



# TARBAT DISCOVERY PROGRAMME

## PORTMAHOMACK ROSS-SHIRE

SITE CODE: TR03 NGR: NH 915 840

DATA STRUCTURE REPORT

March 2004



# TARBAT DISCOVERY PROGRAMME

Department of Archaeology University of York King's Manor York YO1 7EP

TELEPHONE
FACSIMILE
E-MAIL

(01904) 433952 (01904) 433935 arch18@york.ac.uk

PROJECT TEAM	Martin Carver
	Cecily Spall
	Justin Garner-Lahire
	Madeleine Hummler
	Nicola Toop
	Peter Glew
	Roy Jerromes
	Faith Jerromes
	Ralph Shuttleworth
	Regin Meyer
	Doug Kippen
	Katherine Hamilton
REPORT PREPARED BY	Cecily Spall BSc MA
REPORT REVIEWED BY	Justin Garner-Lahire BA
REPORT AUTHORISED BY	Martin Carver BSC FSA FSA (Scot)
KEFORT AUTHORISED BT	Watth Carver BSC 13A 13A (Scot)

## LIST OF CONTENTS

	Contents	Page			
	Summary	iii			
	Acknowledgements	iv			
1.0	INTRODUCTION	1			
2.0	FIELDWORK PROCEDURE	1			
2.1	EXCAVATION PROCEDURE	1			
3.0	FIELDWORK RESULTS	4			
3.1	ROAD AND FLANKING DITCHES	6			
3.2	LEATHER WORKSHOP AND ASSOCIATED FEATURES	10			
3.3	INDUSTRIAL COMPLEX	18			
4.0	DISCUSSION	22			
5.0	2004 EXCAVATION SEASON	23			
6.0	ARCHIVE				
Referenc	ces				
	Figures				
1	Location map	2			
2	Churchyard and Sectors 1 to 4	3			
3	Area of excavation 2003	5			
4	B5 and B6 Road with stone kerbs and flanking ditches	7			
5	East facing section of Module B7	9			
6	Module B4 features	11			
7	Hearth F445 pre-excavation and sections	12			
8	Module B5 feature map	15			
9	Industrial complex	20			
	Plates				
1	F469, road, stone kerbs and flanking ditches	6			
2	F472, post-excavation showing earlier hearth	8			
3	F445, hearth pre-excavation	13			
4	F446, preparation layers of possible wall footing	14			



5	Module B5	16
6	C2000, dump of cattle metapodials	17
7	F467, culvert	18
8	Module B7	19
9	F473, stone-lined pit	21
10	F470, stone-lined pit	21

## Appendices

A	Index of Interventions
В	Index to 2003 field file
C	Context and feature summaries
D	Drawing index
E	Photographic indices
F	Finds indices
G	Sample register

#### **Project Summary**

The Tarbat Discovery Programme was initiated in 1993 by Professor Martin Carver as a research project of the Archaeology Department, University of York following an invitation by the Tarbat Historic Trust. The site was known from discoveries in the kirkyard of elaborate Pictish sculpture (Class II and III), including a fragment bearing Pictland's only Latin inscription in insular majuscules, and a silver hoard of the late 10th century. In 1984, while undertaking aerial reconnaissance, Barri Jones and Ian Keillar identified a large D-shaped ditched enclosure surrounding the church, overlooking the shelving sand beach with the Dornoch Firth beyond.

The evaluation was funded by a grant from Highland Council and subsequent major sponsorship has come from the University of York, Ross and Cromarty Enterprise, the Highland Council, the Heritage Lottery Fund, European Regional Development Fund, the National Museums of Scotland and Historic Scotland.

Evaluation of the site was undertaken during 1993 to 1995 using geophysical and topographic survey, and test trenches. A Project Design (*PD*) was issued in 1995 (Carver 1995) which included excavation and survey. The excavation comprised a T-shaped sample of 0.6ha within the enclosure (Sector 1 and 2), an area to the north (Sector 3) and the interior of the church (Sector 4). The bar of the T-sample runs approximately east-west (140m in length) and spans the large NE-SW orientated ditch identified by Jones and Keillar, including the areas immediately within and without the ditch. This area has been allocated Sector 1 (Intervention 11 and Intervention 25, Appendix A). The T-shape is completed by a transect orientated approximately north-south, allocated Sector 2 (93m in length)(Intervention14 and Intervention 24, see Appendix A), which begins at the northernmost limit of the glebe at Tarbatness Road, as close as possible to the kirkyard of Tarbat Old Church, and reaches to Sector 1 at its southernmost limit. The mapping of Sector 1 and 2, and the excavation of Sector 1, was completed successfully in 2003.

As well as the T-shaped sample, the nave, crypt and north aisle of Tarbat Old Church were excavated in advance of its refurbishment as the Tarbat Discovery Centre, allocated Sector 4. Small-scale excavation has also taken place, in response to development associated with the construction of nearby dwellings (Intervention 15, house plot excavation, allocated Sector 3) and with the Discovery Centre (Intervention 16 and Intervention 22 service trench excavation, Intervention 26 oil-tank excavation and Intervention 27 statue base excavation).

Excavation in Sectors 1 to 4 has revealed evidence for a Pictish monastic settlement enclosed by the large ditch. Within Sector 4, the monastic church and cemeteries have been identified and sampled. Within Sector 1 and 2, areas of industrial craft-working activity, areas for agricultural processing and large features thought to belong to a water-powered mill, have been identified and sampled. The total area of excavation is 6515m<sup>2</sup> (0.65ha).

Initial mapping and excavation in the northern area of Sector 2 encountered a medieval settlement, dated by East Coast Redware of the 13th to 15th century (D. Hall, *pers.comm*.). It included a metalled road, post-built structures, shell middens and features associated with iron-smelting and -smithing of some scale. This settlement overlay the monastic sequence whose end was marked by an extensive layer of burning and broken sculpture, and is provisionally dated to the 9th to 10th century. The monastic workshops lay beneath this layer of burning, and were identified by hearths and debris from precious metal- and glass-working, and wood- and leather-working. Particular artefacts, most notably from metal-working, date the activity broadly to the 7th to



10th century. The area of this activity is deeply stratified, being up to one metre deep in places. It is expected at the lowest levels, that evidence for the earliest layout of the monastery, incorporating activity dating to as early as the mid-6th century, awaits discovery.

The depth and complexity of the strata encountered in Sector 2 between 1996 and 2001 was unexpected and has been rarely found in rural Scottish archaeology. It provoked the preparation of an Updated Project Design (*UPD*) in 2001 to guide a second campaign (2003 to 2008). It was felt that, to fully understand the sequence of monastic structures and activities in the most deeply stratified area of the site (Sector 2, north), an excavation of unusual precision, carried out by a small professional team over five years, would be required. The targeted excavation of the entire sequence in this selected area of Sector 2 forms the basis of the *UPD*; the first season of the five-year campaign (2003) is reported here.

#### 2003 Excavation Season Summary

In accordance with the *UPD*, the 2003 excavation season continued excavation of Sector 2 (north) within a selected area measuring 16.0m x 8.0m being four modules aligned east-west across the Sector at this point (Modules B4, B5, B6 and B7). From previous evaluation and excavation, it was known that these modules contained the remains of a stone-built road, to either side of which were two craft-working areas; one engaged in leather- and wood-working, the other engaged in metal- and glass-working. These remains lie directly beneath the destruction layer characterised by scorched sand, burnt organic building materials, notably oak timbers and turf, and smashed Pictish sculpture. It is possible that the destruction horizon marks the end of the monastic settlement and the phase directly beneath it represents the latest monastic phase, thought to be 8th to 10th century. The 2003 season aimed to further the excavation of the latest monastic phase, which is now nearing completion, and to assess the character of earlier phases. Significant advances were made during 2003, in the understanding of the layout of the settlement during this phase, and also in the understanding and interpretation of individual features as well as complexes of features.

#### Acknowledgements

The Tarbat Discovery Programme would like to thank the Tarbat Historic Trust and the village of Portmahomack for their hospitality, and current sponsors Historic Scotland, the National Museum of Scotland and the University of York. We are grateful to James and Douglas Gordon, for their continuing support and hospitality, and to Billy Vass for his cooperation. Thanks also go to Sabina Strachan for her advice and guidance.



#### 1.0 INTRODUCTION

This document reports on a season of archaeological excavation of the Tarbat Discovery Programme, Portmahomack (Figure 1) (NGR NH 915 840) undertaken by the University of York in association with Field Archaeology Specialists (FAS) Ltd. Fieldwork was carried out between the 28th July and 22nd August 2003. This report is Data Structure Report 1 of the Tarbat Discovery Programme, and has been prepared with reference to Historic Scotland guidelines on the preparation and content of Data Structure Reports (1996, 9).

The 2003 area of excavation was focussed within the area of monastic workshops in Sector 2 (Figure 2). Sector 2 forms the long transect of the T-shaped sample of the project design and its evaluation took place in 1996, followed by excavation seasons from 1997 to 2001, and 2003.

#### 2.0 FIELDWORK PROCEDURE

Written, drawn and photographic records were made of all archaeological deposits. A local site grid is used for recording purposes. All co-ordinates and alignments expressed in this report refer to the site grid; all heights are expressed in metres above ordnance datum (AOD).

The recording system followed *Field Research Procedure* (Carver 1999), the standard operating system employed by FAS. Intervention 14 and 24 share a single index for contexts starting at C1000 and for features starting at F1, all feature and contexts identified in 2003 were allocated from these continuing indices. An index of all records created during 2003, which form the content of the season's archive, is given below (Appendix B). Deposits and features reported here are principally those excavated during the 2003 fieldwork season (Appendix C). Where it is necessary, for the purpose of clarity, to discuss features and contexts allocated and/or excavated in previous seasons, and where excavation of those spans more than one excavation season, they are also included here (marked with asterisks in the appendices). The records deriving from 2003 fieldwork are comprehensively documented here and form the appendices. Due to the nature of the ongoing excavation the numbers are not necessarily continuous as they represent only those records and finds related to the present season of excavation. Additionally, the excavation of some features allocated during the 2003 season was not completed and so the discussion presents the current state of interpretation.

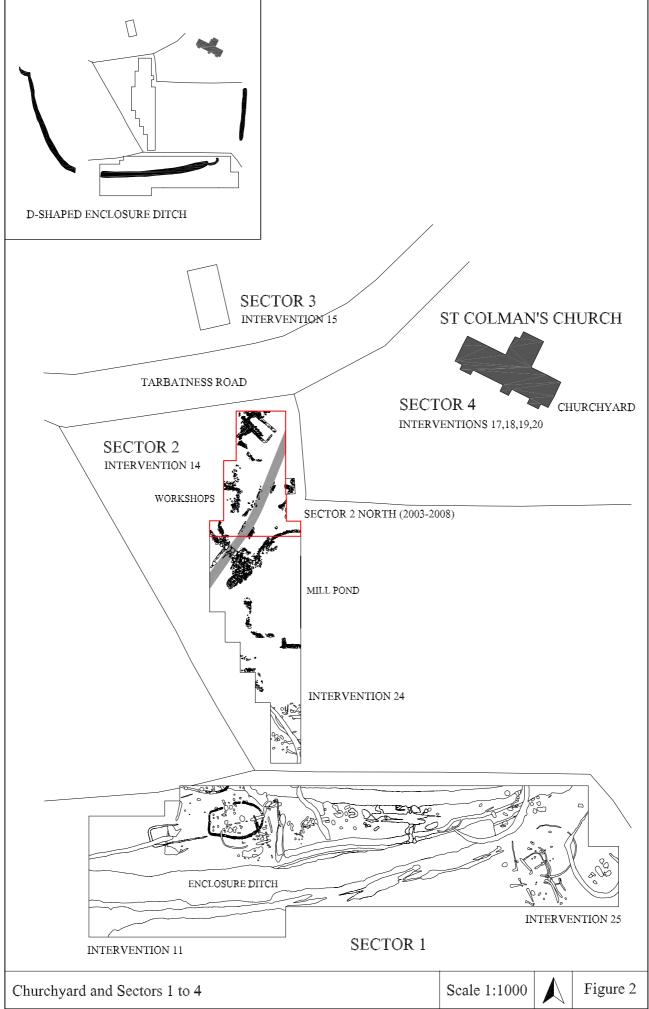
The area of excavation was set out using a Total Station Theodolite, using the project's permanent survey stations, and reopened using a wheeled 360° mechanical excavator fitted with a 1.20m toothless ditching bucket, under strict archaeological supervision. Prior to backfilling the previous season, the underlying archaeology had been protected by thick polythene sheeting and sand bags.

