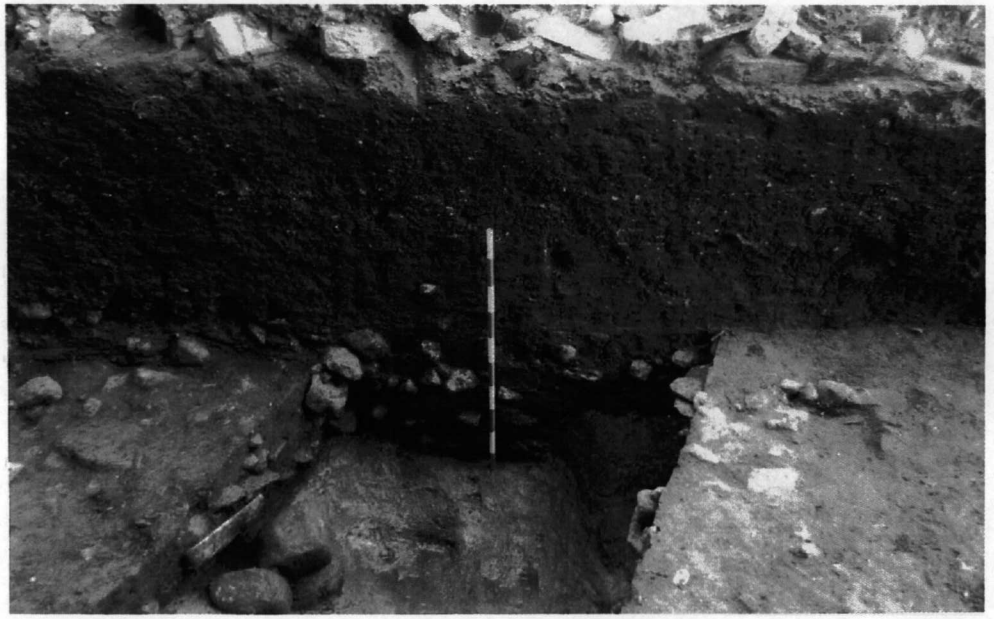


Plate 1. Trench 1 – part of Section 1 showing hand excavated sondage across feature [33]; from the NE, scale 1m

Plate 2. Trench 1 – NW portion of trench showing edge of peat formation in plan; from the NW, scale 1m

Plate 3. Trench 2 – part of Section 2; from the SW, scale 1m

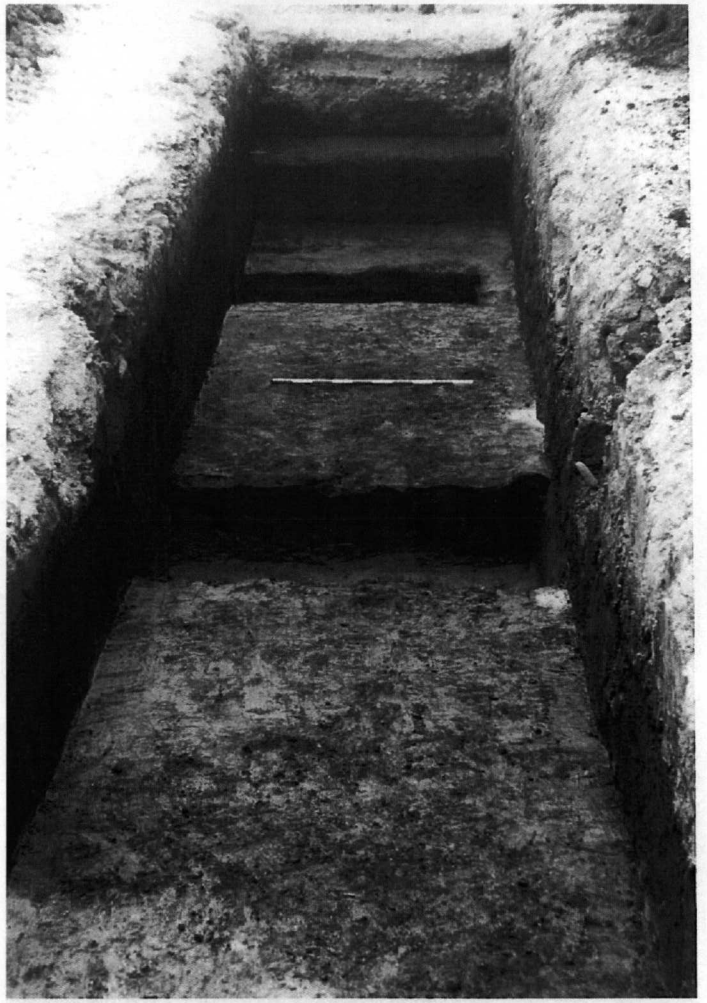


Plate 4. Trench 3 view along trench; from the NE, scale 1m

APPENDIX A: CONTEXT DESCRIPTIONS

CONTEXT [1]	deposit, layer, compact, mid orange brown, silty sand, very frequent fine sub-rounded and sub-angular gravel, frequent large sub-angular and angular fragments of sandstone, moderate small angular fragments of concrete and CBM, 0.5m thick
TRENCH	5
INTERPRETATION	dump layer of rubble hardcore underneath concrete slab
CONTEXT [2]	deposit, fill, friable, mid to light brown, silty sand, very frequent fine to medium sub-rounded, sub-angular and angular gravel, moderate lenses of mid grey silty sand, occasional large sub-rounded cobbles, up to 0.45m wide, 0.20m thick,
TRENCH	5
INTERPRETATION	fill of gully [3]; heavily contaminated with diesel
CONTEXT [3]	cut, linear, NE-SW orientated, moderately sloping sides, rounded base, up to 0.45m wide, 10m long, 0.20m deep
TRENCH	5
INTERPRETATION	post-medieval gully, possibly a drain or a boundary feature
CONTEXT [4]	deposit, layer, heavily compacted, dark grey, slightly sandy clayey silt, moderate fine sub-rounded and sub-angular gravel
TRENCH	5
INTERPRETATION	natural boulder clay in trench 5; heavily contaminated with diesel
CONTEXT [5]	deposit, layer, loose, grey to orange brown, sandy silt, frequent fragmented and whole bricks, very frequent gravel, 0.38m thick
TRENCH	1
INTERPRETATION	layer of rubble hardcore used as a bedding layer for modern gravel surface
CONTEXT [6]	deposit, layer, firm, dark brown to black, slightly sandy silt, occasional mortar flecks, occasional small sub-angular stone fragments, 0.54m thick
TRENCH	1
INTERPRETATION	probable dump layer or reworked garden soil of post-medieval date
CONTEXT [7]	deposit, layer, firm, mid brownish grey, sandy silt, moderate fiie sub-rounded and sub-angular gravel, occasional charcoal flecks, 0.50m thick
TENCH	1
INTERPRETATION	developed soil of medieval date
CONTEXT [8]	deposit, fill, firm, dark greyish brown, clayey sandy silt, very frequent medium and large rounded and well rounded stones and cobbles, frequent fine sub-rounded and sub-angular gravel, up to 1.4m wide, 0.45m thick
TRENCH	1
INTERPRETATION	secondary fill of feature [33], a medieval wall footing
CONTEXT [9]	deposit, fill, friable, mid yellowish grey, fine sand, no inclusions, 0.55m wide, 0.30m thick
TRENCH	1
INTERPRETATION	upper fill of service trench [15]
CONTEXT [10]	deposit, layer, soft dark brown to purplish black, peat and fine silt, occasional lenses of felted vegetable matter, 4.6m N-S, 1.5m E-W, thickness unknown
TRENCH	1
INTERPRETATION	layer of (slightly decayed?) silty peat, exposed in the northern portion of trench 1
CONTEXT [11]	deposit, layer, finn, mid greyish brown, slightly clayey sandy silt, occasional fine sub-rounded and sub-angular gravel, occasional charcoal flecks, thickness unknown
TRENCH	1
INTERPRETATION	developed soil of medieval date, similar to deposit [7], but undisturbed
CONTEXT [12]	deposit, layer, compact, mid yellowish grey, sandy clay, moderate fine sub-rounded and sub-angular gravel, frequent larger sub-rounded stones, thickness unknown
TRENCH	1
INTERPRETATION	natural boulder clay in trench 1
CONTEXT [13]	deposit, layer, soft, light yellowish grey, fine sand, occasional small flecks of decayed sandstone, thickness unknown
TRENCH	1
INTERPRETATION	natural glacial sand exposed in the northern end of trench 1; stratigraphically below deposit [12]

