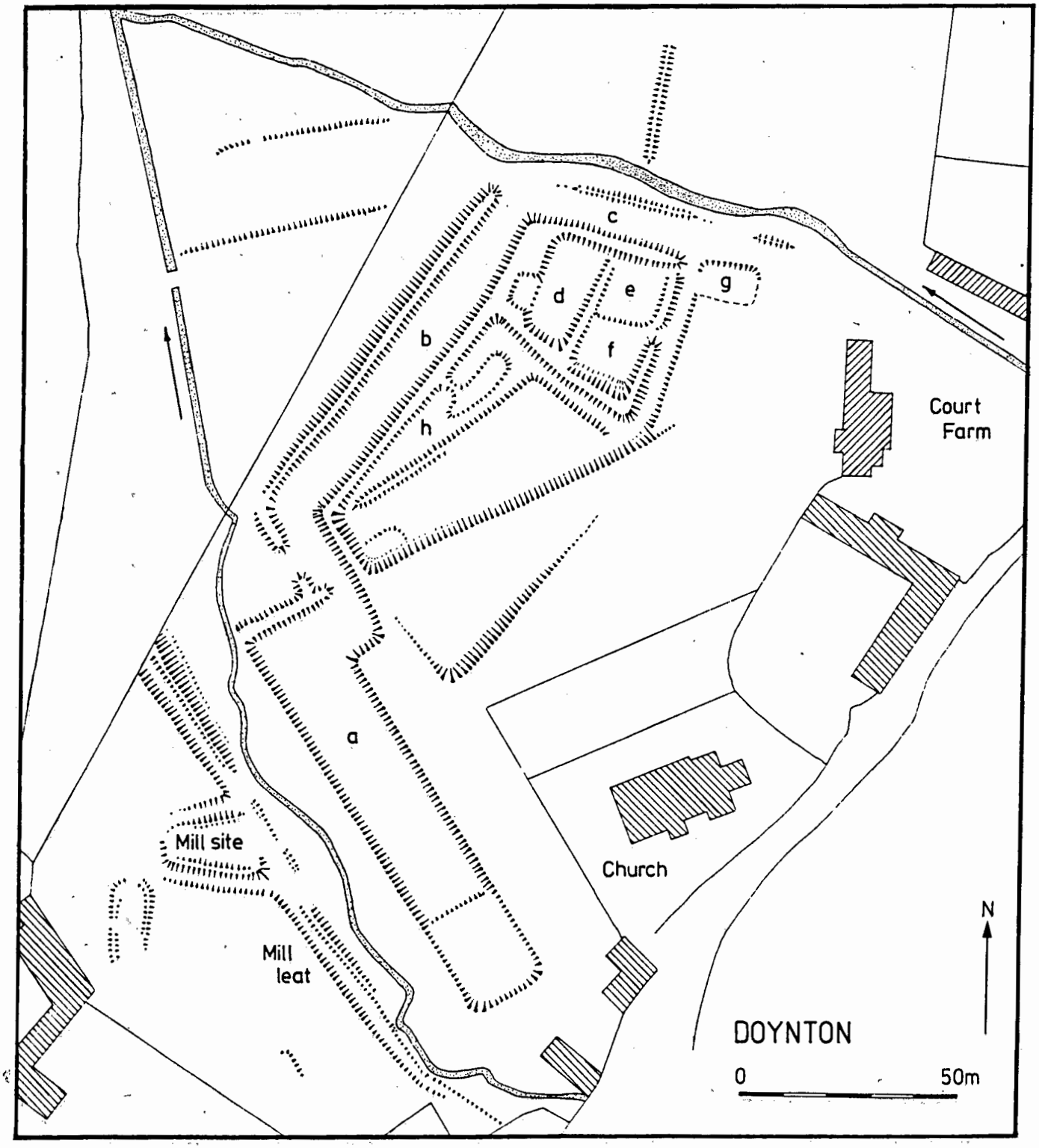

Fig 9 - Fishponds at Court Farm, Doynton.

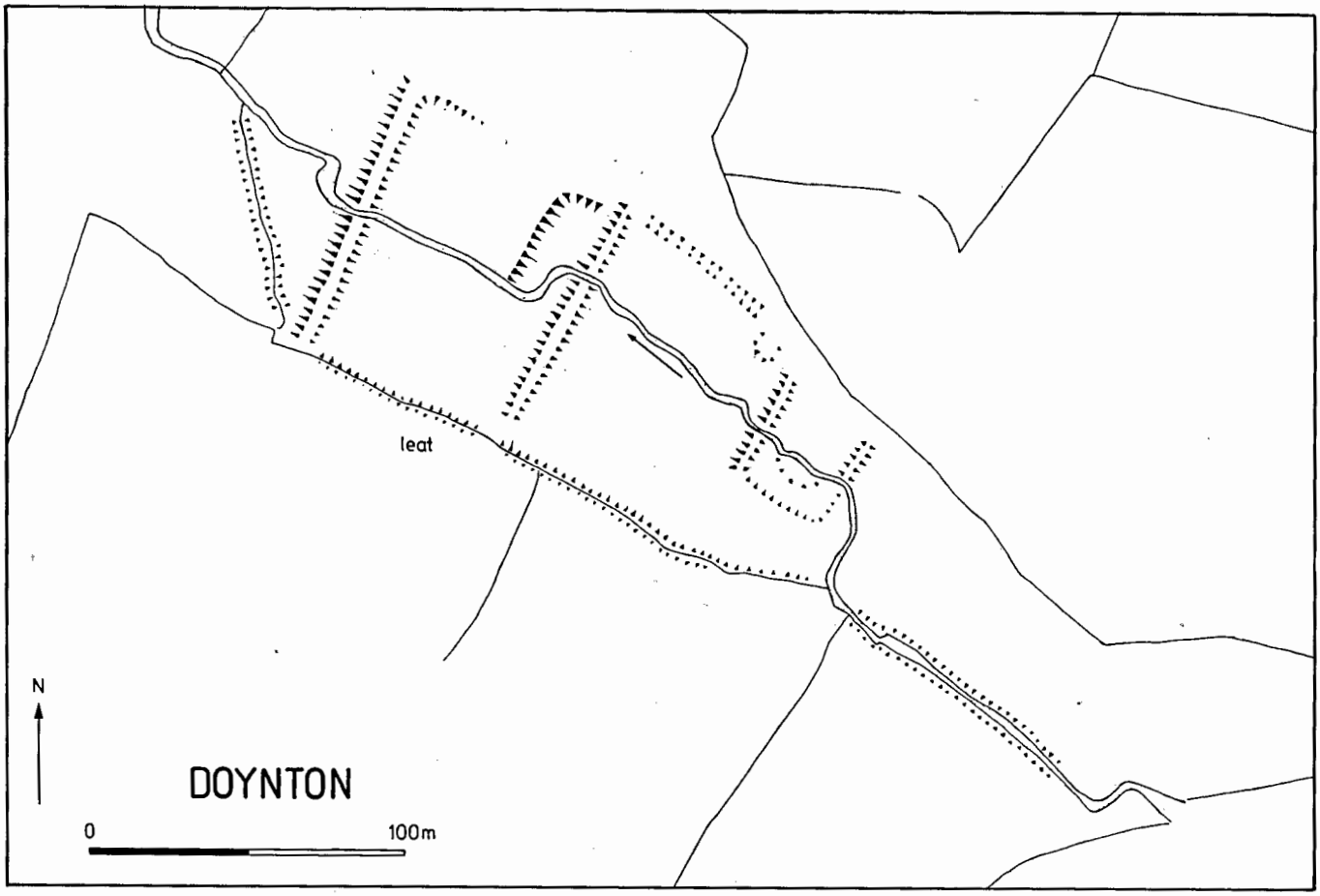

Fig 10 - Fishponds at Doynton.

29. BRISTOL, Sneyd Park, ST555755
B. Sandstone,?
A series of two valley ponds are shown on older maps of the area, formerly within medieval and later parkland. They have not been checked on the ground.

30. BRISTOL, College Green, ST583727
B. Keuper Marl, Stream.
Two ponds are shown in the valley behind the Council House on older maps of Bristol (Lobel & Carus-Wilson 1975, map 3). There is of course no trace of them now, but they could have belonged to St Augustine's Abbey.

31. BRISTOL, West Town Lane, ST616701
B. Keuper Marl, Stream.
The tithe map shows two ponds opposite West Town Lane school. The area was developed in the 1960's and nothing now remains.

32. MANGOTSFIELD, Rodway Hill, ST661755
B, Lower Coal Measures, Stream.
A large dam, 100m long, can be seen in a flat bottomed valley. This would have created a large pond but there has been much tipping and disturbance in the area. The earthworks have been surveyed (Russell 1982). A "Charnocks Pool" in this area was recorded in 1537 as having been broken in a family feud (see above). It is also likely that the pond was used as a mill pond.

33. OLDLAND, Barr's Court Moat, ST660720
B, Lower Coal Series (shales), Stream.
On the southwest side of Barr's Court moat was a large retaining dam under which water was channelled to feed a series of two long narrow ponds in a slight valley. The lowest pond was shown to have had water in it on the tithe map (BRO). This area lay within a park in the seventeenth century (Russell 1980). The area surrounding the moat was developed in the late 1970's.

34. HANHAM, Hanham Court, ST649704
B, ?, Spring.
A series of two, possibly three, rectangular ponds lie to the north of the Court (figure 11). One still has water in it, is stone-lined and has a sluice at the southern end. To the north, across a trackway, are the slight earthwork remains of another pond and beyond that a small depression which may indicate another. Sluices allow the water to pass under the road into the larger pond and further underground into the Court complex.

35. WESTON-IN-GORDANO, Manor House, ST446740
C, ?, Spring.
At least one embanked pond is visible in a field called "Pond Close" on the tithe map (BRO).

36. CLEVEDON, Clevedon Court, ST422713
E, Alluvium, ?Stream.
Three fishponds were created by digging into the lowlying ground immediately to the south of the Court (figure 12). All that remains today is the large pond and vague earthworks of the other two. The largest measures 105m by 30m and is clearly a post-medieval creation with vertical stone-lined banks and the remains of a sluice in the NW corner. The tithe map (SRO) names the field "Pound Ground" which may be a corruption of pond ground and shows three ponds, the southern one larger than the other two. This helps to explain the other earthworks which in fact form the remains of two infilled ponds 50m by 30m with the remains of sluices and channels visible as scatters of stone (S on figure 12). A landscape painting of c1700 in the Court shows three ponds in the field all of the same size - this may be an idealised view or may suggest that the southern pond has been made larger at a later date. In addition there is a small building at the northeast corner of the large pond which may be a summer house or a keepers hut.

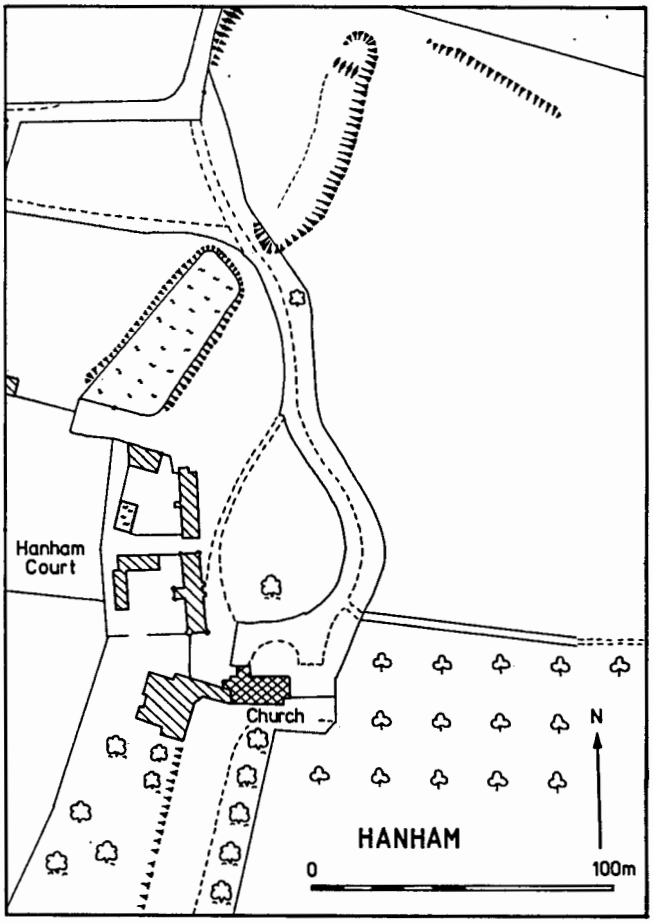

Fig 11 - Fishponds at Hanham Court, Hanham.

37. KENN, Kenn Court, ST414687
F, Gravels, Stream.
Five small rectangular ponds are attached to the moated manor house of Kenn Court (figure 13). One side of the moat is formed by a rhyne and the north east corner is now destroyed. The five fishponds are 15m by 10m (b and c), 50m by 15m (a), 30m by 10m (d) and 30m by 20m (e). As with Thornbury (4, see above), the sizes compare well with those suggested by the sixteenth century treatises (Dubravius 1599, 30,82;North 1715,27). The complex is surrounded by the moat which has a bulbous feature (g) in which appears to be an abandoned stream course utilised for more water area and there is a further unfinished pond (f). All the ponds are interconnected with the positions of sluice gates indicated by notches in the pond banks. Presumably there would have been wood-lined channels as at the ponds at Park Farm, Thornbury. The degree of complexity implies a sophisticated form of fish and water management and it seems feasible to suggest that the smaller ponds were used to breed fish. When filled with water they would have only been about 50cm deep with the moat providing water to a depth of 1.5m. Pond a is larger and set aside from the others and may have been used for predative species.

Two maps survive of the Court, one of 1780 and one of 1811 (figures 14 and 15). The ponds and moat are depicted in various ways in both. The later map shows the area to be coppice which may explain why the earthworks have survived.

38. KEWSTOKE, Woodspring Priory, ST341661
E, Keuper Marl, ?Spring.
Two fishponds were associated with Woodspring Priory but are now largely infilled and ploughed over. The modern OS 25" map shows the remains of two ponds to the W of the Priory, one of which measures 45m by 20m.

39. WESTON-SUPER-MARE, Uphill, ST324585
B, Keuper Marl, Seepage.
Two or three fishponds have been dug out of the hillside now by the side of a caravan site. Two lie in a east-west line with a third at right angles to them.

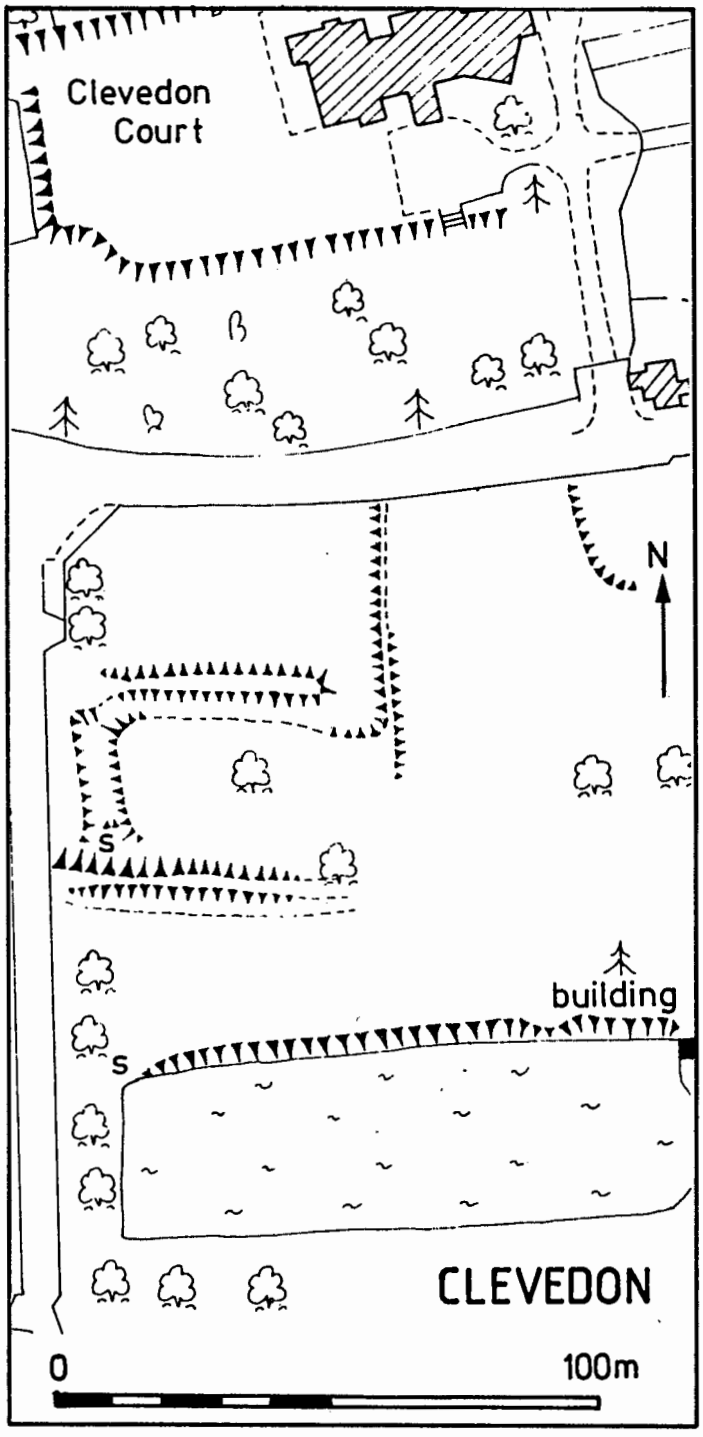

Fig 12 - Fishponds at Clevedon Court, Clevedon.

40. HUTTON, Hutton Court, ST354586
E, Keuper Marl, Spring.
The remains of four small rectangular fishponds lie to the east of Hutton Court. They are almost infilled but it seems that they had an original depth of 1.5m. Three ponds form a north-south chain and the fourth lies at right angles to them. A spring called Ladies Well would have provided the water supply but any traces of a leat or connections between the ponds have gone. The ponds are mentioned in a deed of 1430 as "vivarium" and in 1644 as "three fishponds". They are also shown as three ponds, labelled "fishponds", on a pre-enclosure map (c1836) (BRO31965/45) as well as on the tithe map (SRO).

41. BANWELL, N of Banwell Court, ST400592
E, Keuper Marl, ?Seepage.

The two ponds that lay to the north of the village are now infilled but they are shown as marshy areas on the 1st edition OS 25" map. Their outlines can still be seen as cropmarks in dry weather. It is likely that they were associated with the Bishops Palace and Abbey at Banwell. The ponds are mentioned by Bennett (Bennett 1827, xxvii) and the field is called "part of fishpool orchard" on the tithe map (SRO).

42. WINSCOMBE, Nye Farm, ST410814
Keuper Marl, ?Spring.
This feature, often called a moat, is possibly a single small fishpond with a tiny island in the centre, similar to that at Oldbury (see 3 above).

43. CHURCHILL, Lower Court Farm, ST431605
D, Keuper Marl, Stream.
Three ponds are formed by dams across a shallow valley along which the Churchill Rhyne flows (figure 16). It is quite apparent that the stream, which would have flowed down the centre of the valley, has been diverted and now flows to the north in an embanked leat. The ponds have been fully described elsewhere (Aston 1986) but a few points can be made here. There are two large ponds (a is 95m by 45m and b is 50m by 60m) separated by a dam 1.5m high. In the second pond (b) there is an island which would have just protruded above the water level. A smaller mound is spoil from clearing the rhyne. The third pond (c) is similar to that at Oldbury (see above) with a large island in a small rectangular pool. The island is 1.5m high and it is difficult to see to what purpose this would have been put, unless it was easier to catch the fish in this smaller area. There is a leat which enters this pond from the higher ground to the south. The positions of sluice gates can be seen in the northwest corners of all the ponds marked as scatters of dressed stone. The ponds are perhaps the best in the county and are unlike any others in terms of the size and massive nature of the earthworks. It is tempting to think that they may have belonged to a wealthy, perhaps monastic, landowner (Churchill was part of the estates of the Bishops of Bath and Wells) but as yet no documentary evidence has been found. They certainly conform to the general characteristics of medieval, rather than post medieval, fishponds.

