

Archaeological Evaluation and Assessment of Results





Ref: 62507.01 April 2007

Archaeological Evaluation and Assessment of Results

Prepared on behalf of Videotext Communications Ltd 49 Goldhawk Road LONDON W12 8QP

> By Wessex Archaeology Portway House Old Sarum Park SALISBURY Wiltshire SP4 6EB

Report reference: 62507.01

April 2007

© Wessex Archaeology Limited 2007, all rights reserved Wessex Archaeology Limited is a Registered Charity No. 287786

Archaeological Evaluation and Assessment of Results

Contents

Summary Acknowledgements

1	BAC	KGROUND	1
	1.1	Introduction	1
	1.2	Site Location, Topography and Geology	1
	1.3	Historical Background	1
		Dotton	1
		Dotton Mill	2
		The Leat and Mill Race	3
		Dotton Chapel	4
		Dotton Mill: the implications of the Domesday evidence	5
	1.4	Previous Archaeological Work	5
2	AIM	S AND OBJECTIVES	5
3	MET	ГНОДЅ	6
	3.1	Geophysical Survey	6
	3.2	Evaluation Trenches	6
4	RES	ULTS	7
	4.1	Introduction	7
	4.2	Geophysical Survey	7
		Introduction	7
		Results of Resistance Survey	7
		Results of GPR survey	8
	4.3	Evaluation Trenches	9
		Area 1: The Mill (Trenches 1 & 3, Figure 4, Plates 1-6)	9
		Area 2: The Leat (Trenches 2, 4 & 5)	3
5	FIN	DS1	5
	5.1	Contents of the assemblage1	5
	5.2	Potential and Further Recommendations1	5
6	DIS	CUSSION1	5
	6.2	The Domesday Mill1	6
	6.3	The Post-Medieval Mill1	6
	6.4	The Leat1	7
7	REC	COMMENDATIONS1	7
8	ARC	CHIVE1	8
9	REF	ERENCES1	9

Appendix 1: Trench summaries Appendix 2: List of finds by context

Figures

Figure 1:	Site location showing position of trenches
Figure 2:	Detail of 1842 Tithe Map showing Dotton Mill (courtesy of Clinton
	Devon Estates)
Figure 3:	Geophysical survey areas and summary results
Figure 4:	Plan of trenches 1 and 3
Figure 5:	Plan of trench 2 with south-east facing section
Figure 6:	Trench 2 showing steps (434)
Figure 7:	Trench 4, south-west facing sections

<u>Plates</u>

Plate 1:	Trenches 1 and 3
Plate 2:	Wheel pit group 137
Plate 3:	Wheel pit group 137 and cog pit 138
Plate 4:	Trench 3 showing tiled floor (306)
Plate 5:	Trench 1 from east
Plate 6:	Dotton Mill from the south-east (early 20th century)

Archaeological Evaluation and Assessment of Results

Summary

In July 2006, an archaeological evaluation was undertaken by Channel 4's 'Time Team' at the site of Dotton Mill, Dotton, near Otterton, Devon, to investigate the development of a water mill from the medieval period into the mid 20th century.

The mill was first mentioned in Domesday Book, and a mill appears to have survived on the site until relatively recent times; the most recent building was finally demolished in 1968. The mill leat was first mentioned in the mid 16th century, and the existing parish boundary follows its course as identified from historical mapping. It is possible that the parish boundaries were laid down at Domesday when the land in that area was divided between Dotton and Otterton. As well as exploring the medieval history of the mill and leat, the project also aimed to investigate structures located to the west of the mill leat and shown on the 1842 tithe map of Dotton, to see whether they were connected with the medieval mill.

The evaluation did not reveal any structures or features which could be dated to the medieval period. The rebuilding of the mill in the 17th or 18th century, potentially on the site of the original mill, and the re-digging of the leat at a similar time, is likely to have either removed or masked any evidence of the medieval mill.

The project did, however, identify the type of mill which had been used up to the middle of the 20^{th} century. Old photographs of the mill appeared to show the buildings as having an undershot wheel, but it became clear following the excavation of the wheel pit that Dotton Mill was actually powered by a breast-shot wheel. It was possible to show that the mill had undergone a series of refurbishments, with a major phase occurring during the 19^{th} century which saw the rebuilding of the wheel pit and repair to the main walls of the mill. Areas of the domestic part of the mill were also located, including the kitchen floor.

Archaeological Evaluation and Assessment of Results

Acknowledgements

This programme of post-excavation and assessment work was commissioned and funded by Videotext Communications Ltd, and Wessex Archaeology would like to thank the staff at Videotext, and in particular Michael Douglas (Series Editor), Melinda Corkery (Production Manager), Jaine Hilston (Assistant Producer), Jon Willers (Researcher) and Jenny James (Production Coordinator) for their considerable help during the recording and post-excavation work.

The geophysical survey was undertaken by John Gater, Jimmy Adcock and Emma Wood of GSB Prospection. The field survey was undertaken by Henry Chapman of University of Birmingham and landscape survey. Analysis of the Domesday Book evidence was undertaken by Teresa Hall. The excavation strategy was devised by Mick Aston of Bristol University. The on-site recording was co-ordinated by Steve Thompson assisted by Laura Catlin who was also in charge of on-site finds processing, both of Wessex Archaeology.

The excavations were undertaken by Time Team's retained archaeologists, Phil Harding (Wessex Archaeology), Kerry Ely, Brigid Gallagher, Ian Powlesland, Naomi Sewpaul and Matt Williams with assistance from Claire Haynes, Jonathan House and Mick Tunnicliffe. On-site pottery identification was carried out by John Allan, with small finds identification by Helen Geake (Cambridge University).

The archive was collated and all post-excavation assessment and analysis undertaken by Wessex Archaeology. This report was compiled by Steve Thompson, assisted by Naomi Hall, with specialist reports prepared by Grace Jones (finds) with Jessica Grimm (animal bone). The illustrations were prepared by Will Foster. The postexcavation project was managed on behalf of Wessex Archaeology by Lorraine Mepham.

The work also benefited from discussion on-site with millwright and industrial archaeologist Martin Watts, industrial archaeologist Mike Nevell (University of Manchester Archaeology Unit), Domesday specialist Theresa Hall, Phil Harding, Helen Geake and Mick Aston.

Jennifer Richards and the Clinton Devon Estates are gratefully acknowledged for supplying images used within this report, and thanks are extended to Clinton Devon Estates for allowing access to the Site for geophysical survey and archaeological evaluation.

Archaeological Evaluation and Assessment of Results

1 BACKGROUND

1.1 Introduction

- 1.1.1 Wessex Archaeology was commissioned by Videotext Communications Ltd to undertake a programme of archaeological recording and post-excavation work on an archaeological evaluation undertaken by Channel 4's 'Time Team' at the site Dotton Mill, Dotton, near Otterton, Devon (hereafter the 'Site') (Figure 1).
- 1.1.2 This report documents the results of archaeological survey and evaluation undertaken by Time Team, and presents an assessment of the results of these works.

1.2 Site Location, Topography and Geology

- 1.2.1 The Site is located in the grounds of Dotton Mill, Dotton, Devon and is centred upon NGR 308615 88555. Dotton Mill was demolished by the council in 1968 and the land is currently managed by Clinton Devon Estates.
- 1.2.2 The small hamlet of Dotton now forms part of the parish of the nearby village of Colaton Raleigh. The Site is situated around 5 km south of Budleigh Salterton and 8 km north-east of Sidmouth. The Site consists of two fields separated by a public footpath to the west of the River Otter.
- 1.2.3 The Site is located at an elevation of approximately 16m above Ordnance Datum (aOD). The underlying geology is Upper sand stone with small deposits of valley gravel (Videotext Communications 2006, 2).

1.3 Historical Background

Dotton

- 1.3.1 The origins of the name of Dotton come from Doda the priest, mentioned in the Domesday Book, who held the lands prior to 1066. Doda's Tun means farm or town of Doda. The manor is listed as Otrit in Domesday, one of several small hamlets on the river Otter. The name 'Abbot's Dotton', 'Doddeton' or 'Dodington' was first mentioned in around 1242 when the land was granted to the Abbey of Dunkeswell (Videotext Communications 2006; Orme 1987; Davidson 1880).
- 1.3.2 Domesday records a mill which paid five shillings, two acres of meadow, and ten acres of pasture. The manor was worth a total of seven shillings with the record in Domesday stating: *'Rainer holds DOTTON from Baldwin.* Dodda held it TRE, and it paid geld for 1 virgate of land and 3 ferdings. There is land for 2 ploughs. There are 1¹/₂ ploughs, with 1 slave and 2

bordars, and a mill rendering 5s, and 2 acres of meadow and 10 acres of pasture. Formerly, as now, worth 7s.' (Videotext Communications 2006, 2).

1.3.3 In *c*.1242 the lands and church at Dotton were gifted by Bishop William Brewer of Exeter to Dunkeswell Abbey and called Abbot's Dotton. It is possible that Dotton was divided between Dunkeswell Abbey and other secular or lay owners. 'Doditon Abbatis' (1377) and 'Dodyngton Abbott' (1391) are recorded as being held by Thomas Langford of the Courtenay family and in 1535 Dunkeswell Abbey paid 15d rent for Dotton manor to an unknown person, plus 7s 11d rent to Henry Marc of Exeter (*ibid*, 2).