#### 2.1 EXCAVATION PROCEDURE

The archaeology of Sector 2 is extremely complex since layers are numerous and discontinuous, so very difficult to excavate stratigraphically over large areas. This has resulted in the need to develop a specific excavation strategy for this area of the site. All excavation areas of the project are divided into modules (lettered and numbered) which measure 8m x 4m, and monitored with a series of overhead photography and plans (horizon

FAS\_tr\_dsrl\_fig1.dwg TARBAT NESS Dornoch Firth TARBAT PENINSULA Hilton of Cadbol Shandwick Cromarty Firth THE BLACK ISLE Moray Firth **MORAY** Inverness 20km Figure 1 Location map

FAS\_tr\_dsr1\_fig2.dwg



maps). Stratigraphic excavation is undertaken by module; temporary baulks are left between modules to allow the sequence to be recorded and correlated. All deposits are defined as contexts (standard stratigraphic units). Our system also defines and records features as higher order stratigraphic units consisting of sets of contexts. Thus feature records are additional to, not alternative to, context records (Carver 1999, 158). Where features and contexts span a module or several modules, they are allocated several different numbers; all such equivalents and relationships are noted on recording pro-formae and in the site notebook. Feature and context sequence diagrams of all excavated deposits and features are maintained.

All features are subject to pre-excavation planning (Appendix D, drawing index), section excavation and post-excavation planning, with a photographic record made at each stage (Appendix E, photographic index). All contexts not in features are subject to pre-excavation planning and horizon photography, and are drawn and photographed in section, if they appear in a baulk or permanent section of the intervention. All site drawings are drawn at 1:10 and survey is undertaken using a Total Station theodolite accurate to +/- 5mm.

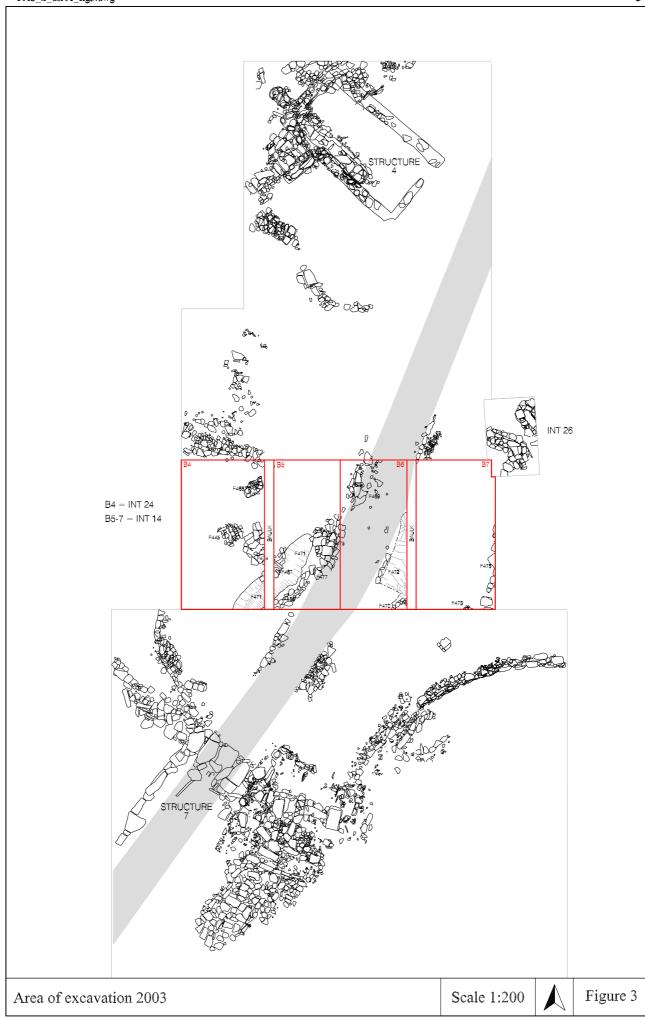
All contexts are subject to 100% coarse dry-sieving (10mm mesh) where practicable, should the deposit prove to be very extensive a sub-sampling regime is implemented. At least 10 litres of each deposit are retained for flotation for general biological analysis (GBA) using a Siraf water-recycling tank (1mm mesh for dense fraction and 300mm mesh for light fraction). Additionally, 'grab' samples (30g) are taken for pollen and microfossil analysis, and geochemical analysis including pH, phosphate, magnetic susceptibility and ICPS analysis. All 'grab' samples and artefacts are located in 3-D, bulk finds are recovered by hand and by context (Appendices F and G, finds indices and sample register).

#### 3.0 FIELDWORK RESULTS

The 2003 Sector 2 excavation area measured 16m x 8m (Modules B4, B5, B6 and B7) (Figure 3). The topographic setting of this part of the site consists of an area of high-ground adjacent to the kirkyard which slopes into a small natural valley to the south, before the land rises again in the area of Sector 1. The 2003 area of investigation was set into the northern slope of the valley where it has been found by excavation that these natural contours have been exaggerated by the construction of stone-built terraces. The northernmost area of Sector 2 has been severely truncated by ploughing, the shallow topsoil affording little protection to underlying stone-built features, but further south the level of the archaeology dives and is buried by a thick covering of accumulated ploughsoil. Consequently the preservation of the monastic settlement improves towards the south until it reaches the terrace walls. This area was also known from previous excavation to contain a possible road feature, to either side of which were craft-working areas situated on the man-made terrace. The road follows a NE-SW alignment and, although intermittent, appears to have had stone kerbs, a sandstone slabbed surface and flanking ditches to either side. To the west of this feature a workshop has been identified and a number of stone-built features were investigated this season. To the east, evidence suggests that the edge of an industrial area has been contacted and is manifested by large stone structures and substantial dumping of ash. Further evidence for the nature of this activity had been gained from Intervention 26, excavated in 1998 in advance of an oil-tank pit, which contacted large stone-built features thought to be part of an elaborate flue or drainage system (see Figure 3).



FAS\_tr\_dsr01\_fig3.dwg



#### 3.1 ROAD AND FLANKING DITCHES

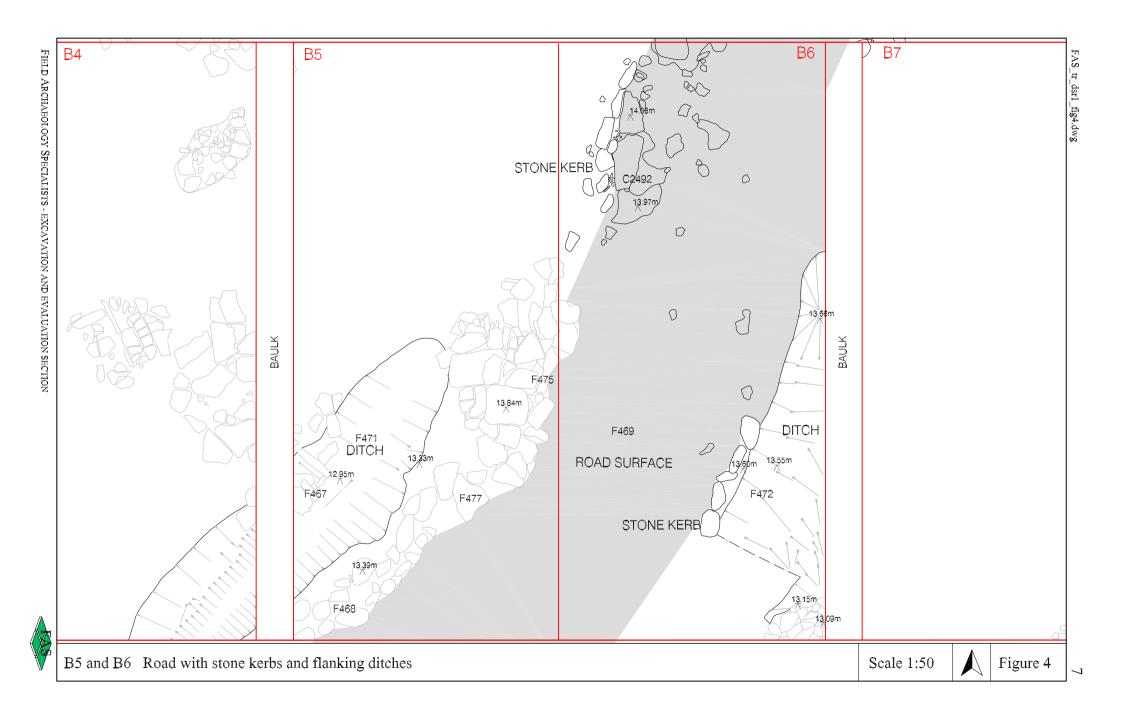
The workshop area is divided by a possible axial road which runs from the northeastern corner of Sector 2 through the excavation area towards the southwest where it merges with stone-built features thought to belong to a water-powered milling complex. The road (F469) is characterised tentatively by stone kerbs, and a cambered surface make-up in the form of sandstone slabs and compacted ash. The camber appears to be created by a 'causeway' of underlying deposits visible beneath the road make-up. Excavation in 2003 also confirmed that to either side of the road, two flanking ditches accompany the feature at this point (F471, F472) (Figure 4, Plate 1).



Plate 1 F469 road and stone kerbs, and F471 and F472 flanking ditches

Within the 2003 excavation area only  $10.0 \text{m} \times 4.0 \text{m}$  of F469 was visible, although the total feature length as mapped in previous excavations is c.22.0 m. The stone kerbs are intermittent but visible at the northeast and southwest of the feature at this point (see Plate 1). Only one deposit belonging to F469 was excavated during 2003, a small area of possible road surface make-up (C2492). This deposit consisted of two large unworked sandstone slabs set end-to-end measuring  $1.25 \text{m} \times c.0.40 \text{m}$ , and abutting the western stone 'kerb' of the road at this point. They were conspicuous in the road surface make-up at this point since the surface in this area is made of beaten or compacted ash. However, the slabs were worn on their upper surface presumably from foot traffic.