44. ABBOTS LEIGH, Ham Green, ST535757
A, Old Red Sandstone, Stream.
Large landscaped pond with concrete edging in part. However, several ponds are shown on older maps.

45. ABBOTS LEIGH, W of Abbots Leigh, ST536732
B, Old Red Sandstone, Spring.
The remains of three fishponds formed by dams across a valley lie in "Fishpond Wood". The largest is called Abbots Pond and measures 80m by 45m. It has recently been substantially altered by creating a concrete lined pool, but its original shape can be seen on the tithe map (BRO). The other two ponds that lie to the north are heavily overgrown.

46. KEYNSHAM, Keynsham Abbey, ST698563
?, Lower Lias clay, ?
Fishponds are shown here on the tithe map (SRO). They belonged to the Abbey which was founded in 1166. It also had a warren, vineyards and a tannery. Nothing now remains of the ponds.

47. KELSTON, ST699669
B, Lower Lias clay, Spring.
Two of the three ponds at Kelston have been infilled, but they do appear on an estate map of 1744 and on the tithe map (SRO). See above for a discussion of the water system that served them.

48. ST. CATHERINE'S, St Catherine's Court, ST775703
B, Clay, Stream/Spring.
A series of two or three fishponds are situated in a small valley (figure 17). There are two main ponds (70m by 20m and 100m by 20m) and there may have been another to the N. Water comes from a spring higher up the valley brought by a leat, now abandoned. On the southeast side of the ponds is the remains of a bypass leat. A little further downstream, on the other side of the road, is the site of a mill. The fishponds were well preserved until recently because they were covered by a small wood called "Fishponds Wood". But in 1984 they were remodelled to make a new pond which drastically affected their layout but the work did reveal the original clay lining of the pond and a possible sluice arrangement. At the base of the main dam on its north side was a stone lined channel and dredged out of the mud on the pond side were several large pieces of timber. Only two could be salvaged for recording (figure 18).

49. BATHFORD, ST803689
B, Keuper Marl, Spring.
Ponds shown on tithe map here.

50. BATH, Prior Park, ST761634
B, Dolomitic Conglomerate, Stream.
A set of ponds existed at Prior Park but were converted into a landscape feature in the C18 by Capability Brown under the orders of the owner Ralph Allen.

51. MARKSBURY, Huntstrete, ST648621
A, Shales/Sandstone, Stream.
A series of landscaped ponds possibly on the site of earlier ponds on an estate formerly owned by Glastonbury Abbey.

52. MARKSBURY, Church Farm, Stanton Prior, ST677626
E, Lower Lias clay, ?Seepage.
Two ponds, one rectangular and the other "L" shaped are shown on the tithe map (SRO) and survive today. Although they are a little overgrown, they are still waterfilled and have stone-lined banks.

53. EAST HARPTREE, East Harptree Court, ST569561
A, Dolomitic Conglomerate, Stream.
There is a set of fishponds in the grounds of East Harptree Court which is marked on the modern OS 25" map. It seems likely that they are of nineteenth century date connected with the River Chew fisheries.

54. CAMELEY, Court Farm, ST611577
C+D, Keuper Marl, Stream/Seepage.
There are two sets of ponds lying near Court Farm (figure 19). Those to the east are of the more typical sort. Initially there is a flat terraced area (g) below which are two ponds, the smaller (h) separated from the larger (i) by a dam which would have held a gate or sluice. The larger pond is 35m by 20m. The water is brought to these ponds by a leat which flows against the lie of the land and returns to the River Cam further upstream. The second set of ponds lies to the north-west of the farm. This is composed of three rectangular ponds (a, b and c - two are still water filled) separated from each other by substantial dams as they are perched on the side of a shallow valley. There are no connections visible between these ponds, but there is a channel (e) leading to a long linear pond (f) which takes the form of a second river channel. Traces of end embankments can be seen and it is likely that it was filled by simply diverting the river water into it. It is likely that there were more earthworks to the west of these ponds (area d) but they have been destroyed, ironically in the creation of a set of modern fish tanks for a trout farm!

55. PEASEDOWN ST JOHN, Woodborough House, ST699562
B, Clay valley, Stream.
A large pond with a dam is marked as "Fish Pond" on the first edition OS 25" map. It may well be a post medieval creation.

56. YATE, Hall End Farm, ST710867
?E, ?, Stream.
To the north-east of the house are two narrow stone lined ponds, probably seventeenth century garden features. To the south is a single rectrangular pond which is likely to be medieval.

57. BARROW GURNEY, Barrow Tanks, ST539676
?B, ?, ?Stream.
An undated map in the Ashton Court papers (BRO) shows two ponds. One is oval with an island and the other is L-shaped. They are now destroyed under Barrow tanks (Information from H White).

58. WICKWAR, Barbers Court Farm, ST707881
E, ?, ?Stream.
In a long paddock to the east of the farm are a series of depressions which might be the remains of a moat and a set of ponds.

59. YATE, Yate Court,
E, ?, Stream.
To the north of Yate Court moat is a large rectangular depression, now marked as a withy bed on OS maps but was probably a fishpond.

60. ALMONDSBURY, Minors Lane, ST545817
?, 7, ?Stream (not shown on figure 1).
There is a thirteenth century reference to a fishpond in this area which changed hands between one manor and another (Aston Court papers,

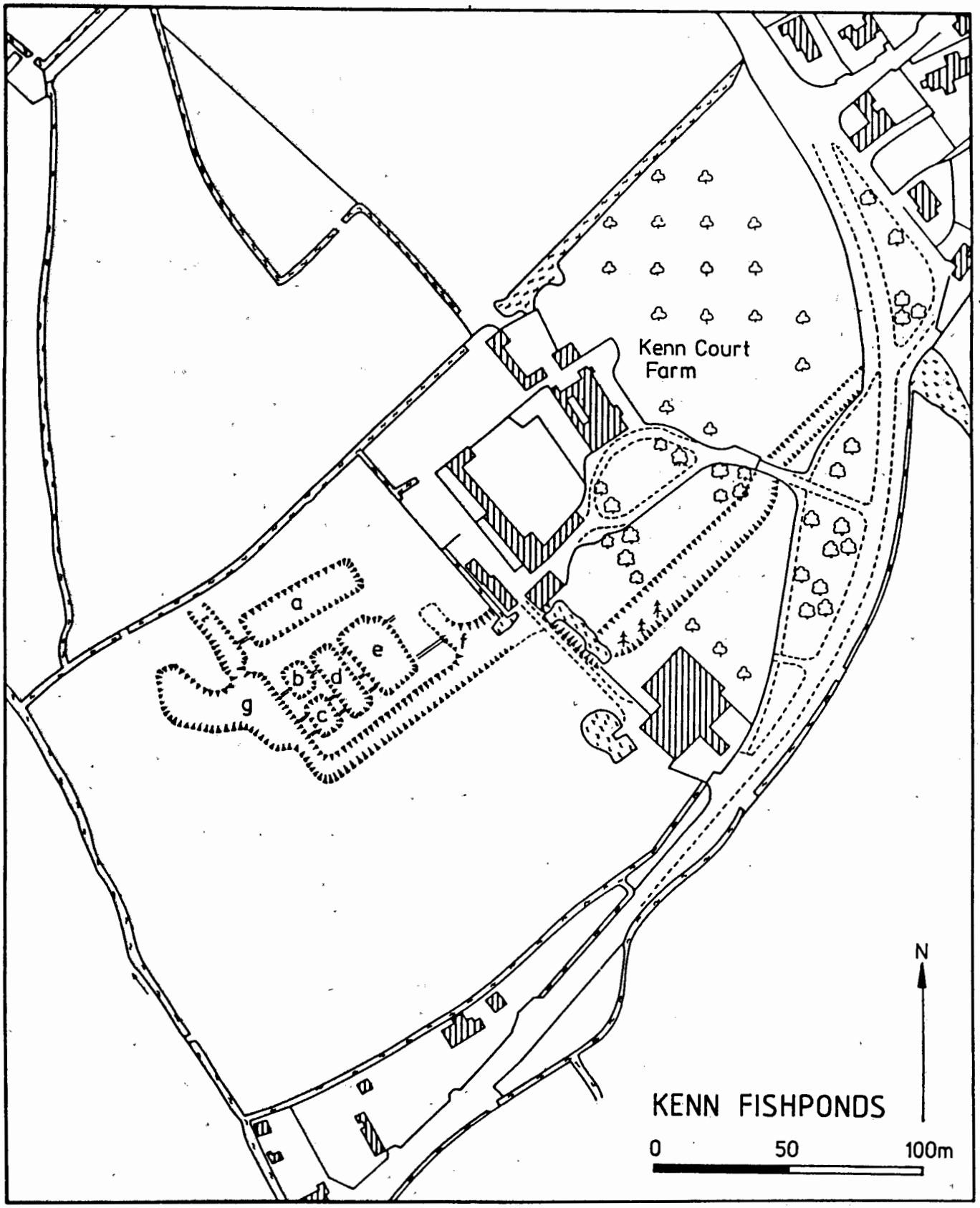

Fig 13 - Fishponds at Kenn Court, Kenn.

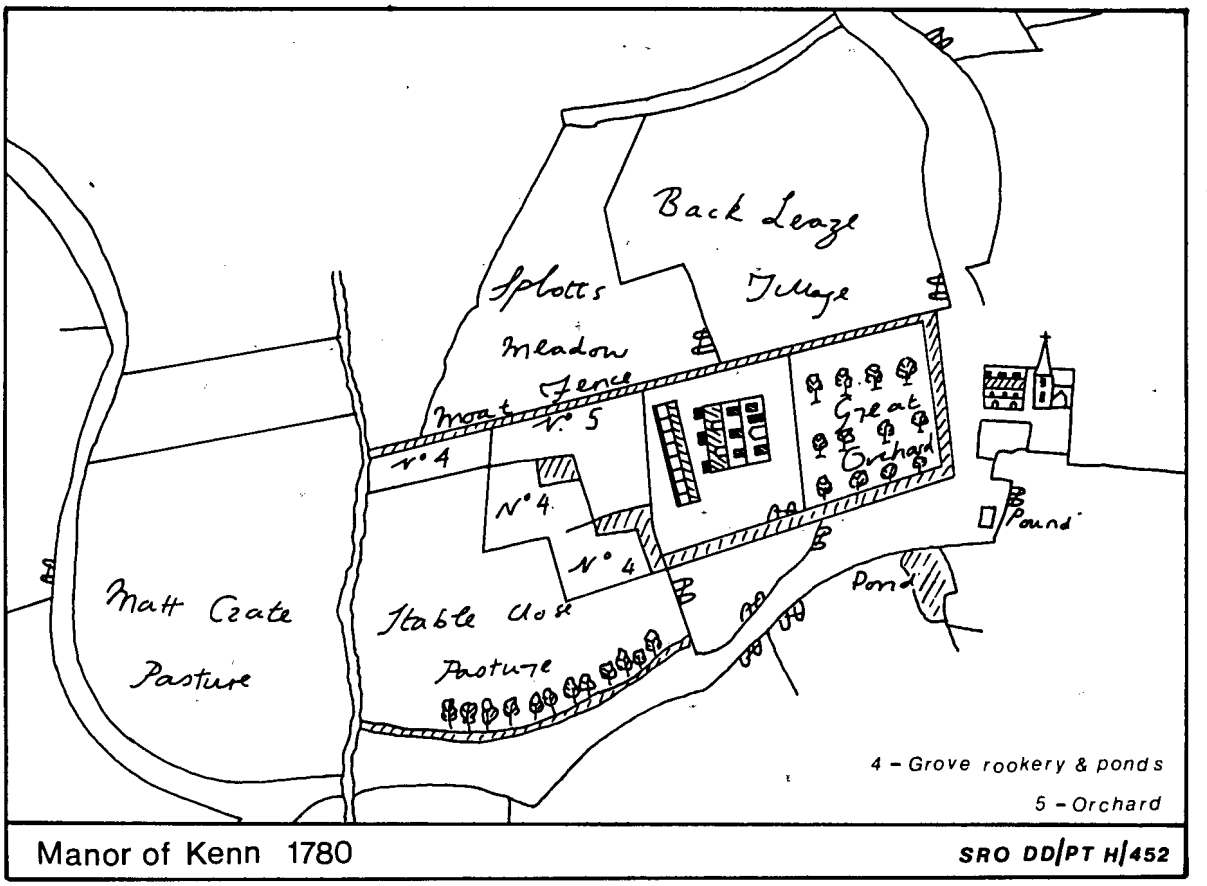

Fig 14 - Map of Kenn 1780.

BROAC/DS/1). There is a further reference to a mill nearby. There is a "Fishpond" field name on the tithe map (Information from J Pullin).

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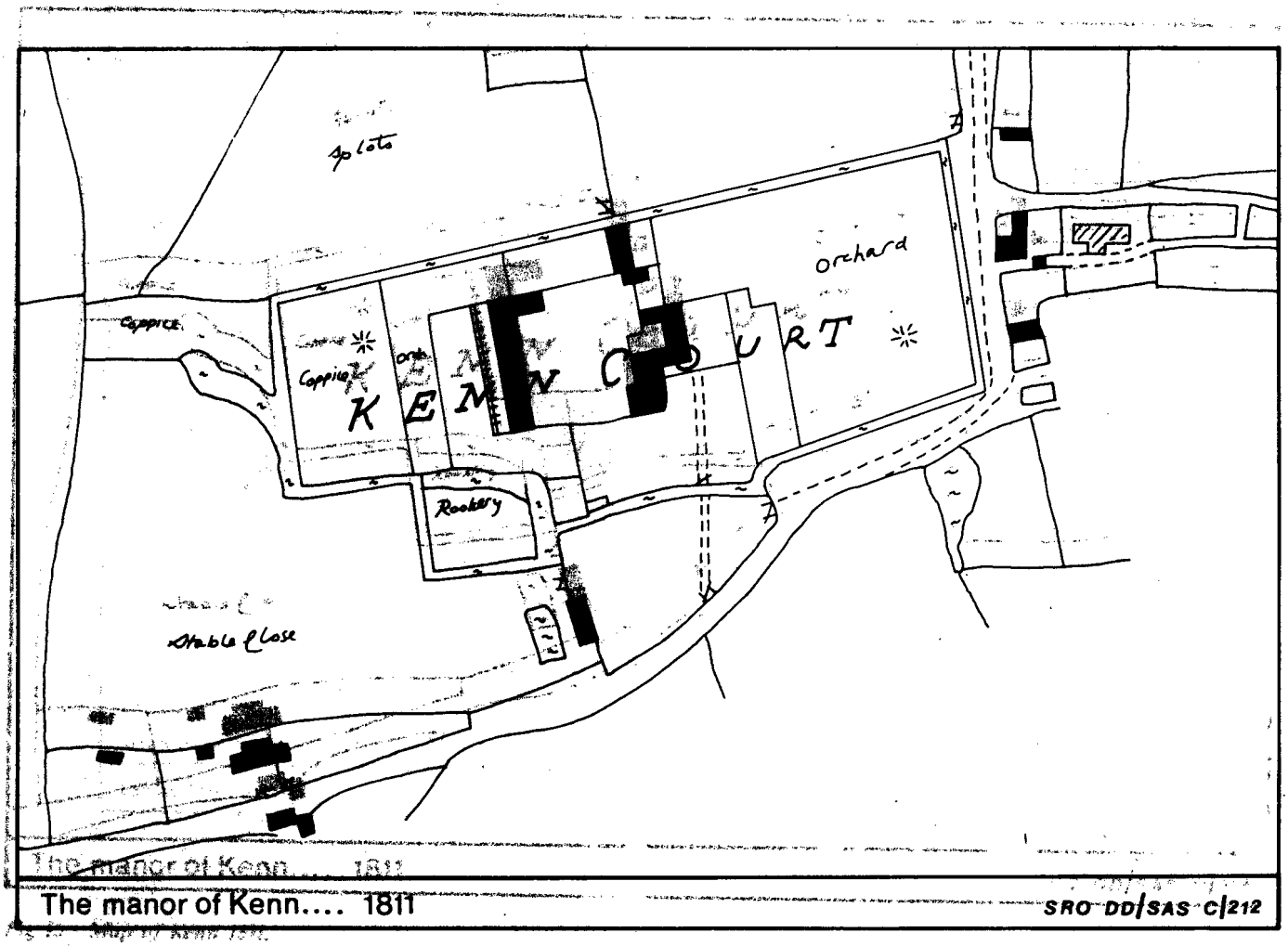

Fig 15 - Map of Kenn 1811.

APPENDIX 1: List of fish in Dyrham Park 1710.

"Account of fish in all the ponds at Derham 4 Aug 1710

In the Upper stew 7 brace of large carp and 4 brace of trout, besides the underneath from Barrows Court. (Fit to eat next year). In the Upper Mill Pond 42 brace of carp, 15 brace of perch and 17 brace of trout. (Two to three year hence). In the Great Pond 116 brace of carp, 60 brace whereof were removed thither from the Mill Ponds, some perch and some trout. (20 brace of carp next year and the year following and ye rest 4, 5, and 6 year hence).
In the Canale 15 dozen of small trout and some which was then before those were put in (7, 8, 9 and 10 yr hence).

Fish had from Sir John Newton's
Little Stew. In the Little Stew pond 12 brace of large carp.
In the Upper Strew Pond 6 brace of large carp and 40 brace of tench. (3 brace these carp this year and 1 brace of tench dead and eaten. Carp this year and next. Tench this year, next and following year).

Total quantity 183 brace of carp, 155 (?133) brace of trout, 40 brace of tench and 15 brace of perch.

Spent from May to this time
12 brace carp, 1 brace trout, 1 brace tench from the Little Stew Pond, 30 brace roach from ye Wilderness Fountain, 40 brace from ye Kitchen Court and 15 brace of roach had from Barrow's Court".

This document is held in Gloucester Record Office (D1799-E46). I am grateful to June Iles who made the above copy.

APPENDIX 2: Condition of the ponds.

The survival of fishponds has depended on their subsequent land use. For the purposes of this article they can be grouped as follows according to their condition and land use.

1 Destroyed - virtually all ponds in the urban and suburban areas (College Green, Brislington, Oldland and Keynsham), also motorway related development (Codrington and ?Clevedon).

11 Agricultural infilling/levelling - many often are "tidied up" by farmers unaware of what they are: either totally (Kewstoke, Hutton, Banwell, Kelston, Pucklechurch, Iron Acton and Hawkesbury (12), and Doynton (24)) or partially (Hawkesbury (14), Churchill, Mangotsfield (32), Almondsbury (7), Hanham and Doynton (23)).

111 Landscaping - those lost to nineteenth and twentieth century landscaping: Bath (Prior Park), Thornbury (7), Abbots Leigh, Mangotsfield (28) and Marksbury (51).

