

Report 2983



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Archaeological Watching Brief along the route of a Replacement Water Main adjacent to the A6 at Pulloxhill, Bedfordshire

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Prepared for
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Location:	A6 Pulloxhill, north of Barton-le-Clay, Bedfordshire
District:	Central Bedfordshire
Grid Ref.:	TL 0819 3230
Planning Ref.:	n/a
Acc. No.:	LUTNM 2012.10
OASIS Ref.:	127997
Client:	Anglian Water Services Limited
Dates of Fieldwork:	20 February-16 March 2012

Summary

An archaeological watching brief was conducted for Anglian Water Services Limited during groundworks associated with the installation of a replacement water main adjacent to the A6 at Pulloxhill, Bedfordshire.

The monitoring revealed no features of archaeological significance. However a layer of subsoil was present over the whole of the monitored area which produced finds of Roman, medieval, post-medieval and modern date, suggesting arable agriculture here since the Roman period.

1.0 INTRODUCTION

Archaeological monitoring took place during groundworks associated with the laying of a replacement water main alongside the A6 at Pulloxhill, Bedfordshire (Fig. 1). A section of the total 2.2km length measuring 400m was selected for monitoring because of the proximity of cropmarks suggesting prehistoric settlement and activity.

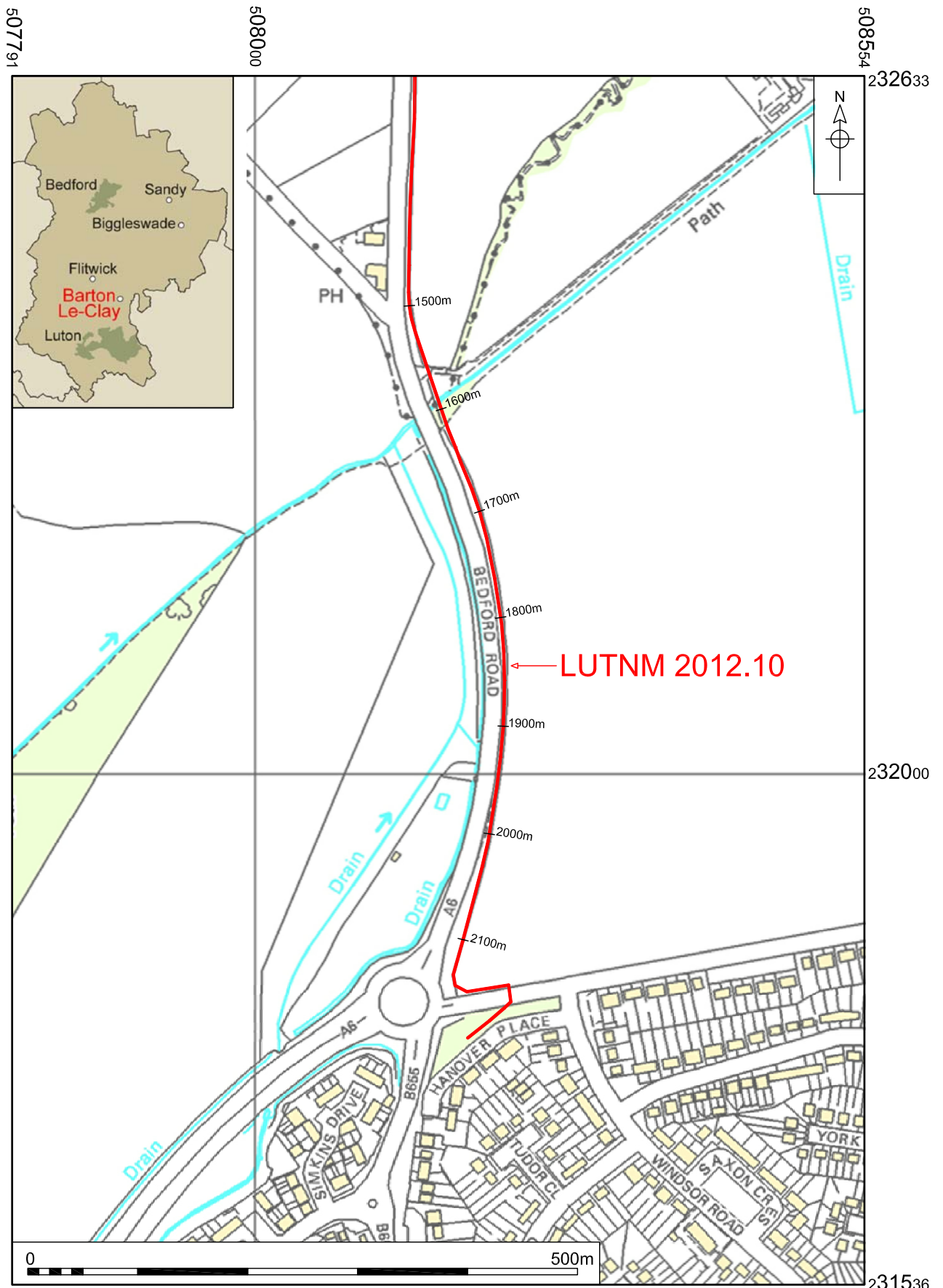
This work was undertaken to fulfil planning recommendations set by the Central Bedfordshire Council Archaeological Team. The work was conducted in accordance with a Project Design and Method Statement prepared by NPS Archaeology (Ref. NAU/BAU2983/DW). This work was commissioned and funded by Anglian Water Services Limited.