Dotton Mill

- 1.3.4 The '*mill rendering 5s*' in Dotton at Domesday was not mentioned again until 1532 when Dunkeswell Abbey leased a fulling mill, garden, pond and watercourse (probably the leat) in Dotton to William Stoford. The lease also included the chapel and the tithes due to it (DRO 96M/93/17).
- 1.3.5 After the dissolution of the monasteries, Dotton was granted to John Lord Russell in 1539 (later Earl of Bedford). In 1543 the lordship and manor of Dotton, the chapel, a meadow and watermill were sold to Richard and John Duke for £405 0s 5d (DRO 96M/81/1).
- 1.3.6 In response to the closing of the Otter estuary by a naturally occurring pebble bar some years earlier, the Duke estate raised levies in nearby parishes in order to remove it in 1553. This was unsuccessful and the pebble bar undoubtedly had an impact on the flow of the river Otter. This was a gradual process, however. The last record of ships sailing up the Otter as far inland as Otterton was in 1482 (M. Watts pers. comm.). In *c*.1540 the antiquarian John Leland visited Otterton and notes that '*less than a hundred years ago, ships used this haven but now it is completely blocked up*'. For a ship to sail that far inland indicates that the river was much broader and possibly deeper than its course today. The closing of the estuary could have affected the location and the development of the mill at Dotton (Videotext Communications 2006, 3; Mason 1993; Lane 2004).
- 1.3.7 In 1779 after the Duke family died out, Dotton Manor was put up for sale but Dotton mill was not listed (DRO 96M/Box2/4). However, the 'water grist mills known as Dotton Mills' were listed in a will of 1785 (Plymouth, 107/251). In the same year, the manor was bought by Denys Rolle of Bicton (Videotext Communications 2006, 3).
- 1.3.8 John Lightfoot was charged with building *a 'dwelling house and sett of mills'* as part of his lease in 1792 (DRO 96M/Add/E1). It is possible that as the mill was not mentioned between 1786 and 1792 in various estate surveys, it had fallen into disrepair and had to be rebuilt (Videotext Communications 2006, 3; Lane, 2004). There is no indication of the type of mill built at Dotton in 1792, nor is it certain whether *'a sett of mills'* refers to millstones, millwheels or mill buildings. Other leases for the arable tenants at Dotton held by the Rolle family required them to *'grind at Otterton mill'*. Otterton mill is some 3 miles to the south of Dotton, which implies that the mill at Dotton was out of action at that time.

- 1.3.9 Following Lightfoot's death in 1826, the mill appears to have been unoccupied for some time. By 1841, however, the census lists Joel Roger Carter as the miller at Dotton (a subsequent directory listing shows that the mill is grinding corn. (Videotext Communications 2006, 3). The 1842 tithe map (**Figure 2**) shows two dwellings in Dotton: Barton Farm and the mill, both situated on the eastern edge of the parish. The mill remained in Carter family ownership until 1891 when Edward Cody is listed as the miller in the estate letters, the 1891 Census, and Kelly's 1893 Trade Directory (Videotext Communications 2006, 3; Steward Letterbooks 1891).
- 1.3.10 Dotton manor and mill came under the ownership of the Clinton Devon Estates in 1907 when the Rolle family line died out. However, from the 1870s onward the mill seems to have been in decline. Estate correspondence recorded in the Steward Letterbooks show that the Rolles were concerned about the *'present state of dilapidation at Dotton Mill'* (Videotext Communications 2006, 3, 15; Steward Letterbooks 1872).
- 1.3.11 In 1873-5 Joel Roger Carter considered refurbishing the mill premises and took out a 60 year rebuilding lease at £5 p.a. From 1914-36 the running of the mill was taken over by Richard Lethbridge. In 1936 Lionel Creed leased the mill, but noted its dilapidated state and that the equipment needed much attention. He shortly moved into a cottage opposite the mill, built by the Clinton Devon Estate on the site of what was the old pre-1871 Barton Farm (Videotext Communications, 4; Lane 2004).
- 1.3.12 The mill is thought to have ceased working in 1946. In 1950 the mill site was listed as 'dwelling house (not fit for human occupation), Mill House, Garden etc' (Vidoetext Communications 2006, 4; Lane 2004).
- 1.3.13 In 1967, Colaton Raleigh Parish Council wrote to Clinton Devon Estates requesting that the Dotton mill should be pulled down as it 'was in a very dangerous state and that children playing there might easily get drowned' (Videotext Communications 2006; Lane 2004) and in December of the following year the Dotton Mill was demolished leaving no upstanding remains.
- 1.3.14 Images of the mill from the early 20th century (**Plate 6**) show a three-storey building with a possible undershot wheel. No descriptions of the mill workings exist except for a reference in 1881 when Joel Carter bought three millstones for £3 from East Budleigh (Steward Letterbooks 1881).

The Leat and Mill Race

1.3.15 It is not known when the leat and mill race were created, or whether any changes were made to them over the years. The lease of 1532 between Dunkeswell Abbey and William Stoford gives the first mention of the mill and watercourse which could refer to the leat and race (DRO 96M/93/17). It is not certain when the leat and race was filled in, although it was last shown on the 1963 OS Map. Local tradition recalls that the leat ran along the base of a fairly steep cliff and not the gradual slope which exists today, and that following a very bad storm in 1967 which brought a number of trees down in Dotton the farmer decided to level and landscape the area, and so reduced the

steepness of the cliff to the slope seen today. The final filling of the leat is likely to have occurred at this time.

1.3.16 The parish boundary still runs along the line of the old leat, a division potentially laid down at Domesday.

Dotton Chapel

- 1.3.17 The church at Dotton was first mentioned in 1242 when the church and lands were gifted to Dunkeswell Abbey. Dunkeswell Abbey was a Cistercian Order which in the 12th century prohibited gifts of parish churches because it could bring unearned revenue and unwarranted contact with lay people. Cistercian houses exploited the land directly by the means of a grange staffed by lay brothers. Often previous inhabitants and their dwellings were removed and the local church was closed.
- 1.3.18 In 1259 the Bishop of Exeter found that the monks at Dotton had ejected the inhabitants, turned the land over to their cultivation, and closed the church. By the following year, the monks were forced to restore the church and hold regular services.
- 1.3.19 In the 1291 survey of Devon parishes the church at Dotton is recorded as worth 13s 4d a year. The income of the manor as a whole was 29s 4d. There is no register of rectors of Dotton church, so services were possibly carried out by a monk or hired chaplain (Videotext Communications 2006, 4; Orme 1987)
- 1.3.20 With the dying out of the Cistercian system of farming by lay brothers in the 14th century it is likely that Dunkeswell Abbey rented out Dotton directly to laymen. In 1532 the abbey leased Dotton and its church, now called a chapel, to William Stoford. The *'free chapel'* and manor, as it is called in the lease, was independent from other parishes. William Stoford was permitted to take all tithes and offerings in return for £1 rent a year and the upkeep of the roof. This status as an extra-parochial parish continued until 1868 when Dotton was recognised as a civil parish. It was annexed to Colaton Raleigh Parish in 1894.
- 1.3.21 It is not clear when the chapel ceased to be used or even where it stood. By 1793 Richard Polwhele believed that the chapel had been *'long since demolished'*. There is no mention of a chapel in any documents after 1584 (Videotext Communications 2006, 4; Orme, 1987).
- 1.3.22 There are several late 19th century accounts which give conflicting locations for the chapel, or grange as it is sometimes termed. An account in 1880 places the chapel on the left of the road leading down to the mill. An 1888 paper notes that "the mill occupies the site of an ancient Chapel, long since destroyed". Finally, Kelly's Directory of Devon and Cornwall states that 'on the site of the chapel, which existed till the 13th century, is now a modern farmhouse' (Vidoetext Communications 2006, 5; Davidson 1880; Hutchinson 1888).

Dotton Mill: the implications of the Domesday evidence

- 1.3.23 In Domesday Book we are told that Dotton was held by Doda in the time of King Edward, and the Exon Domesday supplements this information with the fact that Doda was a priest. After the Conquest, however the land was given to Baldwin, the Sheriff of Devon, who let it to a sub-tenant called Rainer.
- 1.3.24 A chapel at Dotton appears to have been amongst the churches acquired by the Abbey of Mont Saint-Michel when William the Conqueror gave them the manor and church of Otterton (Matthew 1962, 31). Otterton was a high status Anglo-Saxon church with chapels recorded at Bicton, Henderland and Sidmouth as well as Dotton. Its place-name, a combination of the river name and the 'tun' element, is characteristic of Saxon minsters churches in Somerset (e.g. Taunton, Chewton, Bruton) and Devon (e.g. Plympton, Yealmpton, Colyton, Bishopsteignton). It is not unreasonable to suppose, therefore, that Doda was a priest of the church of Otterton and that Dotton was originally part of the lands of that church.
- 1.3.25 Matthew (1962, 31) states that Mont Saint-Michel disposed of six of the churches they were given at the time of Henry I. One of the churches was given to the Bishop of Exeter in 1206, which was presumably Dotton, as in c.1242 the lands at the church at Dotton were given by Bishop William Brewer of Exeter to Dunkeswell Abbey and subsequently called *Abbot's Dotton*.
- 1.3.26 The relationship between Dotton and Otterton may account for the alignment of the parish boundary along the mill leat separating the two parishes, rather than along the River Otter, which the boundary follows for the rest of its length. This boundary is likely to have been fixed with the gift of the land away from the church at Otterton at Domesday.

1.4 Previous Archaeological Work

- 1.4.1 In 2004 local resident Laura Whittock conducted a surface and desktop survey of the site of Dotton Mill and its adjacent field as part of her A-level coursework. From the OS map evidence dating from the early 19th century it was concluded that there was a complex of ten building associated with the mill at various times. Only the shed located next to the site of the mill has standing remains surviving today. Although the leat and race have been filled in, they can be traced along a contour from the weir to the mill and back to the river again. A walk over the site produced masonry and small quantities of 19th and 20th century pottery.
- 1.4.2 No other archaeological work has been carried out at this site.

2 AIMS AND OBJECTIVES

2.1.1 A project design for the work was compiled by Videotext Communications (2006), providing full details of the research aims and methods. A brief summary is provided here.

- 2.1.2 The primary aim of the project was to investigate the Site's development as a water mill from the medieval period into the mid 20th century. The expectation was that data collected during the project would form an important resource for future management and research of the Site.
- 2.1.3 Three areas of investigation were proposed:
 - 1) Trenches on the mill site itself focused on the hurst or cog pit, wheel pit and the domestic areas of the structure.
 - 2) The leat was investigated in an attempt to determine a date of construction, and also to provide data regarding landscape modification over time.
 - 3) Earthwork features in the field to the west of the mill were also investigated, through survey and excavation, in an attempt to characterise this element of the site and its possible relationship to the mill itself.

3 METHODS

3.1 Geophysical Survey

3.1.1 Prior to the excavation of evaluation trenches, a geophysical survey was carried out across the Site using a combination of resistance and magnetic survey (**Figure 1**). The survey grid was set out by Dr Henry Chapman of Birmingham University and tied in to the Ordnance Survey grid using a Trimble real time differential GPS system.