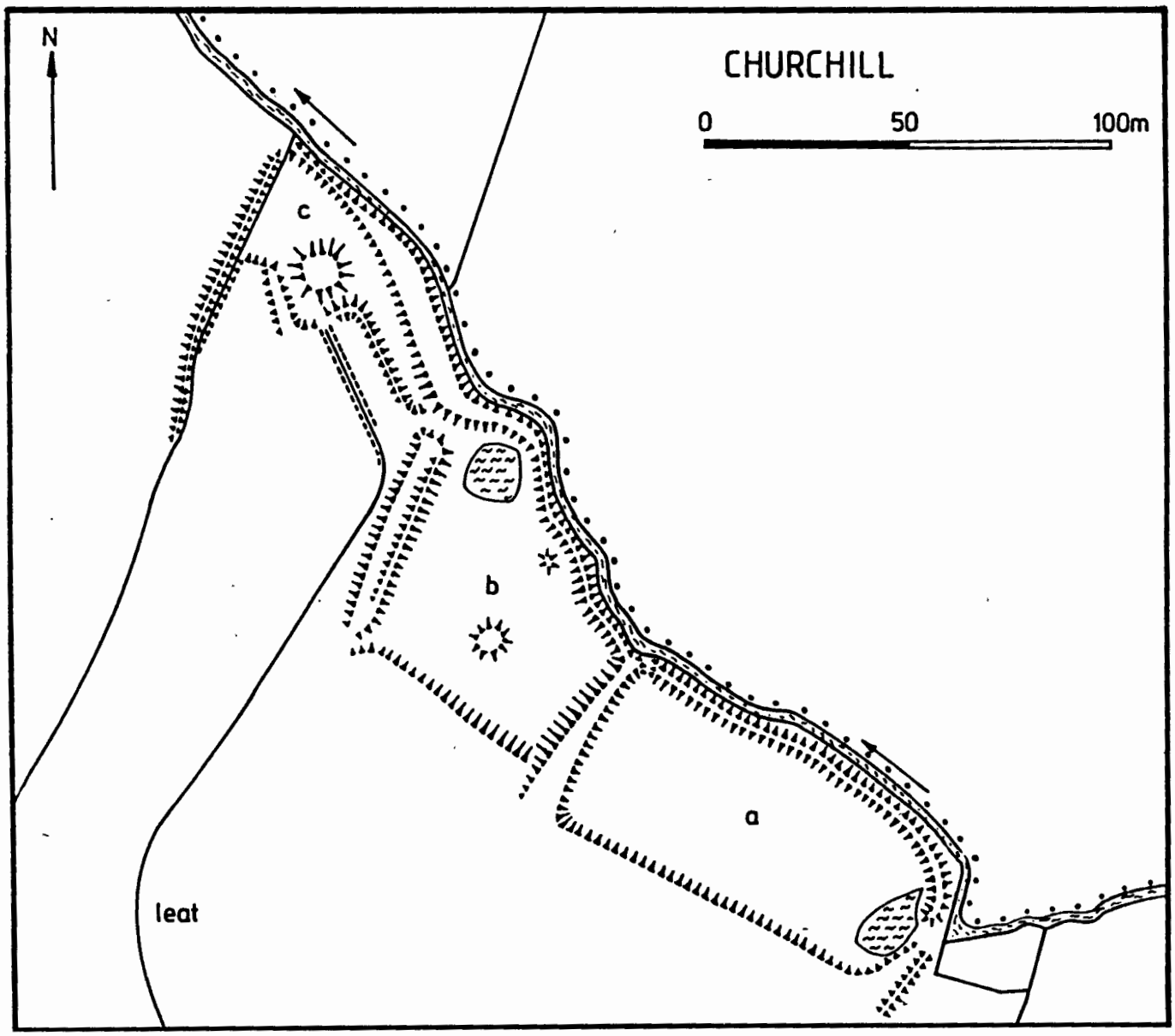

Fig 16 - Fishponds at Churchill Green, Churchill.

IV Woodland - following their disuse many groups of ponds were left and gradually were covered by trees. Woodland, perhaps, has been the best agent for preservation: Hill (2), Iron Acton (large pond), Hawkesbury (13), Horton (15), St Catherine's, Thornbury (4) and Cromhall.

V Nature reserves/"Conservation projects" — ponds in all guises have become popular with "conservationists." The ponds at Winterbourne are now a nature reserve and were partially cleared for that purpose. Far more destructive has been the recent availability of conservation grants from the Countryside Commission. There have been at least three examples in Avon where large grants have allowed the complete reshaping of medieval fishponds. These have been monitored for archaeological finds, but there must be many more that were not observed.

VI Ponds in fair condition - examples under pasture include Marksbury (51), Oldbury, Kenn, Churchill and Doynton (23).

We believe that at least the following list of ponds should be conserved. They should be seriously considered for scheduled monument status as representative of a common medieval monument in this area and are typical examples. All are in reasonably good condition at the moment. These ponds are: Over Court, Almondsbury; Cromhall; Court Farm, Doynton; Court Farm, Hawkesbury; Horton Court, Horton; Rangeworthy Court, Rangeworthy; Thornbury Castle, Thornbury; St Catherine's Court, St. Catherine's; Churchill Green, Churchill and Kenn Court, Kenn. Until the recent scheduling of Acton Court, Iron Acton, there were no scheduled fishponds in the county.

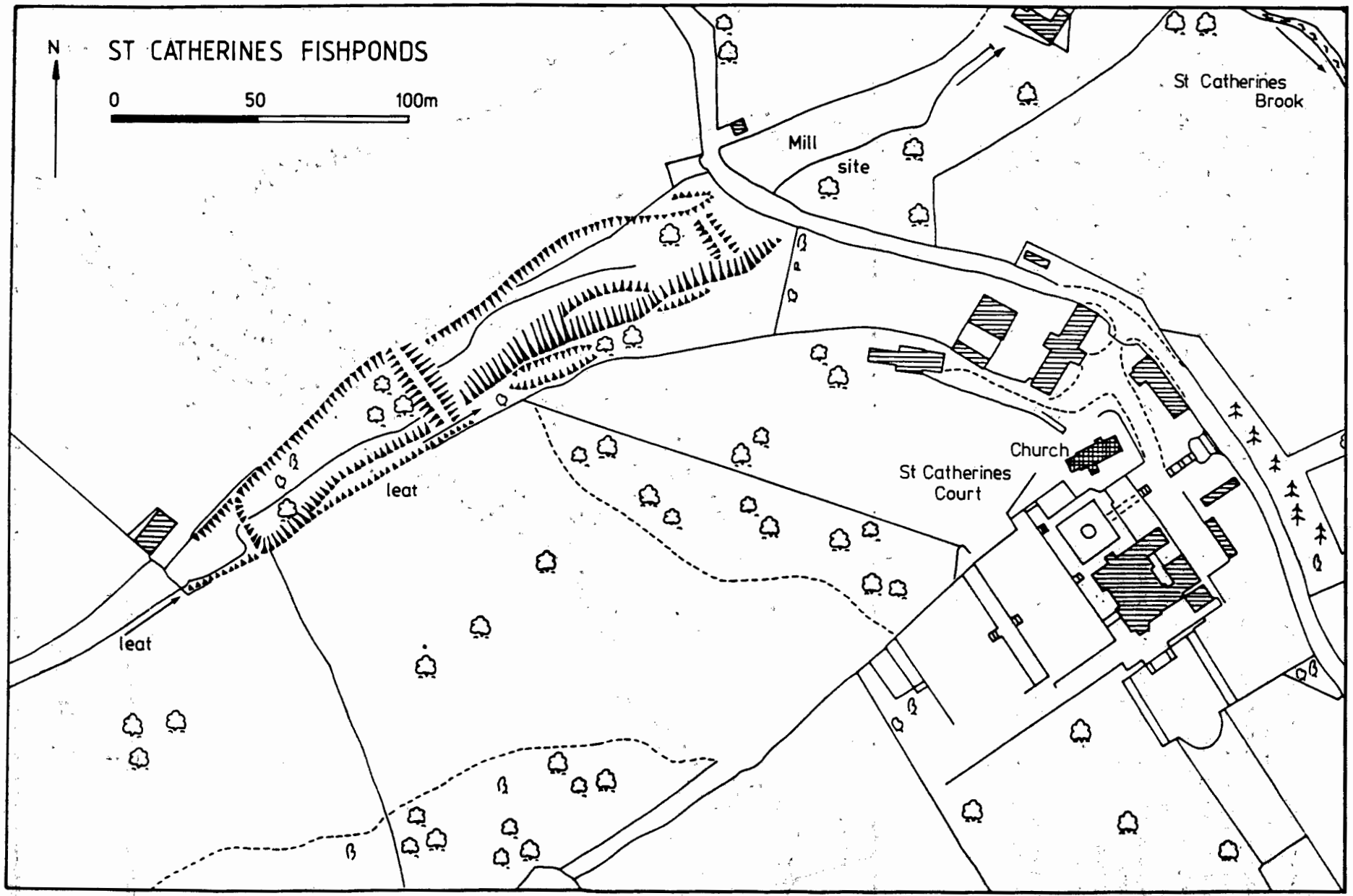

Fig 17 - Fishponds at St Catherine's Court, St Catherine's.

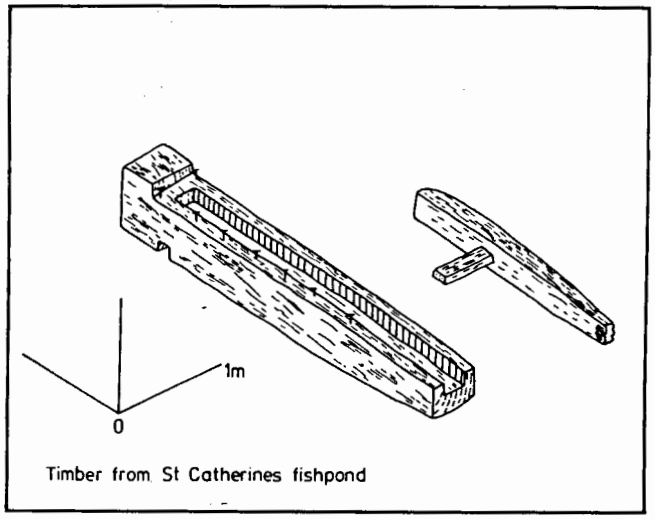

Fig 18 - Timber from St Catherine's fishpond

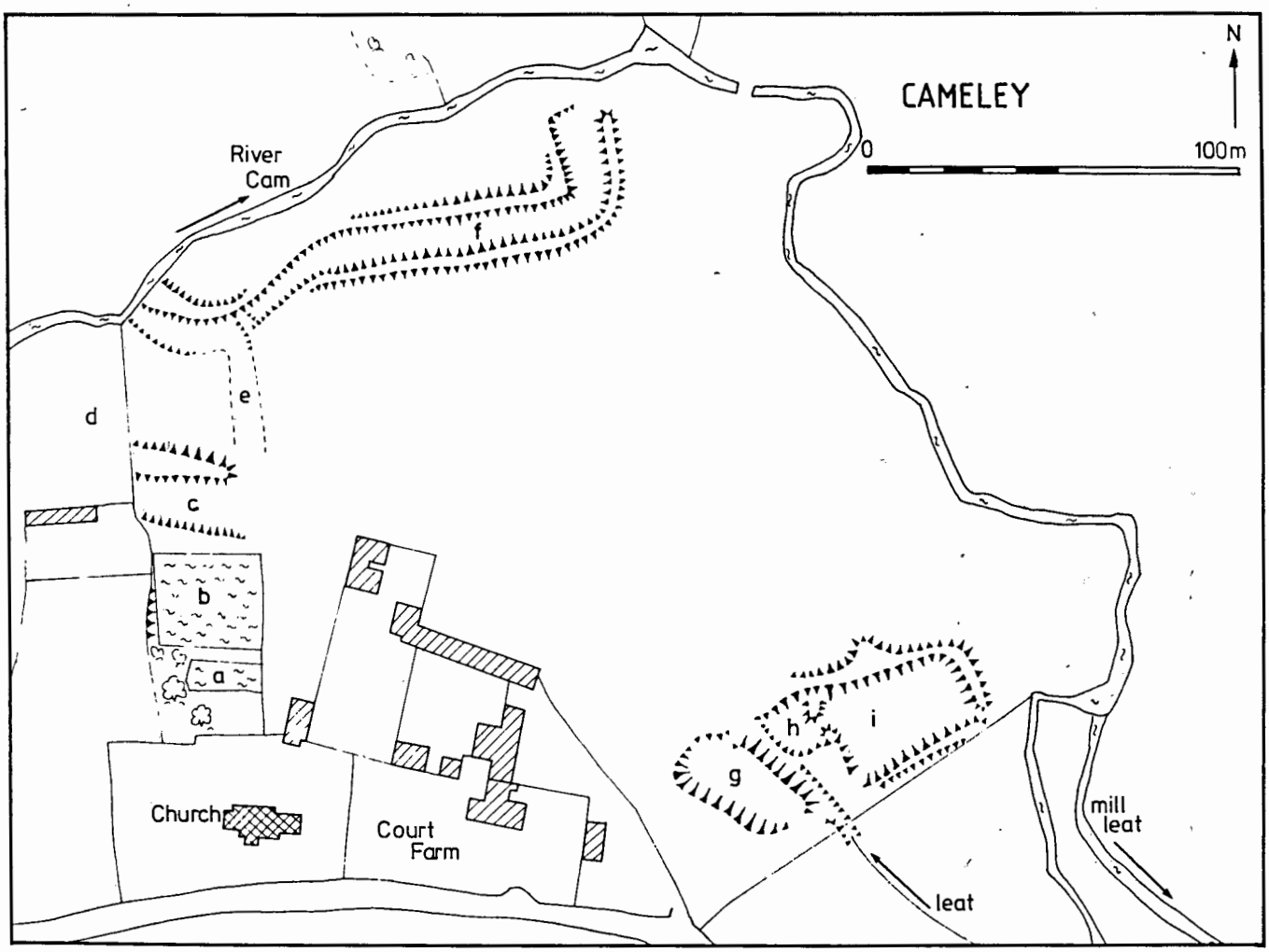

Fig 19 - Fishponds at Cameley.

UBLEY MANOR HOUSE 1974

Michael Ponsford

UBLEY MANOR HOUSE, 1974 Michael Ponsford

In February 1974, a survey was conducted by staff of the Department of Archaeology and History, City of Bristol Museum and Art Gallery, of the standing ruins of the former manor house at Ubley, Avon (ST528584). The village of Ubley lies between Compton Martin and Blagdon, just south of Blagdon Lake, on the south edge of the Mendip Hills. The stonework stood in a garden adjacent to and east of the Rectory and its grounds (Fig 1). The garden had just been sold for immediate private development and the only work possible was the recording of the standing remains and observation of foundation and service trenches for a new bungalow. The survey was, with the site at Cattybrook, Avon, one of the first pieces of work carried out under the auspices of CRAAGS, and was funded by DoE and the City of Bristol.

The site is located in the centre of the village, north of the late medieval St. Bartholomew's church in Tucker's Lane (Fig 1). The parish of Ubley includes not only low-lying land (the site is on the 200 foot 70 (m) contour and on Keuper Marl) but also an area of Mendip limestone rising steeply to the south to a height of 850 feet (259 m). The settlement of this diverse topographical unit is of some interest and it is hoped to pursue this in a further article.

ACKNOWLEDGEMENTS

The author would like to thank Mrs. Frances Neale, Dr. Robert Dunning and Mr. I. P. Collis for their contributions; Messrs. Taylor and Tinnion for allowing access to the site both before and during their building works; Mrs. Barbara Carter for her fine drawings; Pip Jones for typing the manuscript and his colleagues, particularly David Dawson, Curator in Archaeology and History at Bristol City Museum, for their help and advice. English Heritage gave a publication grant.

MEDIEVAL RECORDS OF THE MANOR

by Robert Dunning

Although the features of the ruins of the manor house do not seem to be earlier than the 15th century, the manor was held by Richard Damery or de Aumery of the heirs of Roger de Wyke in 1284-5 (*Feudal Aids* IV, 297). He, or a man of the same name, continued in possession until 1330. One or the other received grants of free warren in 1317 and of a weekly market and annual fair in 1318, and acquired a licence to extend a park in 1328 (*Caldendar Charter Rolls*, 1300-26, 389; *Calendar Patent Rolls*, 1327-30, 324). In 1327, Richard Damery was taxed at 5s. for his property in Ubley, but his was not the largest payment, perhaps because most of the demesne lands were let (*Somerset Record Society*, iii, 112). Three years later, Richard died holding Ubley (valued at £10) and another small property in Somerset as well as extensive lands in Northamptonshire, Buckinghamshire and Oxfordshire. His heir was his sixteen-year-old son Richard (*Calendar Inquisitions Post Mortem*, vii, 203).

By 1344, the manor had been acquired by Mathew Pecche and his wife Joan who apparently purchased it from Damery in 1341 (Collinson, ii, 156; Somerset Record Society, xii, 225). His wife was sole owner by 1346 (*Feudal Aids*, iv, 353). By 1380, Robert Cheddar, a rich Bristol merchant investing his wealth in land, was the owner, but at that time the manor was let to John Stoke for his lifetime (*Somerset Record Society*, xvii, 106-7). Ubley then passed to Robert's widow, Joan, and to her second husband, Sir Thomas Brook, whose main residence was at Holditch (Dorset).

When Sir Thomas died in 1418, Ubley became the part possession of his widow, an heiress in her own right, and of her eldest son and heir, Richard Cheddar. Richard seems to have made Thornfalcon (Somerset) his home. Richard himself died in June 1437 and his heir and brother, Thomas, in 1443, without male heirs. At Thomas's death the property at Ubley included a capital mansion with a park of 104 acres stocked with 120 head of deer (Collinson, 1791, ii, 156).

After a family wrangle over the inheritance, Ubley formed part of the share assigned to Thomas's daughter Isabel, wife of John Newton (*Calendar Patent Rolls*, 1446-53, 327-8, 382-3). Newton, whose family lived at Wyke in Yatton, died in 1488 and lies buried under a fine tomb in Yatton church, where Isabel joined him in 1498 (Somerset Record Office, DD/S/HY Box 1; Public Record Office, C142/12/9; *Somerset Record Society*, xvi, 374-5).

It seems that in the later Middle Ages the only attraction Ubley held for its owners was the hunting. A visit by the lord in 1388 involved an unusual amount of minor repairs and the employment of a woman to collect rushes for the floors, suggesting that his presence was something of an event. The carriage of the items from Bristol, including a 'horsber alias lyter'

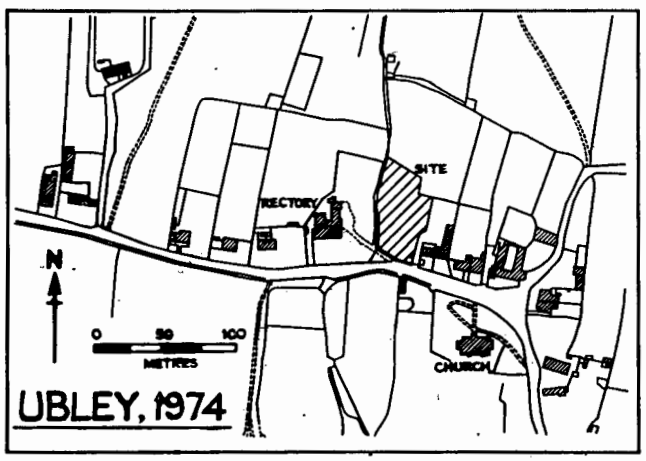

Fig 1. General plan of Ubley

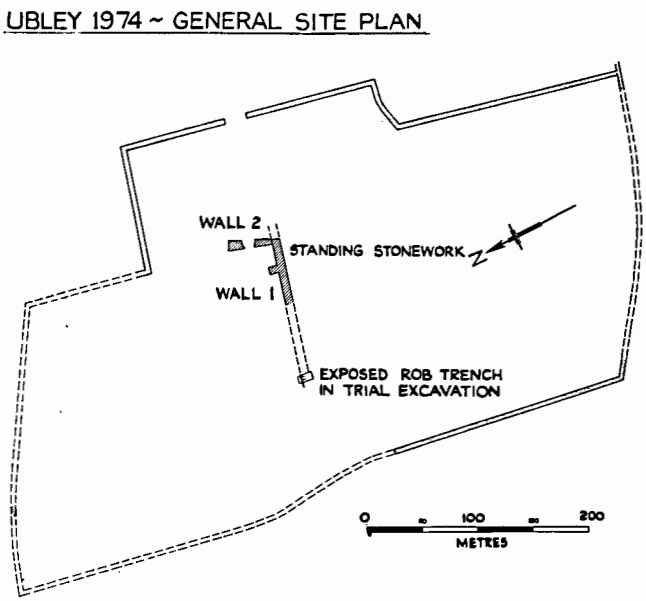

Fig 2. Plan of garden. W1=Wall 1; W2=Wall 2. Standing stonework hatched.

were costs never again repeated in the running accounts (Somerset Record Office, DD/S/HY Box 4). Leland, writing at the time of the Newton's ownership described the house as a 'mean old manor place', though boasting a 'castle-like' gatehouse and a park, suggesting that the house was already past its best (*Somerset Archaeol and Nat Hist.Soc* xxxiii, 132). The surviving manorial accounts compiled between 1384 and 1493 record minor works on the buildings, but help to provide a picture of its structure (Somerset Records Office, DD/S/HY Boxes 4 & 5). In the 1380s, Robert Cheddar's time, the house comprised a stone and stone-tiled hall and chamber with a ktichen. The latter was not tiled at the same time as the chamber and was therefore perhaps a detached building. The woodwork under the chamber renewed by a carpenter in 1388-9 and the replacement of the foot of a 'couple' in the hall the previous year, indicates a two-storey unit at one end and an open hall. Adjoining were a garden, a stone and thatched stable and a stone-tiled barn with a porch entry, the tiles from Nailsea evidently being replaced on a large scale in 1386-7. Near the house was a fish-pond, its edges reinforced with stakes; two wooden bridges may have crossed the lake or some kind of moat or ditch.