This programme of work was designed to assist in defining the character and extent of any archaeological remains within the proposed redevelopment area, following the guidelines set out in *Planning Policy Statement 5: Planning for the Historic Environment* (Department for Communities and Local Government 2010). The results will enable decisions to be made by the Local Planning Authority about the treatment of any archaeological remains found.

The site archive is currently held by NPS Archaeology and on completion of the project will be deposited with Luton Museum following the relevant policies on archiving standards.

2.0 GEOLOGY AND TOPOGRAPHY

The site lies alongside the eastern side of the A6 north of Barton-le-Clay - between Luton to the south and Bedford to the north, within a wide, shallow valley at a height of 57-58m OD.



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Figure 1. Site location. Scale 1:5000

The underlying geology consists of Cretaceous Gault Formation mudstone (http://maps.bgs.ac.uk/geologyviewer_google/googleviewer.html).

3.0 ARCHAEOLOGICAL AND HISTORICAL BACKGROUND

The Central Bedfordshire Historic Environment Record (CBHER) and historic mapping sources have been consulted during the preparation of this section.

There are several cropmarks of possible late prehistoric settlement sites close to the route of the new pipe.

There is a possible Iron Age and Roman settlement site (CBHER MBD9352) within cropmarks of a regular fieldsystem 600m south-east of the pipeline route.

Cropmarks of a rounded enclosure and associated field boundaries are present 540m north-east of the pipeline, where Iron Age pottery and a saddle quern have been found (CBHER MBD9353).

The cropmark of a sub-circular enclosure with a diameter of 60m (CBHER MBD16654) is present 400m to the south-west.

The cropmark of a circular enclosure with an annex (CBHER MBD16707) is present 100m east of the pipeline.

Excavation along the route of the Barton Bypass in 1989 (CBHER EBD925 and MBD15294) produced evidence of a possible medieval farm at its northern end (630m south-west of the pipeline route).

The site of the medieval village of 'Faldo' (515m north-west of the pipeline) is indicated by earthworks, building materials and finds of medieval pottery (CBHER MBD241).

Ridge and furrow earthworks (CBHER MBD3322), the result of medieval openfield agriculture, are present north-west of the present pipeline route, within Pulloxhill parish.

Earthworks indicative of medieval house platforms (CBHER MBD3566) are present 650m south of the pipeline route. Archaeological trenching in that area recorded little evidence of medieval occupation.

Historic mapping (Ordnance Survey from the 1882 First Edition onwards) shows very little change in the landscape since the late 19th century (www.old-maps.co.uk).