Several deposits overlying and abutting the road to the eastern side of F469 were excavated during 2003, some of which were found to belong to the backfill system of a flanking ditch allocated F472. The backfilling of this



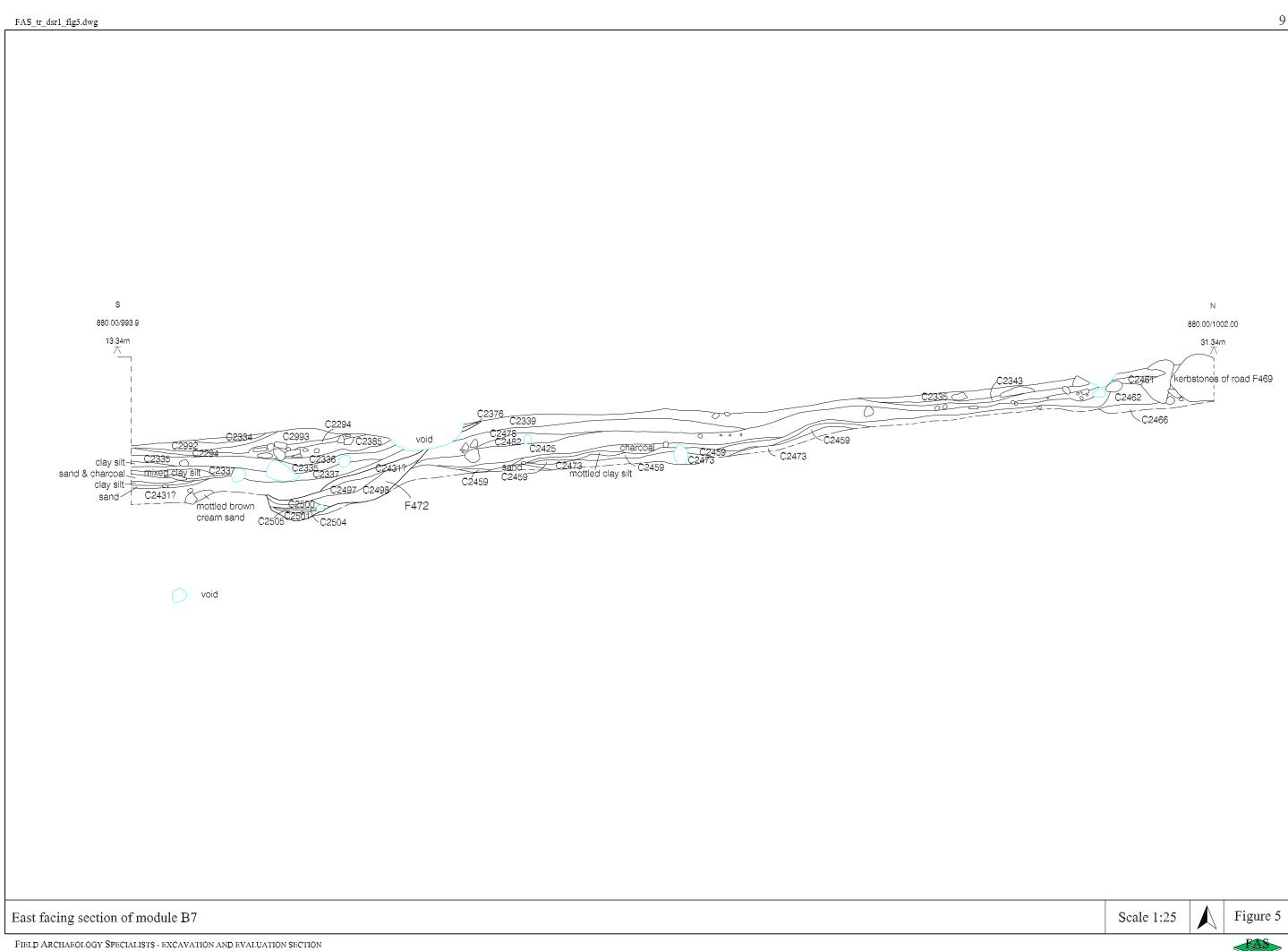
roadside ditch consisted of numerous dumps and spreads of very mixed material making definition of single deposits and the feature edges, at any given point, almost impossible. In 2003, twenty discrete contexts were found to belong to the feature (C2459, C2465, C2466, C2467, C2474, C2475, C2476, C2477, C2478, C2488, C2497, C2498, C2500, C2501, C2504, C2505, C2510, C2516, C2519, C2521, C2523) and these demonstrate the feature backfilled over a period of time with accumulative dumping of material. Other contexts, excavated in earlier seasons, identified by digital overlay were found to have formed part of the infilling of F472 (C2088, C2097, C2104, C2113, C2117). F472 spans two modules (B6 and B7) and the ditch section was therefore visible obliquely in the baulk section (Figure 5). Captured in the post-excavation photograph of F472 are deposits which belong to an earlier building or phase. Partially visible features include a substantial stone-lined hearth, filled with primary ash deposits and an associated working surface. These early features have not yet been allocated numbers since they have not yet been fully defined (Plate 2). This represents firm evidence of the sequence awaiting excavation in this area of Sector 2.



Plate 2 F472, post-excavation, showing earlier hearth

Other deposits found to abut the eastern road kerb towards the northeastern stretch of the feature, are not thought to belong to the backfilling of the eastern roadside ditch but appear to be spreads of material possibly from dumping episodes (C2461, C2462, C2466, C2473, C2480). While F472 is quite diffuse, its contours suggest that the roadside ditches only accompany the road downslope from the northeasternmost end of the feature. This suggests that drainage only became necessary further down the road.

To the west of the road, a possible western flanking ditch has been identified (F471), which is more distinct in its contours than its eastern counterpart. Like F472, the backfill system of F471 was extremely convoluted and in this section of the feature alone a total of 29 contexts of deposits and dumps of silts and clay silts were defined and excavated during the 2000 and 2001 seasons (C1875, C1910, C1912, C1913, C1916, C1923, C1933, C1935, C1941, C1972, C1973, C1976, C1978, C1983, C1989, C1990, C1991, C1992, C1994, C2005, C2007,



C2009, C2010, C2011, C2013, C2019, C2033, C2040, C2057). This ditch seems to limit the extent of the leather-workshop to its west and was associated with several stone-built features defined and excavated during 2003.

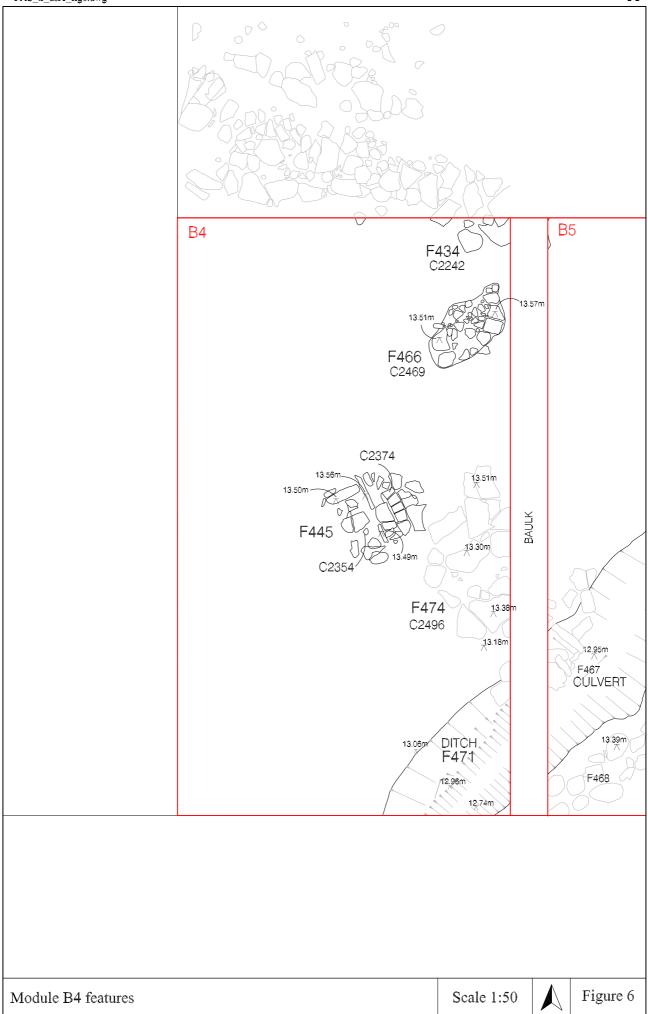
#### 3.2 LEATHER WORKSHOP AND ASSOCIATED STONE-BUILT FEATURES

The ditch F471 provided an eastern limit to an area identified as engaged in leather- and wood-working (see Figure 3, Module B4). The leather-workshop has been under excavation since 2000, and during excavation, was defined principally by an earth floor (C2109) and a distribution of associated artefacts clustered around a stone-lined hearth, although wall footings have been tentatively identified (F434, C2242, C2243, C2188, C2508) (Figure 6). It is thought that the workshop walls were constructed in turf blocks and are therefore difficult to define during excavation, although they may have been set on a foundation of sandstone slabs with alternate layers of earth and mixed gravel. This may have been to provide either a solid foundation for the turf superstructure, or alternatively provide drainage and hardstanding to one side of a turf wall. Whichever interpretation is found to be the most accurate in coming seasons the make-up of alternating slabs and gravel is relatively easily identified, and seem to define real spaces within or between the more elusive walls.

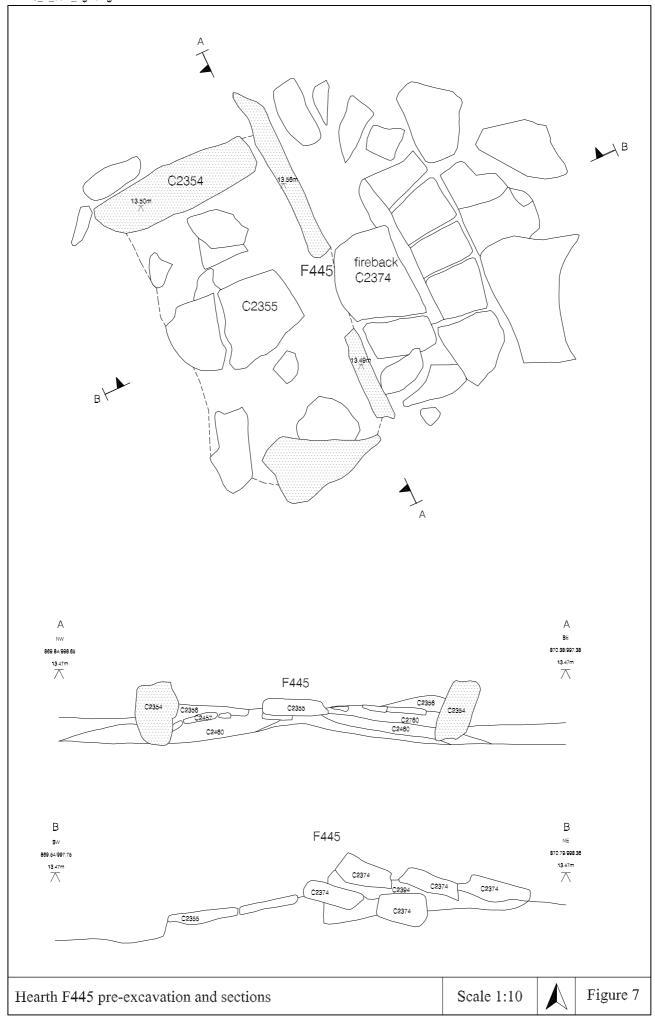
Focal to the workshop is a hearth the excavation of which was begun in 2001. The sequence of primary fills and hearth maintenance episodes contained within the stone hearth make-up was relatively complex and so excavation spanned two seasons (Figure 7, Plate 3). The hearth feature was allocated F445 and its primary stone make-up was allocated C2354. Its construction consisted of four large unworked sandstone blocks, forming a three-sided, open-fronted hearth measuring 1.0m x 0.50m. Originally there appeared to have a free-standing 'fireback', a dry-stone construction forming a heat-shield and/or -reflector at the back of the hearth. Threedimensional finds distributions around the hearth suggest that most activity took place at the open front of the hearth and not behind the fireback. The make-up of the fireback was allocated C2374 and had collapsed backwards onto the workshop floor presumably when the workshop was abandoned since no attempt was made to reinstate the feature. While no hearth base-stone was identified as part of this primary construction, it seems possible that one may have been incorporated originally, since during the use and maintenance of the feature, at least two linings of sandstone were put in place (C2355 and C2457). Primary ash fills (C2356, C2458, C2460, C2468) were interleaved among the sandstone refurbishment of the hearth base. Until the removal of the primary stone make-up, no construction cut for the feature had been visible. It seems likely that the hearth belongs to the workshop floor (C2109) excavated in 2000 since the collapsed fireback lay on the same floor. Equally, the workshop floor, C2109, yielded the finds distribution clustered around the hearth.

