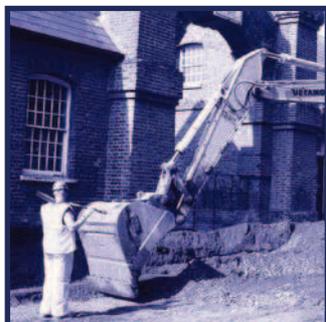


# Flood Alleviation Works Bishops Waltham Hampshire



## Archaeological Watching Brief Report



November 2007

**Client: Environment Agency**

Issue N<sup>o</sup>: 1  
NGR: SU 5517 1729

Flood Alleviation Works  
Abbey Mill Field, Bishop's Waltham  
Hampshire

***ARCHAEOLOGICAL WATCHING BRIEF REPORT***

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## SUMMARY

*Between March and June 2007 Oxford Archaeology (OA) carried out an archaeological watching brief at Abbey Mill Field, Bishop's Waltham, which forms part of the Bishop's Palace Scheduled Monument, Hampshire NGR SU 5517 1729. The work was commissioned by the Environment Agency (EA) to oversee a scheme of flood alleviation works. The watching brief revealed natural sand and gravel overlain by a series of pond silt deposits, in which archaeological material was recovered. This was sealed by thick layers of dumped material deposited in the 1970s when the site was levelled.*

## 1 INTRODUCTION

### 1.1 Location and scope of work

1.1.1 In March and April 2007 Oxford Archaeology (OA) carried out an archaeological watching brief at Abbey Mill Field, Bishop's Waltham, part of which is within the Bishop's Palace Scheduled Monument, (National Monument Number 26721) Hampshire NGR SU 5517 1729. The work was commissioned by the Environment Agency (EA).

1.1.2 A project brief was set by English Heritage including Scheduled Monument Consent (SMC reference HSD 9/2/4808 (pt 1)). The Scheme comprised the excavation of a channel through Mill Field from the River Hamble alongside an existing factory building, removal of tree roots within the channel corridor, and additional excavations to install pipes to connect the existing mill pond to the new open channel.

1.1.3 OA prepared a Written Scheme of Investigation detailing how it would meet the requirements of the brief.

### 1.2 Geology and topography

1.2.1 The site of 0.5 ha lies on gravel at 31 m above OD. The site is situated within a section of the drained 'Little Pond' associated with Bishop's Waltham palace and is bordered to the south, west and east by earthworks of the Scheduled Monument. There is a gradual fall to the southwest where the river Hamble borders the site. The site has more recently been used for a post-medieval millrace and later for disposal of debris and scrap metal associated with the current factory. The current land use includes factory units and a haulage yard with the southeast portion left as waste ground. The site is 0.5 hectares in area.

### 1.3 Archaeological and historical background

1.3.1 The archaeological background to the watching brief was prepared for the WSI for the project and is reproduced below.

- 1.3.2 The palace is located at NGR SU 5517 1729 on the SW side of the settlement of Bishop's Waltham. The first evidence of activity on the site of the Palace comes from archaeological excavations that revealed a small stone building beneath the later Hall and Great Chamber of the Palace. This may be the remains of the castle constructed by Bishop Henry of Blois (1129-71) and slighted in c. 1155 after Henry II came to the throne. The earliest buildings of the Palace likewise date to Bishop Blois's episcopate, and the whole complex was rebuilt in later 14th century.
- 1.3.3 The site of 'Little Pond' where the new channel works are to be undertaken is the remains of one of the fishponds that once formed part of the estate surrounding the Palace. It lies northwest of the main palace complex. An extant bank that once acted as a dam for the pond survives at its south end and is up to 20 m wide and 150 m long.
- 1.3.4 The pond was originally larger: in the 19th century the drained interior was bisected by the Abbey Millrace and its western extent was truncated by construction of the railway line. The pond has been cut across by the present A333.
- 1.3.5 Dating of the fishponds is slight, though an intriguing reference to foxes eating 5 swans at Bishop's Waltham pond in 1251-2 (HRO Eccl 159291A) suggests that they could date to this period or earlier.
- 1.3.6 The line of the pipeline trench will extend from the A333 (Station Road) due southwest to the River Hamble and will cut across the silts and infill layers of the pond. The trench will be c. 1.1 m deep, so may cut through the original (possibly clay) pond lining, while deposits forming the banks of the pond are likely to be disturbed. The trench will join to pipes linked to water stops to control water flow.
- 1.3.7 In May 2002, Oxford Archaeology (OA) monitored the test pit excavations on the site in advance of the current works. The watching brief was commissioned by Scott Wilson Kirkpatrick & Co Ltd on behalf of the Environment Agency.
- 1.3.8 The watching brief revealed undated pond silt deposits overlying natural gravels at the base of each test pit. Part of the Mill Race channel to the 19th century mill was observed together with late structural remains, probably those of demolished buildings on the site. The silts and structures were sealed beneath thick layers of dumped material deposited when the site was levelled in the 1970s.

## 2 PROJECT AIMS AND METHODOLOGY

### 2.1 Aims

- 2.1.1 To establish the presence/absence of archaeological remains within the length of the pipeline trench and the new channel

- 2.1.2 To determine the extent, condition, nature, character, quality and date of any archaeological remains present in all excavations. Of particular importance is the recovery of artifacts to aid dating of the construction of the pond and its banks. Dating evidence will also be sought for the abandonment of the pond from the fills.
- 2.1.3 To establish the ecofactual and environmental potential of archaeological deposits and features.
- 2.1.4 To signal, before the destruction of the material in question, the discovery of a significant archaeological find, for which the resources allocated are not sufficient to support a treatment to a satisfactory and proper standard. In this case additional technicians may be required to aid the excavation of the archaeological material.
- 2.1.5 To make available the results of the investigation.