3.2 Evaluation Trenches

- 3.2.1 Five evaluation trenches of varying sizes were excavated (**Figure 1**). Their precise locations investigated geophysical anomalies, or were targeted to investigate elements of the cartographic evidence.
- 3.2.2 The trenches were excavated using a combination of machine and hand digging. All machine trenches were excavated under constant archaeological supervision and ceased at the identification of significant archaeological remains, or where natural geology was encountered first. When machine excavation had ceased all trenches were cleaned by hand and archaeological deposits investigated.
- 3.2.3 The excavated up-cast was scanned by metal detector.
- 3.2.4 All archaeological deposits were recorded using Wessex Archaeology's *pro forma* record sheets with a unique numbering system for individual contexts. Trenches were located using a Trimble Real Time Differential GPS survey system. All archaeological features and deposits were planned at a scale of 1:20 with sections drawn at 1:10. All principal strata and features were related to the Ordnance Survey datum.
- 3.2.5 A full photographic record of the investigations and individual features was maintained, utilising colour transparencies, black and white negatives (on 35mm film) and digital images. The photographic record illustrated both the

detail and general context of the archaeology revealed and the Site as a whole.

- 3.2.6 At the completion of the work, all trenches were reinstated using the excavated soil.
- 3.2.7 A unique site code (DOT 06) was agreed prior to the commencement of works. The work was carried out on the 2nd -5th July 2006. The archive and all artefacts were subsequently transported to the offices of Wessex Archaeology in Salisbury where they were processed and assessed for this report.

4 **RESULTS**

4.1 Introduction

4.1.1 Details of individual excavated contexts and features, the full geophysical report (GSB 2006), the summary of the landscape and earthwork survey and details of artefactual and environmental assessments, are retained in the archive. Summaries of the excavated sequences can be found in **Appendix 1**.

4.2 Geophysical Survey

Introduction

- 4.2.1 Two areas were surveyed by Ground Penetrating Radar (GPR) and one area investigated by resistance survey (**Figure 1**).
- 4.2.2 Conditions for survey were generally good. The Mill site (Area 1) was cleared of overgrowth prior to survey and Area 2 consisted of short pasture. At the time of survey the weather was very hot, making the soil dry; this resulted in a poor electrical contact between the resistance probes and the ground, but this appears to have had no adverse effect on the data.

Results of Resistance Survey

- 4.2.3 A band of low resistance running through the data is likely to be the course of the leat associated with the demolished Dotton Mill (**Figure 3**). This interpretation is backed up with the information gained from the trenches and also the earthwork information. The bend in the leat at (A) has areas of high resistance at either side and was thought to be a form of canalisation; excavations revealed this not to be the case and the cause may be related to rubble spread by the local farmer.
- 4.2.4 An area of high resistance (B) is likely to be associated with building material/rubble. Parch marks within the grass were visible, which are on the same alignment as the high resistance. However, due to the slope in the topography, a natural cause of the high resistance is also likely.
- 4.2.5 The north-eastern section of the data shows areas of high resistance (C) which are likely to be due to the topography or landscaping rather than building remains

4.2.6 A series of trends (D) appear to form part of an enclosure and an area of high resistance is situated within this 'feature'. This may be purely a coincidence and could have been formed from natural occurrences.

Results of GPR survey

<u>Area 1</u>

- 4.2.7 Despite there being relatively well preserved, substantial remains of Dotton Mill, the GPR time-slices are not particularly clear-cut. The first 0.40m showed little that is readily identifiable as a mill and leat. However, in retrospect, the increased reflectivity in the southwest probably indicates the presence of back-fill material, in contrast to a more naturally developed soil towards the bank.
- 4.2.8 At around 0.5m the zone of increased response spreads out and is shifted northwest, whilst the leat area becomes significantly 'quieter'. The lack of response over the chase is likely to be due to either a relatively homogenous backfill, or the shallow material causing near-total reflection/scattering of the radar energy. The spread of reflections to the northwest shows little definition and assumedly is the top of the demolition layer over the *in situ* mill features.
- 4.2.9 From approximately 0.5m onwards, it is possible to see the outline of the main mill structure, and features with in it. The low amplitude zone in the centre is roughly coincident with an intact tile floor, overlain by burnt material (assumed to be part of the demolition phase). This absence of strong responses may be because the floor is laid directly onto natural material and as such the deposits are not as deep as round the walls where foundations are also to be found. Alternatively, it could be that the composition of the burnt material is causing severe signal attenuation, thus masking features below it.
- 4.2.10 A smaller zone of intense reflections is very distinct from around 0.75m, which continues to show right through the section down to the limits of the data at approximately 2.0m. There is little definition to the responses to suggest an origin. Upon excavation, this was found to be a large wheel pit backfilled with rubble and masonry.

Area 2

- 4.2.11 The shallow slices show a zone of increased amplitude, the trend of which matches noticeable parch marks and a zone of high resistance (B). Although a trench was put in this area it is unclear as to the precise cause of these features. The GPR suggests a shallow origin but little was noticeable upon excavation, except for levelling layers following the landscaping of the area, the main archaeological levels were much deeper.
- 4.2.12 The northern edge of the leat was identified in the GPR results and corresponded with the resistance survey.

4.3 Evaluation Trenches

Area 1: The Mill (Trenches 1 & 3, Figure 4, Plates 1-6)

- 4.3.1 Trench 1 was positioned to investigate a geophysical anomaly interpreted as the mill building and the wheel pit of the mill.
- 4.3.2 Underneath the topsoil (101) was deposit (102), derived from the demolition of the building and the subsequent removal of material in 1968. This deposit sealed *in situ* archaeology (**Plate 1**).
- 4.3.3 It became clear that there had been a number of phases of building and repair to the mill structure, and that earlier remains if present would be masked by the later additions. If there was a medieval mill at this position, it was certainly not identified within Trench 1.

Phase 1

- 4.3.4 The stratigraphically earliest structures in Trench 1 were identified to the south of the main southern wall (122) of the mill building. Mortar layer (126) was revealed in a sondage dug to the south of (122). This layer was overlain by structure (125), which was sealed by wall (122). The nature of (125) remains unknown, but it was possibly the wall for an earlier (but unidentified) wheel pit.
- 4.3.5 Also potentially associated with this phase of activity was the earliest identifiable phase of the excavated wheel pit. Sealed below 19th century alterations at the base of the wheel pit it appeared that that the pit had been rock-cut, as natural sandstone bedrock (117) was exposed at the base. The cut of the wheel pit (139) had created a relatively smooth surface and this would have been smoothed further by the action of water and water-borne stones and pebbles against the rock. The remains of such water-borne material were identified within the wheel pit and recorded as (116/128). This gravel deposit overlay a large fragment of wood (129), a square-shaped beam, only partly revealed, which continued under the Phase 2 wall (107) at the base of the wheel pit. It was unclear as to what structure timber (129) belonged, but it was stratigraphically sealed below (107) and therefore must belong to an earlier phase of activity. No dates for the rock-cut wheel pit or for the timber were ascertained, and so it may be the site of the original early medieval wheel pit, or belong to a later phase of the mill. The rock-cut wheel pit was revealed following the removal of later concrete wheel pit floor (112).

Phase 2

4.3.6 The main mill building was potentially 17th or 18th century in date (M. Nevell and M. Watts, pers. comm.), and was formed of walls (115), (122) and (107). Walls (115) and (122), the northern and southern walls of the mill, were built of cob, and were recorded respectively as (305) and (304) in Trench 3. The eastern wall (107) was stone built, from well dressed local sandstone with compact lime mortar. This wall also formed the western wall of the wheel pit Group (137 (139, 107, 109, 106 and 112)), located on the eastern side of the building, which housed the water wheel (**Plate 2**). Wall (107), therefore, had

to be constructed of stone as it had to be sufficiently waterproof and able to stand the constant soaking it would receive as water passed through the water wheel. Only this wall can be clearly interpreted as part of the 17th century phase of the wheel pit as later alterations have either removed or masked earlier structures.

- 4.3.7 Wall (107) not only formed the eastern wall of the mill building and the western wall of the wheel pit but it also formed the eastern wall of the cog pit Group (138 (107, 110 and 127)), of which sandstone wall (110) formed the western wall. The base of the cog pit was concave in shape (to allow for the rotation of the wheel) and formed of roughly worked sandstone blocks covered with dark grey mortar (**Plate 3**). The base was recorded as (127). The southern wall (140) of the cog pit was built of roughly hewn sandstone blocks. The cog pit housed the pit wheel which was connected (through wall (107)) to the axle of the water wheel and was used to convert the power from the water wheel to drive the mill machinery.
- 4.3.8 As the cog pit was positioned within the mill building, and the pit wheel would normally have been constructed of cast iron, it would have been necessary to keep the machinery dry, as water would travel along the axle joining the water wheel to the cog wheel. A brick-lined drain had been constructed within wall (107), angled downwards so that any water which entered the cog pit along the axle would flow immediately back in to the wheel pit.

Phase 3

4.3.9 Following the construction of the main walls of the mill building, the cog pit and the wheel pit, repairs were necessary to maintain the building's integrity; this can be seen in the northern wall (118) which replaced a section of (115). A possible buttress (132) was added on the northern side of (118), to aid in the strengthening of the building. The date of these alterations is unknown.

Phase 4

- 4.3.10 There then followed a period of large-scale repair and replacement potentially dating to the 19th century, which saw major refurbishment of the wheel pit, repair to wall (107), and the possible addition of a new building on the northern side of the mill. This phase of refurbishment is clearly distinct from the earlier activity on the site as all the work was in brick, unlike the earlier stone construction.
- 4.3.11 Phase 4 saw the construction of a replacement eastern wall of the wheel pit, the construction of a brick-built artificial weir leading form the sluice gates and the leat into the wheel pit, the laying of a concrete floor at the base of the wheel pit and the addition of a concrete pillar to hold the sluice gates.
- 4.3.12 The eastern wall of the wheel pit Group (137) was recorded as (104). This was contemporaneous with the building of (106), an artificial weir known as the 'breast', at the northern end of the wheel pit, and fed from the leat to the north (**Plate 2**). The breast formed a concave structure within which the water wheel rotated, and was so shaped that the distance between the wheel and the structure was reduced, and the full force of the water which fed the

wheel was forced on to the wheel buckets. It was clear from this structure that the water wheel at Dotton was in fact a breast-shot wheel and not undershot as had originally been thought from the photographic evidence.