To the north of hearth F445 two possible wall footings or drainage features of the type discussed above have been tentatively identified, F434 and F466 (see Figure 6). F434 is an extensive feature appearing in at least three modules (B0, B4 and B5) and was identified during the 1999 season of excavation for a length of c.5.0m before it disappeared beneath the western limit of excavation. Only a small area of F434 was visible within the 2003 excavation area in the northeastern corner of Module B4 and the northwestern corner of Module B5. In these modules, the feature had been freed from overlying deposits and was excavated in 2003. It consisted of a dump of rubble set in a matrix of fine silty sand (C2508) which was interpreted as collapsed wall. It lay on the less disturbed stone and silt layers C2242 and C2243. C2243 formed the primary structural material and consisted of slabs of yellow sandstone set in an irregular but roughly linear form. The voids between the slab

FAS\_tr\_dsrl\_fig6.dwg



FAS\_tr\_dsrl\_fig1.dwg



make-up had been filled with small mixed gravel (C2243). The feature appeared to have been laid onto a dark soil or turf layer that awaits excavation.



Plate 3 F445, hearth pre-excavation

Immediately to the south of F434, another possible wall footing was identified and excavated during 2003 (F466). The feature was first identified after the removal of C2353 (an extensive sand layer thought to be a preparation layer belonging to the workshop floor), as a sub rectangular deposit of mixed cobbles and yellow sandstone slabs (2469) measuring 1.0m x 0.40m. Upon excavation the feature proved to have three distinct layers (C2417, C2470, C2469). A distinct turf-like layer was identified, planned and excavated in 2000 (C2209). Post-excavation has shown that C2209 overlay F466 directly and has been allocated to the feature pack retrospectively and may represent the remains of a turf superstructure. This overlay the cobble and slab layer which was found to have been bedded on a mix of crushed seashell and pea grit (C2470) (Plate 4). It seems possible that this deposit may represent some form of bonding material. C2470 overlay a deposit of mixed rounded gravel, C2469, which represented the first layer of make-up. Again, it seems probable that these layers of slabs and gravel had a turf superstructure that is difficult to define during excavation, particularly on a site dominated by brown soils.

At the southern end of the module several spreads and dumps of material were excavated. The deposits consisted of clay silts, probably ash, deposits (C2463, C2482, C2490) interleaving with brown turf-like deposits (C2478, C2485); all were concentrated in the southwestern corner of the module filling a depression. The contours of the deposits and the direction of slope suggests that a negative feature, possibly another ditch may be situated in the area running approximately NW-SE. The problems of definition caused by the convoluted backfill system of ditches in the area, is compounded by the fact that only a small part of the putative ditch lay within the area of current excavation. Future excavation seasons promise to contact the feature to the south of Module B4, until then it remains unallocated.



Plate 4 F446, preparation layers of possible wall footing

Further east, towards the road, several stone-built structures were identified and partially excavated during 2003, although none was completely excavated at the close of season (Figure 8, Plate 5). On the eastern side of the ditch a complex of four features was defined and partially excavated. Two large stone-built features were identified following an approximate NE-SW alignment, (F468 and F475). F468 was the southernmost feature and consisted of two irregular rows of large rough beach cobbles set side-by-side with a rough cobble cover. Excavation of the feature in 2003 involved mapping the feature, removing the cobble cover and emptying the channel, created by the rows of cobbles, of its backfill; the make-up of the feature was allocated C2493 and the backfill within the channel, C2494. The backfill consisted of a fine silty sand with occasional animal bone and was loosely compacted. There was no indication that the backfill was related to the primary function of the feature, additionally the matrix did not appear to be waterborne or even affected by the movement of water, and is has been presumed that the feature would have created an underground open channel possibly for the circulation of air. Again, it seems possible that the feature was rendered airtight using a covering of turf which may not have been identifiable during earlier excavation but might explain the gradual accumulation of backfill.

F475 was the northernmost feature in the stone-built complex and while on a similar alignment to F468, its construction was slightly different and there appeared to be a break between the two features. The make-up of F475 (C2526) consisted of some rough cobbles but was primarily constructed with red and yellow sandstone slabs. The two sides of the feature were made of sandstone slabs which formed a V-shape. The side of the channel against the road relied upon the make-up of the road for its structural integrity while the other side was supported by stepped drystone slab construction which revetted the feature against the downwards slope of the western flanking ditch. This suggests the road, ditch and stone-built features were contemporaneous for a period of time, although the stone-built features may of course be a later addition to the complex. The cover of F475 was a mix of cobbles and slabs and the feature had suffered from periods of collapse, perhaps in antiquity but

15 FAS\_tr\_dsr1\_fig8.dwg B5 BAULK F475 F4₹4\ 13<u>.</u>84m flue? F471 F467 culvert F477 hearth? F468 flue? Scale 1:50 Figure 8 Module B5 feature map

possibly suffering from the weight of modern plough machinery. The feature cover had collapsed into the channel and overlay a loosely compacted fine silty sand backfill (C2534). Like the disuse of associated F468, the backfill did not seem to be related to the primary function of the feature which appeared to have been intended as an underground channel, possibly an open airway or flue, although no stones appeared heat-affected.

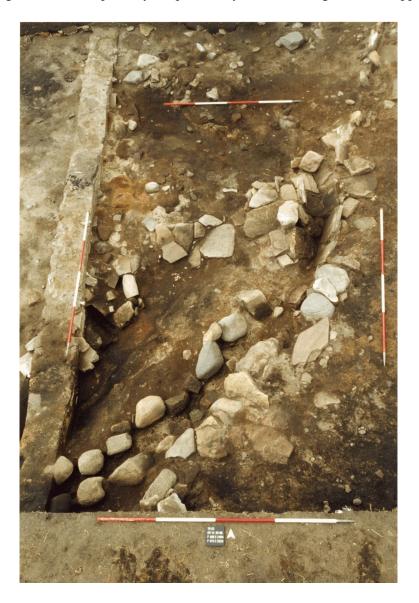


Plate 5 Module B5

Both F468 and F475 were overlain by collapse deposits and later dumping. These deposits included amorphous dumps of ashy clay silts and interleaving brown spreads (C2499 and C2511). The brown spreads overlying the make-up of the stone-built complex lend weight to the idea that the features may have been covered in turf. F475 contained a remarkable dump of cattle metapodials that had tipped into the feature when the cover collapsed (C2000) (Plate 6). Twenty-five bones were recovered in total and all were complete, and from beasts aged over three years (Stephen Rowland, pers. comm.)(Find nos 4150, 4153, 4165, 4167, 4193, 4197-4212, 4215-4218). The collapse of F475 had displaced them from their original position, and had the lid of the feature remained horizontal it seems the metapodials would have laid, side-by-side in a row with the proximal ends pointing approximately west, and the distal ends pointing east. The orientation may not be significant but it is thought the bones derive from the use of the workshop to the west. Against the eastern side of the western flanking ditch (and excavated in 2000), was a V-shaped bone formation of distal metapodial fragments which

had been deliberately arranged (F373, C1957). These bones have been interpreted as deriving from leatherworking (Carver and Spall forthcoming).



Plate 6 C2000 dump of cattle metapodials

Further downslope to the north of F475 and positioned in the gap between F468 and F475 was a possible hearth. The feature was defined principally by a deposit of bright orange clay silt with a high percentage of fire-cracked pebbles (C2520) overlying a possible lining of pebbles (C2535). The deposits were tentatively identified as a hearth make-up, and allocated F477, due to the discrete nature and content of the deposits, and the fact that the surrounding stone make-up belonging to F468 and F475 showed signs of fire-reddening. F477, unlike other hearths encountered at Tarbat, was very makeshift in nature and did not display evidence for long-term use and maintenance. It is possible that the stone make-up of F468 and F475 was reused stone and the fire reddening was not associated with the use of F477. The hearth certainly nestled between the two stone-built features and may be related to the underground channels created by F468 and F475, but its makeshift construction and transient use would suggest this was not the case.

To the west of these features two further stone-built features were identified and excavated during 2003 (F474 and F467). F474 (C2496) was a slab-built sandstone surface which appeared on the western shoulder of F471 and reached westwards to surround the rear of hearth F445. The feature appeared to be forming an area of hardstanding which had been visible when the floor of the workshop was excavated (C2109). The hardstanding may have aided drainage of the floor surface and seems to be associated with a stone-built culvert (F467) positioned on the western shoulder of the western flanking ditch draining into the ditch from a northwesterly direction. F467 was first identified after the removal fo a dump of yellow sandstone rubble and animal bone set in a matrix of dark brown sandy soil (C2481) which has been interpreted as a collapse episode. The feature was made up of yellow sandstone slabs which formed the vertical sides and lid of the culvert (C2486) while the base was made from one large but very degraded micaceous cobble (C2518)(Plate 7). The culvert had acquired

three layers of backfill (C2495=C2509, C2517, C2518). The system consisted of alternate layers of buff sand and dark brown silty sand reflecting the floor make-up deposits of the workshop from which the culvert drained, and the degraded nature of the base would suggest damp if not wet conditions. A construction cut and backfill (C2528) were identified against the western shoulder of F471 once the stone make-up of the culvert had been removed. The sandstone surface F474, formed a collar around the upright side stones of F467 and these features were clearly contemporary with one another, constructed over the contours of the western flanking ditch. In this respect, they can also be considered contemporary with the stone-built feature complex to the east (F468 and F475).



Plate 7 F467, stone-built culvert

#### 3.3 INDUSTRIAL COMPLEX

On the opposite side of the road, and to the east of the flanking ditch F472, Module B7 was the subject of excavation during 2003. Previous excavation in the area included Intervention 26 which encountered large stone-built features and adjacent, a large stone-built feature interpreted as a flue. Excavation in previous seasons encountered dumping of industrial ash waste and material which included a touchstone associated with goldworking and an ornate copper alloy stud decorated with interlocking spirals. The source of this material is thought to be a metal- and glass-working hearth situated a few metres downslope near to the terrace wall. Three principal stone-built features were excavated in 2003, as well as spreads and dumps of material thought to be associated with this craft-working activity.

A possible wall footing (F476) was identified at the eastern side of Module B7, disappearing beneath the eastern limit of excavation (Figure 9, Plate 8). Where visible the feature appeared to be orientated north-south and continued for a length of c.4.0m. The make-up of the possible footing was principally large unworked cobbles

(C2514) overlain by brown silty sand layers which also filled gaps between stones (C2524 and C2529). The general construction of the feature was again suggestive of a stone wall footing overlain by a turf superstructure, although interpretation is necessarily tentative, as so little of the feature lay within the excavation area.



Plate 8 Module B7

To the northwest of F476 were two stone-lined pits allocated F470 and F473, and the overlying strata excavated in previous seasons demonstrate that the pits could have been in use contemporaneously. Stone-lined pit, F473, was located at the southernmost limit of Module B7 and disappeared beneath the limit of excavation (Plate 9). The feature consisted of tightly packed beach pebbles and cobbles lining its sides (C2513) and the feature bottomed out onto underlying deposits. The pit had been backfilled with a loose matrix of dark brown sandy silt with frequent pebbles (C2512). F470 was a pit of similar form backfilled with a loose matrix of dark grey sandy silt and contained a frequent animal bone and mixed cobbles (C2134) while the make-up of the pit consisted of river and beach cobbles packed tightly against its edges (C2503), and a base lined with sandstone slabs (C2506)(Plate 10). The feature disappeared beneath the southern limit of excavation but its visible dimensions suggested the pit was circular in plan, measuring  $0.55 \text{m x} < 0.35 \text{m x} \times 0.30 \text{m}$ . The function of these features is unclear but F470 was seen to cut into the partially backfilled eastern flanking ditch F472 suggesting both stone-lined pits and road features were in use at the same time, at least for a while. The position of F470, within the partially backfilled roadside ditch suggests that the feature may have been a sump for deliberate water collection which may be associated with nearby metal- and glass-working.