## 2.2 Methodology

- 2.2.1 A watching brief was maintained during the excavation of the channel and pipeline trench. The trench was excavated by a machine equipped with a toothless ditching bucket.
- 2.2.2 All excavated spoil was scanned for artefacts.
- 2.2.3 Hand excavation of archaeological features and deposits within the pipe trench was undertaken up to a safe depth. Where the trench proves too narrow or be dangerous to work in, observation took place from a safe distance from the trench edge.
- 2.2.4 All features and deposits were issued with unique context numbers, and contexts recorded in accordance with established OA practice (OA Field Manual, 1992). All contexts, and any small finds and samples from them were allocated unique numbers. Bulk finds were be collected by context.
- 2.2.5 Colour transparency and black-and-white negative photographs were taken during the ground-works and of any archaeological deposits. Site plans were drawn at 1:50 and an overall site plan at 1:250.
- 2.2.6 Section drawings of sample sections were drawn, wherever possible, along the route of the channel to illustrate stratigraphy. These were drawn at a scale of 1:20.
- 2.2.7 Environmental sampling procedures were in accordance with OA Environmental Sampling Guidelines and Instruction Manual (OA, first edition, July 2000).
- 2.2.8 English Heritage were kept informed as to the progress of the fieldwork.
- 2.2.9 The Watching Brief was undertaken by a project supervisor under a project manager (Dan Dodds, Small Works Department Manager), under the overall direction of Nick Shepherd. The watching brief will be undertaken in accordance with 'Standard and Guidance for Archaeological Watching Briefs' (IFA, 1999).

### 3 RESULTS

#### 3.1 Description of deposits

##### *The new channel*

- 3.1.1 A channel approximately 85 m in length and 7 m wide was excavated by machine along the line of a previous canal for the millrace (now completely infilled) which was itself cut into a former medieval pond.
- 3.1.2 Natural sand and gravels (7) and (11) were reached at approximately 29.1 m OD to 28m OD falling towards the river Hamble to the west of the site (fig. 2, sections 7 and 8). Above this, only in a small area of the drainage channel, a thin deposit of yellow and blue mottled clay (13) was located. No dating evidence was recovered but its position at the base of the silt layers suggests it may be part of an original canal lining.
- 3.1.3 Above the potential lining (13) lay a fairly consistent 0.5 m thick deposit of waterlogged dark brown silt (6). This contained a number of brick and tile fragments as well as wood. This deposit is interpreted as the initial silting layer after the use of the pond.
- 3.1.4 From around 29 m OD a sequence of silt, gravel and sand deposits were located (5), (8), (9), (10), (12) and (19). These all appear to be water deposited and suggest a number of flood and draining events over the area of the pond. None of these deposits cover a large area and feather into each other forming banks and sandbars within the pond basin, suggesting the water level was far lower than the initial medieval pond by this time.
- 3.1.5 The next deposit was a fairly consistent layer of blue clay (4), in the northern part of the channel, which appears to seal most of the mixed deposits below. Within layer 4 three pieces of timber were recovered, these appeared to represent two broken posts and part of a beam. Deposit 4 probably represents a longer period of flooding over the area, possibly in association with the mill activity and water meadows which survived until the mid 20th century. Layer 3, a sandy gravel, overlying layer 4 seems to represent a separate flood event leaving a small gravel bank in the waterlogged area.
- 3.1.6 Above the archaeological deposits, and forming the current ground surface, lie thick bands of modern debris and backfilling which contain concrete, scrap metal, tarmac and oil contaminants. Most of this material appears to be late 20th century in date although surprisingly a number of worked flint pieces were also recovered. It is almost certain that this debris was brought in from elsewhere. It is likely, but not certain, that these modern layers truncate the latest silting of the pond basin.

### *The pipe trench*

- 3.1.7 A 37 m pipe trench was machine excavated in order to join the existing pond across Station Road with the new development in Abbey Mill Field (fig 3).
- 3.1.8 This pipe trench revealed the most interesting of the deposits unearthed during the watching brief, showing evidence of the bank of the medieval pond and evidence of a cemetery at the north-east end of the trench.
- 3.1.9 The pipe trench was cut through the existing bank as can be seen on Fig. 2. The bank was constructed of a reddish brown deposit of clayey loam 0.75 m thick (24). This deposit was thicker at the eastern end (outer) of the bank. This deposit was probably derived from the up-cast material of the pond interior. Deposit 24 directly overlies the natural sand deposit observed in the excavation of the channel to the west (7).
- 3.1.10 Overlying bank deposit 24 was a layer of greyish brown sandy gravel (25), this appeared to form the upper layer of the bank. This deposit was 0.4 m thick.
- 3.1.11 The bank was overlain by a deposit of sand (22), probably laid down during flooding (22). The sand was observed to be 0.8 m thick, loose and clean. This was in turn overlain by the debris and overburden described above (1 and 2).
- 3.1.12 At the eastern end of the pipe trench, and lying adjacent to, or possibly overlying the bank was a cemetery containing inhumations. During the excavation of the trench, loose charnel remains were recovered from the soils at this end. After initial cleaning it was established that at least three individuals had been buried at this part of the site. Consultation between English Heritage, the Environment Agency and Oxford Archaeology resulted in the original pipe trench being re-routed due north across Station Road - thus avoiding the exposed human remains on the site. The cemetery was left untouched and duly backfilled.