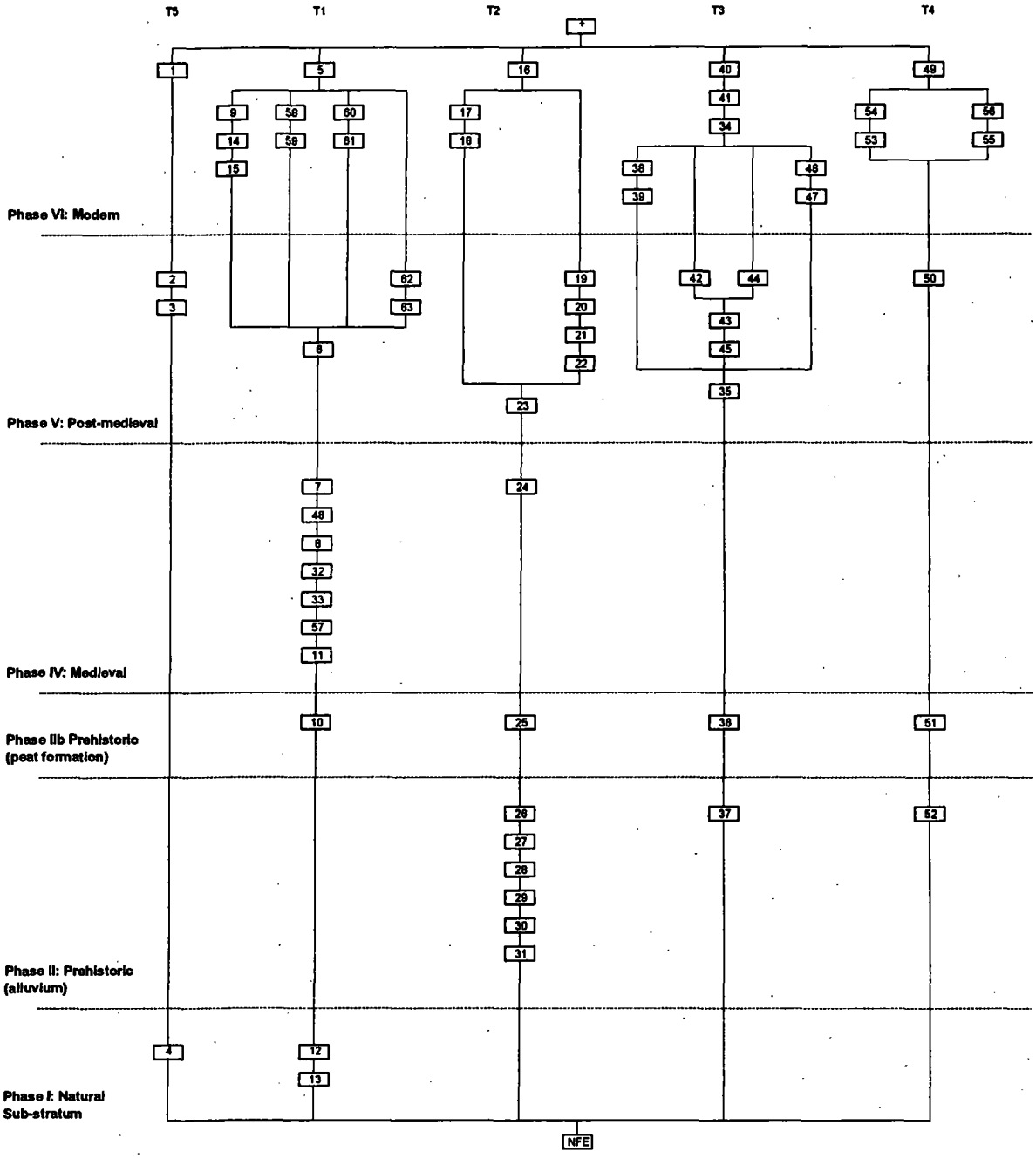
CONTEXT [14]	deposit, fill, stiff, mid grey, silty clay, frequent fragmented brick, occasional peaty lenses, 0.55m wide, thickness unknown
TRENCH	1
INTERPRETATION	lower fill of service trench [15], contains ceramic drain/sewer pipe, not fully excavated
CONTEXT [15]	cut, linear, N-S orientated, vertical sides, base unknown, 2.05m N-S, 0.55m E-W, depth unknown
TRENCH	1
INTERPRETATION	service trench, contains live drain/sewer and fills [9] and [14]
CONTEXT [16]	deposit, layer, loose, mid orange to red, brick rubble within a matrix of mid brown coarse sand and crushed mortar, occasional medium gravel, occasional sub-angular to angular sandstone fragments, 0.20m thick
TRENCH	2
INTERPRETATION	layer of rubble hardcore used as a bedding layer for the modem gravel surface.
CONTEXT [17]	deposit, layer, firm, dark brownish grey, sandy silt, frequent fine gravel and pea grit, occasional fragments of CBM, very occasional fiagments of coal, 0.25m wide, 0.40m thick
TRENCH	2
INTERPRETATION	backfill of service trench [18]
CONTEXT [18]	cut, linear, NW-SE orientated, near vertical sides, rounded, smooth base, 0.25m wide, 0.40m deep
TRENCH	2
INTERPRETATION	modem service trench, contains ceramic pipe, backfilled with [17]
CONTEXT [19]	deposit, fill, firm, dark brownish grey, silty clay, frequent fine gravel, frequent medium stone fragments, frequent cobbles, frequent pea grit, moderate small coal fragments, occasional fiagments of CBM, 0.40m thick
TRENCH	2
INTERPRETATION	silting fill of post-medieval drain [20]/[21]
CONTEXT [20]	masonry, brick and mortar, stretcher bond, bricks are 240mm x 110mm x 75mm, bonded by a light yellowish brown sandy mortar, 0.75m N-S, 0.70m E-W, 0.48m high
TRENCH	2
INTERPRETATION	brickwork of post-medieval drain
CONTEXT [21]	masonry, stone flags, horizontally laid, 0.88rh N-S, 0.70m E-W
TRENCH	2
INTERPRETATION	base slabs of post-medieval drain
CONTEXT [22]	cut, linear, E-W orientated, vertical sides, flat base, 0.75m N-S, 0.7m E-W, 0.48m deep
TRENCH	2
INTERPRETATION	trench-built construction cut for post-medieval drain, containing [19], [20], [21]
CONTEXT [23]	deposit, layer, friable, mid greyish brown, silty clayey sand, moderate pea grit, occasional sub-rounded and sub-angular fine and medium gravel, occasional coal fragments, very occasional flecks and small fragments of CBM and pottery, 0.32m thick
TRENCH	2
INTERPRETATION	probable dump layer or reworked garden soil of post-medieval date
CONTEXT [24]	deposit, layer, soft, friable, mid brownish grey, silty sand, frequent sub-angular and sub-rounded medium cobbles, occasional pea grit, 0.15m thick
TRENCH	2
INTERPRETATION	probable yard surface of medieval date
CONTEXT [25]	deposit, layer, very soft, very dark brown to black, peat, frequent leaves, stalks, and felted vegetable matter, occasional wood fragments, very occasional mollusc shells, 0.40m thick
TRENCH	2
INTERPRETATION	peat formation
CONTEXT [26]	deposit, layer, very soft, light greenish yellow, turning whitish grey on exposure, fine silt, very frequent mollusc shells, moderate organic remains, 0.25m thick
TRENCH	2
INTERPRETATION	alluvial horizon
CONTEXT [27]	deposit, layer, very soft, light greenish yellow, turning light grey on exposure, fine silt, very frequent mollusc shells, moderate organic remains, very occasional insect remains, 0.12m thick
TRENCH	2
INTERPRETATION	alluvial horizon

CONTEXT [28]	deposit, layer, soft, mid bluish grey, silty clay, moderate organic remains, 0.65m thick
TRENCH	2
INTERPRETATION	alluvial horizon
CONTEXT [29]	deposit, layer, mid greenish grey, very fine clayey silt, sterile - no inclusions, 0.13m thick
TRENCH	2
INTERPRETATION	alluvial horizon
CONTEXT [30]	deposit, layer, soft, striated between light greenish yellow, light greenish grey, and mid greyish brown, clayey silt and decayed organic remains, 0.15m thick
TRENCH	2
INTERPRETATION	laminated alluvium and organic material
CONTEXT [31]	deposit, layer, soft, mid greenish grey, silty clay, moderate organic remains, depth unknown
TRENCH	2
INTERPRETATION	alluvial horizon at the base of sondage in trench 2
CONTEXT [32]	deposit, fill, stiff, mid to dark greyish brown, clayey sandy silt, very occasional fine sub-rounded gravel, occasional charcoal flecks, 0.90m wide, 0.35m thick
TRENCH	1
INTERPRETATION	lower fill of feature [33]
CONTEXT [33]	cut, linear, N-S orientated then turning E-W at the southern end, moderately sloping sides, rounded, uneven base, 5.4m N-S, 1.4m E-W, 0.90m wide, 0.52m deep
TRENCH	1
INTERPRETATION	L-shaped construction trench for probable wall footing, containing fills [8] and [32]
CONTEXT [34]	deposit, layer, loose, mid orange/red, brick rubble within a matrix of mid brown coarse sand and mortar, occasional medium gravel, occasional sub-angular to angular sandstone fragments, 0.15m thick
TRENCH	3
INTERPRETATION	layer of rubble hardcore; bedding layer for the modern gravel surface
CONTEXT [35]	deposit, layer, firm, mid greyish brown, silty clay, occasional fine rounded and sub-rounded gravel, 0.30m thick
TRENCH	3
INTERPRETATION	post-medieval soil horizon
CONTEXT [36]	deposit, layer, very soft, very dark brown to black, peat, frequent leaves, stalks, and felted organic remains, occasional wood fragments, very occasional insect shells, 1.35m thick
TRENCH	3
INTERPRETATION	peat formation in bench 3
CONTEXT [37]	deposit, layer, very soft, light yellowish grey turning mid brown on exposure, fine silt, very frequent mollusc shells, 0.70m thick
TRENCH	3
INTERPRETATION	alluvial horizon
CONTEXT [38]	deposit, fill, stiff, dark greyish brown, sandy silty clay, moderate sub-angular gravel, occasional small angular CBM fragments, occasional charcoal flecks, 0.60m wide, 0.30m thick
TRENCH	3
INTERPRETATION	backfill of drain [39], contains ceramic drain pipe
CONTEXT [39]	cut, linear, N-S orientated, steep to moderately sloping sides, rounded base, 1.7m N-S, 0.60m wide, 0.30m deep
TRENCH	3
INTERPRETATION	modern drain trench
CONTEXT [40]	deposit, fill, loose, light grey, occasional coarse gravel, occasional small angular CBM fragments, 0.60m wide, 0.50m thick
TRENCH	3
INTERPRETATION	backfill of drain trench [41] – same material as the existing yard surface
CONTEXT [41]	cut, linear, N-S orientated, steeply sloping sides, flat base, 1.7m N-S, 0.60m wide, 0.50m deep
TRENCH	3
INTERPRETATION	modern drain trench
CONTEXT [42]	deposit, fill, stiff, dark greyish brown, sandy silty clay, moderate sub-angular gravel, occasional small angular CBM fragments, occasional charcoal flecks, 0.95m wide, 0.50m thick
TRENCH	3
INTERPRETATION	backfill of construction cut [45]