Seventy years later, between 1457 and 1462, much less money was spent on such maintenance. The barn was still standing; there was a 'great Garden' outside the court, enclosed with pales, and a certain house called 'le Doorter', formerly thatched with straw, but in 1461-2, with helm. In 1472-3, a tiler was working in the byre and stable, a mason mended the walls called 'le baces' of the wooden bridge outside the gate of the manor court' and planks for the same were provided by a carpenter. In 1478-9, stone tiles were bought to cover the house in the park.

By the 1480s, more details are recorded. A gutter made from lead from the manor's own workings on Mendip was replaced in the hall, a tiler was employed there and on the chamber and a mason employed to repair the gate to the great garden. For the first time an oriel window is recorded, repaired in 1486-7 jointly by a plumber, carpenter and a mason, the last rendering 'le badeliments' which rose above the leaden top. Its gate, called the manor gate, and presumably that mentioned by Leland, separated it from the barton. Beyond was the churchyard. This house was hardly 'a mean manor place' in the 1480s.

In these years, money was spent on a thatched house called 'le kenell' and on a stone-tiled building called the 'bercarie', presumably attached to the sheep fold. 'Lymestones' from Chewton and 'crafts' brought from Bristol were used in the manor house. If accurate, the omission or inclusion of buildings may illustrate a change in the economy of the estate: arable farming requiring a barn, a byre and stables for oxen and horses which could have been replaced by sheep-folding and pastoral husbandry. Joint ownership of the manor and the close proximity of sheep were two good reasons for abandoning the house as a suitable family residence. A survey of the manor dating to the 1550s survives in Bristol Record Office and it is hoped to publish a commentary on this in a future article.

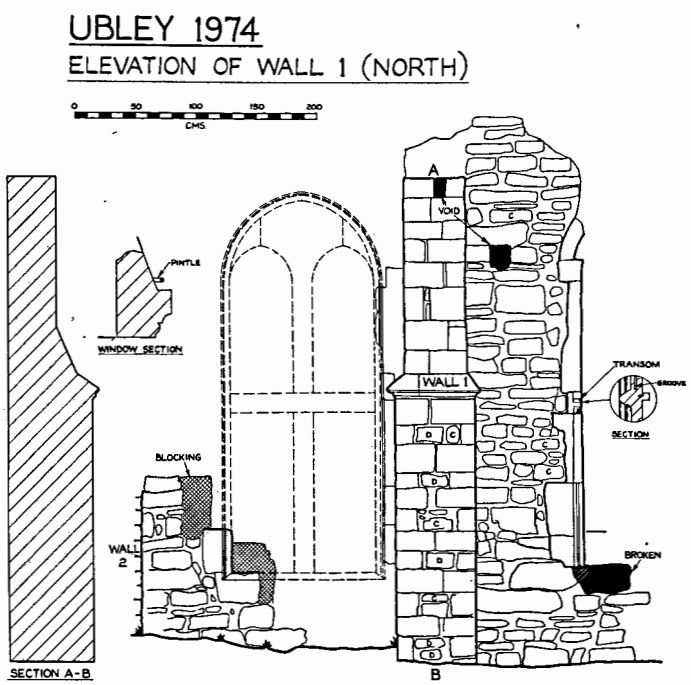

Fig 3. North elevation of part of Manor House (Wall 1)

LATER HISTORY OF THE MANOR HOUSE

The more recent history of the site is surprisingly obscure. In the land tax assessment duplicates among the Somerset Quarter Sessions records, the house was part of a holding called 'the Farm and Wood Cliff' in 1781 when the owner was Alexander Popham and the occupier John Reed (information from Mr. I. P. Collis, Somerset County Archivist). The Popham family held it until 1829, to be succeeded by William Walker who, in any case, had held the tenancy since 1821.

In the tithe map of 1838, the property was described as a 'house and garden' owned and occupied by Walker and sketched in property 108. By 1883-4, the house was already marked as a ruin and only the wall-angle (largely surviving in 1974) was then in the 6" O.S. plan (information from Mr. I. P. Collis). The property was known as Waterloo House by this time. The Somerset Archaeological Society noted its ruined state on their visit in 1936 (*Proc Somerset Archaeol Nat Hist Soc*, lxxxii, 50-1).

The adjacent Rectory, although only 19th century in date, has earlier features including part of a newel stair. It was a manor house until recently and evidently the role was transferred from the old manor house when it became ruined (Proc. Somerset Archaeol. Nat. Hist. Soc., 50 lxxxii,). The rectory and advowson of Ubley church belonged to Keynsham Abbey in the Middle Ages, and the advowson continued in the gift of the Lord

Chancellor until about 1870 (*Proc Somerset Archaeol Nat Hist Soc,* 1xxxvii).

THE STANDING REMAINS

The surviving walls of the manor house consisted of an east-west fragment 5.6 m long and up to 4.4 m high and 0.8 m thick (Wall 1, figures 2-4). There was a buttress on the north side and an abutting north-south wall (Wall 2) against the north side of Wall 1, pierced by a doorway with a depressed four-centred head (figure 5). Wall 2 measured *c.*3.5 m long by 0.5—0.9 m in width from south to north.

The rubble used in the walling consisted largely of Dolomitic Conglomerate, a red sandy stone with limestone pebbles, which outcrops to the south of Ubley village. Some fragments of Carboniferous Limestone were also used. This stone had to be carried further since its nearest outcrop is on Mendip. A few pieces of Old Red Sandstone and Pennant Sandstone were also included. The dressings were all made of an oolitic limestone probably from Dundry Hill which lies 5½ miles (8.8 km) to the north and is the nearest source of this fine material. In the larger Wall 1, occasional slivers of Pennant Sandstone (its nearest occurence is at Nailsea, which we know from the above documentary evidence was a source) were used to tighten up the joints in the stonework. The whole structure was pointed with a pinkish lime mortar coloured by the local iron-rich Triassic sands.

Wall 1 was badly overgrown with ivy which was in the process of destroying the whole structure. Much of the time allocated was spent clearing the very stubborn growth enough to prepare a measured drawing of the surviving stonework. This done, the remans of the windows, one on either side of the buttress, were visible.

Enough had survived of the windows to estimate their original appearance. The width could be assessed from the eastern window which was 1.33 m where it survived and approximately 3 m in height. As to the architectural detail, the edge of a wedge-shaped transom survived in the west window. A two-centred arch could be reconstructed from the remains of the springing of the head of this window. This might have been filled by a quatrefoil above two cinqefoil lights (e.g. Wood, 1965, plate LV). The moulding of the jambs consisted of a scroll-and-hollow, typical of the second half of the 15th century. It seems that there was only a central mullion and this would have had the same moulding as the underside of the transom (Fig 3).

In the western window were two pintles for shutters. Just above the transom bar, the jambs had vertical grooves showing that glazing was intended in the upper lights (Fig 4). The eastern window also contained traces of iron pintles and, as with the western, these had been bedded in lead. At a later date, the window had been blocked using similar stone and a not dissimilar mortar (Fig 3).

As described above, the buttress had been constructed almost entirely from oolitic limestone. At about 2 m from existing ground level was a chamfered offset. Above this the buttress was narrower. The underside had a chamfered edge and a hollow with slight drip mould below, again probably of late 15th-century date (Wood, 1965, figure 117:12) (Fig 3). The buttress was probably added later as it is not symmetrically placed between the windows and overlies the west jamb of the east window.

Both windows had an internal splay. A few traces of plaster had survived on the wall. Towards the base of the wall, a large tree had caused considerable damage and obscured details of the stonework.

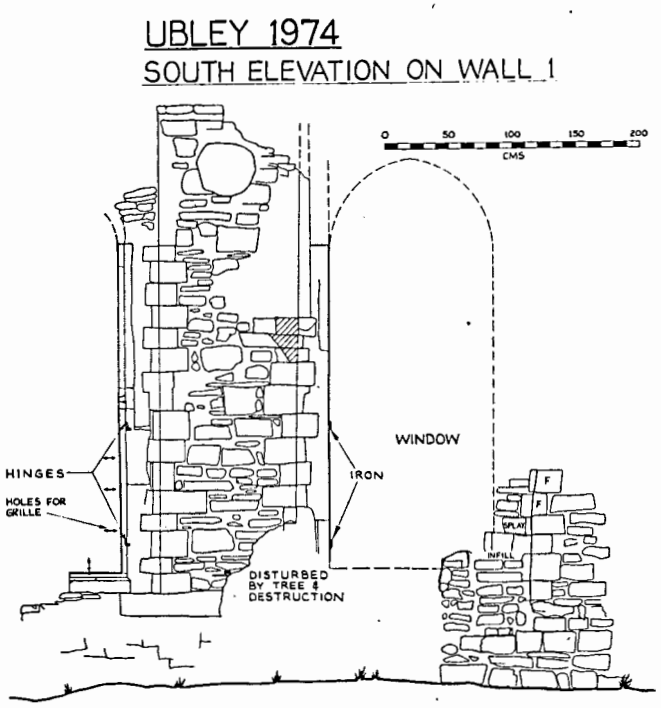

Fig 4. Interior elevation of part of Manor House (Wall 1)

Wall 2 abutted Wall 1 at its surviving east end and was obviously a later addition (Fig 5). A doorway and the remains of a window survived. This wall was also built predominantly in Dolomitic Conglomerate with occasional pieces of Carboniferous Limestone and small pieces of sandstone including Pennant. The builders had used a similar mortar to that used in the earlier wall. That the wall had been altered at some stage is demonstrated by the remarkable increase in thickness from south to north (Fig 2).

The doorway had been built from oolitic limestone and had a depressed four-centred head with external chamfer. On the southern jamb the chamfer was stopped 35 cm from ground level. Thin pieces of slate of Delabole type had been used to tighten the joints in the stonework. In the two side elevations, many changes in the door's closing mechanism were visible. The shoulders of the arch had been cut back on two separate occasions, presumably to provide space for squared wooden lintels. In the north jamb there were an external rectangular bar-hole, three bolt-holes, a square hole with smaller squared hole above and a lower hinge. In the south jamb, however, only the rectangular bar-hole and an iron pin were evident, but there were several nails in the upper part of the jambs. Internally the doorway was splayed on the south with a rebate 1 cm wider for the door to close against.

North of the door the south side of a window opening was visible. Internally it had a splay which was wider at the base than the top. At the top the keying of an internally splayed vault or arch could be seen. The remainder of the wall to the north had been demolished. Since this record was made Wall 2 and most of Wall 1 have been demolished. A piece of Wall 1 still stands alongside the new bungalow.

DISCUSSION

The standing structures recorded here are obviously the remains of a major and prestigious building which can be identified with Ubley's manor house. Wall 1 with its substantial buttress and tall transomed windows is likely to have been the hall and the abutting wall probably part of a porch to the cross-passage or perhaps a corridor to the otherwise detached kitchen building.

It is also likely that the stone-tiled hall was tiled with Pennant Sandstone and the extension in slate from the south-west England as shown by the independent use of each material for tightening joints in the stonework. The tithe-map has an L-shaped structure in this position.

The recorded features are likely to be late 15th century in date with a probably early 16th-century extension. There are no features which can safely be dated earlier. It is possible that an earlier 14th-century building had had new windows fitted at a later date which might have included the oriel mentioned in the documentary sources. No obvious evidence for their insertion was seen however. It is also likely that these structures were on the north side of a courtyard (known in the 15th century), given the space between them and the road, and that there were earlier buildings within the complex. No trace of buildings was found when the rest of the site was watched during foundation works. A small excavation on the line of Wall 1 and to the west (Fig 2) showed that the foundations had been totally removed and that they were very shallow, hardly more than 300mm in depth. The finds (BRSMG: 19/1984) consisted of a knobbed rim-sherd of a Donyatt chafing dish; the rim of a bowl and fragments of jug handle and base all of Wanstrow type; three fragments of unglazed clay tile with inclusions of quartz and large pieces of sandstone; fragments of plaster; a small rim-sherd of plain form of 11th-12th century pottery which is reminiscent of Type AC in the Bristol Castle Series (Price & Ponsford, 1979, 23; for Wanstrow and Donyatt wares, see Good, forthcoming, where many examples are illustrated). The finds demonstrate that the section of wall concerned was removed after *c* 1600 and also that the site may have been occupied since at least the Norman Conquest.

The materials used in the walls have been discussed and demonstrate the variety of good quality stone available fairly close by. Their proximity must have helped the development, not only of the local architectural style but also of the national evolution of late medieval stone housing (Wood, 1965, *passim*). The construction of the windows and their fittings can be compared with the well-known example at Meare dated *c*.1322-35 (Wood, 1965, figure III). No painted plaster was seen, but there were traces of plaster on internal walls, particularly in the kitchen extension.

Although little work could be done at the site, the surviving evidence points to buildings of some quality (as already commented in the documentary section) and comparable with contemporary manorial complexes. Parts of the site remain undisturbed and this, plus the fact that the field to the north of the Rectory contains earthworks, have the makings of a future project on Ubley Manor, its associated buildings and its village.

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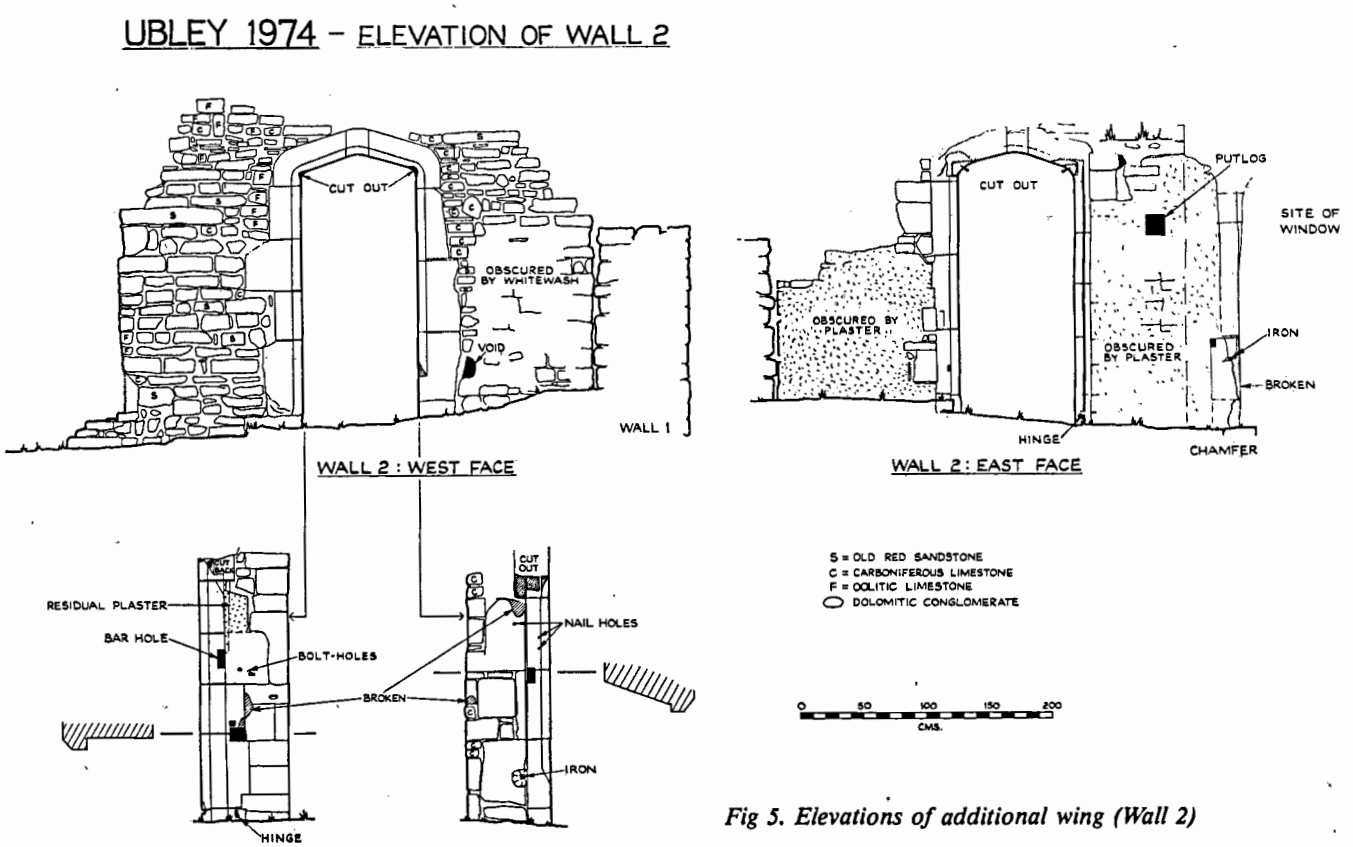


Fig 5. Elevations of additional wing (Wall 2)

AVON ARCHAEOLOGY 1984

R Iles & H White

As usual the only large scale excavations in 1984 took place in Bristol (Canynges House, Redcliff & St Augustine the Less) and Bath (Bishops Palace). 1984 also saw the Western Archaeological Trust make preparations to enter voluntary liquidation, a position it had to take when it became clear that no further funding would come to it from the Historic Buildings & Monuments Commission. At the same time there is a resurgence of rescue archaeology on a part time basis, particularly amongst a small group of BAARG members. Their work is most commendable but even they would admit their own resources are insufficient to meet a major threat in rural parts of the County in the future.

There appears to be less fieldwork than in recent years. One notable exception is Bob Williams who continues to fieldwalk Dundry Hill in his meticulous way, greatly adding to the understanding of that nearby, but often overlooked, area. Perhaps it could be said that this is "the year of the stone" (see Prehistoric section) at least in Northavon. Further reports of Megaliths at Lower Morton, Thornbury, proved on investigation to be correct and indeed to be particularly numerous (any geological explanations?).

Perhaps it is worth restating the purpose of this annual review. As its name suggests it is a catalogue of all important discoveries made in the year. Because of costs it has to be very selective, but all material sent to the County Planning Department for the review is held with the Sites & Monuments Register. The variable length of entries is a reflection not of significance, but more of whether a detailed account will appear later. Thus many fieldwork accounts are longer than major excavations, the full reports of which we eagerly await.

PREHISTORIC

ABBOTS LEIGH, Chapel Pill Farm, ST541761
Fieldwalking produced a series of lower palaeolithic flint & chert implements, including chopping tools and scraper. (N. Roberts)

ALMONDSBURY, Woodhouse Down, ST615854
Retouched flint scraper found in soil excavated for access road. (N. Roberts)

ALVESTON, Old Down.
There are records of a large stone above Lower Hazel known as Alwih's Stone, or the Kissing Stone. (G. White)

BRISTOL, Nr. Square Oak, Kings Weston Lane, ST533790-ST528793
"Celtic" fields noted. (N. Greenberry)

DUNDRY, South west side of Dundry Hill
Pre-medieval fields surveyed. See Roman section.

MARKSBURY, Stantonbury Camp, ST67256366
A series of 3 "keyhole" excavations were dug to test the depth of stratigraphy and possible plough damage to this hillfort. This was carried out as a result of work for a Duchy of Cornwall demonstration farm project. The main (western) enclosure is ploughed irregularly for a game crop, causing some infilling of the central ditch between the 2 enclosures. After the main enclosure was lightly ploughed in May it was fieldwalked but this produced only 3 abraded sherds of (?)Roman pottery and a few flints. 12 sherds of Iron Age pottery were found below the south rampart in an area of rabbit burrows (A on Fig 1) close to previous finds of a few years ago.