## 3.2 **Finds**

### *Pottery by Paul Blinkhorn*

- 3.2.1 Pottery dating from the 12th century up to the present day was present throughout the sequence of deposits. As noted above layers (1) and (2) were represented by predominantly 20th-century pottery and rubbish. None of this clearly modern material was retained. All other pottery, including information on context is presented below.
- 3.2.2 The pottery assemblage comprised 11 sherds with a total weight of 165 g. It all dated to the 12<sup>th</sup> - 13<sup>th</sup> centuries, apart from a single sherd of 19<sup>th</sup> century material.

The following fabric types were noted.

- 3.2.3 F1: *Flint-tempered ware*. Moderate to dense sub-angular flint and chert up to 3 mm. Sparse sub-rounded quartz up to 1 mm, very rare sub-rounded calcareous

material up to 1 mm. The fabric has many similarities with material which is well-known from Winchester, although chalk-and-flint-tempered wares (apparently from several different sources) are a feature of the medieval assemblages in the area between the Thames Valley corridor and the south coast. Such pottery is known from Berkshire, Wiltshire, Southampton, Winchester, and Netherton. At Netherton, such pottery was dated to the 12<sup>th</sup> – mid 13<sup>th</sup> century (McCarthy and Brooks 1988, 331). 7 sherds, 70g.

- 3.2.4 COTS: *Cotswolds-type ware* (Mellor 1994, 44). Oolitic limestone tempered ware, probably from a number of sources in the Cotswolds region, classified as OXAC in the Oxford type-series. 11<sup>th</sup> – 14<sup>th</sup> century. 2 sherds, 31 g.
- 3.2.5 FSG: *Fine Sandy Glazed Ware*. This category encompasses a range of fabrics, all of which have a similar mineralogical composition, based on quartz with varying degrees of iron ore. They seem likely to be the products of several as yet unknown kiln sites, and are typical of 13<sup>th</sup> century Hampshire sites. They mainly comprise glazed pitchers in an orange-coloured sandy ware recognised from the northern and eastern suburbs of Winchester (Denham and Blinkhorn in print). 1 sherd, 37 g.
- 3.2.6 MISC: *Miscellaneous 19<sup>th</sup> century wares*: Encompasses a whole range of common later 19<sup>th</sup> century material, such as transfer-printed Ironstone china and flower pots. 1 sherd, 27 g.
- 3.2.7 The pottery occurrence by number and weight of sherds per context by fabric type is shown in Table 1. Each date should be regarded as a *terminus post quem*. The pottery was all in good condition, and appears to be stratified close to its point of disposal.

*Table 1: Pottery occurrence by number and weight (in g) of sherds per context by fabric type*

Context	F1		COTS		FSG		MISC		Date
	No	Wt	No	Wt	No	Wt	No	Wt	
1							1	27	19thC
4					1	37			13thC
6	4	26							12thC?
23	3	44	2	31					12thC?
Total	7	70	2	31	1	37	1	27	

### *CBM by John Cotter*

#### *Introduction and Methodology*

- 3.2.8 A total of 29 pieces of ceramic building material (CBM) weighing 7834 g were recovered from four contexts. All the CBM was catalogued and spot-dated during the present assessment stage. For each context and each type of CBM the total fragment

count and weight were recorded on an Excel spreadsheet. Complete or significantly complete dimensions (eg. thickness, length) were routinely recorded, together with comments on fabric and any other attributes worthy of note. The spot-date for each object is the date-bracket during which that type of CBM is estimated to have been in production. Given the longevity of production, use, re-use and residuality, spot-dates derived from CBM are often only very approximate and should be treated with caution. Dates derived from pottery and other finds in the same contexts will normally be more accurate and should be consulted first.

### *Date and nature of the assemblage*

- 3.2.9 The CBM assemblage is in a fragmentary condition but consists of a mixture of fairly fresh and abraded pieces. Just over half the assemblage (16 pieces, 4522 g) comprises fragments of Roman CBM and the remainder (13 pieces, 3312 g) comprises medieval and post-medieval CBM. The Roman CBM is, on the whole, more fragmentary and abraded. Details of individual pieces and contexts may be consulted in the catalogue. A summary of the types present is given below.
- 3.2.10 *Medieval and post-medieval flat roof tile (4 pieces, 414 g)*
- 3.2.11 Orange or red-firing peg tiles. Some with evidence of circular nailholes in the corners. All unglazed. One piece (context 30) appears to be medieval (13th-16th century). The other pieces may date as late as the 18th or 19th century. The fabric and firing colour of these suggests the use of the same or similar clays to those used for the Roman roofing tiles and bricks (see below).
- 3.2.12 *Medieval or post-medieval ridge tile (1 piece, 166 g)*
- 3.2.13 This is in a very similar light orange fabric to the Roman tegulae. It is from the upper end of an unglazed curved ridge tile with a long (broken) sub-rectangular crest with shallow knife-cut facets along the top and surviving end which would have created a cockscomb pattern in conjunction with the other crests. Dating is difficult for an individual piece like this but it is probably late medieval or early post-medieval (15th-16th century) rather than earlier. The condition is quite fresh.
- 3.2.14 *Medieval and post-medieval brick (2 pieces, 1432 g)*
- 3.2.15 Two separate bricks are represented. One is an orange handmade brick which appears from its size and uneven characteristics to be quite early, possibly 15th or 16th century. The other piece has a purplish fabric and may be 17th century.
- 3.2.16 *Post-medieval land drain (6 pieces, 1300 g)*
- 3.2.17 This is a single item, the breaks are all fresh. It is a tubular machine-made land drain in an orange terracotta fabric. It most likely dates from the mid 19th up to the early 20th century (context 2).