CONTEXT [43]	masonry, drain, sandstone and brick, N-S orientated, brick laid in stretcher bond, bricks are 240mm x 110mm x 75mm, bonded by a light yellowish brown sandy mortar, dressed and smoothed sandstone block of various dimensions, set onto a sandstone flag and brick base, 1.70m N-S, 0.80m E-W, 0.40m high
TRENCH	3
INTERPRETATION	post-medieval drain, partially exposed
CONTEXT [44]	deposit, fill, soft, dark brown, clayey silt, moderate charcoal flecks, occasional fine sub-rounded and rounded gravel, occasional lenses of pea grit, 0.30m thick
TRENCH	3
INTERPRETATION	silting-up fill of drain [43]
CONTEXT [45]	cut, linear, N-S orientated, near vertical sides, flat base, 1.7m N-S, 0.95m E-W, 0.50m deep
TRENCH	3
INTERPRETATION	trench built construction cut for drain [43]
CONTEXT [46]	deposit, fill, stiff, dark greyish brown, sandy silty clay, moderate fine to medium sub-rounded and sub-angular gravel, occasional charcoal flecks, at least 0.87m wide, 0.46m thick
TRENCH	3
INTERPRETATION	backfill of drain trench [47]
CONTEXT [47]	cut, linear, N-S orientated, moderately sloping sides, base unknown, 1.7m N-S, at least 0.87m E-W, 0.46m deep
TRENCH	3
INTERPRETATION	modern drain trench, not fully exposed in trench
CONTEXT [48]	deposit, layer, stiff, mid brown, clayey sandy silt, very frequent small irregular lenses of orange yellow sand, frequent fine and medium sub-rounded and rounded gravel, 3.9m N-S, 0.80m E-W, 0.17m thick
TRENCH	1
INTERPRETATION	probable occupation layer, has accumulated inside the building represented by feature [33]
CONTEXT [49]	deposit, layer, loose, mid orange/red, brick rubble within a matrix of mid brown coarse sand and mortar, occasional medium gravel, occasional sub-angular to angular sandstone fragments, 0.70m thick
TRENCH	4
INTERPRETATION	layer of mbble hardcore used as a bedding layer for the existing gravel surface
CONTEXT [50]	deposit, layer, firm, mid greyish brown, silty clay, occasional fine rounded and sub-rounded gravel, 0.28m thick
TRENCH	4
INTERPRETATION	probable post-medieval soil horizon
CONTEXT [51]	deposit, layer, very soft, friable, very dark brown to black, peat, frequent leaves, stalks, and felted organic material, occasional wood fragments, very occasional insect shells, 1.05m thick
TRENCH	4
INTERPRETATION	peat formation in trench 4
CONTEXT [52]	deposit, layer, very soft, light yellowish grey turning mid brown on exposure, fine silt, very frequent mollusc shells, 0.50m thick
TRENCH	4
INTERPRETATION	alluvial layer in bench 4, partially exposed below layer [51]
CONTEXT [53]	cut, linear, N-S orientated, near vertical sides, flat base, 1.8m N-S, 0.15m wide, 0.18m deep
TRENCH	4
INTERPRETATION	modern drain bench
CONTEXT [54]	deposit, fill, loose, mid greyish orange, coarse silty sand, occasional fine sub-rounded gravel, occasional charcoal flecks, 0.15m wide, 0.18m thick
TRENCH	4
INTERPRETATION	fill of drain trench [53], contains ceramic drain pipe
CONTEXT [55]	cut, linear, N-S orientated, vertical sides, flat base, 1.8m N-S, 0.10m wide, 0.14m deep
TRENCH	4
INTERPRETATION	modern drain trench
CONTEXT [56]	deposit, fill, loose, dark brownish black, fine slightly sandy silt, occasional pea grit, frequent charcoal flecks, 0.10m wide, 0.14m thick
TRENCH	4
INTERPRETATION	fill of drain trench [55], contains ceramic drain pipe

CONTEXT [57]	deposit, layer, stiff, mid to dark greyish brown, silty clay, occasional fine sub-rounded gravel, occasional pea grit, occasional charcoal flecks, occasional small irreguiar lenses of peat, 0.80m E-W, 0.15m thick
TRENCH	1
INTERPRETATION	occupation deposit cut by probable wall footing [33], seen only in section
CONTEXT [58]	deposit, fill, loose, dark brown, sandy silt, very frequent medium sub-rounded and rounded gravel, 0.62m wide, 0.45m thick
TRENCH	1
INTERPRETATION	fill of service trench [59]
CONTEXT [59]	cut, linear, E-W orientated, steep to near vertical sides, smooth flat base, sloping down to the south, 1.8m E-W, 0.62m N-S, 0.45m deep
TRENCH	1
INTERPRETATION	modem gas pipe bench
CONTEXT [60]	deposit, fill, firm, mid greyish brown, slightiy sandy clayey silt, frequent fine sub-rounded and sub-angular gravel, 1.0m vids, 0.38m thick
TRENCH	1
INTERPRETATION	fill of drain trench [61], contains ceramic pipe
CONTEXT [61]	cut, linear, E-W orientated, moderately sloping sides, rounded smooth base, 1.8m E-W, 1.0m wide, 0.38m deep
TRENCH	1
INTERPRETATION	modem drain bench
CONTEXT [62]	masonry, stone and mortar, E-W orientated, large smoothed and rounded sandstone blocks, no coursing, bonded with a stiorigly cemented/indurated light greyish white sandy mortar, 4.45m E-W, 0.65m N-S, 0.45m thick
TRENCH	1
INTERPRETATION	post-medieval wall footing, bench built, exposed only in section
CONTEXT [63]	cut, linear, E-W orientated, near vertical sides, flat smooth base, 4.44m E-W, 0.65m wide, 0.45m deep
TRENCH	1
INTERPRETATION	construction cut for wall footing [62]

APPENDIX B: STRATIGRAPHIC MATRIX



APPENDIX C: POTTERY ASSESSMENT

By C.G. Cumberpatch B.A., Ph.D.

INTRODUCTION

The pottery assemblage from Bedale was examined by the author on 16th May 2002. It consisted of 111 sherds of pottery weighing 2,494 grams and representing a maximum of 105 vessels. One cross-context join was noted, between contexts 32 and 48. The details of the assemblage are summarised in Table C1.

TYPE SERIES

The assemblage was too small to warrant the construction of a site-specific type series and the majority of the sherds were assigned to previously defined categories. The majority of the pottery was of Tees Valley ware types, as defined by Wrathmell (1989, 1990) and Patterson (1985). There was considerable minor variation between the sherds and these variations within the group are noted in Table C1.

Tees Valley ware type A

Very small quantities of Tees Valley A ware was noted and this invariably accompanied types B and C.

Tees Valley ware types B and C

Wrathmell has defined Tees Valley ware type B as hard and gritty, fired to a uniform red colour. The principal points of his definition conform closely to the characteristics of a considerable part of the Bedale assemblage, although the texture of the wares might be better described as sandy as the quartz inclusions are rarely over 1mm in size, with the normal size range being between 0.5mm and 0.8mm. The type seems to be close to that defined as Tees valley ware 1 by Patterson (1985) and the thin walled character of the vessels is particulariy marked. Type C is described as pinker than type B, somewhat finer and softer. It is also somewhat later in date. These distinctions, particulariy those based on colour, seem less clear cut amongst the Bedale assemblage than is implied in Wrathmell's descriptions, and the possibility that similar types were being manufactured at a number of sites must be considered as an explanation for this variability. This may have implications for the dating of the material, but, in the absence of other evidence, the date ranges derived from the Hartlepool assemblages have been retained in this report.

Other types

A number of sherds of an unidentified Gritty ware were noted in context 48. This was, in all probability, of local manufacture. Two sherds of Reduced Sandy ware were noted in context 32. This later medieval ware occurs in a variety of fabrics, all essentially similar and varying in minor ways, presumably related to changes in raw material sources and in the place of manufacture (cf. Cumberpatch 2001). One large sherd of Splash Glazed Sandy ware was recovered from context 11. This was probably of an eariier date, and may be residual in character.

Eariy post-medieval pottery was absent, with the exception of a single sherd of Later Medieval Green Glazed Sandy ware from context 24. Only context 2 produced any later post-medieval material.

DISCUSSION

Phase 6

Context 14 produced a small group of mixed material, including medieval pottery alongside tobacco pipe stems and recent Whiteware and Pearlware.

Phase 5

Context 2 produced a small group of mixed medieval and early modern wares, including clay tobacco pipe stems.

Phase 4

The bulk of the material came from contexts assigned to Phase 4. With the exception of a sherd of early post-medieval pottery from context 24, the remainder of the assemblage was remarkably homogeneous, consisting largely of Tees valley type wares dating to between the 13th and early 15th centuries.

The condition of the material from context 11 was noticeably worse than that from other contexts and this may be consistent with the interpretation of the context as representing a layer of garden or agricultural soil. The presence of a sherd of Splash Glazed ware indicates some degree of residuality within the context.

Contexts 32 and 48 are connected through two sherds from the rim bf a cooking pot, confirming the stratigraphic association noted in the description of the two contexts. Together with context 8, these deposits produced very similar groups of Tees Valley type wares (mainly type B, but including some type A and significant quantities which could not be easily assigned to pre-defined groups).