The main enclosure is not flat but is highest just to the south west of the centre and lowest on the east side: trench 1 (TI) was dug near the highest point trench 3 (T3) was sited much lower down and trench 2 (T2) was placed between them. The resulting sections are shown diagrammatically in Fig 2. In trench 1 there was as little as 13cm of soil over the bedrock which had ploughmarks on its surface. Trenches 2 and 3 had similar stratigraphy: the natural here was a sand deposit, which went down over 3m in trench 3. The only Iron Age pottery found (2 sherds) in the excavation came from layers 11 and 111 of trench 2, both these layers in trenches 2 and 3 had charcoal flecks and stones. Flint was found in trench 3. This flint shows some slight evidence of earlier prehistoric activity on this hill. Layers II and III in trenches 2 and 3 are presumably iron age levels, although there were no finds from trench 3. It would appear from the section of trench 1 that most structural evidence of the late prehistoric and early historic periods has been removed from the crest of the hill, probably due to the action of ploughing. (R. Iles)

NORTH WESTON, Portishead Down, ST448753 (Fig 3)
A possible Acheullian handaxe (of sandstone) found on site of backfilled trench. Further examination produced an additional flint tool. (N. Roberts)

NORTON MALREWARD, E of Hammerhill Wood, ST60236447
A survey was undertaken of a suggested long barrow, first noted by E. K. Tratman (OS ST66SW12). Several worked flints were found but the section A-B (Fig 4) demonstrates the exaggeration of height when viewed from the south east. It is composed of earth and irregular slabs of local lias limestone; surface quarries nearby suggest a possible spoil heap or field clearance. (R.G.J. Williams)

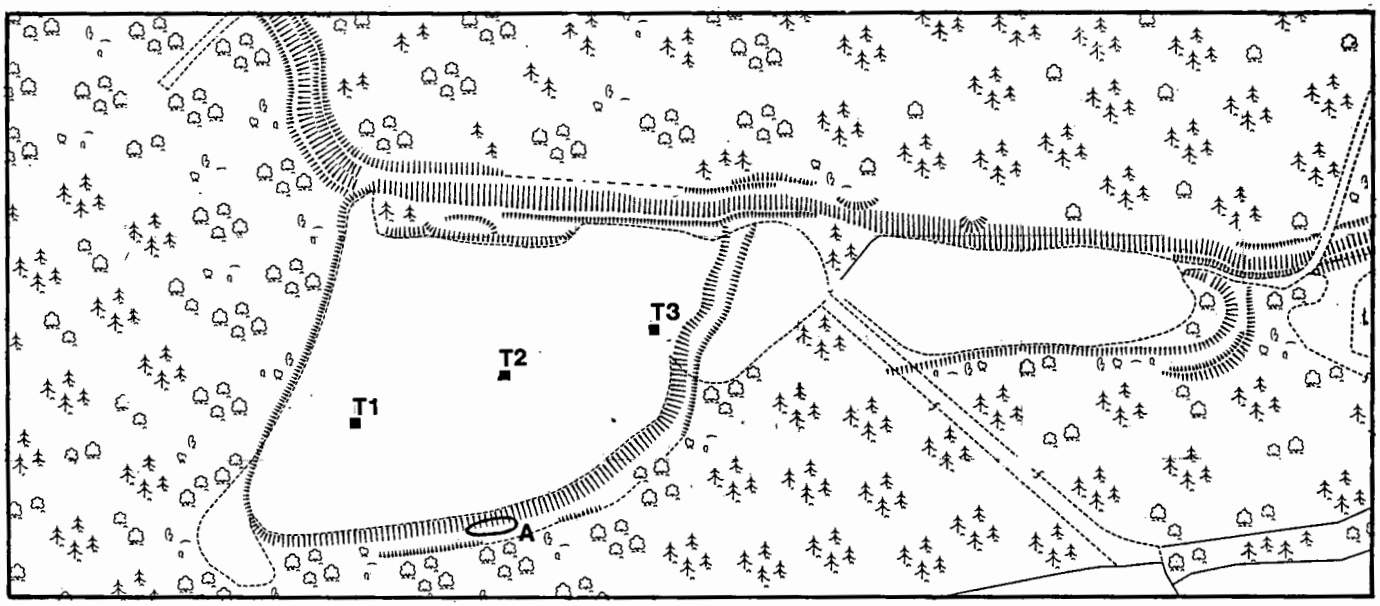


Fig 1: Excavations 1984, Stantonbury Camp, Marksbury

ROCKHAMPTON, ST65679378
Careful observation of a road widening scheme by Carol Ford was rewarded by the discovery of a stone, formerly standing at this T-junction. It was 'lost' in a previous road improvement scheme of the 1920s. It has now been set upright near its original location by Avon CC Highways.

TORTWORTH, ST70869240
Stone, now lying in hedge on south side of B4509, was formerly upright in a position about 10m away at the junction of 2 stone walls (still standing), within a circle of 4 or 5 elms. Children used to 'touch it for luck'. (H. S. Greenway)

ROMAN

BATH, 9-13 Bath Street, ST74956470
Excavations were carried out in the cellars of standing buildings. The western wall, southern wall and the south west corner of the temple precinct and subsequent Roman buildings were located. Further trenches indicated c30-50 cm of truncated Roman stratification, of the late 1st-2nd centuries over the rest of the area sampled. The line of a Roman road, running north east-south west, and probably predating the temple precinct was traced for about 20 m. It was 4.5 m wide with a thick rammed gravel surface over substantial rubble footings. (P. Davenport)

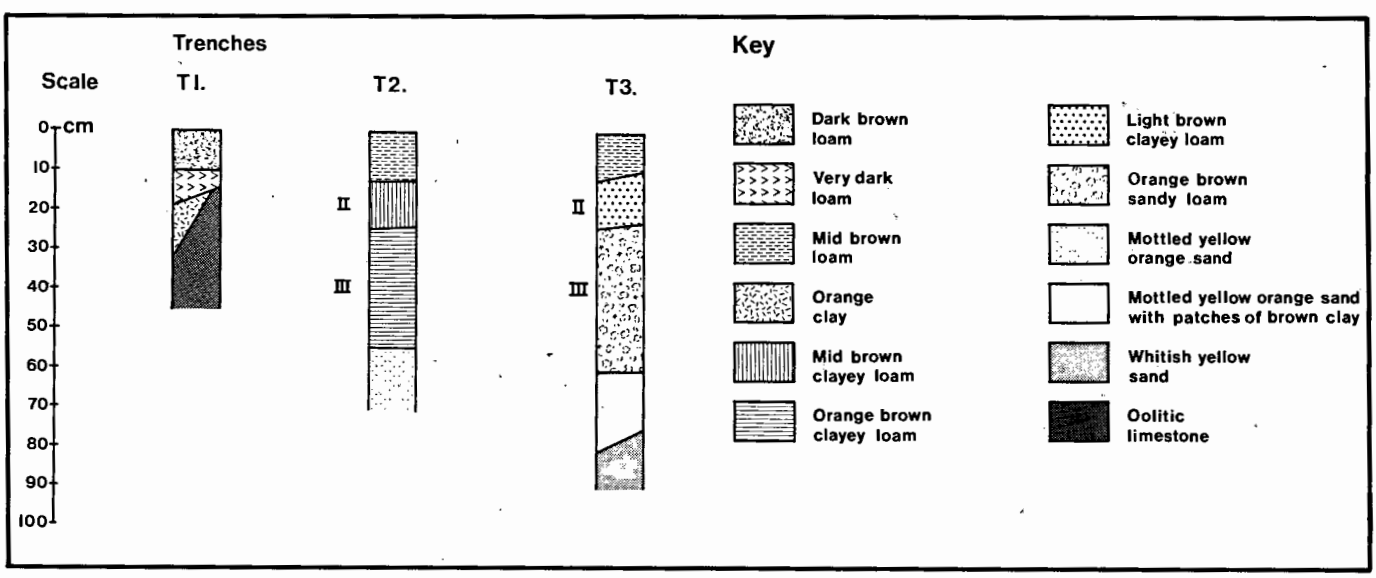


Fig 2: Excavation sections, Stantonbury Camp, Marksbury

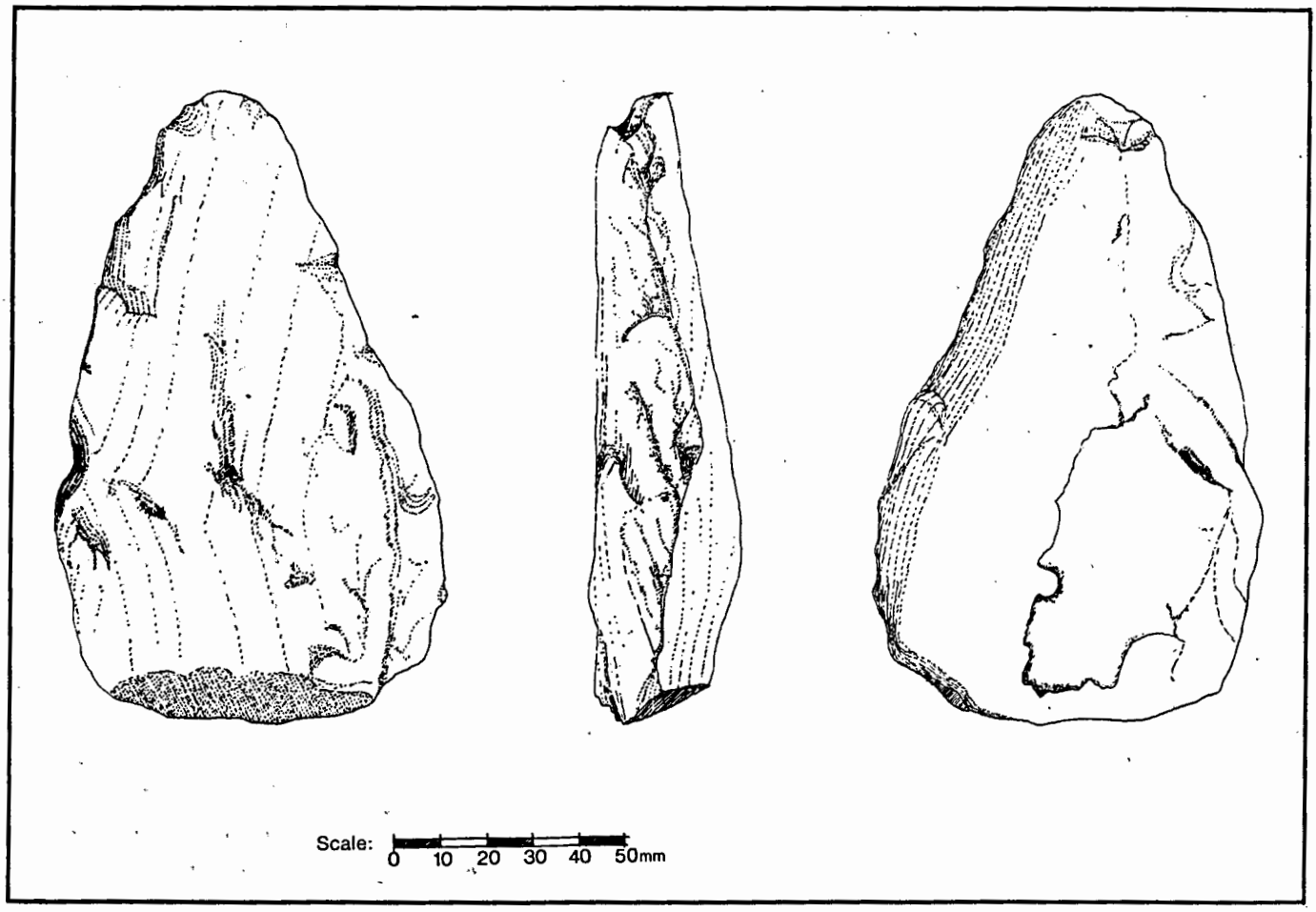


Fig 3: Possible Acheulian hand Axe. Portishead Down, North Weston

BATH, Roman Baths, ST751647
Detailed recording of the Roman masonry at the Baths has been started. A conservation programme will follow. (P. Davenport)

BATH, Swallow Street, ST75106465
See Medieval.

DUNDRY, Dundry Down (Fig 5)
A probable pre-medieval field system on the western spur of Dundry Hill has been sketch surveyed by R.G.J. Williams. Some of the field boundaries have been fossilised by the medieval and later field walls, others remain as stoney banks. Unlike other Parliamentary Enclosure Acts in the region which were concerned with upland wastes, the Dundry Awards of 1819 dealt only with scraps of common land on the lower slopes of the hill. There is good evidence to suggest that the whole of the hill had been utilised from at least the early 12th century AD. At Pickwick Farm Iron Age to Roman occupation preceded medieval resettlement (*BAA* 1,55-56). A recent study at Bleadon (*BAA* 3,55-56) suggests that the layout of a Roman field system had been utilised by medieval open field strips and followed by later enclosure. This is a progression that appears to have occurred at Dundry where medieval ridge and and furrow seems to overlay the early fields in some places. Included in this area are the following sites:

"A" Roman enclosure, Reservoir, Downs Road, ST55506662
Stone has been quarried on Dundry Down since the Roman period and in 1923 Roman potsherds were picked up in this area (SANHS 70). When the reservoir was constructed c1960 further potsherds were found in association with a possible building platform and a rectangular enclosure seen on RAF air photograph (CPE 1869/3135) (PUBSS9(3)165). The enclosure or early field had been levelled by the time the reservoir was built but is shown in the sketch plan.

"B" Field System, Hillhouse Farm, ST550666 (Fig 6)
The stone quarrying and later levelling has obliterated any possible early features on the summit of the plateau but the general field alignment has been followed on the western edge. Here stoney field banks and lynchets survive in a good state and whereas some of these pass below later walls many have been surmounted by them. Hillhouse Farm and Castle Farm in this area are both of 18th-19th century construction and these are aligned with Castle Farm Lane which cuts diagonally across the early field system.

"C" Field System, South of Crabtree Lane, ST558866
A number of later field walls in this area have been removed in recent years but these seem to have been based on an earlier field system of small rectangular fields roughly 50 m × 40 m, traces of which remain.

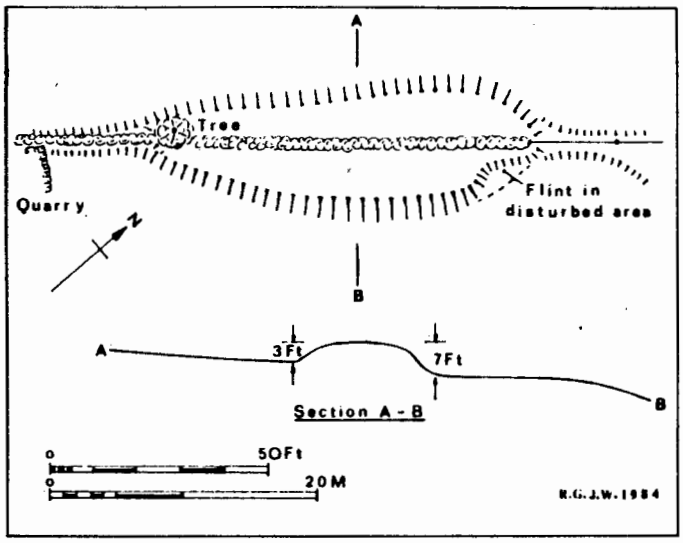


Fig 4: Possible long barrow, Norton Malreward

"D" Deserted farm site, "Piscomb", ST55186613
A ruined stone barn, a well and several platforms are in an enclosure at the centre of a well defined field system in a sheltered combe. The stone walls of the barn survive up to a height of 1.5 m and there are clearly 3 stages of alteration and addition, the last being in this century. Presumptive evidence that this was originally a farmhouse has been obtained from an estate map of 1736. (SRO T/PH/brc6). This records that the group of fields was then a "A Rovvless tennement called PISCOMB containing 33 acres" and gives details of the recent disposal of the land in various lots. A discussion on the meaning of Rovvless (SDNQ XXIV, 258) concludes that it refers to a holding of land without a homestead or at least a habitable dwelling. Desertion of other early farms along the spring line on the upper slopes of Dundry Hill has previously been noted by the writer (BAA 3,59-61).

"E" Dolestones and strip fields, Barns Batch, ST555659
A group of narrow strip fields which survive as low banks are described as allotments on the Dundry Tithe Map, 1842. The OS plan surveyed in 1883 shows 9 stones concentrated in this area and although none of them appear to survive another has been located at ST55566000. This is inscribed "Manor" on one side and "G" on the other.

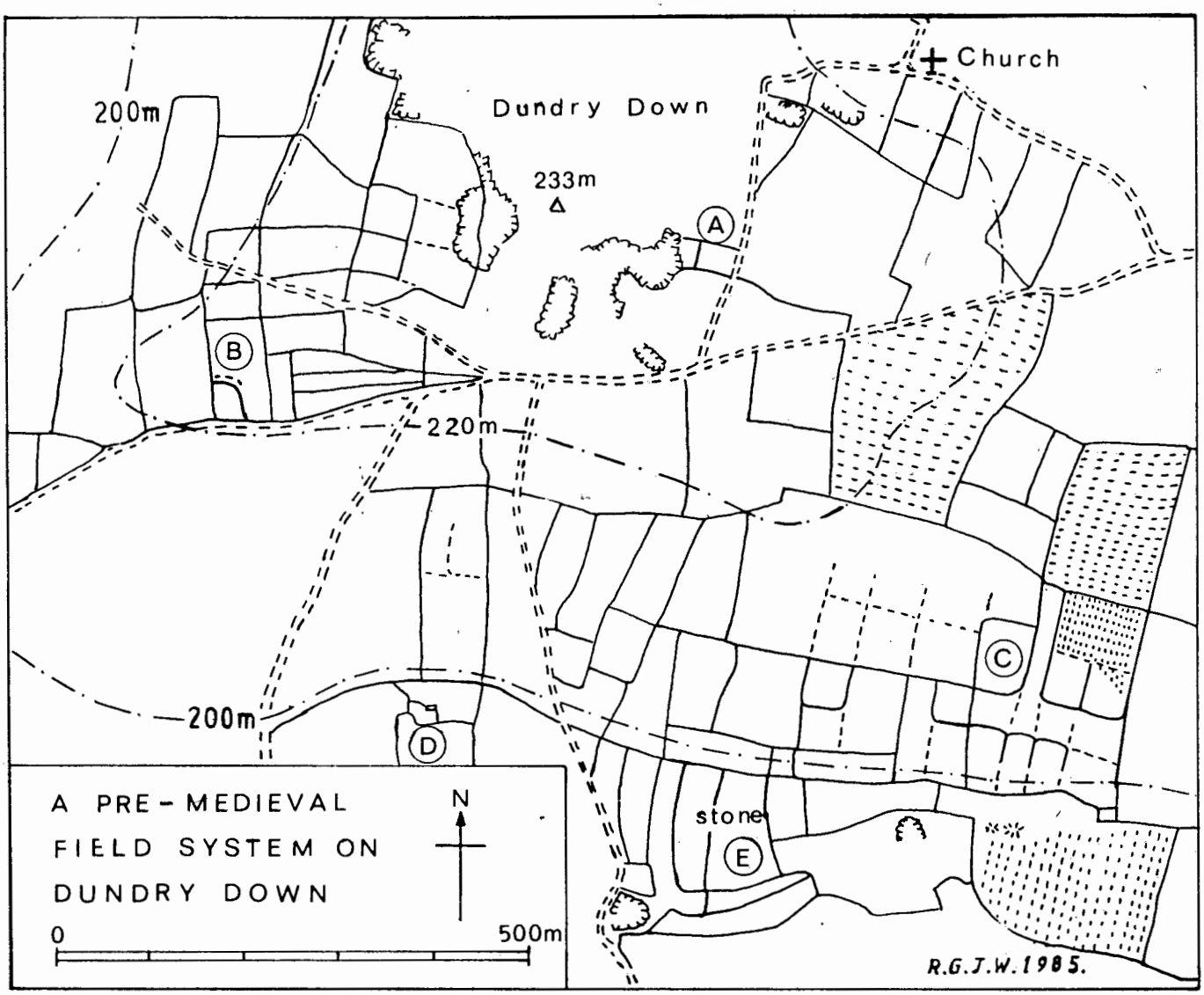


Fig 5: Pre-medieval fields on Dundry Down, Dundry

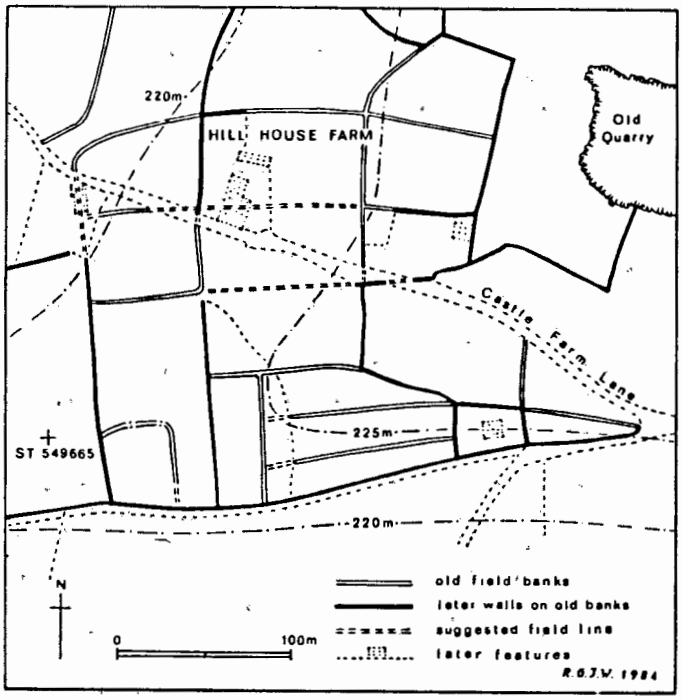


Fig 6: Field system at Hillhouse Farm, Dundry (Site B)

MARKSBURY, Stantonbury Camp
See Prehistoric.