3.2.18 *Roman tegulae (roof tile) (3 pieces, 1032 g)*

3.2.19 These are of standard tegula shape with evidence of upright side flanges. Two are end pieces with flange cut-aways from the top end of a tegula. All are in a light orange sandy fabric with coarse inclusions of red iron oxide and streaks and swirls of pale grey marl. Two pieces are very abraded.

3.2.20 *Roman plain tile (3 pieces 464 g)*

3.2.21 These are plain pieces of tile which are too thin to be brick but could include otherwise indistinguishable fragments from the base plates of tegulae.

3.2.22 *Roman box flue tile (1 piece, 185 g)*

3.2.23 These are the open-ended box-like tiles used in Roman central heating systems. A single end/side piece was recovered with characteristic bold sinuous combing on the outside.

3.2.24 *Roman brick (9 pieces, 2841 g)*

3.2.25 The most abundant type of Roman CBM from the site. These have a similar fabric to the tegulae but often have broad grey cores. The fragments are generally quite small. Thickness varies from 27-43 mm. One or two pieces are edge fragments. One piece has a part of a simple curvilinear signature (maker's or batch mark) (context 23).

### ***Recommendations***

3.2.26 The post-Roman CBM assemblage is quite fragmentary and, apart from the ridge tile perhaps, is fairly unremarkable. The quantity of Roman CBM is significant enough to indicate the presence of a Roman building somewhere in the general vicinity and the presence of a box flue tile indicates that this could have been quite a substantial building. The complete absence of imbrices (curving roof tiles) is however slightly puzzling. It is quite likely however that all the Roman material has been re-used. It is also evident that much of the Roman and post-Roman CBM assemblage was produced with clay from the same general source, presumably local. Other than these general observations the assemblage overall is fairly unremarkable. The existing catalogue is probably detailed enough for material of this nature which appears to have little potential for further study. No further work is therefore recommended.

### ***Flint by Hugo Lamdin-Wymark***

3.2.27 A total of eight struck flints and sixteen pieces/ 101 g of burnt unworked flint was recovered from the evaluation. Three flint flakes and a bladelet were recovered from context 1. These flints exhibited a light bluish-white cortication and extremely heavy post-depositional edge-damage. The degree of edge-damage suggests these flints have been subject to considerable reworking since deposition and a couple A-symmetric notches may result from plough damage (Moss 1983). Dating small

assemblages is problematic, but a Neolithic to early Bronze Age date is suggested as the three flakes are relatively regular and thin and a bladelet is also present.

3.2.28 In addition, context 6 produced two small broken flakes and two pieces of irregular waste. These flints are in relatively fresh condition and are not corticated. It is possible these flints are prehistoric, but as small irregular pieces they may represent spalls accidentally struck during more recent activities. The burnt unworked flint was recovered from context 6 (4 pieces weighing 2 g) and context 161 (12 pieces weighing 99 g). All pieces were white to mid grey in colour and calcined.

### 3.3 Palaeo-environmental remains

3.3.1 Whilst bulk samples were originally taken from the silting layers, the evidence provided by the finds assemblage indicated that the site had been disturbed to a point that environmental processing of the samples would reveal no meaningful results.

## 4 DISCUSSION AND CONCLUSIONS

4.1.1 Archaeological deposits located whilst excavating the drainage channel were generally consistent along the length. It is clear that the main pond silting occurred over a slow period resulting in a thick black deposit (6) which is most likely to provide firm dating for the pond going out of use. Although the date of some finds fits neatly with the palace remains to the east, this is complicated by the presence of a large sample of Roman building material and flue tile. Layers above this seem to be more ephemeral in nature and may represent changing water levels over the area. Up to this point deposits located are reasonably secure with reasonable dating, and contain numerous, roughly knapped flint nodules, which may relate to the crumbling palace structure not far from the area. Access, and thus interpretation, was hindered due to depth and instability of the excavation, and as a result finds and paleo-environmental samples could only be recovered by machine. The upper layers of the excavation were undoubtedly modern in date and contained much imported material from road building and construction elsewhere. They have also resulted in contamination of lower deposits with chemicals and oil.

4.1.2 The excavations of the connection pipe trench uncovered significant archaeological remains. The presence of at least three inhumations, probably associated with the palace to the east, required for the route of the proposed pipe be altered. The pipe trench was shortened to the west and redirected north under station road, thus avoiding any damage to the burials and successfully leaving further cemetery remains undisturbed. It is possible that any further development on the eastern fringes of this site could encounter further human remains. Whilst further disturbance of human remains is to be avoided, further investigation would help to verify the date of the inhumations and offer evidence for the size and demographics of the cemetery.