Context 24 produced only two sherds of pottery, one of which was significantly later than the types from contexts 8, 32 and 48, which might imply that it was of a later date.

The unstratified pottery differed little from the stratified material and includes only one sherd of recent pottery. The general rarity of post-medieval, early modern and recent pottery is unusual and remains to be explained.

REFERENCES

Cumberpatch, C.G., 2001. 'The Pottery' in: P. Came (ed.), Durham City Leazes Bowl: Archaeological Excavations 1996, *Durham Archaeological Journal* **16**, 35-118.

Patterson, H., 1985. 'Medieval Pottery 1980' in: D.H. Evans and D.H. Heslop, Two Medieval sites in Yarm, Yorkshire *Archaeological Journal* 57.

Wrathmell, S., 1987. 'The Pottery' in: G.A.B. Young, Excavations at Southgate, Hartlepool, Cleveland 1981-82, Durham *Archaeological Journal* 3.

Wrathmell, S., 1990. 'Pottery' in: R. Daniels, The development of medieval Hartlepool: excavations at Church Close, 1984-85, *Archaeological Journal* 147.

Context	Tyge	Number	Weight	ENV	Part	Form	Decoration	Date range	Notes
2	Manganese Mettled ware	1	2	1	BS	U/ID	U/Dec	C18th	
2	Tees Valley ware B type	1	11	1	Base	U/ID	U/Dec		Scoted externally
2	Roof tile	3	469	3	Fragments	Roof tile	U/Dec	Undated	Bright orange fabric
2	Tobacco pipe	1	2	1	Stem	Tobacco pipe	U/Dec	Post-medieval	
7	Brick	3	19	3	Fragments	Brick	U/Dec	Undated	
7	Tees Valley B type	2	14	2	BS	U/ID	U/Dec	C13th - EC15th	One sherd somewhat coarser than the other
7	Tees Valley ware B type	1	1	1	BS	U/ID	Shiny clear glaze with green mottling	C13th - EC15th	
7	Tees Valley ware B type	1	13	1	Rim	Jug	Shiny clear glaze with green streaks	C13th - EC15th	Buff slip under glaze; pulled spout
7	Unidentified Sandy ware	1	14	1	Rim	Jug	U/Dec	Medieval	Hard, dense fabric with occasional large (2mm) rounded non-crystalline inclusions
8	Tees Valley ware B type	2	261	1	Rim/handle	Jug	Patchy clear glaze on top of handle and shiny clear glaze with green mottling externally	C13th - EC15th	Large rod handled jug with a very thin walled body
11	Splash Glazed Sandy ware	1	141	1	Base	U/ID	Pinched feet and patchy pitted splash glaze	C12th – C13th	Unidetttified sandy ware, probably local, buff surfaces and a grey core
11	Tees Valley A ware type	1	13	1	BS	U/ID	U/Dec	C13th - EC15th	
11	Tees Valley ware B type	15	140	15	BS	U/ID	Clear glaze internally, patchy and where thick, streaky	C13th - EC15th	Patchy green glaze externally
11	Tees Valley ware B type	1	6	1	BS	U/ID	U/Dec	C13th - EC15th	Patchy pale green glaze externally
14	Brick	2	24	2	Fragments	Brick	U/Dec	Undated	
14	Coarse Sandy ware	3	7	3	BS	U/ID	U/Dec	Medieval	
14	Pearlware	1	10	1	Rim	Plate	Relief moulded flower motif and wavy edge	C19th	
14	Tobacco pipe	2	3	2	Stem	Tobacco pipe	U/Dec	Post-medieval	
14	Whiteware	1	2	1	BS/flake	U/ID	U/Dec	C19th	
24	Later Medieval Green Glazed Sandy ware	1	4	1	BS	Open vessel	Green glaze internally	LC15th - C16th	Green glaze internally and patchy green glaze externally
24	Tees Valley type ware	1	15	1	BS	U/ID	Green glaze externally	C13th - EC15th	
32	Reduced Sandy ware	2	8	2	BS	U/ID	Dark green glaze externally	C14th - C15th	
32	Tees Valley B type	3	40	3	BS	U/ID	Pale green glaze with small applied pellets and dark green streaks externally on a buff slip coating	C13th - EC15th	A slightly gritty orange fabric containing moderate to abundant quartz grit and occasional non-crystalline rock fragments with a fine buff slip externally
32	Tees Valley B type ware	1	31	1	Rim	Jug	Buff/white slip externally with patchy clear glaze	C13th - EC15th	Distinctive inturned rim and pointed cap
32	Tees Valley C type	1	50	1	Rim/handle	Handled jar	U/Dec	C14th - EC15th	A buff sandy fabric but in a form closely resembling that illustrated by Wrathmell 1990: Fig 30;18, Fig 33; 33
32	Tees Valley type A	1	7	1	Rim	Jug	U/Dec	C12th - C13th	Square sectioned rim with flat top

Context	Type	Number	Weight	ENV	Part	Form	Decoration	Date range	Notes
32	Tees Valley typo ware	2	52	2	Rim	Jug	U/Dec	C13th - EC15th	Buff sandy Tees Valley typa fabric with a rectangular sectioned collar and thick mottled green glaze
32	Tees Valley type ware	5	69	5	BS	U/ID	One sherd with patchy green glaze externally, four unglazed	C13th - EC15th	Thin walled vessel with possible buff slip externally over buff fabric with occasional non-crystalline rock fragments
32	Tees Valley type ware	1	19	1	BS	U/ID	Mottled green glaze externally	C13th - EC15th	Buff Tees Valley ware fabric with thicker walls than is normal
32	Tees Valley type ware	3	84	3	BS	U/ID	One sherd with a spot of clear glaze externally	C13th - EC15th	Buff finish externally resembling TV type A, but closer to type B in cross section and internally
32	Tees Valley type ware	2	64	2	Base	Jar/Cooking pot	U/Dec	C13th - EC15th	Sooted and burnt on underside and lower walls
32	Tees Valley type ware	1	10	1	Rim	Jar/Cooking pot	Pale green glaze externally	C13th - C14th	Sharply everted rim
32	Tees Valley type ware	1	9	1	BS	U/ID	U/Dec	C13th - C14th	Coarse textured type, heavily sooted externally
32	Tees Valley ware A type	1	24	1	Base	U/ID	U/Dec	C12th - C13th	A coarse, gritty version of the Tees valley ware fabric
32	Tees Valley ware B	4	79	3	Base/wall	Jug/jar	Pinched feet	LC13th - EC14th	Patchy green glaze externally
32	Tees Valley ware B type	4	123	3	BS	U/ID	U/Dec	LC13th - C14th	Pitted internally and externally
32	Tees Valley ware B type	6	47	6	BS	U/ID	Mottled clear glaze externally	C13th -EC15th	Thin walled vessels, two sherds with prominent rilled profile
32	Tees Valley ware B type	3	20	2	BS	U/ID	U/Dec	C13th - EC15th	
32	Unidentified Sandy ware	1	7	1	BS	U/ID	U/Dec	Medieval	A buff sandy ware with brown glaze internally, knife trimmed externally; probably local
48	Gritty ware	2	27	1	BS	U/ID	U/Dec	C12th - C14th	Gritty ware with reduced grey core, dall orange surfaces internally and externally, sooted externally
48	Gritty ware	1	7	1	Base	U/ID	U/Dec	Medieval	Sooted underside
48	Tees Valley type ware	1	28	1	Base	Jar/Cooking pot	U/Dec	C13th - EC15th	Burnt underside with thick soot externally
48	Tees Valley ware A	1	20	1	Rim	Jar/Cooking pot	U/Dec	C13th - C14th	Typical Tees Valley ware bifid rim
48	Tees Valley ware A	1	11	1	BS	U/ID	U/Dec	C13th - C15th	
48	Tees Valley ware A	1	9	1	Base	U/ID	U/Dec	C13th - EC15th	
48	Tees Valley ware B	2	11	2	BS	U/ID	Applied green pellets under clear glaze	C13th - EC15th	
48	Tees Valley ware B type	3	24	3	BS	U/ID	U/Dec	C13th - EC15th	One sherd with spots of glaze
32 / 48	Tees Valley ware B type	2	33	1	Rim	Jar/Cooking pot	Thin coat of buff slip externally giving a smooth buff finish	C13th - EC15th	Distinctive 'funnel' neck, cf. Wrathmell 199: Fig 31; 21
U/S	Stoneware	1	32	1	BS	Bottle	Stamped 'BEDALE'	C19th - C20th	Bottle, stamped with name of local wholesaler or retailer
U/S	Tees Valley ware A type	1	7	1	BS	U/ID	U/Dec	C13th - EC15th	
U/S	Tees Valley ware B type	3	113	3	BS	U/ID	U/Dec	C13th - EC15th	Buff surface externally, orange in cross section and internally
U/S	Tees Valley ware B type	1	33	1	BS	U/ID	U/Dec	C13th - EC15th	Orange throughout
U/S	Tees Valley ware B type	1	48	1	BS/Handle stump	Jug	U/Dec	C13th - EC15th	Orange throughout
U/S	Tees Valley ware B type	2	173	2	Base	U/ID	Clear glaze internally	C13th - EC15th	Burnt and slightly sooted externally
U/S	Tees Valley ware B type	1	4	1	Rim	Jug	U/Dec	C13th - EC15th	
	Total	**111**	**2494**	**105**					

Table C1. Pottery catalogue for BED 02.

APPENDIX D: CONSERVATION ASSESSMENT

By Archaeological Services University of Durham

Quantification and Condition

One iron object (BED 02 1∇) was received for x-radiography and examination. The object has a plan shape which suggested that it could be an axe head. It has a moderate amount of surface corrosion, and currently appears to be stable.