MARSHFIELD, Ironmongers Piece, ST79907608
A 2 week training excavation for the University of Bristol examined building D, at the N edge of the 1982-3 excavations. The major part of the building had been destroyed by ploughing. No floor survived within the line of the wall. In the centre of the excavation was a dark area that may have been an oven or hearth. The wall of the building had no internal face and it seems likely that it served to revet and bind a make up layer, dumped to create a level surface. At the south east, a well laid area of limestone cobbling abuts the building and what may be the remains of post holes and wall bases suggest that this may have been a porch. Finds were common, some 26 coins in the date range 293-378AD were found. (A. J. Parker)

PORTISHEAD, St. Mary's Road, ST46587545
Excavation to the south of St Mary's Road to examne part of the Roman settlement known to exist from earlier work in the grounds of Gordano School, by Clevedon & District Archaeology Society & BAARG. This revealed a large Roman drainage ditch running SW-NE. To the north west of the ditch were spreads of stones which seem to represent the floors of buildings or yards. Lines of larger stones may have provided bases for sill beams of half timbered walls. (J. Russell)

YATE, Hallend, ST705871
Rescue excavation on a development site by V. Hallett, A. Everton & a team from ACCES revealed a series of Roman ditches, a stone building, pottery and coins of the mid-late 3rd century.

MEDIEVAL AND LATER

BATH, Swallow Street, ST75706465
Excavation, directed by P. Davenport for Bath Archaeological Trust on the corner of Swallow Street & Abbeygate Street on the area of the Bishop's Palace. The earliest post Roman building on site was a rectangular masonry hall 50 feet × 30 feet with walls about 5 feet 6 inches thick, probably dating from the early 12th century, probably a "first floor hall". The stone flagged floor of the undercroft was discovered, with a cobbled yard south of the building. Later in the 12th century the building was extended westwards by at least 30 feet. The thickness of the south wall of the extension suggests that the hall was incorporated within a defensive circuit enclosing the Bishop's Palace, or possibly the whole monastic complex. There are indications that a corner tower or bastion was built at the south west angle of the defensive wall. The alteration in the C12 finalised the S limit of the monastic precinct. Between the wall and the present Abbeygate Street the ground was laid out as tenements. A similar development took place along the west and north walls of the precinct bordering Stall Street and Cheap Stgreet provisionally dated the 13th—14th centuries. The tenements seem to have extended about 24 feet south of the precinct wall.

In 1336 the Bishop's Quarters were known to have been ruinous and were rented out to Bath Abbey. The third phase of the rebuilding, which possibly dates to about this period involved the large scale remodelling of the hall and its extensions, including the demolition of the greater part of the original hall. In small areas of the site Roman buildings were found. A 30 cm layer of brown loam separated the Roman and medieval layers.

BRISTOL, Quarry Lane, Lawrence Weston, ST551785
A hoard of 6 gold and 228 silver coins, mostly English of c1280-1399, were discovered buried by a late medieval wall and marked by an upright stone. (M Archibald and D. Dawson)

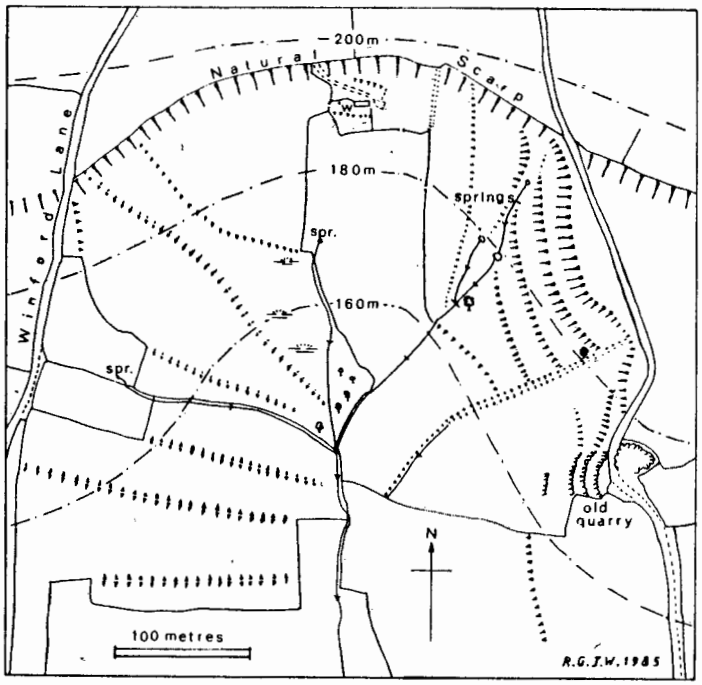


Fig 7: Deserted farm at "Piscomb", Dundry (Site D)

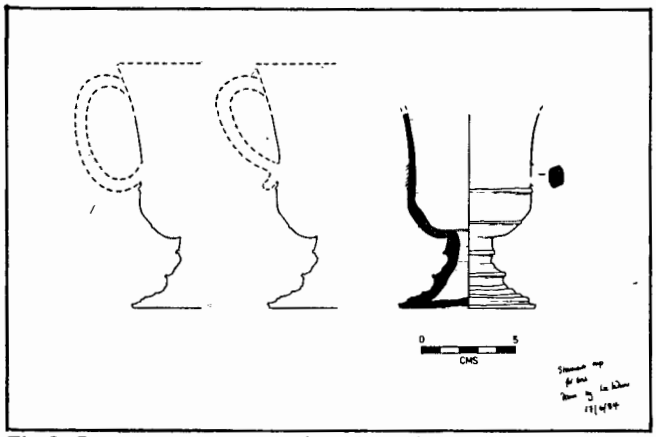


Fig 8: Stoneware cup, Bristol Cathedral Cloisters

BRISTOL, 90-91 Redcliff Street, ST59067251
There is an arcade of three arches, over 2 m high, within the boundary wall separating 90 and 91 Redcliff Street. Two of the arches spring from a freestone corbel in the form of a head. Provisional dating medieval, probably 13th—14th century. (R. H. Jones).

BRISTOL, 95-97 Redcliffe Street, ST59067256
Excavations by R. H. Jones for Bristol City Museum and Art Gallery continued on the site presumed to be the house of the Canynges Family, in the late 14th & 15th centuries. The 13th century river wall was discovered 75 m east of the modern line of the River Avon.

A contemporary slipway about 2 m wide, ran inland for at least 6 m, but possibly a further 10 m. It was rebuilt at least once and may have replaced an inlet or dock. Also contemporary was an extremely substantial building, possibly with an entrance on the north wall to the slipway. The slipway was infilled in the early 14th century. Dump material included leather waste suggesting a nearby workshop. At least 5 m of land was reclaimed beyond the river wall and a range of buildings constructed. To the east of these buildings was a courtyard flanked on the north side by a narrow range. Towards the street frontage 5 baking ovens were excavated (as yet undated). In the 13th century modifications to the structures took place, including the rebuilding of the range to the west of the courtyard.

BRISTOL, St. Augustine the Less, ST58497272
See excavation report in this volume.

BRISTOL, St. Nicholas Church. ST58937293
Engineering works continued to stabilise the west end of the nave of the Lower Church. Further post medieval graves were discovered. The remainder of the flight of stairs which were blocked off in the rebuilding of the 1740s were recorded. This had cut the early medieval town wall which in turn sat on traces of an earlier wall. The area to the north was disturbed and the only find associated with the wall was 1 sherd of Saxo-Norman ware. (J. Bryant and D. Dawson)

BRISTOL, St. George's Road, Hotwells, ST57997266
A watching brief on a development site east of St. George's House revealed a deposit of tin glazed earthenware wasters and kiln debris 4 m deep and 30 m long. It derives from an adjacent pottery known from documents to have been working in the first half of the 18th century. (I. P. Beckey and R. G. Jackson)

BRISTOL, Cathedral Cloisters, ST58337265
A small stoneware cup was found during excavations by the gas board in the cloisters area of the cathedral (Fig 8). Notification of parallels would be appreciated. (E. Boore)

BRISTOL, Lower Field, Fernhill Lane, ST54867841
Large house platform 1 m high, the toft almost intact. Hallway etc. Anglo Norman-13th century pottery, medieval pilgrim badge and 17th century lace bobbin found. (N. Greenberry)

CLAVERTON, Manor House and garden, ST78806416
Claverton old manor house was demolished, by the owner John Vivian, when the new manor house (now the American Museum) was designed in 1820 and built higher up the hill. The old manor house was a large 3 storied gabled building and had a lead rain water head with the date 1625 (Ayres 1979). During the course of the survey (Fig 9) of the garden some vague parchmarks of the house were visible between the church and the cottage (June 82). James Ayres claims that Manor Cottage was originally the single storey service wing of the old manor, the cottage also incorporates the Basset arms on the north gable, formerly over a fireplace in the old manor.

The old manor was built on a steep slope, with garden terraces above and below it. Below the site of the house, between it and the road are several fine garden walls (shown by thick lines). The wall adjoining the road is particularly distinguished with an elaborate balustrading and gate piers (see Avon Conservation News 19, 4-7). There is a similar wall above the next terrace and at its centre some steps which fan out at the bottom. The preservation of these features was due to George Vivian, John's son, who inherited the property in 1828 and who clearly regretted the destruction of the old manor house. (R. Iles)

Ayres J, 1979 Old Claverton Manor, *America in Britain,* xvii(i), 14-15.

CLEEVE, Bickley, ST451650
Excavation continued with an extension. Traces of red clay floors and lines of shallow post holes show that there might be buildings towards the wood. Another segment of swallet was excavated providing C13 finds. The finds from below the terrace wall can be compared with those from Cheddar Palace, dated 10-11th centuries. (M. Ponsford)

DUNDRY
See Roman.

KEYNSHAM, Abbey site, ST655688
Excavations continued, 2 tomb slabs were discovered by the Electricity Board just east of the site fence at the end of abbey park. The slabs were removed. A trench was begun due west of the foundations of the Rood Screen. Portions of a skeleton were recovered. Excavation began on the floor level of the chapter house. Fragments of human bone were scattered over this area. The floor connected with the furnace was removed and a floor matrix for tiles was discover ed. The furnace in the south west part of the room is now thought to date from the late 16th century. (B. J. Lowe)

STEEP HOLM, Priory of St Michael, ST21346064
Excavations continued. A late (15th-16th century) doorway cut into the west wall was discoverd and a number of disturbed and reburied bones from a medieval inhumation. (J. N. & S. D. Rendell)

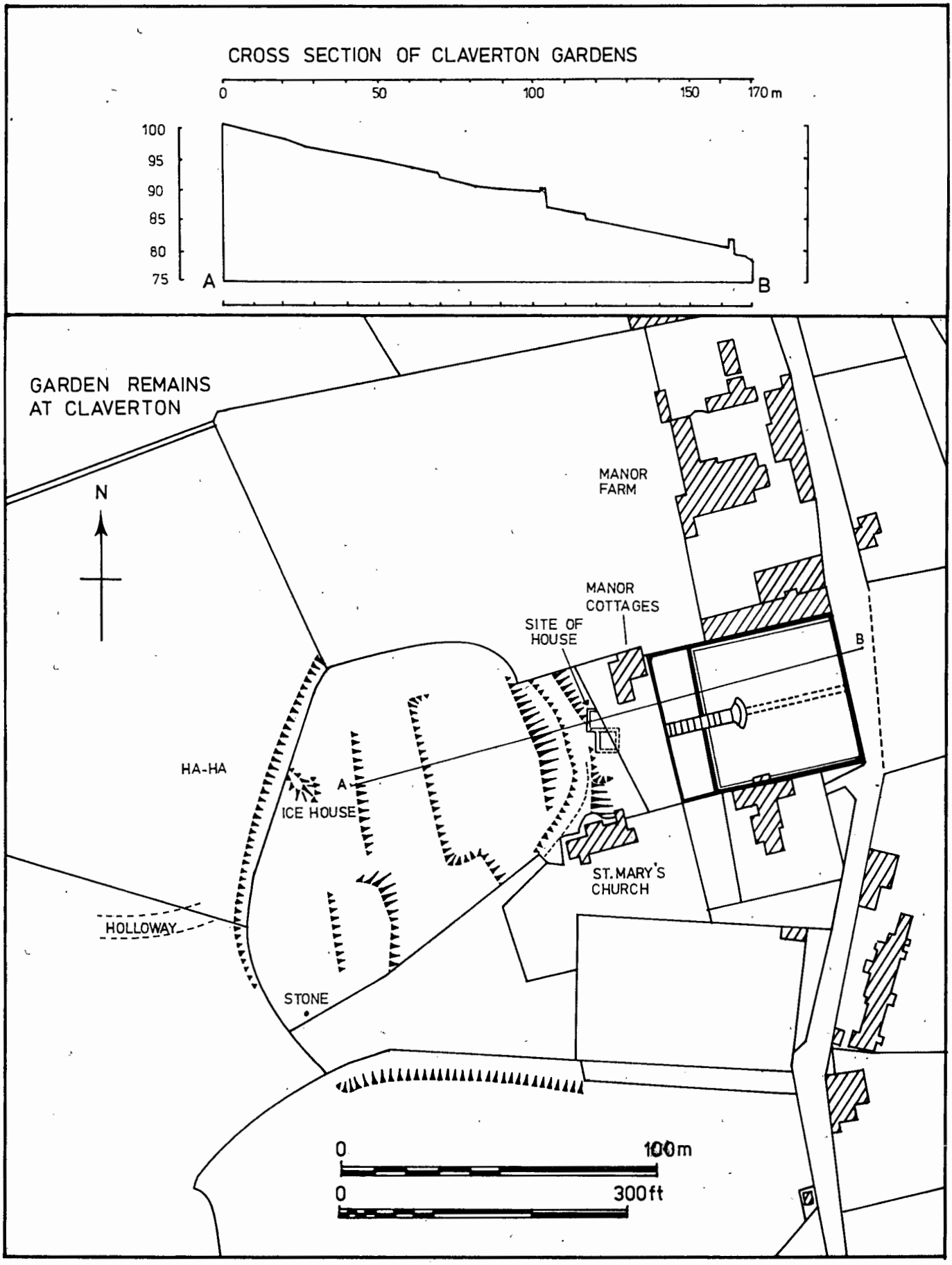


Fig 9: Claverton manor house (site of) and garden

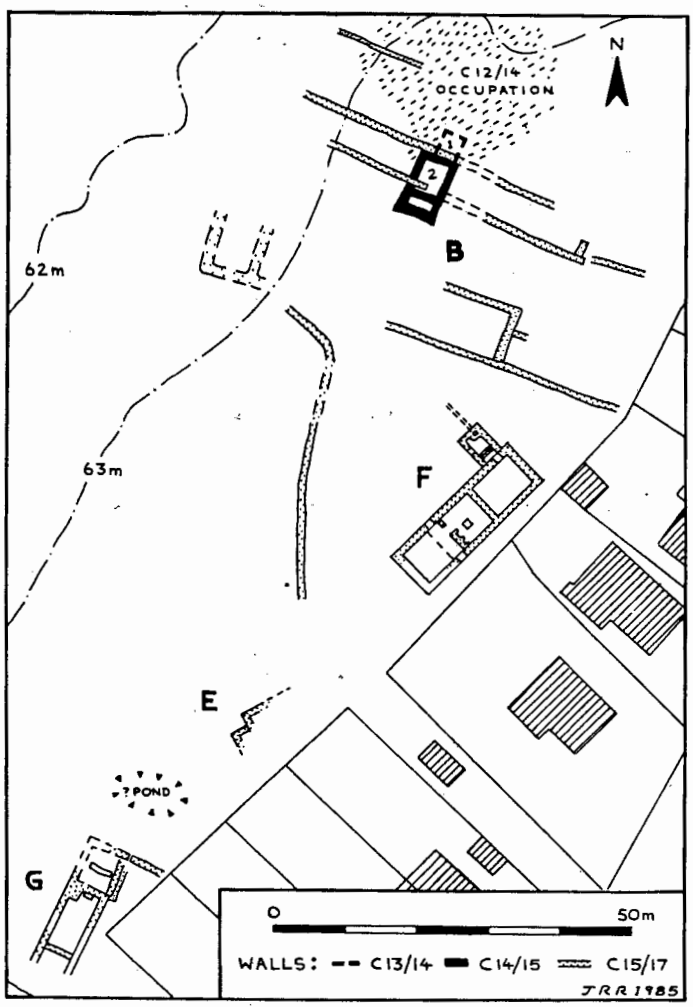


Fig 10: Excavation plan, Parsonage Field, Stoke Gifford

STOKE GIFFORD, Parsonage Field, ST625800 (Fig 10)
Salvage excavations by BAARG volunteers directed by J. Hunt and J. Russell on a site (see BAA 3,63-4) due for redevelopment exposed a complex of walls of at least 3 phases (not all necessarily medieval). At the north end of the area a medieval floor surface associated with a small semi circular hearth was found. Above the floor was a layer containing much 13th-14th century pottery. The most important find from this layer was a glazed "Louver" (Fig 11).

There is now little doubt that the remains are of a section of Stoke Gifford village abandoned in the late medieval period. The high quality of the pottery may indicate a manorial site. (J. Russell)

THORNBURY, Duckhole, ST641922
The large square field to the south west of Pound Farm is still covered by broad curving ridge and furrow. There appears to be trackways running down to the south west corner of the field where there is an earthwork enclosure (ST6949205) which may be the site of a watermill. There is another mill site just to the west at ST63709213; the latter had a fair amount of masonry and features surviving until a recent water improvement scheme cleared the area. (R. Iles and P. Wildgoose)

UNDATED

PATCHWAY, ST609829
The large rectangular enclosure noted previously (BAA 3,63) was trial trenched by machine. Three trenches were cut through the north east and south west sides revealing a deep V shaped ditch, but no finds. The original top soil (and some sub soil?) from this portion of the field was removed some years ago when AZTEC West was being built. One corner of the enclosure now lies under the new roundabout on the A38. The field name was great Stanshawes and it was suggested by J Pullen that this site might have been the moated manor of Stanshall Court. (R. Iles)

BUILDING SURVEYS

Surveyors of buildings are shown by their initials:—
EHDW: E H D Williams; JB: J Bryant; MB: M Barraclough; MC: M Campbell; LH: L Hall; PB: P Brimacombe; CS: C Short; BW: B Williams.