Plate 9 F473, stone-lined pit



Plate 10 F470, stone-lined pit

Both the wall footing and the stone-lined pits overlay and cut into amorphous spreads and dumps of ashy soils at the southern end of B7 (C2483, C2484, C2491, C2502, C2515, C2527, C2529, C2530, C2531, C2532). These deposits clearly pre-date the road and also seal the hearth visible in the base of F472. The nature of these deposits are suggestive of made ground with disused features belonging to earlier buildings.

#### 4.0 DISCUSSION

Prior to the 2003 season, excavation had established that this area of Sector 2 (north) contained a road, between two monastic workshops. There were a number of issues which it was hoped further excavation would clarify: the lack of evidence for wall lines had given rise to the possibility that the crafts may have been undertaken outdoors, and the apparent sophistication of the road feature had also given rise to the suggestion that the area had been the subject of significant planning prior to its layout and construction.

Significant advances were made in the understanding of the road and associated workshop including the flanking ditches, wall lines and footings, and a number of associated stone-built features. The layout of this area of the site has emerged more clearly with the NE-SW aligned road (F469) accompanied downslope by two flanking drainage ditches (F471 and F472). To the west of this road the leather-workshop, has finally been furnished with some boundaries: to the north one, possibly two, stone wall footings (F434 and F466), to the east by the flanking ditch F471 and to the south by another possible ditch feature (as yet unallocated). It had long been suspected that due to turf forming the main building component that only at the base of structures, would clear wall lines emerge. This held true during excavation in 2003 and the long anticipated wall lines were identified confirming the identified crafts were undertaken indoors and in discrete organised areas.

The excavation of the focal hearth (F445) in the leather-workshop was also completed and its use and maintenance sequence suggests a workshop occupied for some time before abandonment. The burnt organics recovered from the sequence of hearth fills have the potential to secure, by radiocarbon dating, a bracket for this latest phase of activity.

Around the hearth a slabbed surface was identified and excavated (F474) which may have aided the drainage of water from the workshop into the stone-built culvert to the east (F467) which in turn drained into F471. Stratigraphic relationships recorded during 2003 confirmed that these features had been built as part of a coherent and apparently well-planned settlement, which may nevertheless have been maintained and altered. The relationship between the features identified in Module B4 were of particular note, as was the retrospective identification of the western flanking ditch. The sophistication that had been assumed from previous seasons of excavation was not only confirmed but strengthened considerably. Most significantly, it had been assumed that this phase of the monastic settlement represented an organisational and technological zenith of the settlement, although features glimpsed during 2003 suggest that the phases awaiting investigation are equally sophisticated.

Alongside the road on its western edge, the complex of stone-built features awaits complete excavation and interpretation is necessarily tentative. These features (F468 and F475) may be part of an elaborate drainage system but the presence of the flanking ditch suggests this may not have been necessary. What seems more likely, based on the backfill sequence within these features, is that they were designed to channel air; the destination and indeed the temperature of this air may become clear upon excavation of the sequence south of the 2003 excavation area. The hearth that nestled between these features (F477) seems unlikely to have been associated directly with the channels or flues in use and may belong to a later phase of activity. Future excavation of this feature complex is planned as part of the *UPD* at which time this question can be addressed.



To the east of the road the possible wall footing (F476) at the eastern limit of excavation suggests the 2003 excavation area lies just outside a building, presumably a workshop. The stone-lined pits (F470 and F473), while their function remains unclear, are likely to have been in use with road and flanking ditch and may have been intended for the collection of water, presumably for metalworking activity contacted immediately to the south during previous seasons.

While no radiocarbon dating has been undertaken on the deposits discussed here, the level of organised craft-working and the extent of planning implied by the road, suggest a date close to the 8th or 9th century. By this time, monasteries are considered to have been powerful and wealthy enough to invest, on some scale, in the production of manuscripts, fine metal and glass work and sculpture.

#### 5.0 2004 EXCAVATION SEASON

It is intended that the focus of excavation during 2004 will be concentrated on the modules immediately to the south of those open during 2003. These modules contain the large stone-built terrace walls which create the terrace for the monastic workshops. They also defined the possible millpond, and contain the southern continuation of the road and its make-up. To both sides of the road exist deposits and features belonging to the phase of monastic workshops that accompany the road. To the east, lie the remains of a workshop which was engaged in precious metal-working and included a hearth and industrial features; to the west lie the remains of the southern end of the leather-workshop. The aim of the 2004 excavation season is to advance the sequence so all disuse deposits overlying the road and workshops have been removed, and if possible, to start the excavation of the workshops themselves. The sequence within the area of targeted excavation would then have reached a common horizon: that of stone-built features and workshops to either side of the road overlying at least one earlier phase of activity. It is expected that as the deeper, earlier levels are reached, the structures and activity will emerge with increasing clarity.

#### 6.0 ARCHIVE

The project archive is in the care of Field Archaeology Specialists, Department of Archaeology, University of York. All finds are reported to the Treasure Trove Advisory Panel, and all excavated material including that of the 2003 excavation season has been awarded, by the Queen's and Lord Treasurer's Remembrancer, to the National Museums of Scotland. Material is accessioned into the National Museums of Scotland after post-excavation analysis has been completed with the exception of human bone which has been returned to Tarbat Old Church.



#### References

Carver, M.O.H. 1995. (ed) Bulletin of the Tarbat Discovery Programme Bulletin Number 1, (York)

Carver, M.O.H. 1999. 'Field Archaeology', in G. Barker (ed) Companion Encyclopaedia of Archaeology (Routledge, London and New York):128-181

Carver, M.O.H. and Spall, C. forthcoming: Identifying monastic arts: the preparation of vellum at Portmahomack, Easter Ross

Historic Scotland 1996 Archaeology Procedure Paper 2, Project Design, Implementation and Archiving (Edinburgh)

## APPENDIX A INDEX TO INTERVENTIONS

YO10	INDEX OF INTERVENTIONS				
Site: TARBAT	DISCOVERY PROGRAMME				
Int. No	Activity	Originator	Date		
1	Trial excavation across enclosure ditch	Harden	1991		
2	Magnetometer survey	Lahire	1994		
3	Resistivity survey	Lahire	1994		
4	Contour survey (churchyard)	Сорр	1994		
5	Church map	Copp	1994		
6	Churchyard map	Copp	1994		
7	Evaluation trench (Sector 1)	Roe	1994		
8	Evaluation trench	Lahire	1994		
9	Radar survey	Sympkins	1994		
10	Evaluation trench	Lahire	1994		
11	Excavation (Sector 2)	Lahire	1995		
12	Cropmark mapping	Lahire	1995		
13	Crypt clearance	Harden	1992-1995		
14	Evaluation (Sector 2)	Lahire/Roe	1996-2003		
15	Excavation (Sector 3)	Lahire	1996		
16	Service trench (Sector 4)	Lahire	1996		
17	Evaluation trench (Sector 4, church)	Roe	1996-1997		
18	Test pits of church foundations (Sector 4)	Geddes/Roe	1997		
19	Crypt excavation (Sector 4)	Roe	1997		
20	Excavation (Sector 4, church nave)	Roe	1997		
21	Watching brief churchyard wall (Sector 4)	Robins	1997		
22	Service trench (Sector 4)	Roe	1997		
23	Building recording (Sector 4, church)	Jones	1997		
24	Excavation (Sector 2)	Lahire	1997-2003		
25	Excavation (Sector 1)	Hummler	1997-1998		
26	Excavation (Sector 2, oil tank)	Lahire	1998		
27	Watching brief (Sector 2, statue base)	Lahire	1999		
28	Gravestone recording (Sector 4)	Carver	1999-2002		
29	Metal detector survey (Sector 1 and 2)	Lahire	1999-2002		



### **APPENDIX B** INDEX TO 2003 FIELD FILE

CODE		DESCRIPTION	RECORD	FORMAT
		Indices		
Y01		Index of notebooks	-	-
Y02		Index of contexts	3	A4
Y03		Index of features	2	A4
Y04		Index of structures	-	-
Y05		Index of drawings	3	A4
Y06	.0	Index of photographs	7	A4
	.1	Index of film processing	1	A4
Y07	.0	Index of finds	10	A4
	.1	Index of finds by context	-	-
	.2	Index of finds by grid square	-	-
	.3	Sample Register	3	A4
	.4	Artefact Register	-	-
Y08	.5	Finds Storage Register	-	-
Y09	.0	Index of geophysical data files Index of survey stations	<del>-</del>	-
109	.0	Index of co-ordinate files	-	-
	.1	Index of top-ordinate files	-	-
Y010	.2	Index of interventions	_	_
Y1		Notebooks	_	_
11		Contexts		
Y2	.0	Context Record	96	A4
	.1	Skeleton Record	-	-
	.2	Coffin Record	-	-
	.3	Masonry Record	-	-
	.4	Timber Record	-	-
		Features		
Y3	.0	Feature Record	11	A4
	.1	Auger Record	-	-
		Structures		
Y4		Structure Record	-	-
		Site drawing		
Y5	.0	Legend	-	-
	.1	Plans	74	A4 / A1
	.2	Maps	-	-
	.3	Sections	7	A4 / A1
		Photographs		
Y6	.0	Black and white negatives	-	-
	.1	Colour negatives	106	-
	.2	Colour slides	67	<del>-</del>
	.3	Colour enprints	106	6 x 4
	.4	Black and white prints	-	-
	•	Finds		
Y7	.0	Finds Location Record	-	-
	.1	Artefact Record	-	-
<b>V</b> 0	0	Survey		
Y8	.0	Record of geophysical data files	-	-
	.1 .2	Record of .RAW data file  Record of .FLD data file	-	-
	.3	Surface Reconnaissance Record	-	-
ADDENE			-	-
APPEND	ix C	CONTEXT AND FEATURE SUMMARY		