- 4.3.13 The base of the wheel pit was constructed of concrete slabs (112) which butted the end of the brick-built breast, and this appears to have been the element of the refurbishment. A sondage was excavated through the concrete floor layer (112), revealing timber (129), gravel layer (116/128) and the earlier, rock-cut wheel pit (139) (see phases 1 & 2). The concrete slab probably continued to the south to form part of the sloped tailrace, but this was not exposed.
- 4.3.14 Phase 4 also saw the partial repair of wall (107) at the point where the axle would have passed through into the cog pit. This was repaired and strengthened by the addition of brick wall (109). The wall would have been subjected to considerable force as the wheel turned, and it appears that the wheel may have been running out of alignment. Even after the addition of (109) it seems that the wheel was not running smoothly and in alignment, as deep grooves had been scored in to the concrete floor (112) and the brick breast (106). The water wheel had slumped slightly to the east and its outer edge was touching the base of the wheel pit and damaging it.
- 4.3.15 To the north of the wheel pit a single concrete pillar (111), positioned at the north-west corner, was identified. This represented the remains of the structure which held the sluice gate or penstock in place to control the flow of water from the pentrough into the pit. There was no evidence of the rest of the penstock structure or the pentrough (which would have sat at the head of the leat, immediately before the wheel pit).
- 4.3.16 A new lean-to building on the northern side of the mill may also have been added during this phase. Wall (133) butted the northern end of possible buttress (132). This was apparently associated with the laying of a concrete floor (113) upon make-up layer (134), creating a room within walls (115) and (118), buttress (132) and the new wall (133). This lean-to building is partly visible on the early 20th century photographs of the mill (**Plate 6**).
- 4.3.17 The main floor of the mill (135), bounded by walls (115) and (122), was also potentially of 19th century date and belonging to Phase 4, but it was sealed beneath a later floor which may have been part of the final refurbishment of the building. Floor (135) was brick-built and was only partially revealed below later concrete floor (114).

Phase 5

4.3.18 Brick floor (135) was replaced by concrete floor (114), which had two reused millstones incorporated into the surface (**Plate 5**). Millstone (120) was the top stone or runner stone of a pair of stones, and had been up-ended to show the 'rynd hole', a carved socket where the 'rynd' (the bracket which holds the runner stone to the spindle and the rest of the gearing mechanism) was positioned. The stone was identified as 19th century on the basis of the rynd hole. (M. Nevell and M. Watts pers. comm.).

- 4.3.19 The millstone was made from local sandstone, a material which lacks strength and durability, and was possibly sourced from a local quarry used from the beginning of the medieval period but which had ceased production by the later medieval period. The fact that this stone was sourced from an old quarry implies the poor status of the mill at Dotton, as far better, more hardwearing stones were being utilised at this date (M. Nevell and M. Watts pers. comm.).
- 4.3.20 The second millstone (121) was also an up-ended runner stone which revealed a 19th century rynd hole. This stone is Dartmoor granite, a more durable material than the local sandstone used for the other millstone.
- 4.3.21 Floor layer (114) was part of slightly raised floor surface which surrounded the machinery pit in which the internal mechanism of the mill machinery was housed. The floor would have been at the level at which the millstones could be accessed, with the base of the main shaft, the wallower and spur wheel located in the pit.
- 4.3.22 The addition of concrete repair (141) to the southern wall (140) of the cog pit may have occurred at this time.

Phase 6

- 4.3.23 The mill is believed to have been last used in 1946, and at this time it appears that portions of the mill machinery were dismantled and removed, but the final demolition and levelling of the mill in 1968 constituted the last phase of activity. The demolition and levelling of the site was recorded as deposits (105), (108) and (123), filling the wheel pit, machine pit and cog pit respectively. Only (105) and (123) were fully excavated; both contained the remains of mill machinery, fragments of cogs and spindles which had not been removed. Deposit (123) contained sherds of post-medieval utilitarian redware pottery and modern teawares as well as other finds dated to the modern period. Deposit (108), however, contained a number of sherds of residual medieval pottery, the only medieval material to be recovered, including 13th-century material.
- 4.3.24 To the east of the wheel pit was a large slab of concrete (103) which overlay backfill deposit (131); this marked the final backfilling and capping of the by-pass channel which ran around the wheel pit. The by-pass channel was used to divert water through, when the penstock was closed to allow access to the wheel pit.

Trench 3

4.3.25 Trench 3 was positioned to investigate the potential domestic area of the mill building. Underneath topsoil (301) were various demolition deposits. Deposit (302/307) was derived from the demolition of the cob walls of the building. Layers (301) and (302) both contained sherds of modern refined white wares and fragments of 18th-century clay tobacco pipe. Layer (302) in turn overlay burnt deposit (303), derived from the burning of timbers within the mill and (313), a dump of smashed roofing slate from the lean-to building on the north side of the mill. Following the removal of these demolition deposits *in situ* archaeology was revealed.

- 4.3.26 The main walls of the mill were identified with the continuation of walls (115) and (122) from Trench 1, recorded as (305) and (304) respectively, and the floor surface of the mill also identified. Floor surface (306) was constructed of ceramic tiles. The tiles concentrated around the edge of the room had survived well, but those in the centre of the room were very worn (**Plate 4**). A sondage excavated through the tiles revealed that the floor was set into concrete bedding layer (312), which in turn overlay a redeposited natural levelling layer (311). This area of the mill appeared to represent domestic quarters, which was confirmed by a number of local residents who remembered the mill when it was upstanding and recalled the tiled floor as belonging to the kitchen.
- 4.3.27 To the north of mill wall (305), an area of concrete flooring was uncovered which appeared to represent the continuation of floor layer (113) from Trench 1, belonging to the lean-to structure on north side. The outer wall of the lean-to was identified and recorded as (318).
- 4.3.28 On the south side of wall (304) a sondage was excavated through the deposits exposed, and revealed layers of garden soil (309) overlying natural deposits. Layer (309) contained sherds of 17th/18th-century German Westerwald stoneware and Staffordshire-type slipware.
- Area 2: The Leat (Trenches 2, 4 & 5)

Trench 2 (Figure 5)

- 4.3.29 Trench 2 was placed across the line of the leat and the boundary between the parishes of Colaton Raleigh to the west and Otterton (now Newton Poppleford and Harpford) to the east as identified in the geophysical survey as anomaly (A) (**Figures 1** and **3**). The upper fill of the backfilled leat and the remains of the leat bank were identified below topsoil (201). Following the partial excavation of the leat, an auger survey was undertaken to record its full depth and the earliest fills within it.
- 4.3.30 The leat cut (203) was only partially revealed, but was recorded as over 4.5m wide, with a stone revetment (206) on the eastern side; the western side was not exposed. The date of the construction of the leat is unknown although its existence is known from at least 1532 when it was first mentioned in documentary sources. It is tempting to identify the leat as the same one feeding the mill mentioned at Domesday, which could suggest that the parish boundary (which the leat follows) was also potentially established at this period.
- 4.3.31 The leat cut natural geology (220), with revetment (206) to the east. Although the revetment had partially collapsed several redeposited natural layers forming the eastern bank of the leat were identified. Layers (204), (205), (212), (210) and (211) were all derived from the excavated up-cast and used to create a bank.
- 4.3.32 The infilling of the leat through both natural and deliberate means had occurred over some time and was probably accompanied by numerous periods of cleaning out and potential re-cutting of the leat, but the sequence

was difficult to date. Material recovered from the fills of the leat may have been washed down from up-stream and redeposited within the backfill layers.

- 4.3.33 The earliest recorded leat fills were identified through the auger survey. Overlying natural at the base of (203) was (216), a peat like deposit, which was overlain in turn by (215), a deposit laid down during a period of fast flowing water. Above (215) was (214), which accumulated during a period of slow water movement. Concentrated against the eastern slope was possible bank collapse deposit (209). Deposit (213/208/217) overlay (209) and (214) and was sealed by (207) which appeared to represent the final filling of the leat.
- 4.3.34 Deposit (202), which was over 1m thick, overlay (207). This was derived from the period of landscaping and levelling which occurred in 1967, when the steep cliff which had once formed the western limit of the leat was reduced to a gradual slope, sealing the course of the leat.
- 4.3.35 No datable material was recovered form the backfill deposits of the leat.

 $\underline{\text{Trench 4}}$ (Figure 6)

- 4.3.36 Trench 4 was positioned to investigate the mill leat further, and also the possibility of buildings on the higher ground to the west of the leat identified in the geophysics as anomaly (B) (**Figures 1** and **3**).
- 4.3.37 Following the removal of topsoil (401), levelling/landscaping layer (402) was encountered. Layer (402) was equivalent to (202) in Trench 2 the result of the landscaping of the cliff in 1967, which sealed the already almost completely backfilled leat. The topsoil contained pottery of 18th to 20th century date.
- 4.3.38 The earliest archaeological structures and deposits identified within Trench 4 potentially related to group of buildings identified on an 1842 tithe map (**Figure 2**), but the features were only partially revealed, and thus not fully understood. A rammed mortar floor surface (410) was identified towards the western limit of the trench, overlying the natural geology. No evidence of walls associated with the floor surface was observed, but a series of steps (434) to the east were potentially contemporaneous. The steps may have been designed to provide access from the upper level down towards the flatter floodplain of the River Otter. It is possible that they related to an earlier leat.
- 4.3.39 Both the steps and the floor layer were sealed by a number of deposits, (434) was overlain by (in order of deposition) (412), (413), (411), (406), (431), (432), (424), (433) and (430). Layers (412), (413) and (406) contained pottery and glass of 17th to 20th century date. These slumping deposits were potentially derived from upslope of the steps to the west. Layer (410) was sealed by (415/408) which contained modern pottery and which also sealed (430) and (433).
- 4.3.40 It appears that the leat was excavated after this period of deposition; this may have been a re-cut following the partially or perhaps full silting up of an earlier feature, but no evidence for an earlier leat was identified.

4.3.41 The leat, recorded in this trench as (429), cut through layer (415/408). At this point it was over 8m wide with gradually sloping sides; the base was only partially revealed although it appeared flat. On the western side was revetment (414), a mixture of stone rubble and timber, of which a number of timber planks survived. The leat was filled with a series of natural silting and deliberate backfilling layers (Figure 7). The earliest fill recorded was (420) which was then overlain (in order of deposition) by (419), (418), (417/426), (407), (404), (425), (405), (421) and (422). Layers (419), (418), (417/426), (407) and (404) contained pottery and glass of 17th to 20th century date. Subsequent to this, layers (428), (403), and (423) formed. These were then buried by the deposition of levelling/landscaping layer (402).