4.0 METHODOLOGY

The objective of this watching brief was to record the presence or absence, location, nature, extent, date, quality, condition and significance of any exposed archaeological deposits within the development area.

The Brief required that all groundworks within the specified area be monitored.

Machine excavation was carried out with a hydraulic 360° excavator equipped with a toothless ditching bucket and operated under constant archaeological supervision.

Spoil, exposed surfaces and features were scanned with a metal-detector. All metal-detected and hand-collected finds other than those which were obviously modern, were retained for inspection.

Due to a lack of suitable deposits, environmental samples were not taken.

All archaeological features and deposits were recorded using NPS Archaeology pro forma. Trench locations, plans and sections were recorded at appropriate scales. Colour, monochrome and digital photographs were taken of all relevant features and deposits where appropriate.

Site conditions were good, with the work taking place in fine weather.

5.0 RESULTS

Monitoring was undertaken in two parts; the stripping of the easement and the excavation of the pipe trench. Excavation of the pipe trench required monitoring due to the presence of a layer of subsoil which would have masked deposits.

Topsoil strip

The easement strip involved the clearance of topsoil along a 7.5-8m wide band within the defined 12m-wide construction corridor. Topsoil (1) was a dark brown clay with occasional flint and chalk gravel.

The removal of the topsoil revealed subsoil.



Plate 1. The easement between chainages 1500 and 1600, looking south

Between chainages 1500 and 1600 (Plate 1) the subsoil was numbered (3) and was a pale brownish grey clay containing moderate amounts of flint and chalk gravel with rare occurrences of charcoal. It contained finds including an 11th-

century horseshoe, a 15th-century horseshoe fragment, part of the stem from a post-medieval clay tobacco pipe and post-medieval pottery.



Plate 2. The easement between chainages 1600 and 1900, looking north

Between chainages 1600 and 1900 (Plate 2) the subsoil (labelled (2)) was found to be very disturbed where a gas main crossed the easement at chainage 1840. There was evidence of earlier topsoil stripping in the form of patches of imported gravel and scraps of geotextile. There were also areas of redeposited chalk. Subsoil (2) was identical to subsoil (3) and contained medieval, post-medieval and modern pottery fragments and a couple of Roman tile fragments.

Pipe trench

The pipe trench was located c.1.5m east of the western edge of the easement. It measured 0.4m wide and was 1.2m deep (Plate 3).

Subsoils (2) and (3) were found to be 0.1-0.2m deep sealing the natural deposit which was grey clay containing occasional chalk fragments.

One sherd of 18th- to 20th-century pottery was found within the backfill of the gas main trench (deposit (4)).



Plate 3. The water main being laid in the area of the gas main, looking south

6.0 FINDS

The finds were processed and recorded by count and weight, and an Excel spreadsheet was produced summarising their broad dating. Each material type has been considered separately and is included below organised by material (and within that category, chronologically). A list of finds ordered by context can be found in Appendix 2a.

6.1 The Pottery

by Sue Anderson

6.1.1 Introduction

Twenty-five sherds of pottery weighing 538g were collected from three contexts. Table 1 shows the quantification by fabric; a summary catalogue by context is included as Appendix 3.

Description	Fabric	Code	No	Wt(g)	Eve	MNV
Medieval coarseware	MCW	3.20	1	5		1
Late Essex-type Wares	LMTE	5.60	1	24	0.17	1
Late Medieval and Transitional Beds types	LMTB	5.75	1	41	0.04	1
<i>Total medieval</i>			3	70	0.21	3
Iron-glazed blackwares	IGBW	6.11	1	5		1
Glazed red earthenware	GRE	6.12	10	152		9
Metropolitan Slipware	METS	6.42	1	33	0.06	1
<i>Total post-medieval</i>			12	190	0.06	11
Late post-medieval unglazed earthenwares	LPME	8.01	4	31		2

Description	Fabric	Code	No	Wt(g)	Eve	MNV
Refined white earthenwares	REFW	8.03	1	12		1
English Stoneware	ESW	8.20	5	235		1
<i>Total modern</i>			10	278		4
Totals			25	538	0.27	18