### APPENDIX C CONTEXT AND FEATURE SUMMARIES

### CONTEXTS

Context	Identity	Feature	Description	Munsell
1875*	spread	471	very dark greyish-brown silty clay, 0.10m deep, occasional pebbles, charcoal and degraded sandstone	10YR3/2
1910*	spread	471	very dark gray sandy silt, occasional gravel	10YR3/1
1912*	spread	471	very dark brown fine sandy silt, $1.40 \times 0.30$ m, occasional charcoal flecks	10YR2/2
1913*	dump	471	brownish-yellow silty clay, $1.50 \times 3.0 \times 0.12$ m, occasional charcoal and gravel	7.5YR5/6
1916*	layer	471	yellowish-brown scorched sand with frequent charcoal flecks	10YR5/4
1923*	layer	471	dark brown silty sand with lenses of ash grey silty sand, $3.0 \times 3.0 \times 0.15$ m, occasional gravel and charcoal flecks	7.5YR3/2
1933*	spread	471	light yellowish-brown silty clay, 1.50 x 0.50 x 0.05m, occasional gravel and charcoal flecks	10YR6/4
1935*	spread	471	dark yellowish-brown silty sand with lenses of pale yellow silty clay, $1.50 \times 0.50 \times 0.10$ m, occasional charcoal flecks, gravel and pebbles	10YR4/4
1941*	spread	471	spread of mixed pebbles set in a matrix of dark grayish brown silty sand, $2.0 \times 1.0 \times 0.10 \text{m}$	10YR4/2
1972*	dump	471	dark brown silty sand, $1.00 \times 0.50 \times 0.15$ m, occasional pebbles and cobbles	10YR4/3
1973*	layer	471	yellowish-red clayey-silt, $1.50 \times 0.85 \times 0.10$ m, occasional charcoal flecks	5YR4/6
1976*	layer	471	greyish-brown slightly clayey-sand, $1.40 \times 1.05 \times .15 \text{m}$ , occasional charcoal flecks and animal bone	10YR5/2
1978*	layer	471	dark brown silty clay, 1.00 x 0.30 x 0.05m, occasional charcoal flecks	7.5YR3/2
1983*	layer	471	dark brown clayey-silt, $0.70 \times 0.50 \times 0.03$ m, occasional charcoal flecks	7.5YR3/2
1989*	spread	471	reddish-yellow clayey-silt spread, occasional charcoal flecks	7.5YR6/6
1990*	layer	471	dark grayish-brown silty clay, 0.60 x 0.56 x 0.10m, occasional charcoal flecks and degraded sandstone	10YR4/2
1991*	layer	471	reddish-yellow clayey-silt, 1.80 x 0.50 x 0.05m, occasional charcoal and animal bone	7.5YR6/8
1992*	spread	471	yellow silty clay, 2.00 x 0.80 x 0.10m, occasional charcoal flecks	10YR7/6
1994*	layer	471	dark yellowish-brown clayey-silt, $3.0 \times 0.05 \text{m}$ , occasional charcoal, gravel and pebbles, and calcined animal bone	10YR4/6
2005*	layer	471	very dark greyish-brown silt, occasional gravel	10YR3/2
2007*	dump	471	yellowish-brown clayey-silt, occasional burnt and unburnt animal bone	10YR5/6
2009*	layer	471	reddish-brown sandy silt, occasional lenses of light grey sand and charcoal flecks	2.5YR3/4
2010*	spread	471	dark brown sandy silt, occasional charcoal flecks	10YR4/3
2011*	dump	471	yellowish-red clayey-silt, occasional charcoal flecks and gravel	5YR 5/8



Context	Identity	Feature	Description	Munsell
2013*	dump	471	very dark greyish-brown sandy-silt, occasional lenses of mixed clay silt and pebbles	10YR3/2
2019*	spread	471	mixed clay silt, occasional gravel, pebbles and cobbles	variable
2033*	dump	471	reddish-yellow clayey-silt, occasional charcoal	7.5YR6/6
2040*	tip	471	very dark greyish-brown silty sand, occasional charcoal flecks and gravel, pebbles and cobbles	10YR3/2
2057*	spread	471	reddish-brown clayey-silt, occasional charcoal flecks	5YR4/4
2088*	layer	-	a mottled, dark greyish-brown layer of silty-sand $c.0.5\mathrm{m}$ deep, with inclusions of gravel, slag and animal bone.	10YR 4/2
2097*	dump	-	a clean, very dark grey dump of silty-sand $c.0.14\mathrm{m}$ deep, with inclusions of gravel, pebbles, animal bone, slag and charcoal	10YR 3/1
2104*	dump	-	an amorphous dump of brown silty-sand, with inclusions of gravel and pebbles, animal bone and slag, $c.0.11m$ deep	10YR 4/3
2113*	dump	-	an amorphous dump of clean olive-brown clay-silt, with inclusions of gravel and pebbles, animal bone and crushed shell, varied in depth from $0.01 m$ to $0.12 m$	2.5YR 4/3
2117*	dump	-	an amorphous dump of very dark greyish-brown silty-sand, with inclusions of large gravel and pebbles, and animal bone, $c.0.06\mathrm{m}$ deep with a lense of orange silty-sand	10YR 3/2
2134*	backfill	470	very dark grayish brown sandy silt, frequent animal bone, cobbles and gravel	10YR3/2
2209	layer	466	an amorphous layer of yellowish-red, slightly silty-sand overlying a rough cobbled surface, no inclusions or finds	5YR 4/6
2242	make up	434	a sterile gravel of variable colour identified as a linear series of small pockets and dumps filling voids and acting as bedding/bonding material for overlying ?wall footing	variable
2243	make up	434	comprised mostly of large angular yellow sandstone slabs, but set into an orangey-brown matrix	variable
2355*	hearth stone	445	comprises a single sub-rectangular red sandstone slab, which lay horizontally within the kerbs of the hearth, $c.0.4 \times 0.2 \times 0.05$ m, represents the final lining of F445	
2356*	fill	445	identified as an irregular shaped layer of mottled yellowish-red clayey-silt, a fill of hearth F445, large inclusions of degraded charcoal	5YR 4/6
2374*	hearth makeup (collapse)	445	three fragmentary slabs of yellowish-red sandstone, possibly the collapsed make up of hearth F445	variable
2457*	slab lining of hearth	445	series of small red sandstone slabs representing a renewal of the hearth base	variable
2459	spread	-	irregular dump of mottled black/grey sandy-silt, characterised by a high percentage of burnt shell/ashy inclusions, as well as animal bone, charcoal, and pebbles, >0.1m deep	10YR 2/1
2460	fill	445	irregular layer of clean dark brown sandy-silt with lenses of greyish-brown clay-silt, $c.1.20 \times 0.38 \text{m} \times 0.03$ -0.10m, small inclusions of heat cracked sandstone	10YR 3/3
2461	dump	-	very dark-greyish brown dump of sandy-silt, with large inclusions of pebbles, cobbles and animal bone, $0.6 \times 0.7 \times 0.03 \text{m}$	10YR 3/2



Context	Identity	Feature	Description	Munsell
2462	dump	-	dump of greyish-brown clay-silt with inclusions of gravel and pebbles, and animal bone, and fuelash slag	10YR 5/2
2463	deposit	-	irregular deposit of yellowish-brown clay-silt with inclusions of animal bone and slag	10YR 5/8
2464	recovery context	-	recovery context for surface finds in Module B7 by 3-D	-
2465	layer	472	irregular layer of pinkish-white silt containing flecks of charcoal, pebbles, and animal bone	7.5YR 8/2
2466	spread	472	deposit of sandy-silt, with small inclusions of gravel and pebbles, animal bone and charcoal, $c.0.04$ m thick	variable
2467	spread	472	a sub-circular spread of dark brown silty clay, $c.0.5 \times 0.50 \times 0.01$ -0.02m, with small inclusions of gravel and pebbles	10YR 3/3
2468	backfill	445	dark yellowish-brown sandy-silt, with occasional inclusions of gravel, and burned animal bone, one red jasper pebble was also recovered	10YR 3/6
2469	make-up	466	linear deposit of yellow sandstone slabs and cobbles, set in a dark brown fine silt with orange veins and lenses	variable
2470	make-up	466	thin spread or layer of mixed crushed sea shell and pea grit possible bonding/mortar substitute	variable
2471	make-up	466	linear deposit of compacted mixed gravel	variable
2472	layer	-	irregular layer of buff sand containing occasional charcoal and animal bone, several craft-working artefacts were recovered	variable
2473	dump	-	a sub-oval dump of dark reddish-brown sandy-silt with small inclusions of gravel and pebbles, $c.1.35 \times 0.80 \times <0.05 \mathrm{m}$ , some animal bone and charcoal were recovered	5YR 3/2
2474	spread	472	rectangular spread of black sandy-silt with small inclusions of pebbles and cobbles, $c.0.03 \times 0.09 \times 0.02$ m, a small amount of animal bone was also recovered	7.5YR 2.5/1
2475	spread	472	amorphous spread of grey clay-silt with rare gravel inclusions	7.5YR 6/1
2476	spread	472	irregular spread of very dark greyish-brown silty-sand with small inclusions of gravel, $<0.02m$ thick	10YR 3/2
2477	spread	472	irregular shaped spread of grey clay-silt with inclusions of gravel, <0.09m thick	7.5YR 5/1
2478	dump	472	irregular dump of silty-sand with inclusions of charcoal, gravel, and animal bone (burnt and unburnt)	10YR 3/3
2479		-	fine light brown silty-sand collapse	10YR3/2
2480	dump	-	irregular dump of mixed dark grey and dark reddish-brown silty- sand, with inclusions of pebbles, charcoal, ash, shell, slag and animal bone	10YR 4/1
2481	make-up	467	amorphous deposit of yellow sandstone slabs set into a dark brown fine silty-sand, with frequent inclusions of animal bone, possible 'lid' collapse of stone-built culvert	10YR 3/3
2482	dump	-	irregular dump of yellow clay-silt, inclusions of animal bone and charcoal	2.5YR 8/8
2483	dump	-	irregular dump of very mottled greyish-brown clay-silt, contained small amounts of gravel and pebbles, animal bone, charcoal, and shell	10YR 5/2



Tarbat Discovery Programme Civ

Context	Identity	Feature	Description	Munsell
2484	deposit	-	irregular deposit of black clay-silt, $c.0.50 \times 0.50 \text{m}$ , inclusions of gravel, charcoal, and shell	10YR 2/1
2485	dump	-	irregular dump of dark brown sandy-silt with rare inclusions of charcoal and pebbles	10YR 3/3
2486	make-up	467	yellow sandstone slab make-up of culvert sides and lid	variable
2487	dump	-	irregular dump of greyish-brown silty-clay, <0.03m in depth, no other inclusions or finds	10YR 5/2
2488	spread	472	sub-circular spread of light brown, windblown sand, no inclusions or finds	7.5YR 6/3
2489	spread	-	irregular spread of dark brown sandy-silt, rare gravel inclusions	7.5YR 3/2
2490	dump	-	irregular dump of mottled clay-silt, inclusions of charcoal and animal bone	2.5YR 7/8
2491	dump	-	irregular dump of clean greyish-brown sand, $c.1.5 \times 1.3 \text{m}$ , variable depth, inclusions of pebbles, large fragments of charcoal, and well preserved animal bone	10YR 5/2
2492	slab surface	469	two sandstones slabs laid end-to-end, orientated north-south adjacent to road kerb, $c.1.25\mathrm{m}$ in length, possible road surface make-up	7.5YR 6/1
2493	backfill	468	curvilinear, mottled very dark greyish-brown backfill with inclusions of charcoal, animal bone and gravel	10YR 3/2
2494	make-up	468	make-up of stone-built ?flue to west side of road, mixture of granite and sandstone cobbles showing signs of burning and weathering	variable
2495	backfill	467	clean yellowish-brown sand backfill of culvert	10YR6/3
2496	make-up	474	irregular surface of sandstone slabs and cobbles, set into a matrix of dark brown fine sandy-silt	variable
2497	backfill	472	mottled reddish-brown clay-silt backfill, flecked with charcoal, inclusions of pebbles, and one large fragment of slag	5YR 4/4
2498	backfill	472	clean, very dark brown sandy-silt backfill, $c.0.5$ m, occasional flecks of charcoal, and rare pebbles	10YR 2/2
2499	layer	-	sub-rectangular layer of dark yellowish-brown silty-clay, occasional inclusions of red sandstone and charcoal flecks, $>0.05 \mathrm{m}$ thick	10YR 4/6
2500	spread	472	irregular clean, black clayey-silt deposit, and rich in turf charcoal	10YR 2/1
2501	backfill	472	clean, pale brown sand backfill, containing occasional pebbles, $c.0.55 \ge 0.3 \ge 0.07 \mathrm{m}$	10YR 6/3
2502	dump	-	sub-circular dump of yellowish-brown clay-silt, with inclusions of pebbles, animal bone and charcoal, badly disturbed by rodent activity	10YR 5/6
2503	make-up	470	stone-lining of pit consisting mostly of beach/river cobbles (c. $0.15$ - $0.35$ m diameter), no bonding material	variable
2504	backfill	472	deposit of clay-silt backfill, with small inclusions of gravel, $c.0.2\mathrm{m}$ x $0.02\mathrm{m}$ deep	10YR 5/4
2505	backfill	472	very dark brown sandy-silt backfill, rare inclusions of charcoal, clay-silt and fine gravel	10YR 2/2
2506	base make-up	470	sandstone-slab lining base of a pit, possibly $c.0.30 \mathrm{m}^2 \times c.0.02 \mathrm{m}$ thick, disappeared beneath limit of excavation	variable
2507	collapse	475	deposit of sandstone slabs set in a loose matrix of fine sandy-silt which contained charcoal, animal bone and gravel	variable