Trench 5 (Figure 1)

4.3.42 Trench 5 was also positioned across the leat. The trench was entirely machine excavated and was dug to a depth which was unsafe to work and so was not fully recorded. The leat was revealed in the trench and showed evidence of similar silting and deliberate backfilling deposits as seen in Trenches 2 and 4; these were not recorded.

5 FINDS

5.1 Contents of the assemblage

- 5.1.1 Finds were recovered from all five trenches excavated. Many are likely to relate to the occupation of the mill in the 17th and 18th centuries, with others also dating up to the present day. A very small quantity of medieval material was also recovered. The finds are summarised by context and functional group in **Appendix 2**.
- 5.1.2 The only medieval material recovered comprised 15 sherds of medieval pottery, all deriving from backfill/levelling layer (108) in Trench 1, and including a jar rim of 13th century date. They must be regarded as residual in this context.
- 5.1.3 A small number of hand-forged iron tools from the backfill/levelling layer (108), over the machine room, are of interest and are probably of 19th century date, contemporaneous with the rebuilding of the mill.

5.2 Potential and Further Recommendations

5.2.1 The finds have little potential for further analysis. Subject to the recommendations of the recipient museum, the assemblage could be subjected to selective disposal prior to archive deposition.

6 **DISCUSSION**

6.1.1 The project at Dotton Mill was only partially successful in achieving its stated aims. No traces of medieval structures or features associated with the mill mentioned at Domesday could be identified, perhaps due to the extent of the rebuilding and repair to the mill, and the extent of the landscaping which

had occurred along the line of the leat, affecting both the leat and the buildings located on the platform to the west identified on the historical mapping. The limited quantity of medieval pottery that was recovered does however indicate some activity at this time in the area. The evaluation was, however, successful in identifying the later phases of the mill from the 17^{th} or 18^{th} century onwards to the end of its working life and final demolition.

6.2 The Domesday Mill

- 6.2.1 According to Domesday Book, Dotton was held by Bishop Doda before the Conquest and then sub-let to Rainer by Baldwin, the Sheriff of Devon. Matthew (1962, 31) states that the chapel at Dotton was one of a number of churches given along with the high status Anglo-Saxon church at Otterton to the Abbey of Mont Saint Michel by William the Conqueror. The Abbey of Mont Saint Michel disposed of a number of the churches acquired c.1100-1135, with one church being given to the Bishop of Exeter c.1206. This is presumably Dotton, as in c.1242 the Bishop of Exeter gave the lands at Dotton to the Cistercian Abbey at Dunkeswell.
- 6.2.2 It is therefore possible that Doda was a priest of the Saxon church of Otterton and that the mill at Otterton (recorded in Domesday as '40s for the two water driven fulling mills and the flour mill with three working pairs of mill-stones'; http://www.ottertonmill.com/mill/index.htm) belonged to that church while the mill at Dotton belonged to the chapel at Dotton.
- 6.2.3 No evidence for structures definitely dating to the medieval period was identified. However, the rock-cut wheel pit, worn smooth by the continuous action of water-borne pebbles, could have been part of the medieval mill, continuing in use through to the 18th century and being incorporated into the new mill. Medieval pottery dating to the 13th century was recovered from the backfill/levelling deposits of the mill excavated in Trench 1.

6.3 The Post-Medieval Mill

- 6.3.1 When the manor at Dotton was put up for sale in 1779 the mill was not listed, although the will of Dorothy Elfordleigh of 1785 records *'the water grist mills known as Dotton mills'*, a clear indication that corn was being milled for flour there. Several surveys of the manor occurred at this time and none mention the mills, perhaps because they had fallen into such a state of disrepair that they were no longer worth mentioning.
- 6.3.2 In 1795 John Lightfoot was charged with the building of a 'dwelling house and a sett of mills' at Dotton and in the same period it is recorded that the arable tenants of Dotton had to travel the 3 miles south to Otterton to use the mill there. This suggests that any existing mill at Dotton was out of action. The earliest structures of the mill building as excavated in Trenches 1 and 2 appeared to be no earlier than 17^{th} or 18^{th} century; some parts of the structures are therefore likely to be that built by Lightfoot *c*.1795.
- 6.3.3 The northern and southern walls of the mill building were built of cob, while the eastern wall was built of stone it would have had to endure more strain

and vibration due to the main axle connecting the mill wheel to the cog wheel passing through it. Repair to the wall following the wheel's shift out of alignment is evidence for the strain placed upon the structure. The mill subsequently underwent several phases of repair and refurbishment, with the addition of a lean-to building to the north and the construction of a series of concrete floors incorporating worn out mill stones.

6.3.4 The 19th century repairs and additions included the laying of the tile floor at the western end of the building, remembered by local residents as the floor of the kitchen, as well as the replacement of the rock-cut wheel pit with a brick-built pit and breast, and a concrete floor shaped to fit the water wheel. The recovery of the breast in particular proved an important point, that the mill (at this period at least) had a breast-shot wheel rather than an undershot wheel, as had been suggested by the 20th century photographs (**Plate 6**).

6.4 The Leat

- 6.4.1 The parish boundary is still located along the line of the leat, and this line, as seen in the evaluation trenches, although not demonstrably medieval in date follows the medieval alignment. The leat underwent a period of infilling and neglect which required the re-digging of the feature to create enough of a flow of water to power the water wheel. The period of neglect and infilling potentially dates from around the middle of the 16th century when it is recorded that the Duke family, who acquired the Dotton estate in 1543, attempted to raise money to remove a pebble bar forming a the mouth of the River Otter. The re-digging of the leat along its original alignment appears to have removed all evidence for a medieval structure including any finds which may have accumulated during the use of the feature.
- 6.4.2 The evaluation trenches revealed a wide and relatively shallow leat lined with a timber and stone revetment. The width and shallow depth would have been designed to increase the water flow and ultimately to increase the head of water driving the wheel (M. Nevell and M. Watts pers. comm.).
- 6.4.3 Material recovered from the backfilled leat dated from the 17th to 20th century, giving a *terminus ante quem* for the cutting (or re-cutting) of the leat, but the material may be derived from further upstream of the Otter and deposited much earlier only to be washed downstream into the leat.

7 **RECOMMENDATIONS**

7.1.1 A short note, probably between 2000 and 3000 words with two or three supporting illustrations, based on the results and discussion presented in this report, in the *Proceedings of the Devon Archaeological Society* is suggested as an adequate level of publication. This would comprise a brief introduction detailing the circumstances of the project and aims and objectives; a results section detailing the structural remains recorded; and a brief discussion of the results, with reference to the original aims and objectives.

8 ARCHIVE

8.1.1 The excavated material and archive, including plans, photographs and written records, are currently held at the Wessex Archaeology offices under the project code 62507 and site code DOT 06. It is intended that the archive should ultimately be deposited with the Royal Albert Memorial Museum, Exeter.

9 **REFERENCES**

- Davidson, J.B., 1880, 'Datton Mill and Donitone', *Transactions of the Devonshire* Association, Vol.12
- GSB Prospection, 2006, Dotton Mill, unpub. report for Time Team
- Hutchinson, P.O., 1888, 'The Cartulary of Otterton and Sidmouth', *Devon & Cornwall Notes and Queries*, Vol.1
- Lane, H., 2004, The Story of Dotton: A Hamlet Lost in the Passage of Time
- Mason, S., 1993, 'Otterton' in *Historical Guide to the Lower Otter Valley*, Otter Valley Association
- Matthew, D., 1962, The Norman Monasteries and their English Possessions
- Orme, N., 1987, 'The 'Lost' Parish of Dotton', Devon & Cornwall Notes & Queries Vol. 36
- Videotext Communications, 2006, Proposed Archaeological Evaluation at Dotton Mill, Dotton, Near Otterton, Devon NGR SY 086 885: Project Design, unpub. report

Documentary sources

- 1532 Lease, Devon Records Office ref.96M/93/17
- 1543 Deed, Devon Records Office ref.96M/81/1
- 1584 Deed for Dotton Manor, Devon Records Office ref.96M/47/6
- 1779 Schedule, Devon Records Office ref.96M/Box2/4
- 1785 Will of Dorothy Elfordleigh, Plymouth & West Devon Record Office ref.107/251
- 1792 Schedule for Dotton Manor, Devon Records Office ref.96M/Add/E1
- 1841 Census Return, National Archives
- 1842 Dotton Manor Tithe Map, Clinton Devon Estates
- 1891 Census Return, National Archives
- Kelly's Directory of Devon and Cornwall, 1889
- Kelly's Directory of Devon and Cornwall, 1893

Steward Letterbooks April 25th 1872 [7/883], Clinton Devon Estate Archives Steward Letterbooks February 9th 1881 [17/450], Clinton Devon Estate Archives Steward Letterbooks February 12th 1891 [28/945], Clinton Devon Estate Archives

Internet Sources

http://www.norfolkmills.co.uk/watermill-machinery.html. Source of Water Mill terminology.

http://www.ottertonmill.com/mill/index.htm Source of information on Otterton Mill