BANWELL, Winthill Cottage, ST394584
Interpretation uncertain, possibly C17. 2 roomed house, 1 heated, fireplace added in other. Original unheated room exceptionally long, adequate drainage for a small late longhouse? (EHDW, PB)

BATHFORD, Lower Shockerwick Farm, ST802687
House of mid C17, improved in 1793 when a large dairy farmyard laid out with high quality buildings. Barn late C16-17. Granary C19 (EHDW)

BUTCOMBE, Butcombe Farm, ST503608
Early C15 house, of high quality. Early C16 wing added. C17 dairy wing added. 3 room and cross passage plan had low solar over service room(s). (EHDW, PB)

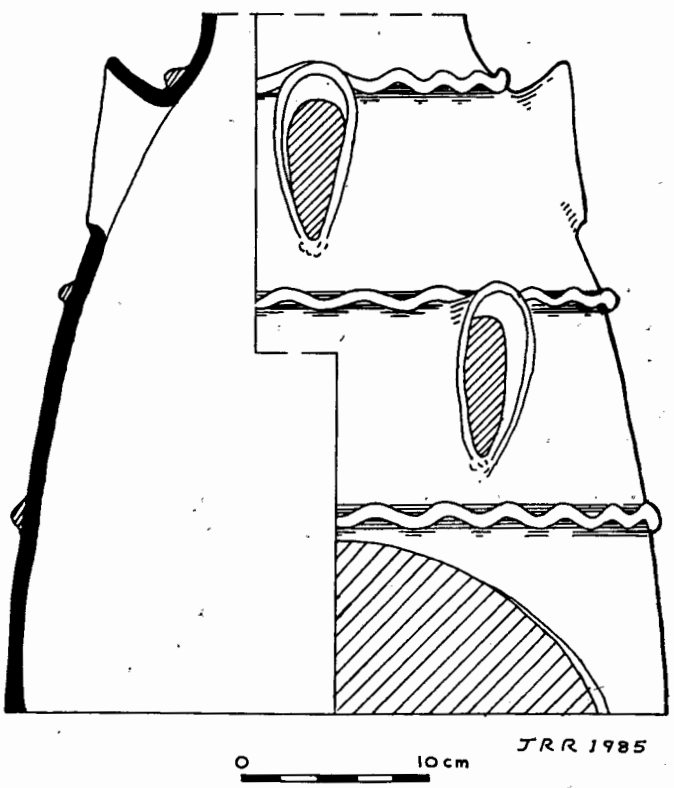


Fig 11: medieval louver, Parsonage Field, Stoke Gifford

CAMERTON, Tunley Farm, ST686591
Range of c1700 added to much altered earlier house. (EHDW)

CHURCHILL, Upper Langford Court, ST458595
Much rebuilt fragment of house of not later than C1500. C16 added wing extended in the C17. (EHDW, PB)

CLEEVE, Cleeve Cottage, ST460659
Much modernised cruck house. (EHDW, MC)

CLEEVE, Cleeve Nurseries, ST465664
1 room fragment of medieval cruck house. C17 and later alterations and additions. (EHDW, MC)

CLEEVE, Goblin Combe Farm. ST461654
Late C15 3 room and cross passage house. C17. Later modernisation. (EHDW, MC)

CLEEVE, Little Manor/Perry Orchard, ST464664
C15 house of hall and inner room with low end cross wing; detached kitchen? C17 and later alterations. (EHDW, MC)

CLEEVE, 'Old Inn' and Post Office, ST463664
A mid C17 2 roomed house and an C18 2 roomed house, later infill between and extension. (EHDW, MC)

CLEEVE, Old School House, ST459654
Probably C16, many later changes. (EHDW, MC)

CLEEVE, Walnut Tree Farm, ST461657
Drastic C20 alteration of 3 room and cross passage house of at least early C16. Buttery within hall. Possible longhouse? Wing is rebuilt cow stalls. (EHDW, MC)

CLEEVE, Yew Tree Farm, ST458653
Hall and inner room of 3 room and cross passage house of early C17. C19 additions and modification. (EHDW, MC)

CONGRESBURY, Popular Farm, ST442625
Possibly late C17. Much altered and extended. (EHDW, CS)

CONGRESBURY, Brinsea Green Farm, ST448616
A rebuild of C16—C17 house. (EHDW, CS)

CROMHALL, Old Smithy, Bibstone, ST698910
C17 house, odd layout, possibly because built as a smithy. Bellows still in cellar. House attached at one end may be earlier. (LH)

CROMHALL, The Gables, ST699905
Gabled farmhouse dated 1669. Contemporary bakehouse. (LH)

CROMHALL, Valley Farm Cottage, ST699905
Probable origins as late medieval longhouse. (LH)

DUNDRY, Hill House Farm, ST550667
Interpretation uncertain, either two adjacent houses, one early C16, other C17 and later joined. Or part survival of early C16 with added wing of which part rebuilt and extended in the C17—C18. (EHDW)

DUNDRY, North Hill Cottage, ST574663
Early C16 hall survival with later additions and alterations. (EHDW)

DUNDRY, Old Well Cottage, E. Dundry. ST576662
C17 3 room and cross passage house, much modernised. (EHDW)

DUNDRY, The Dingle, ST574663
C18 and later, modernised. (EHDW)

DUNDRY, Upper Grove Farm, ST553671
C17 house of irregular plan suggesting a rebuild of earlier house; this possibly was 3 rooms and cross passage, outer room downhill lost in later outbuilding. A possible longhouse? (EHDW)

FLAX BOURTON, Church Farm, ST505695
Much altered 3 room and cross passage house extended in the C17 with later modernisation. (EHDW, PB)

FLAX BOURTON, Mill Farm, ST512698
Probably early C15 origin. Early C16 improvements. Added wing of about same date. Later kitchen added beyond original service area. (EHDW, PB) Possible tannery discovered in outbuilding. (R1).

IRON ACTON, Acton Court, ST675814
Alterations, probably late C16 to provide accommodation on first storey of E wing. Remodelling in late C16 - early C17 provided new entrance in E wing. Cartsheds and Dovecotes largely C18 and C19. (BW, JB)

IRON ACTON, Lamb Inn, ST681835
Dated 1690, possibly rebuild of C16-17 through passage house. (LH)

KENN, Kenn Court Farm, ST412688
C18-19 front is an addition and modification in form of a wing to a house not later than C1500 which was much modified in the C17. (EHDW, PB)

MANGOTSFIELD, Baugh Farm, ST654783
External appearance C17. includes older through passage house, perhaps a long house. Gabled part has date 1713 in attic. (LH)

NAILSEA, Mizzy Mead Farm, ST471705
Latge C15 cruck house, much altered. (EHDW, PB)

OLDBURY on SEVERN, Chapel House, Shepperdine, ST615964
Shell of mid c17 house turned into 3 cottages in 1872. Documentary evidence suggests it was built between 1650 and 1670 (LH)

OLDBURY on SEVERN, Rook Farm, ST612925
Date panel 1672, but probably C16, though longhouse type. (LH)

STOKE GIFFORD, Webb's Farm (Bailey's Cottages), ST625811
Ruined farmhouse of probable C16 Origin. Almost certainly longhouse. (LH)

TICKENHAM, Tickenham House and Hale Farm Cottages, ST473722
Late C16 cottages were original house, added to in the C17. Latter an early double pile plan of C17 with some C18 detail. (EHDW, PB)

TYTHERINGTON, Brook Farm, ST665881
C17 gabled farmhouse. Central service room plan. (LH)

WINFORD, Felton Farm House, Felton, ST524658
Early C17. Much altered. (ERHDW, PB)

WINFORD, Holly Hedge, ST526657
Late C16-17, 2 room and cross passage with added wing. Outer room rebuilt. Curing chamber. (EHDW, PB)

WINFORD, New Farm, Felton, ST525658
Not later than C1500, could be late c15. Cruck roofed, 3 room and cross passage plan with jettied solar into hall. (EHDW, PB)

WINTERBOURNE, Brook House, Hambrook, ST638788
Early C17 house. later C17 another unit added beyond hall. (LH.)

YATE, Hallend Farm, ST709866
C17 house. Contemporary detached bakehouse. (LH)

YATE, Yate Court, ST712860
Probable medieval origins. Through passage house. Close to moat. (LH)

YATTON, Grove Farm, Claverham, ST452670
Two storey house with cross wing of C16. C17 wing added at other end. Now much altered. (EHDW, MB)

YATTON, Manor Farm, Claverham, ST442663
C17—C18 house of possibly earlier origin. Much modernised. (EHDW, MB)

Fig 12: North elevation, north wing, Acton Court, Iron Acton

DRAWING SMALL FINDS

George A T Woolls

Of all that has been published concerning archaeological drawing it appears that very little indeed makes reference to the actual mechanics of measuring an object to obtain data enabling an accurate drawing to be made. The importance of illustrations is stressed, types of drawings discussed, papers and drafting films compared, even methods of printing the final result and the anguish suffered by the printers in the process is fully described, but almost nothing about how to actually produce a true representation of an object as lines on paper.

This then was the situation which faced this writer when he started to draw small finds etc., and were it not for his long experience as an engineering draftsman he would no doubt have approached the problem in the same way as very many people do. Armed with a ruler marked off in millimetres or inches and a pencil they will hold the object in one hand, or slightly better, secure it to a flat surfaced, then holding the ruler as close as possible to the object attempt to measure it's main dimensions. These will then be marked on the paper and the object drawn by eye to fit in. As it is almost impossible to ensure that the ruler is always held at the same level, and that the graduation marks are vertically above the corresponding points on the object, the measurements are most likely to be wrong, and no amount of artistic effort on the part of the illustrator will make them correct. Many beautifully drawn inaccurate illustrations have been produced by this method. As David Price Williams says "It is important to realize that one does not have to possess artistic skill for many of the drawings since they are intended to depict the evidence rather than be a work of art." (1) But that evidence *must* be depicted accurately.

We are trying to produce what amounts to an engineering drawing, to scale and dimensionally precise, and an engineer will — ignoring modern electronic devices — think of vernier height and caliper gauges, and dead flat ground steel surface tables. Obviously we do not have access to such sophistication, nor indeed would these things be suitable for our purpose, but the principle involved, that of always measuring from and at right angles to a fixed datum, line, point or plane can, and should always be, observed. Not surprisingly considering that there is so much of it, one, if not the only subject to be favoured with comment on its practical side, is Pot Drawing. This varies from the information that "After a great deal of practise an experienced archaeological draughtsman can hold a rim sherd firmly over his drawing sheet in such a way that the rim edge lines up with a horizontal line drawn on the paper and then by sighting vertically down past the surface of the pot draw its outline on the sheet." (2) to " . . . . . rest the pot horizontally on a sheet of paper against a vertical background, its rim flush with the board. With the aid of a vertically held set-square, ... salient points such as the rim, base, carinations, (sharp changes in angle), and handle can be projected downwards on to the paper and the resulting dots joined up to give an accurate 1:1 outline of the pot." (3) This is a practical and realistic approach and fulfills the technical requirements but does appear to involve the use of three hands if one is to hold the pot steady during the process.

The present writer (under the nom de plume Daedalus) has described his original development of this scheme in Popular Archaeology. (2). The device here described as an OUTLINE SCRIBER (Fig 1) enables the continuous contour of any object to be drawn quickly and accurately while leaving one hand free to hold the item firmly in position if desired. The use of an adjustable template obtainable from D.I.Y. shops to determine wall angle or slope of a pot sherd, also referred to in Popular Archaeology (2) is illustrated (Fig 2). Note sometimes the ends of the wires used in the template can be quite sharp and great care must be exercised to ensure that the surface of the pot sherd is not scratched during the gauging process. Do not attempt to push the entire set of wires onto the sherd all at once, but, after pushing them entirely clear, return them individually to make gentle contact with the surface of the pot.)

The two other techniques Figs 3-4 enable details such as patterns etc. on objects to be accurately recorded together with the foreshortening which occurs when the decoration is on a curved surface. Using the D.T.P. (Fig 3) points on the surface of the object are transferred directly to the drawing, while the other scheme (Fig 4) enables a tracing of surface engraving, painting etc. to be drawn on clear plastic film using a Rotring type pen and black drawing ink. This tracing may be placed under the drawing film or paper on which the final drawing is made.

Hazel Martingell refers to tracing flints on to glass or perspex (4) and the development of this scheme shown here features a block used to ensure a truly vertical line of sight and as the object is retained between the base and glass the whole assembly may be moved to obtain the best lighting on the object.

Earlier in this article the writer commented that an archaeological illustration was virtually an engineering drawing and as such should be clear and unambiguous. In order that this should be so particular attention should be paid to the positioning on the final drawing of any extra views that are considered necessary. The study of any beginners text book on engineering drawing will clarify the basic principles of correct relationship of front view, side views, plan view, and sections. This would help to eliminate the lack of consistency that often occurs in the placing of these views, not only between one publication and another, but even between drawings on the same page of a publication.

NOTES

(1) Grinsell, L, Rahtz, F, Price Williams, D, 1974 *Preparation of Archaeological Reports,* page 34.

(2) *Popular Archaeology Vol. 3 No. 7* (Jar 1982) Page 36.

(3) Grinsell, L, Rahtz, F, Price Williams, D, 1974 *Preparation of Archaeological Reports,* Page 46.

(4) Martingell, H, 1980 Drawing flaked stone artifacts, *Lithic Studies Society Newsletter* 1, 8-10.

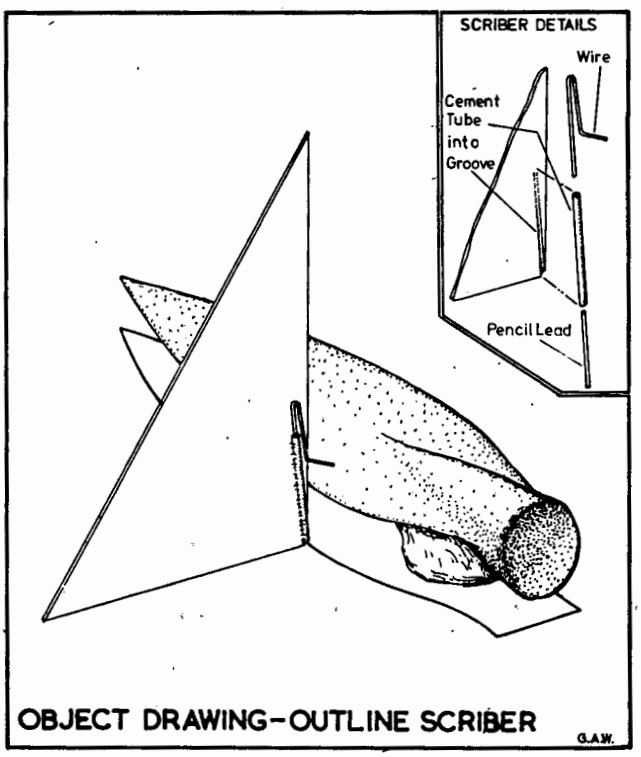
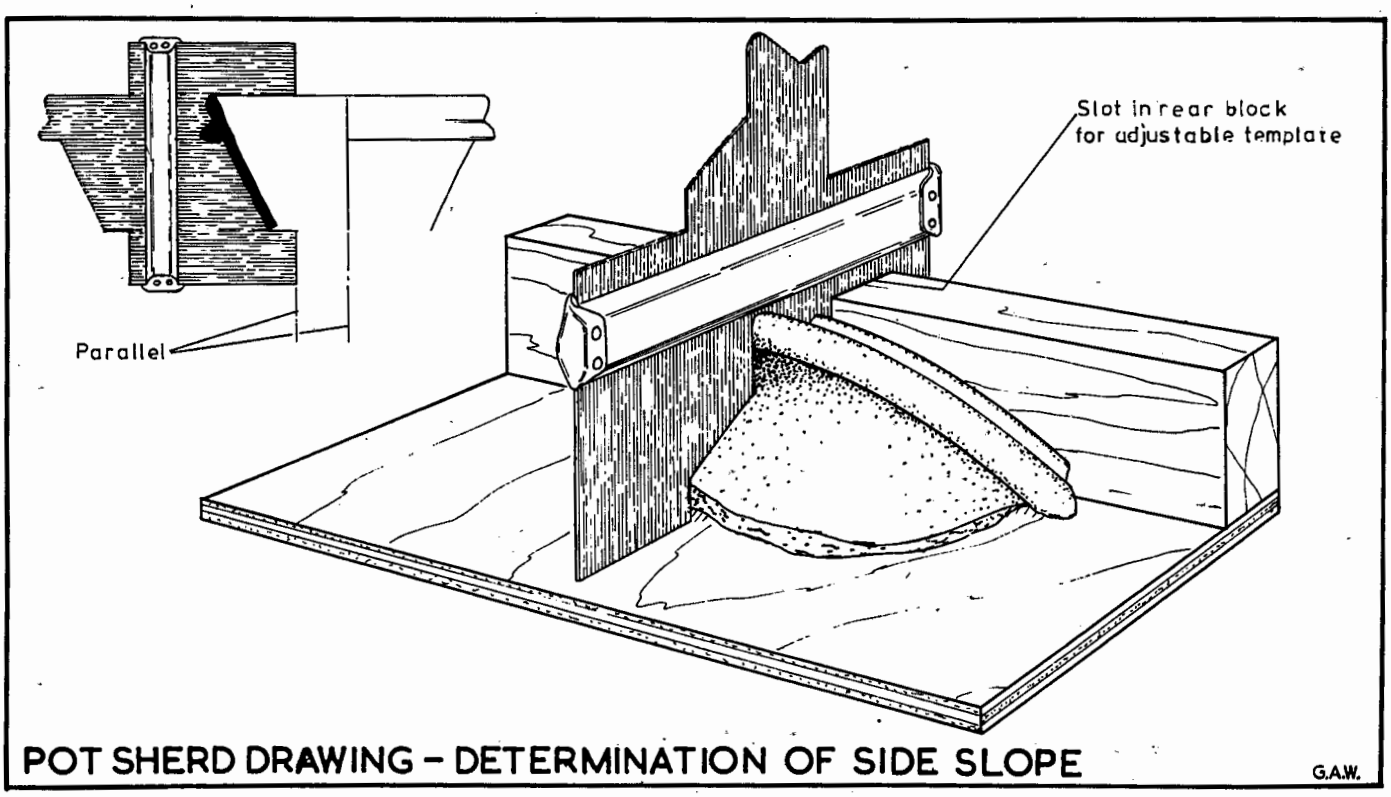


FIG 1. OBJECT DRAWING-OUTLINE SCRIBER left
A small plastic set-square is ideal for modification. The tubing to hold the 0.5 or 0.35 pencil lead may be obtained from good model shops, or an old course hypodermic needle could be used (ask a veterinary surgeon).
Gentle pressure on the wire will ensure that the lead produces a continuous line while following the contour of the object.

FIG 2 POT SHERD DRAWING — DETERMINATION OF SIDE SLOPE below
The sherd is held so that the rim makes continuous contact with the vertical face of the rear block. The bottom edge of the adjustable template when maintaining contact with the platform base will be parallel to the centre-line of the whole pot. N.B. Sherds from shallow bowls or lids may be held with their rims in continuous contact with the base in which case the bottom edge of the adjustable template when maintaining contact with the base will be horizontal.