X-Radiography

The object was X-radiographed on one plate, using plan and side views. The XR showed that the object is not an axe head, as it lacks a socket. There is irregular shaping at the narrow end and also 2 possible nails/rivets or nails/rivets holes, which are visible on the XR. Examination showed that the object is wedged shaped in section.

Storage

The object has been repackaged in a sealed polythene bag with silica gel. It should be stored at a low relative humidity (<20%), which can be achieved by regular monitoring and regeneration of the silica.

Personnel

Analysis was undertaken 28th May 2002 by Jennifer Jones, Department of Archaeology, University of Durham.

APPENDIX E: ENVIRONMENTAL ASSESSMENTS AND RADIOCARBON DATING

By Archaeological Services University of Durham

1. Summary

1.1 This appendix present the results of plant macrofossil and microfossil assessments and radiocarixon dating of deposits from the archaeological evaluation on land to the rear of 26 Market Place, Bedale, North Yorkshire.

1.2 The works were commissioned by Pre-Construct Archaeology Ltd (Northem Office) and conducted by Archaeological Services University of Durham in accordance with a pre-arranged specification.

1.3 Insignificant quantities of plant macrofossils were present in the samples assessed. A significant quantity of molluscs was preserved in alluvial context 37, beneath the peat fonnation. Pollen within the peat has been shown to be both well-preserved and abundant, of probable eariy Holocene date, with potential for further sampling and analysis to provide a chronological record of environmental and vegetation changes at the site.

1.4 No further work is recommended on the plant macrofossil remains, however, the molluscs in context 37 may provide information regarding the local environment prior to formation of the peat deposits.

1.5 It is recommended that full pollen analysis is undertaken on a vertical sequence of samples from the monolith supplied. These analyses should be supported by radiocarbon dating of the deposits.

2. Project Background

2.1 The excavations were located on land to the rear of 26 Market Place, Bedale, North Yorkshire, at NGR centre: SE 265 881.

2.2 Five evaluation trenches were investigated, which revealed evidence relating to medieval, post-medieval and modem occupation of the site. Evidence for a substantial water-filled feature was also encountered in the central portion of the site. The date of this feature is uncertain but it is believed to have pre-medieval origins.

2.3 Five bulk sediment samples from selected contexts at the site were submitted for assessment of their plant macrofossil remains. These comprised:

- context 25 (sample 3) detrital peat
- context 36 (sample 15) detrital peat
- context 36 (sample 19) detrital peat
- context 37 (sample 24) alluvial deposit
- context 57 (sample 25) occupation deposit

2.4 One sample from context 25 (sample 1) was submitted for assessment of its pollen content.

2.5 Two samples from context 36 (samples 22 and 23; top and bottom of peat deposit) were submitted for radiocarbon dating.

2.6 The objective of the scheme of works was to assess the nature, extent and potential of the plant remains within the samples, provide dates for the peat comprising context 36 and to provide the client with recommendations for further work if appropriate.

2.7 Samples were submitted to Archaeological Services in May 2002. Analysis and report preparation was conducted in March-May 2003.

2.8 Bulk sample processing was undertaken by Catherine Bell and the macrofossii analysis by Dr Jacqui Cotton. Pollen processing and analysis was conducted by Dr Rob Scaife. Radiocarbon dating was carried out by Beta Analytic. This appendix has been compiled by Duncan Hale.

3. Plant Macrofossils

Methods Statement

3.1 5,000ml sub-samples of each sample were manually floated and sieved through 500µm mesh sieves. The residues were retained, described and scanned using a magnet for ferrous fragments. The flots were dried slowly then scanned at x40 magnification for waterlogged and charred botanical remains, which were identified by comparison with modern reference material held in the Environmental Laboratory. The abundance of each waterlogged species was noted and total counts of charred species were logged.

Results

3.2 The results are presented in Table 1.

Table 1: Plant macrofossil assessment results

Context		25	36	36	37	57
Sample		3	15	19	24	25
Volume processed (ml)		5,000	5,000	5,000	5,000	5,000
Volume of flot (ml)		145	300	300	20	5
Volume of flot assessed (ml)		145	150	150	20	5
Residue contents						
Coal		*				
Mammal bone fragments						*
Pot						*
Shell						*
Wood			*			
Flat matrix (relative abundance)						
Charcoal		1		1		1
Clinker						2
Coal						2
Coarse organic material		4	2	3		
Coarse sand			1	1		
Insect fragments		1			1	
Modern roots (some woody)						2
Molluscs					3	1
Waterlogged organic fragments		2	4	3	4	
Charred remains (total counts)						
(c) Triticum spp	(wheat undiff.)					1
(c) Cerealia indeterminate		2				2
Waterlogged remains (relative abundance)						
(r) Polygonum persicaria	(redshank)	1				
(t) Betula spp	(birch)				3	
(t) Rubus fruticosa	(bramble)	1				
(t) Sambucus nigra	(elder)					1
(x) Ranunculus spp	(buttercup)	1				

[c-cereal, r-ruderal, t-tree/shrub, x-wide niche]
Relative abundance is based on a scale from 1 (lowest) to 5 (highest).

3.3 The quantity of flot produced by the processing of the five samples varied between 5 and 300ml. The flot matrix components were also variable, with charcoal, coal and clinker being preserved alongside organic material and molluscs. Relatively low numbers of charred and waterlogged seeds were preserved in the flots.

Discussion

3.4 Coal was present in the residue of context 25, sample 3, while very occasional fragments of charcoal were present in the flot. This limited quantity of fuel waste may not be contemporary with the context, which was provisionally dated as prehistoric. The coarse organic material and waterlogged plant fragments in the flot indicate that the context was waterlogged. The dominance of fine grained mineral matter and organic material in the sample suggests that the water depth of the area where the peaty material accumulated was shallow, with limited input of water and sediment from elsewhere. Two degraded charred cereal grains were present in the flot, suggesting that domestic or agricultural waste material was not deposited in or near to this area.

3.5 Waterlogged seeds preserved in the flot are low in number and are not from species associated with waterlogged, peaty environments. The absence of large numbers of seeds from wetland habitats could indicate that the wetland area was not heavily vegetated or that fluctuating water levels over time have resulted in the degradation of fragile organic material. Occasional aerobic conditions in the context are also indicated by the degraded appearance of the waterlogged plant material in the flots. It is also possible that a Sphagnum vegetation association, with few seed-producing plants, colonised the area.

3.6 The flots and residues from context 36 (samples 15 and 19) were dominated by natural deposits, as only rare fragments of charcoal were present in sample 19. Neither waterlogged nor charred plant macrofossils were preserved in the flots. In similarity to context 25, this absence of seeds could be the result of fluctuating water levels over time or could reflect a peat bog habitat with few seed-producing species. The absence of significant anthropogenic finds suggests that the feature was not close to, or subjected to, waste deposition from human activity.

3.7 The small volume pf flot from context 37 (sample 24), an alluvial layer, reflects the dominance of fine-grained mineral matter in the sample, which will have been washed from the sample during the processing procedure. No finds indicative of human activity were preserved in the flot. Birch seeds were preserved in the sample. The size and morphology of birch seeds allows easy transport by wind, hence their presence in the sample suggests birch woodland either at the site or in the area around the site. A significant number of molluscs were preserved in the sample. Assessment of the species composition could provide further evidence of the former environmental conditions.

3.8 Context 57 (sample 25), an occupation deposit, produced a very small volume of flot containing fragments of charcoal, coal and clinker. These low quantities suggest that fuel waste was not deposited directly into the context and may be residual, from waste deposits nearby. Moreover, the single charred wheat grain and two degraded cereal grains in the flot also indicate that significant quantities of waste material did not accumulate in the context.

Conclusions

3.8 Four of the five samples assessed contained natural deposits indicative of a waterlogged environment with limited exposure to human activity. Contexts 25 and 36 contained material representative of a peaty habitat. The relatively poor preservation of the organic matter and absence of large numbers of seeds could suggest that water levels have fluctuated over time and any fragile seeds may not have survived. The seeds in context 37 suggest the presence of birch in or around the site. The composition of plant macrofossils in the sediments can provide little indication of the chronology of the deposits.

3.9 Relatively large numbers of molluscs were preserved in the alluvial sediment from context 37. Although the molluscs may have been washed into the silts, the identification of the species composition could determine the origin of both molluscs and associated silts and the characteristics of the former environmental conditions.

3.10 The insignificant quantity of material deriving from human activity in the medieval deposit of context 57 can produce no environmental or economic data.

4. Pollen

Methods Statement

4.1 Standard techniques were used for the extraction of sub-fossil pollen and spores from this single sample (1, from context 25) (Moore and Webb 1978; Moore et al. 1992). A sample of 2ml volume was used and absolute pollen frequencies were calculated using added exotics to known volumes of sample (Stockman 1971). A total pollen count of 265 grains (200 dry-land grains) was made. Pollen was identified and counted using an Olympus biological research microscope fitted with Leitz optics.

4.2 Taxonomy in general follows that of Moore and Webb (1978) modified according to Bennett et al. (1994) for pollen types and Stace (1992) for plant descriptions.

Results

4.3 Pollen data/counts are given in Table 2. Pollen was well preserved and abundant. Absolute pollen frequencies were calculated at 78,600 grains/ml. Clearly, a single sample cannot give any information on vegetation and environmental change through time, however, the premise of pollen analysis is that the pollen contained within a sediment in some way relates to the vegetation growing at the time of the sediment accumulation; that is, given the possibility also of reworking of earlier material. Thus, some inferences can be made regarding the local and near regional vegetation of the time of this peat accumulation.

Table 2: Pollen count and percentage data for *BED* 02 (context 25). Percentages as % total dry land pollen. Marsh taxa and spores are as % of this sum plus the respective group. Absolute pollen frequency 78,616 grains/ml.