APPENDIX 1: Trench Summaries

Trench 1

Trench 1 Type: Machine Exca					cavated			
Dimension	ns: 9.30x9.5	0m	Max. depth: 2.94 m	Ground level: 17.64 m	n aOD			
Context	Descriptio	n			depth (bgl)			
101	Topsoil	Modern to	psoil. Formed since the 1968 demolition of	the mill. Mid red-	0.00-0.20m			
		brown sand	dy silt loam. 2% stone, subangular-subround	led, <1-4cm. Very				
		humic. Sli	ghtly diffuse interface. Bioturbated. Overli	es (102).				
102	Layer	Demolition	/ levelling deposit from 1968. Seals the in s	situ archaeology. Dark	0.20-0.70m			
	-	grey brown	1 sandy silt loam. 10% sandstone fragments	, subangular, <10-				
		60mm; 20	60mm; 20% brick and building rubble. Overlies (103), (109), (108), (113),					
		(114) and ((123).					
103	Layer	Concrete la	ayer. Levelling to prevent collapse into bypa	ass channel. Overlies				
		backfill de	posit (131).					
104	Wall	Brick wall.	North-east - south-west aligned eastern wa	all of wheel pit.	1.45m high			
		Probably a	19th century rebuild contemporary with the	strengthening of wall				
		(107) with	(109). Eighteen courses survive, English bo	ond, pale grey lime				
		mortar. Le	ength 4.08m, width 0.44m. Foundation unse	en. Associated with				
		artificial w	eir (106) and stratigraphically above concret	te floor (112).				
105	Fill	Rubble bac	ckfill associated with the 1968 demolition. M	Aixed rubble deposit	-			
		which fills	wheel pit and the leat area exposed in trencl	n 1. Mid brown sandy				
		silt loam.	15% brick rubble. Overlies (109) and (104).					
106	Structure	Concave b	rick structure constructed of 21 courses in st	retcher bond with lime	-			
		mortar. Br	ricks laid at a slope forming an artificial weir	(also known as breast)				
		from the sl	uice gates to the wheel pit. Structure creates	s an increased head of				
		water to fe	ed the wheel. Water hits the wheel at the same	me height as the axle of				
		the water v	vheel. Length 1.80, width 1.22m.					
107	Wall	Stone wall	, forms the western elevation of the mill buil	ding. Forms the west	0.96m high			
		wall of the	wheel pit and the eastern wall of the cog pit	. Potentially 17th				
		century in	date but has been re-enforced by the addition	n of (109). Consists of				
		well dresse	ed stone blocks with regular coursing and lin	he mortar. Length				
		5.10m, wic	Ith 0.66m. Foundation unseen. Has a drain	from the cog pit into				
100	5.11	the wheel p	oit. Associated with (104), (106) and (112).	1.1 0.00/				
108	Fill	Rubble backfill over machine room. Mid brown sandy silt loam. 20%		-				
		sandstone	rubble, subangular, <1-10cm. Not fully exca	ivated. Equal to the fill				
100	117 11	of the cog	and wheel pits (105). General demolition m	aterial.	0.26 1:1			
109	Wall	Repair to t	he stone built western elevation of the mill b	uilding, wall (107).	0.26m high			
		Brick built	, stretcher bonded wall with pale white lime	mortar. 3 courses,				
		ength 0.74	Im, which 0.38 m. while (107) can be seen to	have been running out				
		re enforce	(107) but failed Associated with (104) (10)	(109) was added to (112) and (107)				
110	Wall	Western w	(107) but failed. Associated with (104) , $(10$	$\frac{0}{00}$ and floor (107).				
110	, wan	separates t	the cog pit from the rest of the machine room	Consists of roughly	-			
		shaped san	detone blocks, irregularly coursed with a red	l nink sandy mortar				
111	Structure		nillar that forms part of the pen trough. It h	olds the penstock in				
111	Siruciure	nlace to rec	gular the flow by lifting the penstock or sluid	re gate Overlies (107)	-			
112	Structure	Concrete b	ase of the wheel nit A later addition possible	ly 19th century				
112	Siruciure	Shows evi	dence of being eroded by misaligned wheel	Overlies (116) and	-			
		(128)	sence of being croace by misanglied wilcol.					
113	Floor	Concrete f	loor of a small lean to on the north side of w	all (115) A later	_			
115	1 1001	addition to	the main mill building Butts wall (115)	(13) (13) (134)				
114	Floor	Concrete f	loor which incorporated two reuse millstone	s(120) and (121)	_			
117	1 1001	Leads to m	achine nit Overlies (135)	5(120) and (121) .				
115	Wall	Main north	ern east – west aligned wall of the mill build	ling Cob built with				
110	,,	irregular co	ourses, unworked stone and sandy silt loam l	onding. Butted by				
		floors (113) and (114). Has been repaired in the north-	east corner by wall				

	1		
		(118) which is clearly later.	
116	Layer	Ground layer beneath concrete floor (112). The possible result of material	-
		being washed down the leat and settling on the natural bedrock $(117)/(130)$	
		which has been hollowed out to make the wheel pit. Overlies timber (129)	
117	Natural	Natural sandstone bedrock exposed in sondage through concrete floor (1112)	-
		and sealed beneath the ground layer (116) and the possible remains of a timber	
		structure. Possible base of an earlier rock-cut wheel pit. Equal to (130).	
118	Wall	Repair to wall (115), a later insertion with dressed sandstone blocks and a	-
		later lime mortar.	
119	VOID	VOID	-
120	Object	Local sandstone millstone – lacks strength and durability. From the medieval	-
	/surface	quarry but is likely to be later reflected the poor status of the mill. Stone is	
		worn and upended so the rynd hole is visible. Incorporated into concrete floor	
		(114).	
121	Object	Dartmoor granite mill stone. Upended so the rynd hole is visible.	-
	/surface	Incorporated into concrete floor (121).	
122	Wall	Cob built wall. Forms the southern wall of the main mill building. Consists	1.80m high
		of undressed sandstone blocks, irregular courses and pink sandy mortar.	
		Bonded to (107). Associated with (115). Overlies (125).	
123	Fill	Overlies (109) and (110). Equal to (105).	-
124	Layer	Garden soil. Dark red-brown sandy silt loam. Topsoil which formed up	-
		against the northern external wall of the building (115).	
125	Structure	Structure of unknown function though possibly part of foundation deposit for	-
		wall (122). Area of stonework. Overlies mortar layer (126). Interpretation	
		difficult as only partly exposed.	
126	Layer	Mortar layer. Pale pink white. Function unknown but possibly part of	-
		foundation deposit.	
127	Floor	Concave sloping floor. Roughly worked stone blocks with dark grey mortar.	-
		Allows pit wheel to rotate within cog pit. Stratigraphically above (110) and	
100			
128	Layer	Equal to (116)	-
129	Timber	Highly degraded timber which was located beneath (128)/(116) and above the	
100		bedrock $(130)/(117)$ and is lost under wall (107) .	
130	Natural	Equal to (117).	-
131	Fill	Sand backfill under concrete (103) and above wall (104).	-
132	Structure	Sandstone built structure, abuts wall (118). Possible buttress.	-
133	Wall	Brick built, north – south aligned wall. Later extension for lean to attached to	-
	-	the north wall of the main mill building.	
134	Layer	Layer beneath concrete floor (113).	-
135	Floor	Brick floor below (114).	-
136	Layer	Levelling and backfill deposit to the south of wall (122) and seals (125) and	
	~	(126). 20% brick and sandstone rubble.	
137	Group	Group number for wheel pit, composed of cut [139], walls (107), (109), breast	-
	~	(106) and concrete floor (112).	
138	Group	Group number for cog pit, composed of wall (107), (110) and floor (127)	-
139	Cut	Possible original cut of wheel pit, cuts natural geology (117) forming rock-cut	-
1.40	TT7 11	wheel pit.	
140	Wall	Southern wall of cog pit Group (138), bonded to (107) and (110) . Formed of	-
1.41	7	roughly snaped sandstone blocks, overlain by concrete (141).	
141	Layer	Concrete repair on top of wall (140).	-

Trench 2

Trench 2 Type: Machine Ex						cavated
Dimensions: 8.36x1.34m Max. depth: 1.86m Ground level					level: 18.53m	aOD
Context	Context Description					depth (bgl)
201	Topsoil	TopsoilModern topsoil. Mid brown sandy silt loam. 2% stone, subangular-			ar-	0.30m thick
		subrounded	l, <1-6cm.			

202	Fill	Upper fill of leat [203] . A naturally derived topsoil and colluvial secondary fill possibly incorporating some deliberate backfill. Mid pink-brown silty clay. 1% gravel and flint, subangular-subrounded, <1-12cm. Medium compaction, some bioturbation. Local knowledge suggests this material was deliberately backfilled during the 1960's. Overlies (207)	1.08m thick
203	Cut	Cut of north – south aligned leat channel. The eastern extent has a stone revetment while the western end as not fully exposed. Contained several phases of deposition including alluvial deposits towards the base and upcast/bank material on the eastern side. Filled with (202), (204)-(210) and (212)-(217).	1.91m deep
204	Layer	Upcast material from excavation of leat [203], used to form a bank. Mid brown sandy clay loam. 30% gravel and flint, subangular-subrounded, <1- 10cm. Medium compaction, abundant unsorted gravel. The nature of the gravel implies that this material comes from the lower phases of excavation of the leat, originating from the lower natural gravels. Deposition occurs from the east side. Overlies (205).	0.52m thick
205	Layer	Eastern bank associated with leat [203] , derives from upcast material from the leat's excavation. Mid brown sandy clay loam. 2% gravel and flint, subrounded, <1-8cm. Similar in properties to overlying (204) but with a lower concentration of gravel. Coarse components unsorted. Medium compaction, some bioturbation. Overlies (212).	0.86m thick
206	Structure	Stone revetment associated with leat [203]. Located on eastern side of leat. Fairly narrow stone structure comprising fairly large, stacked stones with little if any working. Stratigraphically above [203].	0.34m high
207	Fill	Secondary fill of leat [203] . Numerous lenses of alluvial silts, varying properties denote speed of deposition. Deposition likely follows disuse of the leat. Mid orange silty clay with lenses of mid green sandy clay loam and light grey sand. Lenses contain no apparent coarse components. Some bioturbation. Overlies (204), (208), (213) and (217).	0.72m thick
208	Fill	Secondary fill of leat [203]. Mid yellow-brown sandy clay. No coarse components. Some bioturbation. Found on the eastern side. Same as (213) towards the base and (217) on the western side. Overlies (209).	0.33m thick
209	Fill	Secondary fill of leat [203] . Mid brown silty clay. 1% gravel and flint, subangular-subrounded, <1-5cm. Lies just over the western edge of revetment (206). A probable mix of collapse bank and up-cast material. Coarse components unsorted. Some bioturbation. Overlies (205)	0.58m thick
210	Layer	Associated with leat [203] . Mid orange-brown sandy clay. 1% gravel and flint, subangular, <1-6cm. Butted up to and just over the eastern stone revetment (206). Medium to loose compaction. Possible upcast material. Overlies (206).	0.56m thick
211	Layer	Upcast material found on the eastern side of leat [203] . Mid brown silty clay. 2% subangular-subrounded, <1-9cm. Coarse components randomly sorted. Some bioturbation. Similar to (204). Overlies natural (220).	0.91m thick
212	Layer	Bank material associated with leat [203] . Mid brown sandy clay loam. 15% gravel and flint, subrounded, <1-12cm. Coarse components unsorted. Medium compaction, some bioturbation. Similar to (205). Overlies (210).	0.73m thick
213	Fill	Equal to (208) and (217)	0.13m thick
214	Fill	Secondary fill of leat [203] , derived from slow, gradual silting. Mid greybrown sandy clay loam. Identified during auguring. No coarse components found. Overlies (215).	0.10m thick
215	Fill	Secondary fill of leat [203] , a more dynamic depositional stage than (214). Mid grey-brown sandy clay. Identified during auguring. No coarse components found. Overlies (216).	0.09m thick
216	Fill	Carbonaceous deposit at the base of leat [203]. Dark grey-brown clay peat like deposit. Represents waterlogged organic matter lying at base of leat. Identified during auguring. No coarse components found.	0.08m thick
217	Fill	Equal to (208) and (213).	0.36m thick
218	Cut	Cut of stakehole. Subcircular. Unexcavated. Upper fill (219).	-
219	Fill	Fill of [218]. Dark grey clay. Solid compaction. Small stake still apparent in	-

		centre.	
220	Natural	Natural geology.	