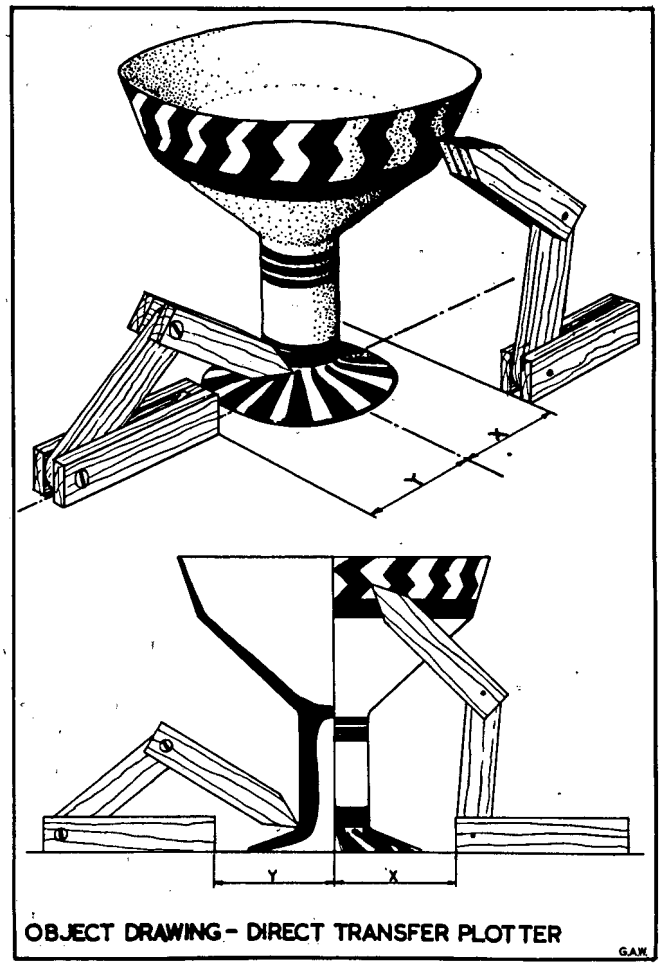
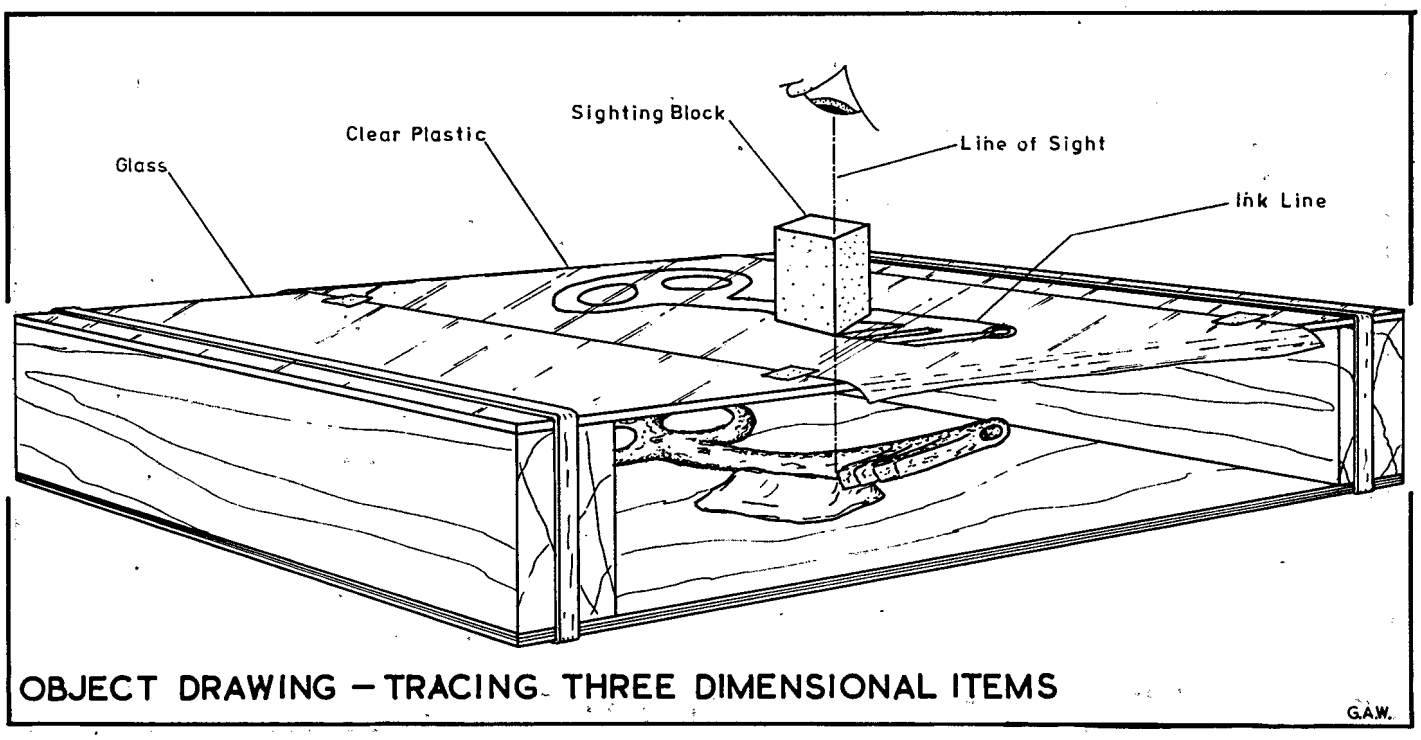


FIG 3 OBJECT DRAWING - DIRECT TRANSFER PLOTTER left
Quite easily constructed from strip wood approx. 5 mm×20 mm in section. The central link is clamped between the sides of the outer arms by a countersunk wood screw or small nut and bolt. Upper arm and link lengths should be about ¾ height of object. An extra joint in the upper arm allows greater versatility and simplifies the gauging of the thickness of the object.

FIG 4 OBJECT DRAWING - TRACING THREE DIMENSIONAL ITEMS below
The 5 thou. thick clear Polyester sheet used for double glazing is ideal as black drawing ink 'takes' satisfactorily. Any small block with a flat base and having at least one vertical edge will serve as a sighting block. Use of the sighting block as shown will eliminate paralax and ensure that the 'tracing' will be accurate. Ornamentation etc., on the object's surface can also be copied.



BOOK REVIEWS

MARSHFIELD, IRONMONGERS PIECE EXCAVATIONS 1982-3. AN IRON AGE AND ROMANO-BRITISH SETTLEMENT IN THE SOUTH COTSWOLDS, by Kevin Blockley, British Archaeological Reports (British Series 141), 1985. ISBN 0 86054 3439, 378 pp, 18 plates, 98 figures. £22 (post free)

The chance find of a Roman oven by the farmer while ploughing in 1981 led to this excavation on the South Cotswold plateau, sponsored by the Avon Planning Department with the aid of the Manpower Services Commission. The director, Kevin Blockley, succeeded not only in conducting a large excavation to high standards but also in welding together many contributions to fill out this excellent report, which has been published only two years after the dig had, regrettably, to be curtailed. This is a substantial achievement and reflects credit on all concerned.

The many flints found in Ironmongers Piece (studied in detail by Anne Everton) show there was Late Neolithic occupation thereabouts, but no undisturbed remains of that period were found. By the mid first century BC, the countryside was open: part was grassland, part ploughed fields; cattle and sheep were kept. At this time, a circular wooden building, with two adjacent boundary ditches, was erected; although the remains of this period have not been completely explored, the building may well have been a shrine. It was rebuilt in stone in the mid first century AD, and a combination of features (including buried deposits, and the painted plaster on the interior face of the building's wall) suggest continued religious use, even though no specifically religious objects were found. Nearby was a wooden structure (perhaps also a shrine or shelter, rather than a platform) within a timber enclosure; a 25-30 year old man was buried in the centre of the south side of the enclosure. Unfortunately, damage by ploughing had made it impossible to interpret the function of this structure more fully; nor is there any trace of living or working buildings associated with either of these early Roman structures, though the animal bones from this period show that normal farm life was in progress round about. Cattle were being kept for milk and draught, and sheep for wool and possibly milk; there were also pigs and chickens, dogs (of medium size) and horses, scavenging crows, and (caught in the nearby countryside from time to time) hares and woodcocks.

In the mid 3rd century AD these structures were demolished and the site was laid out completely afresh. A rectangular stone house, with farmyard, enclosure wall, crop-drying oven, and other features, was built. This was occupied, with successive extensions and modifications, till early in the 5th century. In c. 360-370, the bodies of several people (adults, children and new-born babies) were buried in stone-slabbed graves outside the farmyard wall. During the first part of the 5th century, the house was mostly abandoned and partly demolished; people continued to live in three rooms for a period, but, presumably by c. 450, the site was deserted, and (at an unknown date) the ruins were finally robbed of useful materials. The 3rd-4th century farm economy was generally similar to that of the preceding phase. Sheep now outnumbered cattle; horses were used in some number as pack animals; as well as dogs (mostly small) there were cats, which had wood mice and house mice to catch. The remains of nine water voles, all found in one context, probably signal the activities of an owl. Woodcocks, hares, and red deer were caught, but, as in the earlier phases, almost no remans of woodland plants or trees have been found; the fields, then as now, must have been divided by dry-stone walls.

There are many interesting details throughout the excavation report; the finds repors (many of them written or edited by P M Barford) are full and informative (that on pennant tiles, for example, is especially good). The drawings are excellent, and the pottery catalogue, with descriptions and attributions of fabrics, will be very helpful for working on other finds from the region. There are, unfortunately, many spelling and proof-reading errors; some are especially irritating or misleading (eg. 'unica' for 'uncia' several times on p 168, Long Ashton 'east' of Bristol on p 224, and figure 88, said in the caption to be scale ½, must surely be ¼). The excellent figure 4 (referred to annoyingly in the text as figure 3) has been over-reduced and is too faint, but gives an excellent idea of Roman occupation in the South Cotswold area. Distant readers would benefit from a fuller description of the natural setting of the site, and even locals could be misled by the statement that it lies 'in the gently sloping valley of Broadmead Brook', when it in fact stands over the crest of the hill on that valley's southern side and overlooks a different (dry) valley.

'Marshfield' is not easy reading; there is gold here, but it must be dug for. Nor can it be the final word, for further excavations, for which its author calls (p 376) could well change the stimulating conclusions which he has here so rapidly and effectively set forth.

A J PARKER

MARSHFIELD: AN ARCHAEOLOGICAL SURVEY OF A SOUTHERN COTSWOLD PARISH

by Vince Russett, Avon County Council, Bristol, 1985. 108 pages + fiche. £3.60 (post free)

As stated in the introduction, this volume forms part of a survey of the parish of Marshfield, formerly in south Gloucestershire, now in east Avon. It is the result of two years' work by 13 people under the supervision of Vince Russett, working as part of Avon County Council's ACCES (Avon County Community and Environment Scheme) for

unemployed people. It consists of 21 sections ranging over the geology and periods of settlement in the parish to place names, folklore and World War II features.

In almost every way this is a highly commendable and exemplary book and it should serve as a model, not only in Avon but generally, for those seeking to produce an archaeological parish survey of their area. It is *not* a local history, although it contains much that is and will be of immense interest to local people, neither is it a parish survey, as they are produced by the Devon and Cornwall Archaeological Societies, for example, or by BAARG (before the recent Tytherington Survey). There are no bald lists of features with grid references and bibliographical details which are indigestible to most of us. Rather, Vince Russett has sought to integrate *relevant* local history and details of sites and features located on the ground into some meaningful and satisfying account of peoples' activities in Marshfield in the past. This approach, format, selection of methodology and illustrations *should* form the model for subsequent topographical studies in the Bristol region. Clearly, there is some relationship with the survey of Englishcombe and this reviewer detects the quiet but encouraging hand of Rob Iles in the consistent format.

The book is in A4 format with small double column text with unjustified margins. The titling is bold and there are ample illustrations (60). Of these, no less than 13 are maps of the whole parish at different periods with sites marked on. It would have helped to have more of these sites individually labelled (for example, the medieval sites on Fig 19, p41). A large number of the rest of the illustrations are surveys of earthworks located and detailed sections of the parish at different dates. These plans and the notes with them form a body of data which we should all aim to compile for every other parish in the region! The accompanying text is well written, fully referenced and displays a knowledge of *general* developments, as a background to Marshfield itself, which is usually lacking in local studies and makes most local history irrelevant in helping to solve problems about past activities in an area. It is this context and 'non-local-history' approach which puts this survey in a higher class to most local history and parish surveys.

As an example of new academic information contained in it, the reader should look at the 'Post Roman and Saxon' and 'Medieval and Later Settlement' sections, and especially Figs 17 and 19. For the first time in the West Country we can see here those same developments which are becoming common, for example in the north of England and the east Midlands, where former scatters of farmsteads and/or hamlets are abandoned as new sites, hamlets but not villages in this case, develop. In Marshfield this is complemented with the new town created in the 13th century. Also, we need more detailed fieldwalking with rigorous collection and plotting of potsherds (as shown in Figs 11-15) to see such changes in settlement patterns.

The methodology of the survey is impressive. Rarely do we know from local work *exactly* what was undertaken against which we can judge what was achieved. However, in this survey Fig 7 shows us the extent of fieldwork, with only some 15% of the parish *not* being fieldwalked. Of this, 10% represents the refusal of *one* farmer to allow access by Vince Russett's team. This reviewer finds it incredible that one person can still have this effect on such an uncontentious piece of research and it is a sad reflection of the feudal proprietorial rights which still exist in this country. Pottery scatters were carefully surveyed (Figs 11-15) with weights of sherds found annd numbers of sherds being recorded. Industrial Archaeology is covered, as are the fast-disappearing aspects of the Second World War. This *is* now archaeology as so little of what was done is not recorded anywhere and a generation has grown up (mine) which did not live through 1939-45. Finally, the *folklore* is recorded — not goblins and gremlins, but local explanations for features and sites. How often have we ignored this in the past and yet it is of interest both historically and psychologically - here we have an exemplary way of how to deal with 'local hearsay'!

If I have any criticisms, it is that a few photographs of buildings and earthworks, including air views, would have been useful, and with 108 pages perhaps an index was called for. But at £3.60, a price designed to sell a lot of copies to local people, this represents exceptional value (commercial publishers please note) and again Avon County Council are to be congratulated for taking the publication risk as well as encouraging such research. Everyone who is involved in local work within the Bristol region, in which I include Gloucestershire, Wiltshire and Somerset as well as Avon, should have a copy of the Marshfield survey; they should read it carefully, study the methodology and ideas in it and apply what they have read to their own areas of interest. Future parish surveys and local histories would benefit immensely and we should all understand our communal historic environment better. We have been done a great service by this volume.

M. ASTON

THE TEMPLE OF SULIS MINERVA AT BATH (VOLUME 1 - THE SITE) by Barry Cunliffe and Peter Davenport, Oxford Committeee for Archaeology Monograph 7, 1985 £48.00.

It is now nearly two centuries since the sculptured components of the temple of Sulis Minerva and its associated monuments came to light in the footings of Thomas Baldwin's Pump Room. The general layout of the buildings to which they belonged has however been properly understood only since 1969, when Barry Cunliffe was able to publish an outline reconstruction of the temple precinct based on a careful study of earlier records and his own small-scale trenching in the Pump Room cellars. Now our knowledge of this major site is further amplified by the remarkably rapid publication of the spectacular 1978-1984 excavations, which involved the complete exposure of those parts of the inner temple precinct lying below the Pump Room, coupled with the re-examination of the adjacent Sacred Spring.

The present publication sets out to provide a complete and self-contained account of the temple site as currently understood; as a result certain sections of the 1969 report are reprinted with little or no alteration, a fact freely acknowledged by the authors. The recent work has produced little, for instance, to modify Samuel Lysons' admirable 1813 reconstruction of the original, purely classical, 1st century temple. Elsewhere, however, the reader will find much that is new. The mysterious origins of the hot springs, for instance, have now been largely de-mystified as a result of the geomorphological researches of Dr. Geoffrey Kellaway. In addition to producing a rich haul of votive offerings (to be published separately in 1986) the work on the Sacred Spring has revealed in fascinating detail the methods used by the Ist century Roman engineers to construct the reservoir above

it. The extensive transformation of the temple precinct around 200 A.D., in which classical clarity gave way to celtic theatricality, can now be fully appreciated; the temple is shown to have been thoroughly 'celticised' by the addition of an ambulatory and side-chambers, while the sacred spring was enclosed in an enormous barrel-vaulted grotto entered through an imposing baroque *quadrifrons*.

The subsequent secularisation (?), decay and eventual structural collapse of the inner temple precinct has been examined in detail during the recent work, although the exact chronology of what was clearly a long drawn-out decline remains inevitably tentative. Finally, the changing fortunes of the temple area in Saxon, medieval and later times have been faithfully charted by the excavators; previous antiquarian research on the site is fully discussed, with an interesting series of diagrams (figs 9-10) showing how the deposits below the the Pump Room have been eroded by successive archaeological interventions (including Cunliffe's own work of the 1960's!).

This is a good looking publication, well-printed on high-quality paper with attractive glossy board covers (one has doubts, however, about the long-term durability of the binding). The numerous illustrations are of the usual high standard one expects from a Cunliffe-directed enterprise; they include (in a separate folder) some fine reconstructions by Sheila Gibson and a detailed plan of the inner precinct at 1 : 50, with transparent overlays showing successive phrases of sub-Roman cobbling. While some data concerning the stratigraphy and finds is consigned to the now obligatory microfiche enough remains in print to satisfy most readers. For a definitive report the work as a whole is unusually readable, the central narrative chapters (IV-VII) in particular being models of lucid and elegant exposition. Sadly these many virtues serve only to highlight the publication's major defect; this, of course, its exorbitant price, which virtually ensures that few readers of this journal will even see a copy, let alone purchase one!

JAMES RUSSELL

INTERPRETING THE LANDSCAPE: LANDSCAPE ARCHAEOLOGY IN LOCAL STUDIES by Michael Aston, Batsford, 1985 £9.95 (pb) £14.95 (hb)

This book, I feel, with Christopher Taylor's *Village and Farmstead* (1983, reveiwed in *BAA* 3) heralds the third generation of landscape history studies. The first generation was begun 30 years ago with the books by W. G. Hoskins and M. W. Beresford. The second generation was probably marked, I think, by the publication in 1974 of *Landscape Archaeology* (by Michael Aston and Trevor Rowley) and *Fieldwork in Medieval Archaeology* (by Christopher Taylor). The pioneering work of Hoskins and Beresford was based mainly upon their own researches, but since then the subject has grown so much that general books have to draw from many researchers and disciplines. This book does indeed use a very diverse range of sources and methods to build up a picture of past landscapes, however it still remains a very readable introduction just as the books of Hoskins and Beresford were.

A series of major topics are covered by this book. The chapter on 'Early Landscapes' is only one of the shortest but also contains the most photographs. This book concentrates on evidence from post-Roman landscapes but one of its recurring themes is that there is much more pre-history in most landscapes than was previously imagined. The first chapter on fieldwork methods ('How do we know what we know') and the three central chapters on settlement will contain much that is already familiar to fieldworkers. Less familiar, and not so obvious visually, are the hierarchical concepts of different places in the chapters on Estates and Status in the landscape. 'Sites and Patterns' gives a brief but useful review of some of the work and ideas of historical geographers. At the latter end of the are chapters on land use, fields and communications.

A constant theme in all the chapters is the complex way that the different parts of a landscape are inter-related, each dependent on the others and all subject to change. The final chapter 'What does it all mean?' is a short state of the art of landscape studies with suggestions for further research. Much emphasis is placed on ideas developed in different parts of England having a wide applicability and it is common for reviewers of such books to stress that point when there are no local examples. In this case *BAARG* members have it both ways, not only is there an abundance of original ideas and research but also many studies and plans from this area.

This book is written in a very personal style, even giving a quick landscape history of the last five addresses of the author! Researchers are named in the text, dispensing with the rather stilted Harvard referencing system (Author/date) we have become used to. Even so there is still a very good bibliography (10 pages long) divided by chapter headings. The book is brimming over with nearly a hundred illustrations and figures in the manner we have cometo expect from good landscape history books. However, some of the illustrations did not reproduce as well as might be expected from a book of this quality.

It could be said that many of the examples and evidence in this book have already been published, albeit often in obscure journals. But this book succeeds in not only drawing together very diverse current research but also develops many of the ideas which have come out of that research. For anyone doing fieldwork it should be essential reading.

R. ILES