## Appendices

## APPENDIX 1 ARCHAEOLOGICAL CONTEXT INVENTORY

Ctx	type	depth	width	length	comment	env samples	finds
1	layer	1.3 m	-	-	modern overburden		pot, flint
2	layer	0.4 m	-	-	modern silting		animal bone, CBM
3	layer	0.2 m	-	3 m	clay silt		-
4	layer	0.2 m	-	14 m	clay and sand		pot, animal bone, wood
5	layer	0.2 m	-	8 m	gravel		-
6	layer	0.5 m	-		dark silt	1	animal bone, cbm, wood
7	layer	n/k	-	-	natural sand		-
8	layer	0.07 m	1m	2m	silt		-
9	layer	0.2 m	-	9m	clay		-
10	layer	0.11 m	-	8m	sand		-
11	layer	n/k	-	-	gravel		-
12	layer	0.44 m	-		sandy silt		-
13	layer	0.3 m	-	5m	clay		-
14	n/a	n/a	-	-	unstratified finds		metal, pot
15	wood	0.25m	0.13m	3.5m	wooden beam within 4	3	wood
16	wood	0.25 m	0.15m	0.13m	wood within 6	2	wood
17	wood	0.56 m	0.14m	0.14m	wooden post within 4	4	wood
18	wood	0.06 m	0.07m	0.07m	wooden stake within 4	5	wood
19	layer	0.4 m	-	3 m	natural gravel		-
20	layer				modern bank		-
21	layer				buried topsoil		-
22	layer				sand lenses		-
23	layer				buried soil (cemetery)		pot, CBM, animal bone, human bone
24	layer				buried clay loam soil		-
25	layer				gravel and silt		-
26	fill				chalk fill		-
27	fill				clay fill		-
28	fill				mortar and gravel		-
29	cut				feature		-
30	layer				silt		CBM, animal bone
31	layer				silt		Modern Debris

## APPENDIX 2 FINDS ASSESSMENTS

**Pottery**

Pottery from the 12th century up to the present day was present throughout the sequence of deposits. As noted above layers (1) and (2) were represented predominantly 20th century pottery and rubbish. None of this clearly modern material was retained. All other pottery including information on context is presented below.

The pottery assemblage comprised 11 sherds with a total weight of 165g. It all dated to the 12<sup>th</sup> - 13<sup>th</sup> centuries, apart from a single sherd of 19<sup>th</sup> century material.

The following fabric types were noted.

F1: *Flint-tempered ware*. Moderate to dense sub-angular flint and chert up to 3 mm. Sparse sub-rounded quartz up to 1mm, very rare sub-rounded calcareous material up to 1 mm. The fabric has many similarities with material which is well-known from Winchester, although chalk-and-flint-tempered wares (apparently from several different sources) are a feature of the medieval assemblages in the area between the Thames Valley corridor and the south coast. Such pottery is known from Berkshire, Wiltshire, Southampton, Winchester, and Netherton. At Netherton, such pottery was dated to the 12<sup>th</sup> – mid 13<sup>th</sup> century (McCarthy and Brooks 1988, 331). 7 sherds, 70 g.

COTS: *Cotswolds-type ware* (Mellor 1994, 44). Oolitic limestone tempered ware, probably from a number of sources in the Cotswolds region, classified as OXAC in the Oxford type-series. 11<sup>th</sup> – 14<sup>th</sup> century. 2 sherds, 31 g.

FSG: *Fine Sandy Glazed Ware*. This category encompasses a range of fabrics, all of which have a similar mineralogical composition, based on quartz with varying degrees of iron ore. They seem likely to be the products of several as yet unknown kiln sites, and are typical of 13<sup>th</sup> century Hampshire sites. They mainly comprise glazed pitchers in an orange-coloured sandy ware recognised from the northern and eastern suburbs of Winchester (Denham and Blinkhorn in print). 1 sherd, 37 g.

MISC: *Miscellaneous 19<sup>th</sup> century wares*: Encompasses a whole range of common later 19<sup>th</sup> century material, such as transfer-printed Ironstone china and flower pots. 1 sherds, 27 g. The pottery occurrence by number and weight of sherds per context by fabric type is shown in Table 1. Each date should be regarded as a *terminus post quem*. The pottery was all in good condition, and appears to be stratified close to its point of disposal.

Table 1: Pottery occurrence by number and weight (in g) of sherds per context by fabric type

Context	F1		COTS		FSG		MISC		Date
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6	4	26							12thC?
23	3	44	2	31					12thC?
Total	7	70	2	31	1	37	1	27	

### CBM

A total of 29 pieces of ceramic building material (CBM) weighing 7834 g were recovered from four contexts. All the CBM was catalogued and spot-dated during the present assessment stage. For each context and each type of CBM the total fragment count and weight were recorded on an Excel spreadsheet. Complete or significantly complete dimensions (eg. thickness, length) were routinely recorded, together with comments on fabric and any other attributes worthy of note. The spot-date for each object is the date-bracket during which that type of CBM is estimated to have been in production. Given the longevity of production, use, re-use and residuality, spot-dates derived from CBM are often only very approximate and should be treated with caution. Dates derived from pottery and other finds in the same contexts will normally be more accurate and should be consulted first.