Trench 3

Trench 3	Trench 3 Type: Machine Exca				
Dimensior	ns: 14.38x2.	64m Max. depth: 1.50 m	Ground level: 18.76m	aOD	
Context	Descriptio	'n		depth (bgl)	
301	Topsoil	Modern topsoil. Formed since the 1968 demolition of the	he mill. Possible	0.00-0.34m	
	_	combination of deliberate placement as well as natural a	ccumulation. Mid		
		brown sandy silt loam. 10% stone, subangular-subround	ded, <1-4cm. Very		
		humic. Slightly diffuse interface. Bioturbated. Overlie	s (302).		
302	Layer	Layer resulting from the demolition of the cob walls. Pa	ale red loamy sand.	0.28m thick	
		15% stone, subrounded, <1-2cm. Seals demolition laye	r (303). Shows that		
		the roof collapsed before the walls were robbed or destru-	oyed.		
303	Layer	Heavily burnt deposit. Dark brown-black loamy sand.	Around 90% charcoal	0.24m thick	
		incorporated with slate fragments and burnt timber. Res	sult of the burning of		
		the mill during the 1968 demolition. Overlies (317).			
304	Wall	Southern east – west aligned wall of mill. Cobb built w	all with loamy sand	0.92m high	
		bonding. Equal to (122) in Trench 1.			
305	Wall	Northern east – west wall of mill. Cobb built wall of sn	nall stones with pale	0.68m high	
		pink sandy clay bonding. Equal to (115) in Trench 1.			
306	Floor	Tile floor. Tiles 0.24cm2 and c. 4cm thick. The tiles th	in towards the centre		
		of the room. Kitchen floor. Stratigraphically above (30	4), (305) and (312).		
307	Layer	Deposit on northern side of wall (305). Mid red-brown	0.30m thick		
		stone, subangular-subrounded, <1-2cm. Overlies (308).	Equal to (302).		
308	Layer	Layer beneath (307), buried ground surface. Dark grey-	brown sandy clay	0.26m thick	
		loam. 2% stone, subangular-subrounded, <1-2cm. Equa	ll to (314).		
309	Layer	Garden soil to south of wall (304). Mid brown clay loan	n. 2% stone,	0.80m thick	
		subangular-subrounded, <1-2cm. Overlies (317).			
310	Layer	Redeposited natural to the north of wall (305). Pale red	-brown sandy clay	0.22m thick	
		loam.			
311	Layer	Redeposited natural levelling layer beneath tile floor (30)6) and the bedding	-	
		layer (312).			
312	Layer	Concrete cement bedding layer for tile floor (306). Ove	rlies (311).	-	
313	Layer	Dump of slate fragments. under (307) overlies (308)		0.08m thick	
314	Layer	Equal to (308).		-	
315	Structure	Concrete stand to north-east end of trench.		-	
316	Layer	Layer adjacent to (315).		-	
317	Layer	Layer beneath (309).		-	
318	Wall	Truncated east – west aligned brick built wall. Located	in the north end of the	-	
		trench. Potentially north wall of lean to added to the no	rthern elevation of the		
		main mill building as identified from old photographs.			

Trench 4

Trench 4	Trench 4				pe: Machine excavated	
Dimension	s: 16.63x5.	27m	Max. depth: 1.88m	Ground	level: 19.26m	aOD
Context	Descriptio	n				depth (bgl)
401	Topsoil	Modern top	osoil. Mid brown sandy silt loam. 2% incl	usions, suba	ingular-	0.00-0.20m
		subrounded	l, <1-6cm.			
402	Layer	Large scale	e deliberate dumping of material to level aft	er 1967 lan	dscaping.	0.84m thick
		Mid red-br	own sandy loam. 20% sandstone, subangu	lar, <1-8cm	. Overlies	
		(423).				
403	Layer	1967 grour	d surface. Mid grey-brown sandy loam. 29	% inclusion	s,	0.39m thick
		subangular	-subrounded, <1-8cm. Similar to (423) and	(422). Ove	erlies (422).	

404	Fill	Secondary fill of leat [429] . Result of the high energy deposition of sand while the leat was full. Mid yellow loamy sand. Very few inclusions. Overlies (407).	0.36m thick
405	Fill	Secondary fill of leat [429] . Result of high energy water-borne deposition. Mid red brown sandy loam. 20% gravel, subangular-subrounded, <1-4cm.	0.54m thick
406	Layer	Mixed deposit. Overlies (425) Layer down slope of steps (434) and banked up against revetment (414). Mid	-
407	Fill	brown silt. Removed in plan, does not appear in section. Overlies (411). Secondary fill of leat [429]. Gradual, low energy deposition. Mid grey silt.	0.38m thick
408	Laver	Fault to (415) Overlies (430) (433) and (410)	
408	VOID	VOID	-
410	Laver	Rammed layer possible floor surface associated with earlier building and	-
410	Luyer	steps (434). Consists of ironstone, sandstone, plaster and mortar fragments. Beneath (408).	
411	Layer	Layer of burning seen in plan rather than section. Dark grey-black sandy clay loam. Overlies (413).	-
412	Layer	Pale yellow-brown sandy loam. Partially excavated. Overlies structure (434)	0.35m thick.
413	Layer	Rubble rich layer which butts against steps (434). Mid brown sandy loam. 50% gravel/rubble, subangular, <1-10cm. Stratigraphically above (412).	0.25m thick
414	Structure	Revetment along the east of the leat [429]. Contemporary with the excavation of this later re-cut. Constructed of stone, rubble and timber.	-
415	Layer	Buried ground surface. Mid brown loamy sand. 10% inclusions, subangular- subrounded, <1-12cm. Equal to (405). Overlies (430), (433) and (410). Cut by leat [429].	0.40m thick
416	Layer	Possible natural geology. Mid yellow brown sandy gravel. 25% gravel, subangular-subrounded. <1-15cm.	-
417	Fill	Secondary fill of leat [429] , high energy deposit. Mid yellow brown loamy sand. 35% gravel, subangular-subrounded, <1-5cm. Likely to be identical to (426). Overlies (418).	0.10m thick
418	Fill	Secondary fill of leat [429] , high energy flood deposit. Mid yellow-grey sand. Laminated. Overlies (419).	0.24m thick
419	Fill	Secondary fill of leat [429] , high energy deposit. Mid orange gravel. 40% gravel, subangular, <1-18cm. Overlies (420).	0.31m thick
420	Fill	Secondary fill of leat [429]. Light yellow sand. <1% inclusions. Initial fill of leat.	0.09m thick
421	Fill	Deliberate dump of material into the disused leat [429]. Mid orange loamy sand. 20% sandstone rubble. Frequent CBM rubble. Overlies (405).	0.14m thick
422	Layer	Buried ground surface, probably becomes buried c.1967 when sealed by demotion layer (402). Mid brown loamy sand. 5% gravel and flint, subangular-subrounded, <1-3cm. Beneath (428) and (403). Overlies (421).	0.28m thick
423	Layer	Buried ground surface, probably becomes buried c.1967 when sealed by demotion layer (402). Mid brown loamy sand. 5% gravel and flint, subangular-subrounded, <1-4cm. Overlies (403).	0.22m thick
424	Layer	Thin discrete lens of burnt natural. Dump of material. Very dark grey-brown silt. Charcoal rich. Gritty texture. Overlies (431).	0.05m thick
425	Fill	Secondary fill of leat [429] , gradually deposited. Mid grey loamy sand with sand lenses. 1% gravel, subangular-subrounded, <1-4cm, Overlies (427).	0.33m thick
426	Fill	Secondary fill of leat [429] , high energy deposit. Mid yellow brown loamy sand. 35% gravel, subangular-subrounded, <1-8cm. Likely to be identical to (417). Overlies (418).	0.39m thick
427	Fill	Secondary fill of leat [429] , gradually deposited. Mid yellow-brown sandy clay loam. <1% gravel, subangular-subrounded, <1-2cm. Overlies (404).	0.38m thick
428	Layer	Discrete dump of material. Mid orange brown silty clay. <1% gravel, subangular-subrounded, <1-2cm. Overlies (422).	0.07m thick
429	Cut	Cut of north – south aligned leat channel. Potentially a re-cut.	1.90m deen
		Contemporary with revetment (414). Not fully excavated. Sides	
		moderately step and concave. Filled with (404). (405). (407). (417)-(421)	
		and (425)-(427). Cuts (408)/(415).	

430	Layer	Deliberately deposited material part of landscaping probably associated with the building to the west. Redeposited natural. Mid red-brown loamy sand. 5% gravel and flint, subangular-subrounded, <1-4cm. Frequent CBM rubble.	0.29m thick
		Similar to (402). Overlies (432) and (424).	
431	Layer	Dump of material. Mid red-brown sandy clay. 5% gravel and flint,	0.11m thick
		subangular-subrounded, <1-5cm. Overlies structure (434) and layer (406).	
432	Layer	Possible buried ground surface. Mid brown silty clay. 2% gravel, subangular-	0.03m thick
		subrounded, <1-2cm.	
433	Layer	Likely to be identical to (431) but differentiated on section drawing. Dump of	0.18m thick
	-	material. Mid red-brown sandy clay. 5% gravel and flint, subangular-	
		subrounded, <1-8cm. Overlies (431).	
434	Structure	Series of steps running along alignment of previous cliff face before the site	-
		was landscaped. Possibly associated with surface (410). Consists of dressed	
		stone blocks, 3 courses remaining. Bonding agent unseen.	