Table 1. Pottery quantification by fabric

6.1.2 Methodology

Quantification was carried out using sherd count, weight and estimated vessel equivalent (eve). A full quantification by fabric, context and feature is available in the archive. All fabric codes were assigned from the author's post-Roman fabric series, which includes East Anglian and Midlands fabrics, as well as imported wares. Local wares were identified based on Baker *et al.* (1979) and Jennings (1981). Form terminology follows MPRG (1998). Recording uses a system of letters for fabric codes together with number codes for ease of sorting in database format. The results were input directly onto an MS Access database.

6.1.3 Pottery by period

6.1.3.1 Medieval

One sherd of medieval coarseware was found in subsoil (2). It was in a moderately sandy oxidised fabric similar to early medieval wares from Essex and is likely to be of 12th/13th-century date.

The same context contained two late medieval sherds. One was a jug rim comparable with late medieval examples from Harlow (*cf.* Davey and Walker 2009, fig. 22 nos 87–88) and the other was a bowl with a beaded rim similar to an example from Bedford (Baker *et al.* 1979, fig.129 no. 771).

6.1.3.2 Post-medieval

The post-medieval group made up approximately half of this assemblage by sherd count, and comprised local red earthenwares. One small fragment of an iron-glazed blackware vessel was found in (2) and there was a dish rim of Metropolitan slipware with wavy line trailed slip decoration, also from (2). Glazed red earthenwares were all collected from subsoil (2) and (3) and all ten fragments were body and base sherds of unknown form.

6.1.3.3 Modern

Four sherds of unglazed redwares, all probably from plantpots, were found in subsoil (2) and gas main trench fill (4). A rim fragment of refined whiteware with a blue transfer-printed floral design was found in (2), together with five sherds of a Doulton stoneware bottle.

6.1.4 Pottery by context

A summary of the pottery by context, with spotdates, is provided in Table 2.

Context	Identifier	Fabric	Spotdate
2	Subsoil	MCW, LMTE, LMTB, GRE, METS, IGBW, REFW, ESW	19th/20th c.
3	Subsoil	GRE	16th-18th c.
4	Fill	LPME	19th/20th c.

Table 2. Pottery types present by context

All contexts were of post-medieval or modern date.

6.1.5 Discussion

This small assemblage is dominated by post-medieval and modern pottery. There is some evidence of earlier activity from context (2), which included medieval and late medieval wares. The small group of late medieval and early post-medieval pottery suggests that pottery was being sourced from Essex and Bedfordshire in these periods, with comparable wares occurring in assemblages from Bedford and Harlow. The group is too small for further interpretation.

6.2 Ceramic Building Material

by Sue Anderson

Twenty-five fragments of ceramic building material (CBM) weighing 1,009g were collected from two contexts. The assemblage was quantified (count and weight) by fabric and form. Fabrics were identified on the basis of macroscopic appearance and main inclusions. A full catalogue is included as Appendix 4.

Table 3 shows the quantification by fabric and form.

Fabric	Code	RBT	RTM	RTM?	RTP	RT	LB
estuarine clays	est		1				
fine sandy	fs				2	1	1
fs with red clay pellets	fscp	1	1		3		2
medium sandy with red clay pellets	mscp				6		
fs with occasional coarse quartz	fscq				1		
fs, ferrous inclusions	fsfe				1		
fs, flint and ferrous inclusions	fsffe				1		
fs with common to abundant coarse grog	fsg		2		1		
fine sandy with shell	fssh			1			
Totals		1	4	1	16	1	3

Table 3. Ceramic building material by fabric and form

The earliest CBM was an abraded fragment of Roman tile (RBT) measuring 20mm in thickness and possibly a piece of flanged tegula.