	Count	%
Trees & Shrubs		
Betula	104	52
Pinus	25	12.5
Quercus	1	+
Corylus avellana type	15	7.5
Salix	13	6.5
Herbs		
Poaceae	39	19.5
Filipendula	3	1.5
Marsh		
Cyperaceae	64	24
Sparganium type	1	+
Spores		
Dryopteris type	130	38
Pteridium aquilinum	1	+
Equisetum	9	2.6

Discussion

4.4 This was an anaerobic, peat-forming environment. Cyperaceae (sedge fen) are an important component of the pollen spectrum and along with Poaceae (grasses), which are less ecologically definable, indicates that this was a grass-sedge fen. *Sparganium* type (reed mace and bur reed) and *Filipendula* (meadow-sweet) are also likely to derive from this wetland habitat or its fringes. *Salix* (willow) is greatly under represented in pollen spectra and the numbers of pollen recovered here indicate growth in close proximity or on the sample site, perhaps growing along the edge of the suggested grass-sedge fen. *Equisetum* (horsetail fern) is important and whilst it is not definite, it is probable that this is also one of the marsh elements (e.g. *E. fluviatile*).

4.5 Trees and shrubs are dominant with *Betula* (52%) being most important. *Pinus* (pine, 13%) and *Corylus avellana* type (hazel/bog myrtle/sweet gale, 7%) are also present. There is only a single grain of *Quercus* (oak) present. Herb diversity is small and those present here may be referable to the autochthonous (marsh) community. Spores of ferns comprise largely monolete *Dryopteris* type (typical ferns) and *Equisetum* (horse-tail ferns).

4.6 The pollen spectrum indicates that birch, with some pine and hazel, woodland was dominant on the drier surrounding area whilst the on-site peat-forming habitat was a grass-sedge fen surrounded by willow (see above). Pollen is not a medium for dating, however, it can be said that the pollen assemblage here does not have similarity with what might be expected for the medieval period. Medieval pollen spectra would usually have a much greater dominance of herbs including cultigens and associated weeds. This is not the case here. Furthermore, more oak, hazel, alder, ash and other trees and shrubs might be expected. These are not, however, present.

4.7 In summary, the sequence is indicative of a far earlier origin than the medieval period, perhaps early Holocene (Flandrian Chronozone I; early Mesolithic). This suggestion is based on the dominance of birch pollen and it is possible that we have birch acting as a pioneer coloniser after the last (Devensian) glacial period.

Conclusions

4.8 The principal aim of this assessment was to establish the presence or absence of pollen in this peat sequence and as such, potential for reconstructing the local archaeological environment. The following points can be summarised from this preliminary study:

- Pollen and spores are well preserved and abundant (c.79, 000 grains/ml.).
- Birch woodland with some hazel and pine was the dominant terrestrial vegetation with the depositional site being a grass-sedge fen surrounded by willows.
- The pollen appears to be of far greater age than the medieval period, possibly being of early Holocene, early Mesolithic age.
- A fuller analysis with radiocarbon dating will resolve the question of the age of the deposit and provide information on the local vegetation and environment and changes through time.
- Clearly, the profile has potential for further analysis which would provide useful data. Additional work should be carried out at a standard sampling interval of 4 or 8cm intervals with pollen counts of 500 total dry land pollen (plus extant autochthonous pollen and spores) counted for each level where preservation permits.

5. Radiocarbon Dating

Methods

5.1 Two samples were submitted to Beta Analytic in Miami for determination of radiocarbon dates:

BED02 36/22	Beta-177414
BED02 36/23	Beta-177415

5.2 Both samples were pre-treated by sieving through 250pm mesh sieves. Plant material was caught in the sieves. In each case the sediment was treated to remove carbonates and the plant material was treated to remove carbonates and mobile humic acids.

5.3 36/22 contained both woody material and sediment in good quantities for radiomebic dating; the woody portion was considered more suitable for dating.

5.4 36/23 contained sediment and fine plant fibres, including rootlets which were suspected to be more recent in origin, and so the sediment portion was considered more suitable for dating in this case. Following combustion of the sediment, the remaining sample was below optimal size and so extended counting was employed to achieve the best standard deviation.

Results

5.5 Each sample provided plenty of carbon for accurate measurements and all the analyses went normally. The report sheets showing the calibration method are included as Appendix I. The summary results of each analysis are as follows:

Sample BED02 36/22 (wood)

Laboratory sample code	Beta-177414
Radiocarbon age	5830 ± 50 BP
2σ calibrated result (95% probability)	Cal BC 4790 to 4550 (Cal BP 6740 to 6500)

Sample BED02 36/23 (organic sediment with extended counting)

Laboratory sample code	Beta-177415
Radiocarbon age	8120 ± 60 BP
2σ calibrated result (95% probability)	Cal BC 7300 to 7040 (Cal BP 9250 to 8990)

Discussion

5.6 Radiometric analysis has confirmed the prehistoric date of these samples. The dates are in broad agreement with that suggested for context 25, based on pollen evidence.

6. Recommendations

6.1 No further plant macrofossil work is recommended on the samples assessed.

6.2 It is recommended that the molluscs from context 37 are evaluated. This will ascertain if the remains can produce environmental information pertaining to the origin of the material and the former local environmental conditions.

6.3 It is recommended that the monolith supplied for the pollen assessment is sampled at 4 or 8cm intervals with pollen counts of 500 total dry land pollen grains for each sample. This will provide data for reconstructing the environment and associated vegetation changes over time. It is also recommended that radiocarbon dating is undertaken in order to secure dates for the accumulation of these deposits.

7. References

Bennett, KD, Whittington, G, and Edwards, KJ, 1994 Recent plant nomenclatural changes and pollen morphology in the British Isles. *Quaternary Newsletter* 73,1-6.

Moore, PD, and Webb, JA, 1978 *An illustrated guide to pollen analysis*. London: Hodder and Stoughton.

Moore, PD, Webb, JA, and Collinson, ME, 1991 *Pollen analysis* Second edition. Oxford: Blackwell Scientific.

Stockmarr, I, 1971 Tablets with spores used in absolute pollen analysis. *Pollen et Spores* 13,614-621.

Stace, C, 1991 *New flora of the British Isles*. Cambridge: Cambridge University Press.

Appendix to Appendix E: Results of calibration of radiocarbon ages to calendar years

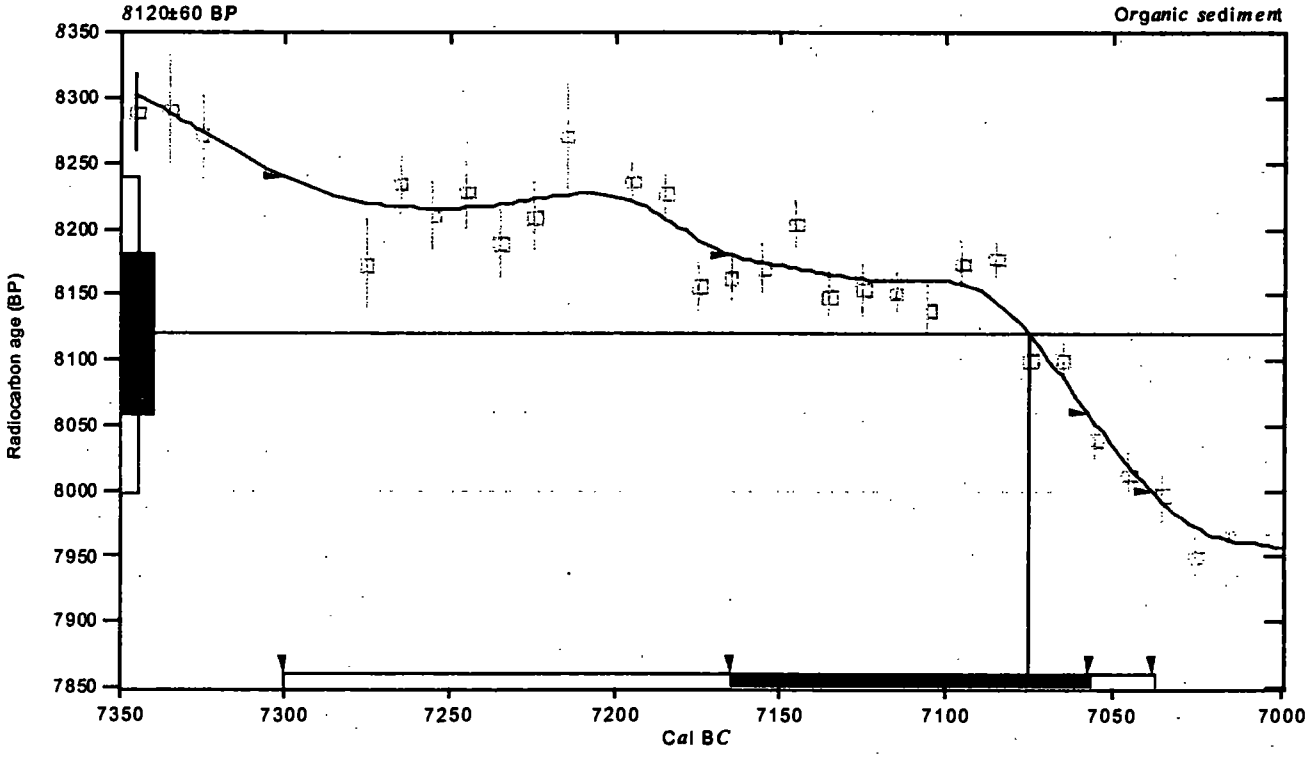
CALIBRATION OF RADIOCARBON AGE TO CALENDAR YEARS

(Variables: C13/C12=-30.6:lab. mult=1)