Tarbat Discovery Programme CV

Context	Identity	Feature	Description	Munsell
2508	?make- up/collapse layer	434	linear deposit of yellow sandstone slabs set into a sandy-silt matrix with occasional gravel, charcoal, and animal bone, = C2243 (Modules B0 and B4)	variable
2509	backfill	467	mottled brown sandy-silt backfill, with rare inclusions of charcoal, and shell, disappeared beneath limit of baulk	10YR 4/3
2510	backfill	472	mottled reddish-brown clay-silt backfill, <0.15m thick, inclusions of charcoal, and fine gravel	5YR 4/4
2511	layer	475	dark reddish-brown silty-sand layer, containing a high percentage of fragmented sandstone slabs, and animal bone	5YR 3/2
2512	backfill	473	clean very dark brown sandy-silt backfill, $c.0.55 \times 0.13 \mathrm{m}$ in plan, with inclusions of large and small pebbles, and animal bone, badly disturbed by animal burrowing	10YR 2/2
2513	make-up	473	pebble make-up of a stone-lined pit, (0.10-0.15m diameter), packed together tightly to a depth of $0.30  \mathrm{m}$	variable
2514	make-up	476	series of grey/pink sandstone slabs and blocks forming the make-up of a possible culvert	variable
2515	deposit	-	amorphous deposit of mottled very dark brown/very dark grey sandy-silt, inclusions of gravel and pebbles, frequent shell and animal bone, rare charcoal	variable
2516	backfill	472	thin layer $(c.0.01\text{m})$ of very dark grey sandy silt, with flecks of charcoal	10YR 3/1
2517	backfill	467	identified as a mottled light yellowish-brown sand with inclusions of animal bone and fuelash slag	10YR 6/4
2518	backfill	467	mottled dark brown clay-silt with occasional inclusions of light brown sand, disappeared beneath baulk section	10YR 3/3
2519	backfill	472	black deposit of charcoal, = C2500 in Module B7	10YR 2/1
2520	fill	477	primary fill of hearth (F477) consisting of a clean orange clay-silt with frequent large cracked pebbles, and small quantities of animal bone	7.5YR 4/3
2521	backfill	472	very dark greyish-brown backfill of clay-silt, light grey clay lenses, charcoal flecks, and fine gravel	10YR 3/2
2522	?fill	467	mottled fine yellowish-brown sandy-silt, sandstone crumbs, quartz pebbles and one fragment of animal bone	10YR 5/4
2523	backfill	472	irregular, stained greyish-brown layer of silty-clay backfill, 0.01-0.15m deep, no inclusions	10YR 5/2
2524	backfill	476	clean, brown sand backfill of possible culvert F476, rare gravel, $c.0.65 \times 0.3  \text{m} \times < 0.10  \text{m}$ thick	10YR 4/3
2525	backfill	476	deposit of very dark greyish-brown sand, charcoal fleeks, friable burnt shell, and small pebbles	10YR 3/2
2526	make-up	475	make-up of stone-built flue, excavation not completed 2003	variable
2527	deposit	-	sub-circular deposit of mottled very dark greyish-brown sand with small inclusions of pebbles, animal bone and charcoal, $c.0.5 \times 1.5 \times 0.07 \text{m}$ deep	10YR 3/2
2528	backfill	467	irregular, yellowish-brown sandy-silt backfill, with degraded sandstone and charcoal	10YR 5/4
2529	deposit	-	irregular deposit of brown sand, with flecks of charcoal, and a few pebbles, $c.1.5 \times 1.2 \times 0.15 \text{m}$ deep	7.5YR 4/3



Tarbat Discovery Programme Cvi

Context	Identity	Feature	Description	Munsell
2530	deposit	-	irregular deposit of brown sand with lenses of light yellowish-brown sand	10YR 4/4
2531	deposit	-	irregular deposit of brown sand, <0.03m deep, yellowish mineral staining, charcoal flecks, shell and gravel	10YR 4/3
2532	deposit	-	irregular deposit of very dark brown clay-silt, $c.0.6 \times 0.55 \times 0.05$ m, pebbles, burnt shell, charcoal flecks, and animal bone	10YR 2/2
2533	make-up	434	unexcavated at end of 2003 season	
2534	backfill	475	dark reddish-brown deposit of silt, containing a large amount of pebbles and a small amount of animal bone	5YR 2.5/2
2535	?lining of hearth	477	layer of dark yellowish-brown sandy-silt lining of hearth F445, gravel and pebbles, charcoal fragments, and animal bone	variable

# FEATURES

Feature	Identity	Contexts	Description	Profile
434	?wall footing	2242, 2243, 2188, 2508	identified as possible wall footing, consisting of layers of gravel and cobbles over and under sandstone slabs, collapse of the slab make-up was sealed by a possible desiccated turf deposit	irregular
445	hearth		F445 consisted of three upright sandstone kerbstones with possible reredos (observed as collapse), various primary fills within the hearth	not seen
466	wall footing	2209, 2469, 2470, 2471	linear slab-built feature, $c.1.0 \times 0.4 \text{m}$ , three distinct layers of make-up - gravel bed, shell and pea-grit preparation and cobble/slab surface	sub-rectangular
467	culvert		stone-built culvert made of yellow sandstone slab sides and lid, with cobble base. Backfilled on three occasions and sealed by collapse deposit.	rectangular
468	flue (roadside)	2493, 2494	curvilinear ?flue to the west of the road, made of C2493 and backfilled with C2494, c.2.7 x 0.6 x 0.3m excavation not completed 2003	sub-rectangular
469	master number for road	2492	master feature number for road to incorporate numbering from previous seasons; includes west and east kerbs, and sandstone and clay silt surfacing	-
470	stone-lined pit	2503, 2506, 2134	stone-lined pit made of cobble lining and sandstone slab base, backfilled once with C2134	irregular



Tarbat Discovery Programme Cvii

Feature	Identity	Contexts	Description	Profile
471	NE-SW western	1875, 1910, 1912,	western flanking ditch measuring c.2.50m across,	u-shaped
	roadside ditch	1913, 1916, 1923,	full length unseen, backfilled slowly with dumping	
		1933, 1935, 1941,	episodes	
		1972, 1973, 1976,		
		1978, 1983, 1989,		
		1990, 1991, 1992,		
		1994, 2005, 2007,		
		2009, 2010, 2011,		
		2013, 2019, 2033,		
		2040, 2057		
472	NE-SW eastern	2459, 2465,	eastern flanking ditch, full dimensions unseen,	u-shaped
	roadside ditch	2466, 2467, 2474,	backfilled slowly with dumping episodes	
		2475, 2476, 2477,		
		2478, 2488 2497,		
		2498, 2500, 2501,		
		2504, 2505, 2510,		
		2516, 2519, 2521,		
		2523		
473	stone-lined pit	2512, 2513	stone-lined pit or soak away, near-vertical sides,	u-shaped
			disappeared beneath southern limit of excavation	
			$0.55\mathrm{m}$ x $0.35\mathrm{m}$ visible in plan, $c.0.30\mathrm{m}$ deep	
474	sandstone	2496	surface of sandstone and cobble hardstanding, it	irregular
	surface/lining		respected the underlying contours of ditch F471	
			and abutted F476 (stone-lined culvert)	
475	roadside culvert/	2507, 2511, 2534	stone-built ?flue made of yellow sandstone slabs	-
	flue		and cobbles, backfilled once, excavation not	
			completed 2003	
476	?wall footing	2514, 2524, 2525	stone-built culvert made of large sandstone blocks,	-
			set in a greyish sandy deposit, orientated north-	
			south	
477	hearth	2520, 2535	makeshift hearth consisting of ash set on pebble	u-shaped
			lining	



Tarbat Discovery Programme Di

## **APPENDIX D** DRAWING INDEX

Drawing No.	Format*	Scale	Type	Module	Description (Context / Feature / Structure / Find No)
1168	A1 L	1:10	plan	В7	C2459, C2461 pre-excavation plan
1169	A1 L	1:10	plan	В7	C2462 pre-excavation plan
1170	A4 P	1:10	plan	B4	C2463 pre-excavation plan
1171	A4 P	1:10	plan	B4	C2460 F445 pre-excavation plan
1172	A4 P	1:10	plan	B4	post-excavation hachure plan F445
1173	A4 P	1:10	plan	В7	C2473 pre-excavation plan
1174	A4 P	1:10	plan	В7	C2466 pre-excavation plan
1175	A4 P	1:10	plan	В7	C2483, C2484 pre-excavation plan
1176	A4 P	1:10	plan	В7	C2480 pre-excavation plan
1177	A4 P	1:10	plan	B4	C2478 pre-excavation plan
1178	A4 P	1:10	plan	B4	C2482 pre-excavation plan
1179	A4 P	1:10	plan	B4	C2485 pre-excavation plan
1180	A4 L	1:10	plan	В7	C2491 pre-excavation plan
1181	A4 P	1:10	plan	В7	C2497 pre-excavation plan
1182	A4 P	1:10	plan	В7	C2498 pre-excavation plan
1183	A4 P	1:10	plan	В7	C2500 pre-excavation plan
1184	A4 P	1:10	plan	В7	C2502 pre-excavation plan
1185	A4 P	1:10	plan	В7	C2501 pre-excavation plan
1186	A1 L	1:10	plan	В6	C2144 pre-excavation plan
1187	A1 P	1:10	plan	B4	F466, C2469 - 2471, C2472, C2496
1188	A1 P	1:10	plan	В5	F468, C2494, C2481, C2507, C 2508
1189	A4 P	1:10	plan	B4	F466, C2470, C2471
1190	A1 L	1:10	plan	В6	C2117 pre-excavation plan
1191	A1 L	1:10	plan	В6	C2474, C2475 pre-excavation plan
1192	A1 L	1:10	plan	В6	C2476 (=C2130) pre-excavation plan
1193	A1 L	1:10	plan	В6	C2477 (=C2130) pre-excavation plan
1194	A1 P	1:10	plan	B6	C2492 pre-excavation plan
1195	A4 P	1:10	plan	В6	C2499 pre-excavation plan
1196	A4 P	1:10	plan	В7	F473 C2512, C2513 pre-excavation plan
1197	A4 P	1:10	plan	В7	C2176, C2514, C2524 pre-excavation plan
1198	A4 P	1:10	plan	В7	C2531 pre-excavation plan
1199	A4 P	1:10	plan	В7	C2532 pre-excavation plan
1200	A4 P	1:10	plan	В7	C2515 pre-excavation plan
1201	A4 L	1:10	plan	В7	C2527 pre-excavation plan
1202	A4 P	1:10	plan	В7	C2530 pre-excavation plan
1203	A4 P	1:10	plan	В7	F473, C2513 pre-excavation plan
1204	A4 L	1:10	hachure	В7	F473 post excavation hachure plan