Five fragments of plain roof tile were probably of medieval date (RTM). Two pieces of a single tile from subsoil (2) were coarsely tempered with abundant red grog; this tile could also be of Roman date but the surfaces were eroded and its form is uncertain. One fragment in a probable estuarine clay fabric with sparse leached shell inclusions is more typical of medieval roof tiles; this fragment was covered in thick lime mortar. A tile with more frequent shell inclusions may also be of medieval date. A fragment in 'fscp' fabric had a reduced core.

The majority of tile in this assemblage was post-medieval plain roof tile (RTP). The pieces were probably peg tiles, but only two had evidence for peg holes, one circular and one square. These were in a variety of fabrics, including the soft orange types typical of south Suffolk, Essex and Cambridgeshire. One tile was recorded as 'RT' as the date was uncertain – it has a reduced core but is well made and could be late medieval or post-medieval.

Three fragments of post-medieval red brick (LB) were found in subsoil (2), all small and abraded.

6.3 Iron

by Rebecca Sillwood

A total of five iron pieces were recovered during the watching brief. These objects comprised three modern pieces including a nail (which have subsequently been discarded). The remaining iron artefacts consist of one complete and one incomplete horseshoe.

Both of the horseshoes came from subsoil (3) and are quite distinctive. The pieces themselves are dateable, with the complete example being probably of 11th-century date and the incomplete example dating to around the 15th century. The complete horseshoe (141g) is broad and crudely made with a rounded appearance, no calkins, and with apparently three nail holes on each branch. The nail holes are rectangular, and may be countersunk, although corrosion obscures the details somewhat. The piece measures 104mm in length with a width of 118mm. This piece is a Type 1, according to Clark's typology (2004, 85) and is similar to an illustrated example from London (2004, 114, fig. 80, no. 89) dating to the 11th century.

The second horseshoe (101g) is incomplete and is missing part of one branch. The branch that is present is broader than usual and tapers towards the terminal end (the missing element would have been quite narrow and probably more brittle than the remaining one). Corrosion covers much of the piece, but two small, possibly square nail holes are just visible on the surviving branch. This shoe is probably a Clark Type 4 although the unusual shape is very similar to Sparkes' 15th-century 'Guildhall'-type shoe (1998, 11 and 13, top right).

The presence of two horseshoes of such distinctive forms is interesting and contributes a little to the picture of Late Saxon/Norman and later medieval activity in the area.

6.4 Clay Pipe

by Rebecca Sillwood

A single fragment of clay tobacco pipe stem (5g) was recovered from subsoil (3), and can only be broadly dated to the post-medieval period, due to the lack of any diagnostic features on the piece.

6.5 Faunal Remains

by Rebecca Sillwood

Five fragments of animal bone and horn were recovered from two contexts, and weighed 49g in total. Four pieces came from subsoil (2), and one piece came from subsoil (3).

These ecofacts comprise three abraded pieces of mammal bone and two possible fragments of horn. All of these pieces are likely to have occurred as a result of butchering for food in the vicinity.

7.0 CONCLUSIONS

Monitoring along the route of a replacement water main adjacent to the A6 at Pulloxhill produced negative results with no features or artefacts of archaeological significance being encountered.

The subsoil layer, which covered the whole of the monitored area, appears to have been the result of manuring of arable land from at least the 11th century to the present day. Finds from manuring spreads tend to be denser closest to associated settlements, suggesting that Roman and Saxon/medieval settlement sites may be located in the immediate vicinity. This view is borne out by the presence of Iron Age and Roman sites recorded on aerial photographs to the east and west of the site, and the medieval farmstead to the south, the deserted medieval village earthworks to the north-west and ridge and furrow earthworks (the remains of intensive medieval and post-medieval arable agriculture) elsewhere in the parish.

Acknowledgements

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The finds were processed and recorded by Rebecca Sillwood. The pottery and ceramic building material was reported on by Sue Anderson. The clay pipe, iron and faunal remains were reported on by Rebecca Sillwood.

This report was illustrated and produced by David Dobson and edited by Jayne Bown.