### Date and nature of the assemblage

The CBM assemblage is in a fragmentary condition but consists of a mixture of fairly fresh and abraded pieces. Just over half the assemblage (16 pieces, 4522 g) comprises fragments of

Roman CBM and the remainder (13 pieces, 3312 g) comprises medieval and post-medieval CBM. The Roman CBM is, on the whole, more fragmentary and abraded. Details of individual pieces and contexts may be consulted in the catalogue. A summary of the types present is given below.

*Medieval and post-medieval flat roof tile (4 pieces, 414 g)*

Orange or red-firing peg tiles. Some with evidence of circular nailholes in the corners. All unglazed. One piece (context 30) appears to be medieval (13th-16th century). The other pieces may date as late as the 18th or 19th century. The fabric and firing colour of these suggests the use of the same or similar clays to those used for the Roman roofing tiles and bricks (see below).

*Medieval or post-medieval ridge tile (1 piece, 166 g)*

This is in a very similar light orange fabric to the Roman tegulae. It is from the upper end of an unglazed curved ridge tile with a long (broken) sub-rectangular crest with shallow knife-cut facets along the top and surviving end which would have created a cockscomb pattern in conjunction with the other crests. Dating is difficult for an individual piece like this but it is probably late medieval or early post-medieval (15th-16th century) rather than earlier. The condition is quite fresh.

*Medieval and post-medieval brick (2 pieces, 1432 g)*

Two separate bricks are represented. One is an orange handmade brick which appears from its size and uneven characteristics to be quite early, possibly 15th or 16th century. The other piece has a purplish fabric and may be 17th century.

*Post-medieval land drain (6 pieces, 1300 g)*

This is a single item, the breaks are all fresh. It is a tubular machine-made land drain in an orange terracotta fabric. It most likely dates from the mid 19th up to the early 20th century (context 2).

*Roman tegulae (roof tile) (3 pieces, 1032 g)*

These are of standard tegula shape with evidence of upright side flanges. Two are end pieces with flange cut-aways from the top end of a tegula. All are in a light orange sandy fabric with coarse inclusions of red iron oxide and streaks and swirls of pale grey marl. Two pieces are very abraded.

*Roman plain tile (3 pieces 464 g)*

These are plain pieces of tile which are too thin to be brick but could include otherwise indistinguishable fragments from the base plates of tegulae.

*Roman box flue tile (1 piece, 185 g)*

These are the open-ended box-like tiles used in Roman central heating systems. A single end/side piece was recovered with characteristic bold sinuous combing on the outside.

*Roman brick (9 pieces, 2841 g)*

The most abundant type of Roman CBM from the site. These have a similar fabric to the tegulae but often have broad grey cores. The fragments are generally quite small. Thickness varies from 27-43 mm. One or two pieces are edge fragments. One piece has a part of a simple curvilinear signature (maker's or batch mark) (context 23).

### **Flint**

A total of eight struck flints and sixteen pieces/ 101 g of burnt unworked flint was recovered from the evaluation. Three flint flakes and a bladelet were recovered from context 1. These flints exhibited a light bluish-white cortication and extremely heavy post-depositional edge-damage. The degree of edge-damage suggests these flints have been subject to considerable reworking since deposition and a couple A-symmetric notches may result from plough damage (Moss 1983). Dating small assemblages is problematic, but a Neolithic to early Bronze Age date is suggested as the three flakes are relatively regular and thin and a bladelet is also present.

In addition, context 6 produced two small broken flakes and two pieces of irregular waste. These flints are in relatively fresh condition and are not corticated. It is possible these flints are prehistoric, but as small irregular pieces they may represent spalls accidentally struck during more recent activities. The burnt unworked flint was recovered from context 6 (4 pieces weighing 2 g) and context 161 (12 pieces weighing 99 g). All pieces were white to mid grey in colour and calcined.

## **APPENDIX 3 BIBLIOGRAPHY AND REFERENCES**

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## **APPENDIX 4 SUMMARY OF SITE DETAILS**

**Site name:** Flood Alleviation Works (Overflow Culvert) Abbey Mill Field, Bishop's Waltham, Hampshire

**Site code:** WINCM AY314

**Grid reference:** NGR SU 5517 1729

**Type of watching brief:** 85 m machine dug drainage channel and 60 m machine dug pipe trench

**Date and duration of project:** March 27th to April 2007

**Area of site:** 0.5ha

**Summary of results:** A sequence of pond silts over natural gravels overlain by modern dumped layers in the site of the new channel. The connecting pipe disturbed at least three inhumations.

**Location of archive:** The archive is currently held at OA, Janus House, Osney Mead, Oxford, OX2 0ES, and will be deposited with Winchester Museum Service in due course, under the following accession number: WINCM AY314