Laboratory number:	Beta-177415
Conventional radiocarbon age:	8120±60 BP
2 Sigma calibrated result: (95% probability)	Cal BC 7300 to 7040 (Cal BP 9250 to 8990)

Intercept data

Intercept of radiocarbon age with calibration curve:	Cal BC 7080 (Cal BP 9020)
1 Sigma calibrated result: (68% probability)	Cal BC 7160 to 7060 (Cal BP 9120 to 9010)



References:

Database used

INTCAL98

Calibration Database

Editorial Comment

Stuiver, M., van der Plicht, H., 1998, Radiocarbon 40(3), pxii-xiii

INTCAL98 Radiocarbon Age Calibration

Stuiver, M., et. al., 1998, Radiocarbon 40(3), p1041-1083

Mathematics

A Simplified Approach to Calibrating C14 Dates

Talma, A. S., Vogel, J. C., 1993, Radiocarbon 35(2), p317-322

Beta Analytic Radiocarbon Dating Laboratory

4985 8.W. 74th Court, Miami, Florida 33155 • Tel: (305) 667-5167 • Fax: (305) 663-0964 • E-Mail: beta@radiocarbon.com

CALIBRATION OF RADIOCARBON AGE TO CALENDAR YEARS

(Variables: C13/C12=-29.1:lab. mult=1)

Laboratory number: Beta-177414

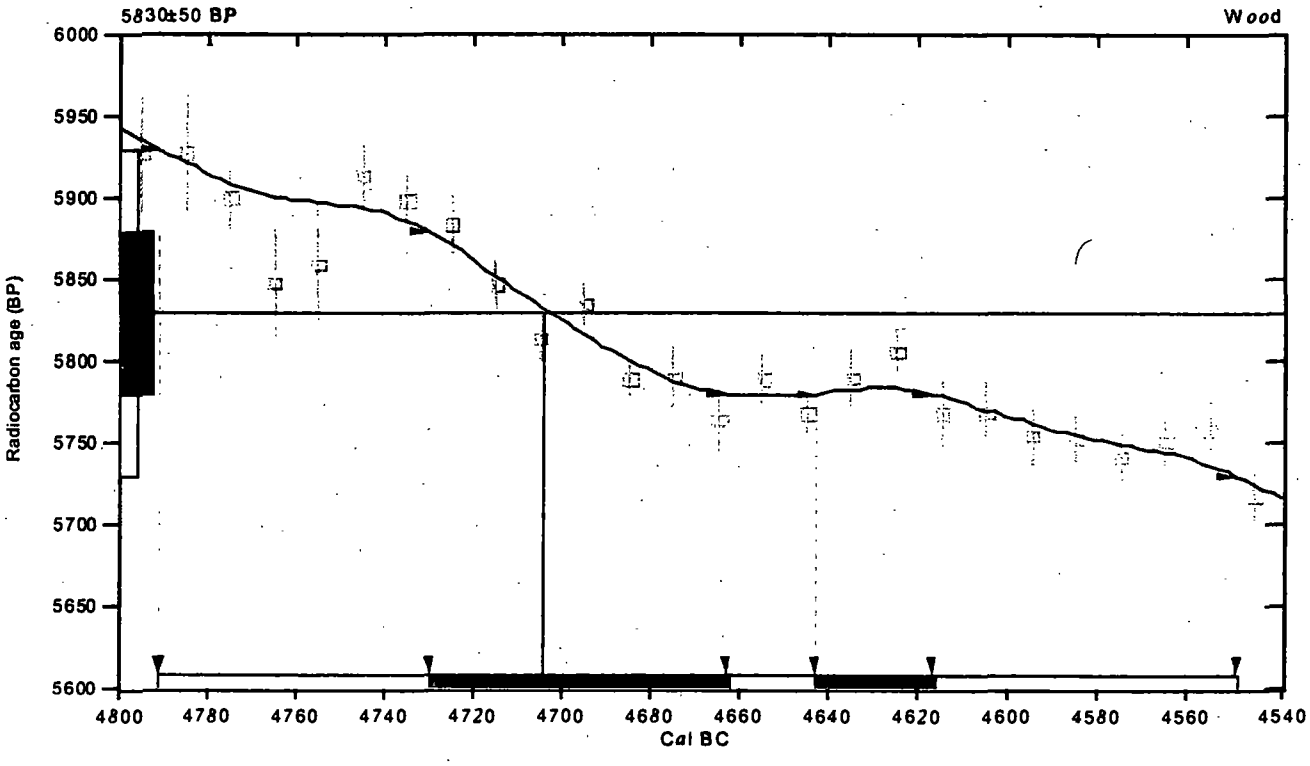
Conventional radiocarbon age: 5830±50 BP

2 Sigma calibrated result: Cal BC 4790 to 4550 (Cal BP 6740 to 6500)
(95% probability)

Intercept data

Intercept of radiocarbon age with calibration curve: Cal BC 4700 (Cal BP 6650)

1 Sigma calibrated results: Cal BC 4730 to 4660 (Cal BP 6680 to 6610) and
(68% probability) Cal BC 4640 to 4620 (Cal BP 6590 to 6570)



References:

Database used
INTCAL98
Calibration Database
Editorial Comment
Stuiver, M., van der Plichi, H., 1998, Radiocarbon 40(3), pxii-xiii
INTCAL98 Radiocarbon Age Calibration
Stuiver, M., et. al., 1998, Radiocarbon 40(3), p1041-1083
Mathematics
A Simplified Approach to Calibrating C14 Dates
Talma, A. S., Vogel, J. C., 1993, Radiocarbon 35(2), p317-322

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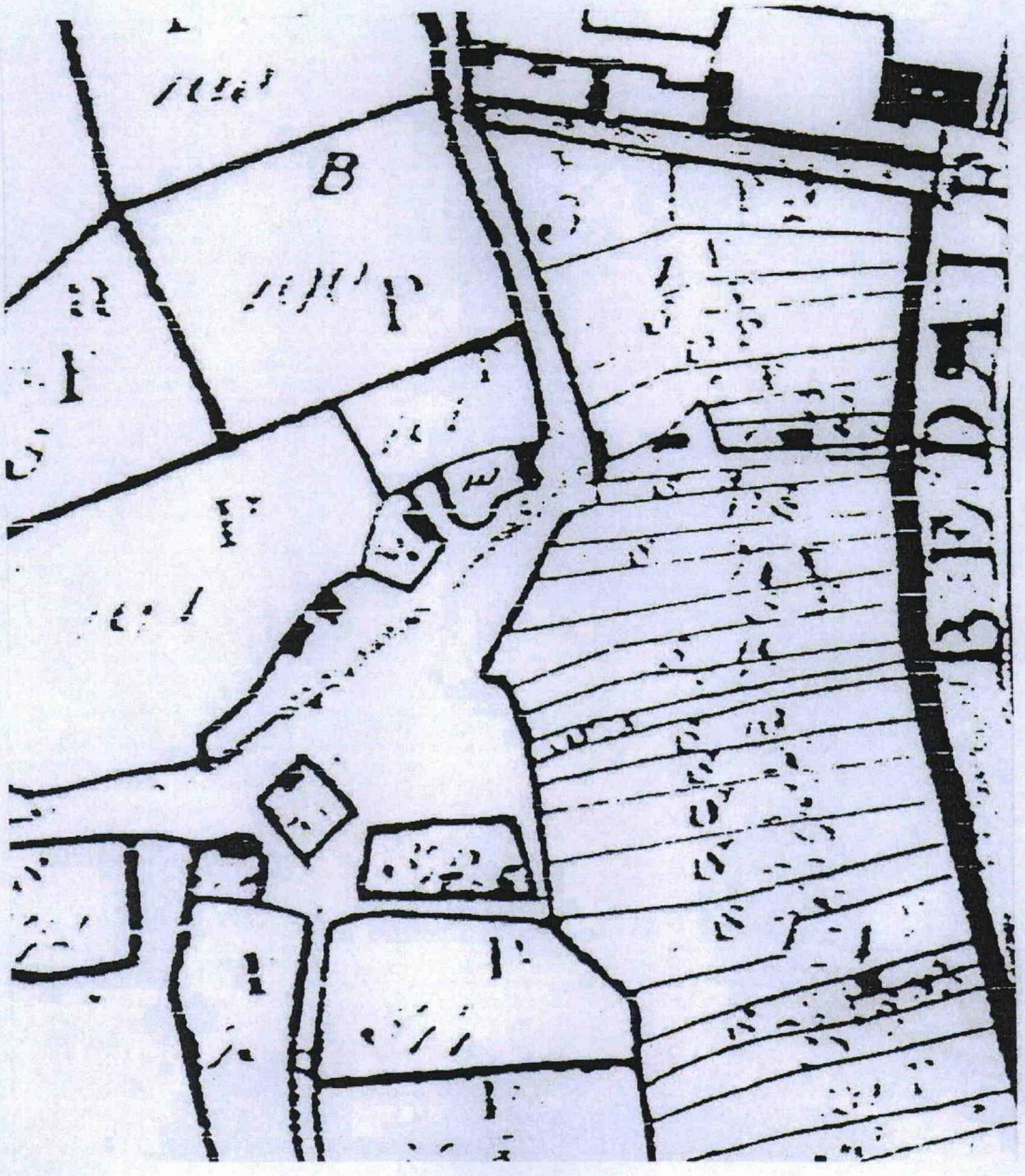
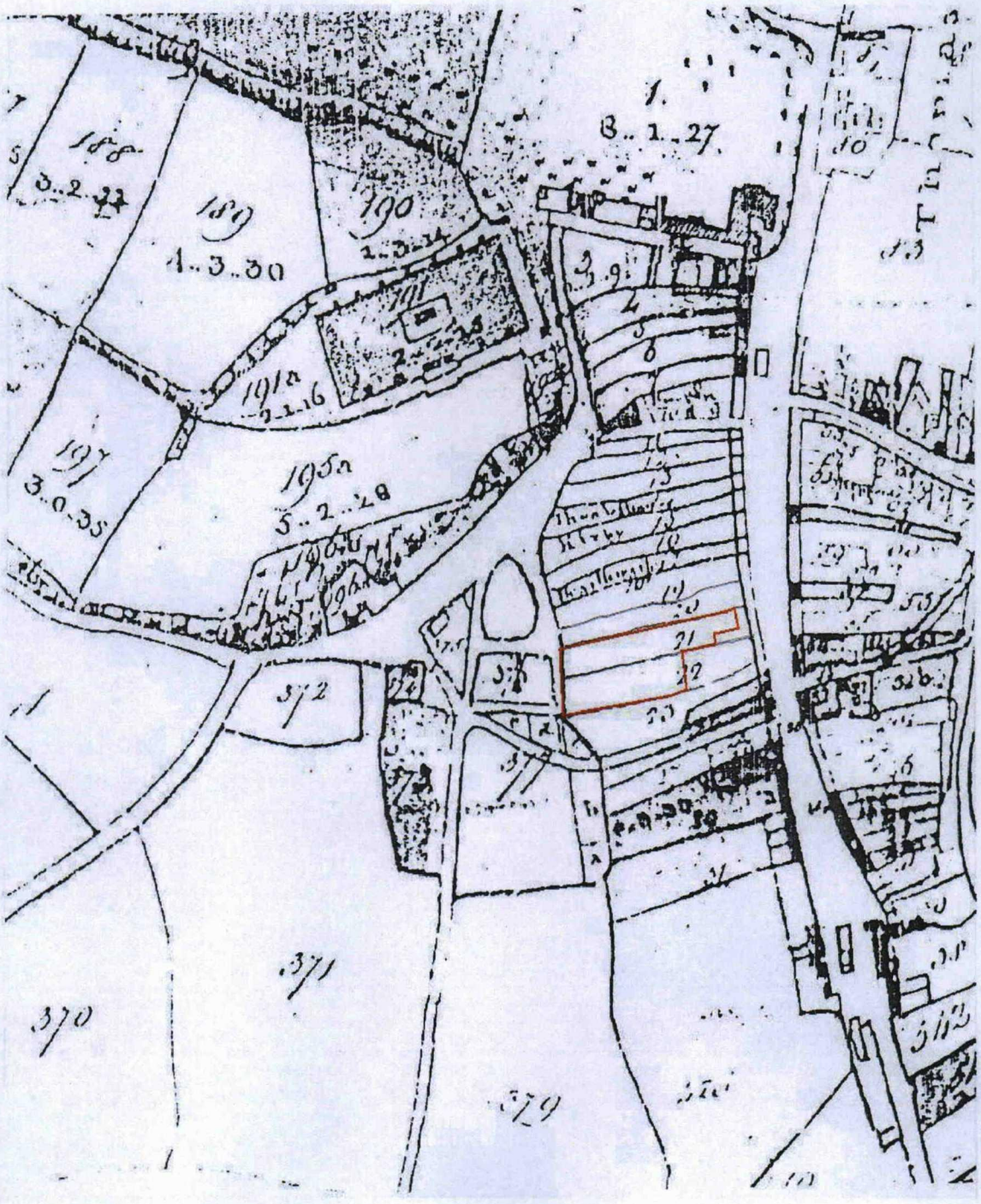
APPENDIX F: MAP REGRESSION