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Appendix 1a: Context Summary

Context	Category	Cut Type	Fill Of	Description	Period
1	Deposit			Topsoil whole site	Modern
2	Deposit			Subsoil – chainages 1600-1900	Uncertain
3	Deposit			Subsoil – chainages 1500-1600	Uncertain
4	Deposit			Backfill of gas main trench	Modern

Appendix 2a: Finds by Context

Context	Material	Qty	Wt	Period	Notes
2	Animal Bone	4	24g	Unknown	
2	Ceramic Building Material	3	179g	Medieval	
2	Ceramic Building Material	1	165g	Med./Post-Med.	
2	Ceramic Building Material	15	572g	Post-medieval	
2	Iron	1	53g	Modern	Nail - DISCARDED
2	Iron	2	25g	Modern	Rod fragments - DISCARDED
2	Pottery	1	5g	Medieval	12th-13th-century
2	Pottery	2	65g	Med./Post-Med.	15th-16th-century
2	Pottery	17	401g	Post-medieval	16th-20th-century
3	Animal Bone	1	25g	Unknown	
3	Ceramic Building Material	1	40g	Roman	
3	Ceramic Building Material	2	112g	Medieval	
3	Ceramic Building Material	3	120g	Post-medieval	
3	Clay Pipe	1	5g	Post-medieval	Stem
3	Iron	1	141g	Medieval	Horseshoe; complete; L104; W118; 11th-century
3	Iron	1	101g	Medieval	Horseshoe fragment; L110; 15th-century
3	Pottery	4	56g	Post-medieval	16th-18th-century
4	Pottery	1	11g	Post-medieval	18th-20th-century

Appendix 2b: Oasis Finds Summary

Period	Material	Total
Roman	Ceramic Building Material	1
Medieval	Ceramic Building Material	5
Medieval	Iron	2
Medieval	Pottery	1
Med./Post-Med.	Ceramic Building Material	1
Med./Post-Med.	Pottery	2
Post-medieval	Ceramic Building Material	18
Post-medieval	Clay Pipe	1
Post-medieval	Pottery	22
Modern	Iron	3
Unknown	Animal Bone	5

Appendix 3: Pottery

Context	Fabric	Form	Rim	No	Wt/g	Spotdate
2	MCW			1	5	12th-13th c.
2	GRE			4	72	16th-18th c.
2	GRE			1	21	16th-18th c.
2	IGBW			1	5	16th-18th c.
2	LMTB	bowl	BD	1	41	
2	LMTE	jug	TRBD	1	24	15th-16th c.
2	GRE			1	3	16th-18th c.
2	METS	dish	BD	1	33	17th c.
2	LPME	plantpot?		3	20	18th-20th c.
2	ESW	bottle		5	235	17th-19th c.
2	REF W	?	EV	1	12	L.18th-20th c.
3	GRE			2	30	16th-18th c.
3	GRE			1	5	16th-18th c.
3	GRE			1	21	16th-18th c.
4	LPME	plantpot?		1	11	18th-20th c.

Notes: Rim: BD – beaded; EV –everted; TRBD – triangular bead

Appendix 4: Ceramic Building Material

Context	Fabric	Form	No	Wt/g	Abr	Height	Peg	Mortar	Comments	Date
2	fs	RTP	2	70						pmed
2	fscq	RTP	1	36						pmed
2	fsfe	RTP	1	32	+					pmed
2	fscp	RTP	3	102			1 x R			pmed
2	mscp	RTP	4	82	+				soft orange, sim to S Suffolk	pmed
2	fsg	RTP	1	16					common coarse grog	pmed
2	fs	RT	1	165					reduced core, well made, poss lmed?	lmed?
2	fsg	RTM	2	143					abundant coarse grog, could be Rom?	med?
2	fscp	RTM	1	36	+				reduced core	med
2	fscp	LB	2	25	++					pmed?
2	fs	LB	1	30	+					pmed
3	fsffe	RTP	1	61			1 x S		pink	pmed
3	mscp	RTP	2	59						pmed
3	fscp	RBT	1	40	+	20				Rom
3	fssh	RTM?	1	65					shell leached	med?
3	est?	RTM	1	47				ms thick	some shell inclusions, leached	med