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Figure 1: Site location

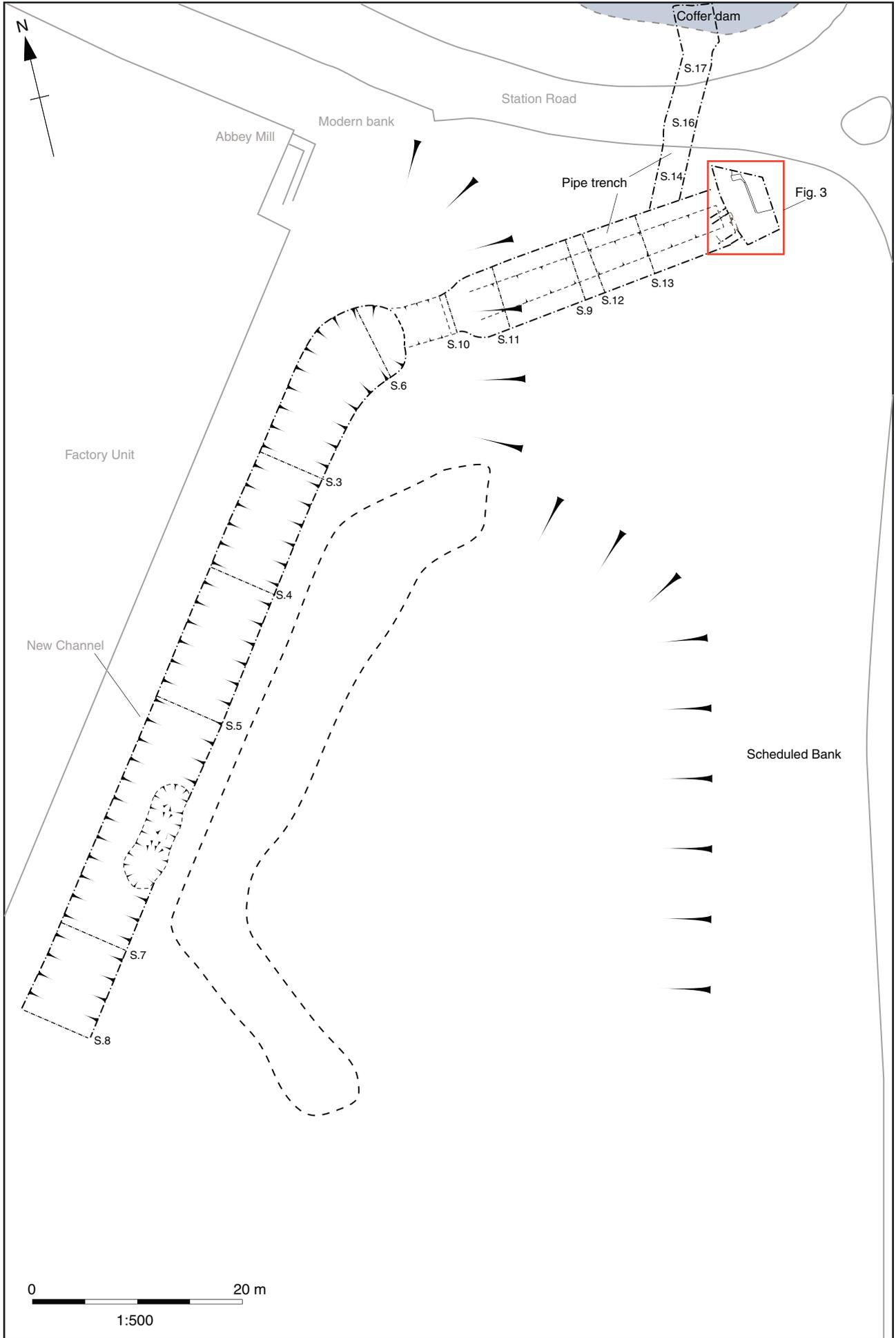


Figure 2 : Site plan

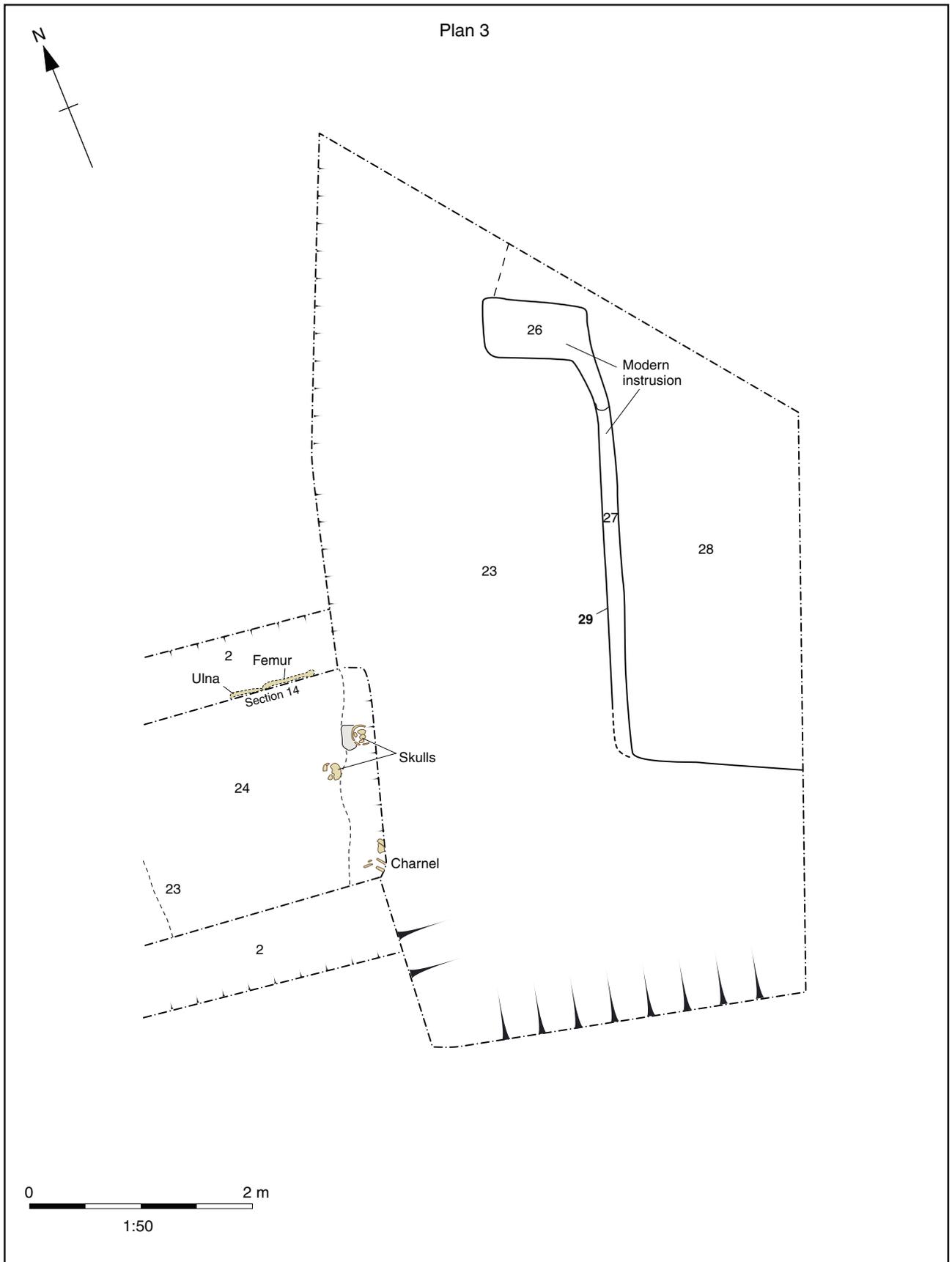
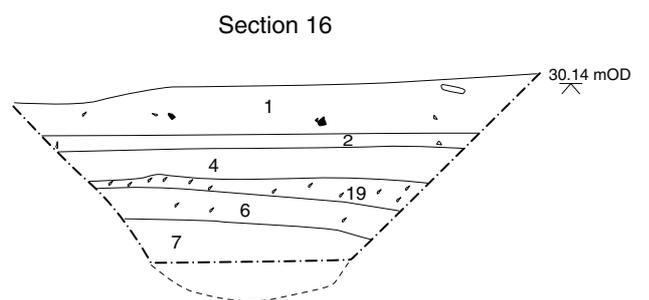
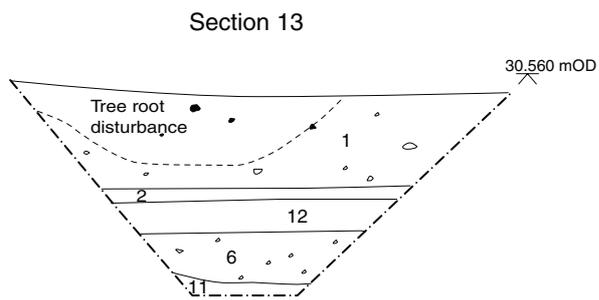