Map regression was undertaken by CgMs Consulting prior to the field evaluation.

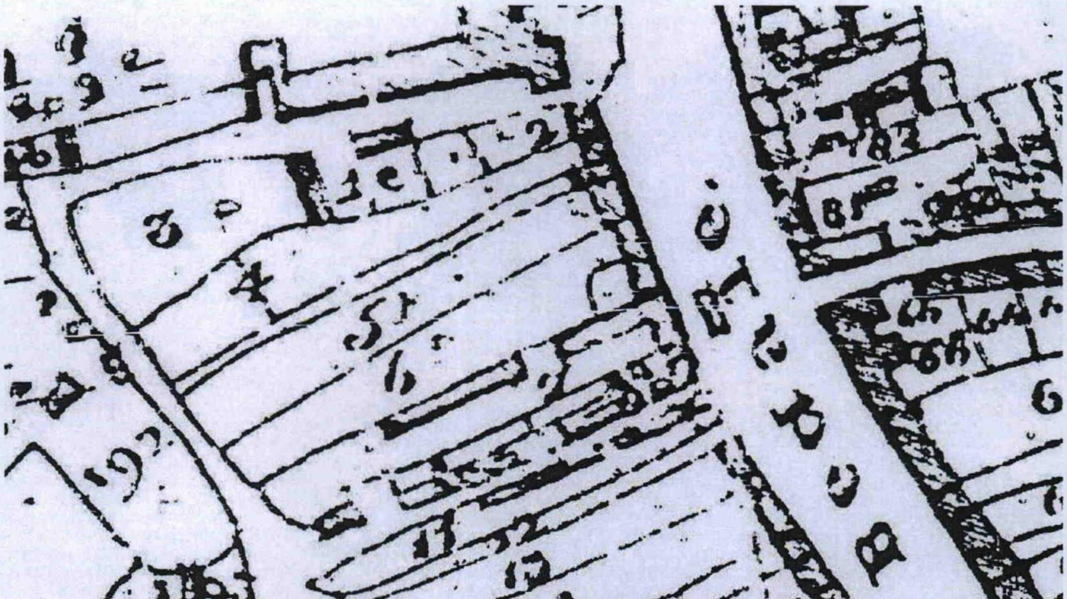
Extracts from four historical maps comprise this appendix.



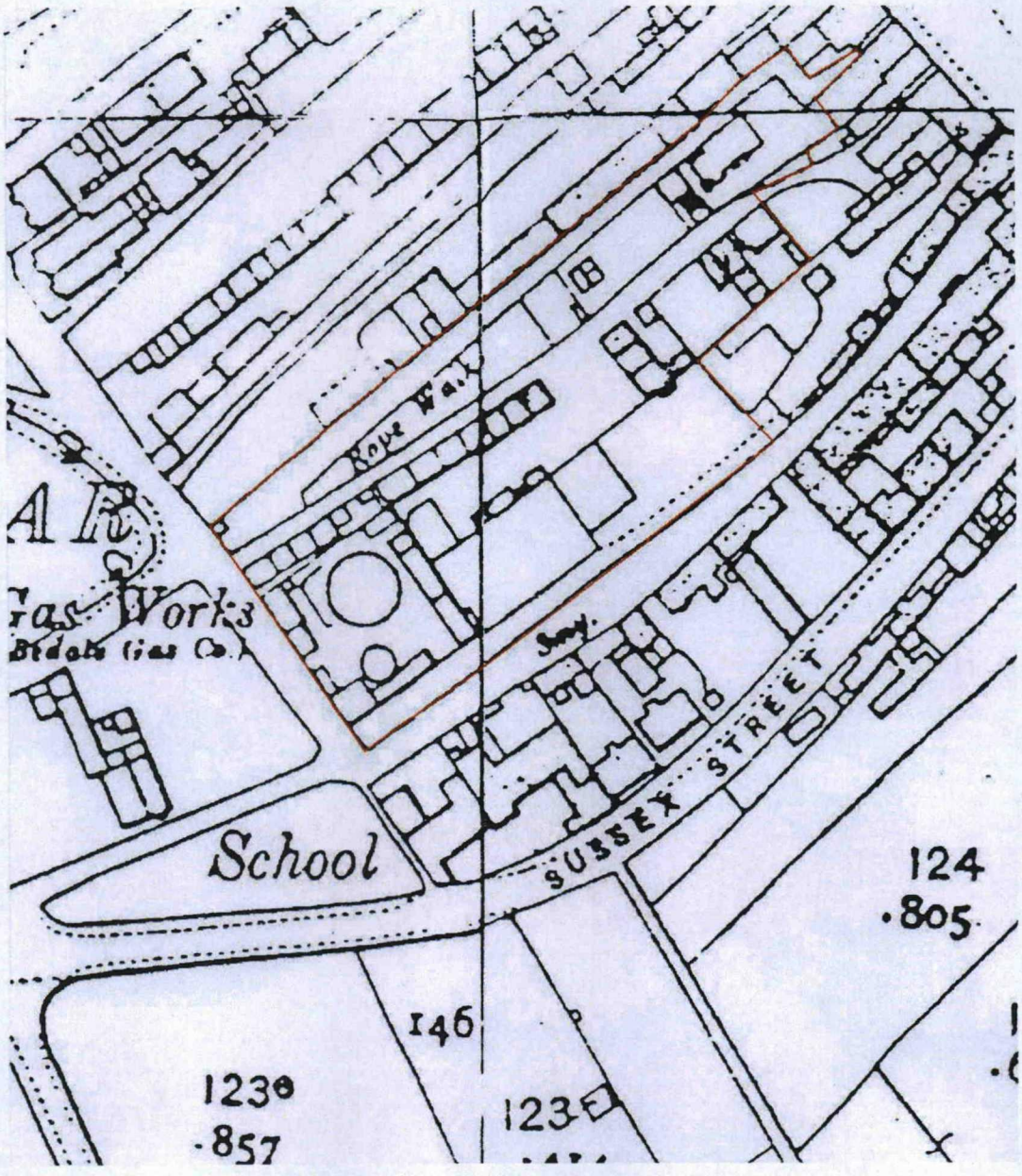
Map of Bedale, 1772



Map of Bedale, early 19th century
(approximate site outline in red)



Tithe map of Bedale, 1838
(approximate site outline in red)



Ordnance Survey, 1913
(site outline in red)