APPENDIX 2: List of finds by context

Context	Category	Material	Number	Description		
101	structural	CBM	7	roof tile fragments		
101	domestic	nottery	6	modern sink fragment refined redware refined		
101	domestie	pottery	0	whiteware		
101	structural	iron	1	nlate with holts		
101	structural	stone	1	place will bolls structural fragment tool marks on two sides grooved		
105	Suuctural	stone	1	succurat fragment, tool marks on two sides, grooved,		
108	domestic	animal hone	2			
100	domestie	nottery	15	medieval coarsewares including squared rim C13		
108	tools	iron	5	hand-forged tentor from second floor of mill (Obi No		
100		non		2): 19 th C clamp probably hand-forged (Obi No. 3): pin		
				with wood in corrosion (Obi, No. 4): hand-forged chisel		
				(Obi, No. 5): line-shafting piece with small helt-driven		
				wheel, probably from ground floor of mill (Obj. No. 6)		
123	domestic	Pottery	2	burnt redware, refined whiteware		
		glass	3	vessel glass		
123	structural	mortar	3			
		CBM	3	ridge tile x 1; frogged brick x 1; paving brick x 1		
		glass	1	window fragment		
		stone	1	roofing slate fragment		
		iron	9	2 nails, 1 washer, 4 structural fittings, some wood in		
				corrosion products		
128	agricultural	iron	1	horseshoe (Obj. No. 14)		
201	miscellaneous	copper alloy	7	post-medieval coin (Obj. No. 1), cartridge end, strip		
				fragment, nail, spoon, vessel fragment		
201	structural	CBM	2	Drainpipe, stamped "HEXTER HUMPHERSON & Co		
				NEWTON-ABBOT"		
		stone	1	roofing slate fragment		
201	domestic	pottery	1	refined whiteware		
201	· 1 / C 1	glass	1	complete bottle (modern)		
201	unidentified	1ron	2	unidentified		
301	domestic	worked bone		gaming counter		
		glass	6	refined whiteware figurine leg and egg cup; redware		
		ponery	0	vellow		
301	nersonal	clay nine	1	stem		
301	structural	iron	1	wheel (Obi No. 10)		
501	Structural	olass	1	window fragment		
302	domestic	animal bone	2			
502	domestie	glass	$\frac{2}{2}$	vessel fragments		
		potterv	18	refined redware, refined whiteware, vellow ware		
302	personal	clav pipe	1	spurred pipe with moulded leaf decoration. 18 th C:		
	L			stamped 'J' on spur.		
		copper alloy	1	button		
302	structural	wall plaster	4	cream-coloured		
		glass	2	window fragments		
		iron	3	nails		
302	unidentified	iron	1			
303	structural	wall plaster	58	one cream-coloured		
		glass	3	window fragments		
		stone	6	roofing slate fragments		
		iron	15	9 nails, 2 wire, 1 fitting, 1 collar with much adhered		
				charcoal, coil (Obj. No. 9)		
		CBM	5	4 x glazed ridge tile; 1 x floor tile		
303	domestic	glass	25	vessel fragments		
		stone	1	marble		

CBM=ceramic building material

303	unidentified	wood	4	variously charred, one piece with iron nail		
303	miscellaneous	copper alloy	9	fragmentary bell (Obj. No. 7)		
306	structural	CBM	2	floor tiles		
307	domestic	animal bone	3	bone china, stoneware, vellow ware, redware, refined		
		pottery	21	whiteware		
		glass	4	vessel fragments		
307	personal	clay pipe	3	3 stems, one with base of spurred bowl, post-1700, one		
	P ·····	····) [-]-	_	with mouthpiece		
307	structural	stone	1	roofing slate fragment		
	Succession	glass	4	window fragments		
		iron	4	1 nail 1 fitting 1 grill plate (Obi No 8)		
		CBM	3	glazed ridge tile		
		wall plaster	1	dark brown/black colour		
307	fixtures and	copper alloy	1	fitting		
507	fittings	copper unoy	1	inting		
309	domestic	animal bone	3	1 x sawn		
507	domestic	alass	2	Vessel		
		nottery	38	Westerwald stoneware redware stoneware vellow ware		
		ponery	50	Staffordshire-type slipware refined whiteware white		
				glazed stoneware		
309	structural	CBM	2	1 x flat tile 1 x roof tile		
507	structurar	dass	1	window		
		giass	2	window		
		iron		noile		
		land	4	lians		
200	manaana1	alay nina	2	stem		
309	domostio	ciay pipe	1			
510	domestic	pottery	0	renned redware, renned winteware		
210	manaana1	alimai bone	1	stom		
310	personal		1			
510	structural	glass		window 2. pails (1 with weaker)		
211	manaana1	alay nina	3	stam		
211	demontio	ciay pipe	1			
311	domestic	pottery	9	redware, stoneware		
310	domestic	pottery	3	reined redware, reined whiteware		
310	structural	wall plaster		cream-coloured		
216	C t man and	Iron	1			
310	fixtures and	copper alloy	1	naii		
216	fittings	•	1			
316	unidentified	iron	1	tube		
401	domestic	animal bone	6			
		pottery	32	redware, yellow ware, refined whiteware, Westerwald		
		1 11		stoneware		
		shell	2	oyster, left shell x 2		
		glass	1	vessel		
401	.	metal	1	modern tube		
401	structural	stone		rooting slate tragment		
		iron	29	nails		
		CBM	1	brick fragment		
401	unidentified	iron	5	1 sheet fragment, 4 unidentified fragments		
401	fixtures and	copper alloy	1	fitting		
	fittings		-			
404	structural	glass	2	window fragments		
404	domestic	pottery	10	yellow ware, refined whiteware, redware		
		glass		Coca-Cola bottle		
		metal	2	cans		
404	unidentified	iron	14			
406	domentia	animal hara	14	1 with an allow stein		
400	domestic	animal bone	14	1 with cu alloy stain		
1		giass	2	VCSSC1		

		pottery	53	Westerwald stoneware, refined whiteware, yellow ware,		
				redware		
		shell	7	oyster, right side x 4, left side x 1, fragments x 2		
406	structural	CBM	1	unfrogged brick		
		glass	7	window		
		stone	7	roofing slate fragments		
		mortar	1			
		iron	1			
406	nersonal	copper alloy	1	buckle fragment		
406	unidentified	iron	3	1 rod 1 strip and 1 fitting		
400	domestic	nottory	6	refined whiteware stoneware		
407	uomestic	glass		vessel		
407	unidantified	iron	2	2 shoot fragments and an unidentified object (Obj. No.		
407	unidentified	11011	5	2 sheet fragments and an undentified object (Obj. No. 11)		
407	structural	CBM	3	1 x frogged brick: 1 x airbrick		
407	domostio	nottom	2	Westerweld stenewere		
411		ponery	2	westerward stoneware		
412	domestic	animal bone				
		pottery	56	white salt-glazed stoneware, refined whiteware,		
				Staffordshire slipware, redware, Westerwald stoneware		
		shell	3	oyster fragments		
		glass	2	vessel fragments		
		wood	1	handle		
412	structural	stone	2	roofing slate fragments		
		glass	1	window fragment		
		iron	5	nails		
412	personal	clay pipe	2	1 stem, 1 heeled bowl, pre-1700		
	-	• • • •				
413	domestic	animal bone	6			
		glass	20	including onion-shaped bottle, 17 th /18 th C		
		pottery	66	white salt-glazed stoneware, refined whiteware, redware,		
				Staffordshire-type slipware		
		metal	5	can fragments		
413	structural	stone	1	roofing slate fragment		
		glass	1	window fragment		
		iron	6	nails		
414	structural	iron	1	encrusted nail		
	Succurat	glass	5	window fragments		
414	domestic	animal hone	1			
111	domestic	aliniai oolie	2	vassal fragmants		
		pottory	$\frac{2}{24}$	redware stoneware refined whiteware tin glazed		
		pottery	24	aerthenuvere		
415	1		0			
415	domestic	pottery	8	refined whiteware, redware		
41.7		glass	8	vessel tragments		
415	structural	stone	2	rooting slate tragments		
		glass	1	window fragments		
416	domestic	animal bone	25			
		pottery	34	redware, Westerwald stoneware, Staffordshire-type		
		glass	1	slipware		
				vessel fragment		
416	structural	iron	1	nail		
		stone	3	roofing slates with peg holes		
416	personal	clay pipe	1	stem		
417	domestic	pottery	4	redware, refined whiteware, yellow ware		
		glass	3	vessel fragments		
418	domestic	nottery	11	refined whiteware, vellow ware		
	Gomostio	glass	3	vessel x 3 late 17th-early 18 th C		
410	domestic	nottery	12	Staffordshire_type slinware refined whiteware vellow		
19	uomestie	ponery	12	ware redware		
420	1	atoria	2	ware, reuware		
420	structural	stone	2	rooming state tragments		

420	domestic	glass	1	vessel	
		animal bone	1		
		pottery	2	stoneware, refined whiteware	
501	structural	CBM	2	roof tile, probably pantile	
501	domestic	glass	4	rim from late 17 th -early 18 th C bottle	
Unstrat.	domestic	pottery	41	redware, yellow ware, stoneware, refined whiteware	
Unstrat.	personal	copper alloy	1	button	
Unstrat.	structural	copper alloy	1	door knob	
		iron	4	nails	
Unstrat.	tools	iron	1	implement	
		copper alloy	1	implement	
Unstrat.	unidentified	iron	7	includes one spring	



Site location and position of Trenches





Site location and position of Trenches



Plan of Trench 1 and 3



Plan of Trench 2, detail of steps (434)







1. Plan of Trenches 1 and 3



2. West facing shot of Wheel Pit Group (137), showing breast (106), wall (104) and floor (112)



3. Shot of Wheel Pit Group (137) and Cog Pit Group (138) from the south east



4. Plan of Trench 3 showing wall (305) floor (306) and wall (304) from the north



5. Plan of Trench 1 from the east

Archaeology





	Date:	28/02/07	Revision Number:	
Wessex	Scale:		Illustrator:	WAF
Archaeology	Path:	Y:\PROJECTS\62507 TT\Drawing Office\Report Figures (06-09)\TimeTeam\07_02_28\Plate 6.ai		



WESSEX ARCHAEOLOGY LIMITED. Registered Head Office: Portway House, Old Sarum Park, Salisbury, Wiltshire SP4 6EB. Tel: 01722 326867 Fax: 01722 337562 info@wessexarch.co.uk www.wessexarch.co.uk London Office: Unit 113, The Chandlery, 50 Westminster Bridge Road, London SE1 7QY. Tel: 020 7953 7494 Fax: 020 7953 7499 london-info@wessexarch.co.uk www.wessexarch.co.uk



Registered Charity No. 287786. A company with limited liability registered in England No. 1712772.