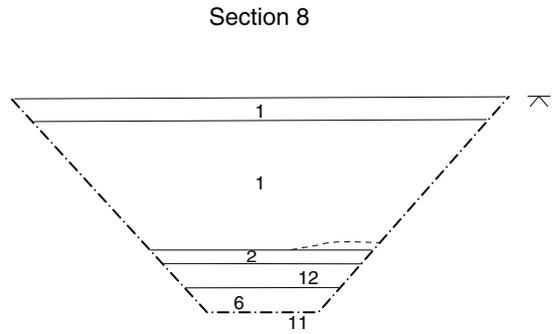
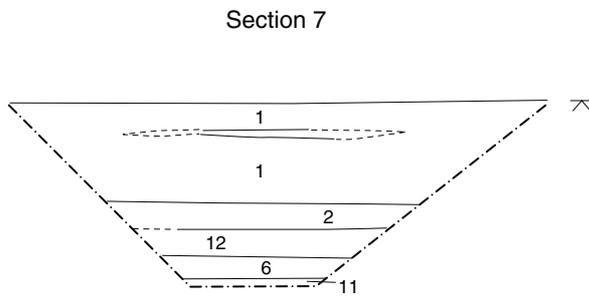
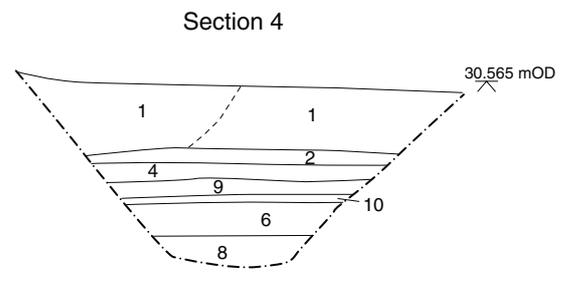
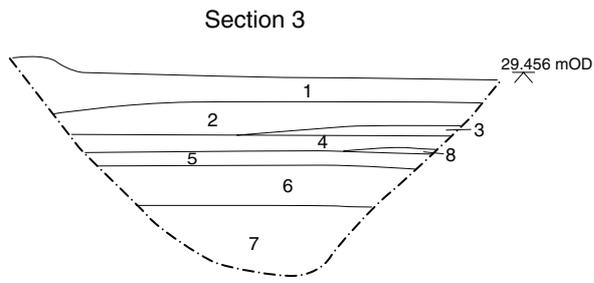


Figure 3 : Plan showing position of human remains



1:100

Figure 4 : Sections



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