Tarbat Discovery Programme Dii

Drawing No.	Format*	Scale	Type	Module	Description (Context / Feature / Structure / Find No)
1205	A4 P	1:10	plan	В7	C2525 pre-excavation plan
1206	A4 L	1:10	plan	В7	C2529 pre-excavation plan
1207	A4 L	1:10	plan	B5-B6	F475 C2534, C2526 pre-excavation plan
1208	A4 L	1:10	plan	B5-B6	F475 C2526 pre-excavation plan
1209	A4 L	1:10	section	B5-B6	F475 C2526, C2534 north facing section
1210	A4 P	1:10	plan	B5-B6	F475 pre-excavation plan of culvert capping
1211	A4 P	1:10	plan	B6	C2499 pre-excavation plan
1212	A4 P	1:10	plan	B5-B6	C2511 pre-excavation plan
1213	A4 P	1:10	plan	В5	F467 C2509 pre-excavation plan
1214	A4 P	1:10	plan	В5	F467 C2517 pre-excavation plan
1215	A4 P	1:10	plan	В5	F467 C2522 pre-excavation plan
1216	A4 L	1:10	section	В5	F467 C2509, C2517, C2518 east facing section
1217	A4 P	1:10	plan	В5	F467 C2486 pre-excavation plan
1218	A4 L	1:10	hachure	В5	F467 post excavation hachure plan
1219	A4 L	1:10	hachure	В5	F467 post excavation plan of stone settings
1220	A4 P	1:10	plan	В5	F467 C2486 pre-ex plan
1221	A4 L	1:10	section	В5	F468 C2493, C2494 south-west facing section
1222	A4 P	1:10	plan	В5	F477 C2520 pre-ex plan
1223	A4 P	1:10	plan	В5	F477 C? pre-excavation plan
1224	A4 L	1:10	plan	В5	F477 C2535 pre-excavation plan
1225	A4 P	1:10	section	В5	F477 C2520 south facing section
1226	A4 L	1:10	plan	В6	F472 C2510 pre-excavation plan
1227	A4 L	1:10	plan	B6	F472 C2516 pre-excavation plan
1228	A4 L	1:10	plan	В6	F472 C2519 pre-excavation plan
1229	A4 L	1:10	plan	В6	F472 C2521 pre-excavation plan
1230	A4 L	1:10	plan	В6	F472 C2523 pre-excavation plan
1231	A4 L	1:10	plan	В6	F470 C2503 pre-excavation plan
1232	A4 L	1:10	plan	В6	F470 C2506 pre-excavation plan
1233	A4 L	1:10	hachure	В6	F470 post excavation hachure plan
1234	A4 L	1:10	plan	В6	C2489 pre-excavation plan
1235	A4 L	1:10	plan	В6	C2335 pre-excavation plan
1236	A4 L	1:10	plan	В6	C2465 pre-excavation plan
1237	A4 L	1:10	plan	В6	C2467 pre-excavation plan
1238	A4 L	1:10	plan	В6	C2387 pre-excavation plan
1239	A4 P	1:10	plan	В4	C2490 pre-excavation plan
1240	A1 P	1:10	section	В6	module B6 - west facing section of baulk
1241	A1 L	1:10	hachure	B6-B7	F472 post excavation hachure plan
1242	A1 P	1:10	plan	В5	F468 C2494, C2481, C2507, C2508 pre-excavation plan
1243	A1 P	1:10	plan	В5	F468 C2493 C2494 pre-excavation plan



Tarbat Discovery Programme Diii

Drawing No.	Format*	Scale	Type	Module	Description (Context / Feature / Structure / Find No)
1244	A1 P	1:10	plan	В7	F476 C2514, C2525, C2524 pre-excavation plan
1245	A1 L	1:10	hachure	B4-B5	F471 post excavation hachure plan
1246	A1 P	1:10	section	B4-B7	modules B4, B5, B6 and B7 north facing section
1247	A1 P	1:10	section	В7	module B7 east facing section
1248	A1 P	1:10	plan	B5-B6	F468 pre-excavation plan

\*Format: A1/A4 = paper size

P/L = portrait or landscape

Tarbat Discovery Programme Ei

## APPENDIX E PHOTOGRAPHIC INDICES

								Film No: N342
Frame	Lens	Scale	Direction	Int. No.	Module	Subject	Details (F/C Nos)	Notes
0								
1	zoom	2m	e	14	В7	plan	C2514	
2	zoom	-	-	14	B5-B6	-	C2511	working shot of bone dump
3	zoom	2m	e	14	В7	plan	C2514	
4	zoom	2m	e	14	В7	plan	C2514	
5	zoom	0.5m	e	14	B5-B6	plan	C2511	bone dump
6	zoom	0.5m	e	14	B5-B6	plan	C2511	bone dump
7	zoom	-	-	14	B5-B6	plan	C2511	bone dump with photo- markers
8	zoom	-	-	14	B5-B6	plan	C2511	bone dump with photo- markers
9	zoom	-	-	14	B5-B6	-	C2511	working shot of bone dump
10	zoom	-	-	14	B5-B6	-	C2511	working shot of bone dump
11	zoom	-	-	14	B5-B6	-	C2511	working shot of bone dump
12	zoom	-	-	14	B5-B6	-	C2511	working shot of bone dump
13	zoom	0.5m	nw	14	В5	plan	F467, C2509, C2517, C2518	
14	zoom	0.5m	nw	14	В5	plan	F467, C2509, C2517, C2518	
15	zoom	-	-	14	В5	-	F467	working shot
16	zoom	-	-	14	В5	-	F467	working shot
17	zoom	0.5m	s	14	В7	plan	F473, C2512, C2513	
18	zoom	0.5m	s	14	В7	plan	F473, C2512, C2513	
19	zoom	0.5m	s	14	В7	plan	F473, C2513	
20	zoom	0.5m	s	14	В7	plan	F473, C2513	
21	zoom	0.5m	nw	14	В7	plan	F467, C2522	
22	zoom	0.5m	nw	14	В7	plan	F467, C2522	
23	zoom	1m	e	14	В7	plan	F476, C2514, C2524	
24	zoom	1m	e	14	В7	plan	F476, C2514, C2524	
25	zoom	0.5m	s	14	В7	section	F473, C2512, C2513	
26	zoom	0.5m	s	14	В7	section	F473, C2512, C2513	
27	zoom	0.5m	s	14	В7	plan	F473	
28	zoom	0.5m	s	14	В7	plan	F473	
29	zoom	0.5m	s	14	В7	plan	F473	
30	zoom	2m	n	14	В7	plan	F468, C2494 / F475, C2526 / F477, C2520	
31	zoom	2m	n	14	В7	plan	F468, C2494 / F475, C2526 / F477, C2520	
32	zoom	2m	se	14	В6	plan	F472	
33	zoom	2m	se	14	В6	plan	F472	
34	zoom	0.5m	nw	14	В5	plan	F467, C2528	
35	zoom	0.5m	nw	14	В5	plan	F467, C2528	
36	zoom	0.5m	nw	14	В5	plan	F467	
37								



Tarbat Discovery Programme Eii

								Film No: N344
Frame	Lens	Scale	Direction	Int. No.	Module	Subject	Details (F/C Nos)	Notes
27	zoom	-	n	14/24	B4-B7	-		working shot
28	zoom	-	n	14/24	B4-B7	-		working shot
29	zoom	2m	n	14	В7	plan	C2459	
30	zoom	2m	n	14	В7	plan	C2459	
31	zoom	2m	n	14	В7	plan	C2459	
32	zoom	2m	n	24	B4	plan	C2460	
33	zoom	2m	n	24	B4	plan	C2460	
34	zoom	0.5m	N	24	B4	plan	F445, C2354	
35	zoom	0.5m	N	24	В4	plan	F445, C2354	
36	zoom	0.5m	N	24	B4	plan	F445, C2354	
37								

								Film No: N345
Frame	Lens	Scale	Direction	Int. No.	Module	Subject	Details (F/C Nos)	Notes
0								
1	zoom	2m	n	14	B5-B6	plan	C2465	
2	zoom	2m	n	14	B5-B6	plan	C2465	
3	zoom	2m	n	14	B5-B6	plan	C2465	
4	zoom	-	se	14/24	B4-B7	-		general working shot
5	zoom	-	e	24	В4	-	F445	working shot
6	zoom	-	e	24	В4	-	F445	working shot
7								
8	zoom	0.5m	s	24	В4	plan	F446, C2470, C2471	
9	zoom	0.5m	s	24	В4	plan	F446, C2470, C2471	
10	zoom	0.5m	w	24	В4	plan	C2478	
11	zoom	2m	n	14	В7	plan	C2480	module shot
12	zoom	2m	n	14	В7	plan	C2480	module shot
13	zoom	0.5m	nw	14	В5	plan	F467, C2486	
14	zoom	0.5m	nw	14	В5	plan	F467, C2486	
15	zoom	1m	se	14	В6	plan	F470, C2503	
16	zoom	1m	se	14	В6	plan	F470, C2506	
17	zoom	1m	se	14	В6	plan	F470, C2506	
18	zoom	2m	se	14	В5	plan	F468, C2483, C2484	
19	zoom	2m	se	14	В5	plan	F468, C2483, C2484	
20	zoom	1m	se	14	В6	plan	F470	post excavation
21	zoom	1m	se	14	В6	plan	F470	post excavation
22	zoom	1m	w	14	В7	plan	F472	post excavation
23	zoom	1m	w	14	В7	plan	F472	post excavation
24	zoom	1m	w	14	В7	section	F472	east facing section
25	zoom	1m	w	14	В7	section	F472	east facing section
26	zoom	0.5m	nw	14	В5	plan	F467, C2509	
27	zoom	0.5m	nw	14	В5	plan	F467, C2509	
28	zoom	1m	w	14	В7	section	F472	east facing section
29	zoom	1m	w	14	В7	section	F472	east facing section
30	zoom	1m	w	14	В7	plan	F472	post excavation

Tarbat Discovery Programme Eiii

31	zoom	1m	w	14	В7	plan	F472	post excavation
32	zoom	2m	w	14	В7	plan	C2515	
33	zoom	2m	w	14	В7	plan	C2515	
34	zoom	2m	e	14	В7	plan	C2514	
35	zoom	2m	e	14	В7	plan	C2514	
36	zoom	0.5m	S	14	В7	plan	F473, C2512, C2513	
37	zoom	0.5m	S	14	В7	plan	F473, C2512, C2513	

								Film No: N347
Frame	Lens	Scale	Direction	Int. No.	Module	Subject	Details (F/C Nos)	Notes
0								
1	zoom	0.5m	nw	14	В5	plan	F467	post excavation
2	zoom	0.5m	nw	14	В5	plan	F467	post excavation
3	zoom	2m	sw	14	В5	plan	F434, C2533	
4	zoom	2m	sw	14	В5	plan	F434, C2533	
5	zoom	0.5m	s	14	B5-B6	plan	F475, C2526, C2534	
6	zoom	0.5m	s	14	B5-B6	plan	F475, C2526, C2534	
7	zoom	0.5m	s	14	B5-B6	plan	F475, C2526, C2534	
8	zoom	2m	e	14	В7	section		west facing baulk section
9	zoom	2m	e	14	В7	section		west facing baulk section
10	zoom	-	-	14	В7	-		working shot while taking samples
11	zoom	-	-	14	В7	-		working shot while taking samples
12	zoom	-	-	14	В7	-		working shot while taking samples
13	zoom	-	-	14	В7	-		working shot while taking samples
14	zoom	-	-	14	В7	-		working shot while taking samples
15	zoom	-	-	14	В7	-		working shot while taking samples
16	zoom	0.5m	ne	14	B5-B6	plan	F475, C2520	
17	zoom	0.5m	ne	14	B5-B6	plan	F475, C2520	
18	zoom	0.5m		14	B5-B6	secrtion	F475, C2520	
19	zoom	0.5m		14	B5-B6	section	F475, C2520	
20	zoom	1m	w	14	B5-B6	plan	F475, C2534	
21	zoom	1m	w	14	B5-B6	plan	F475, C2534	
29	zoom	2m	n	14	В5	plan	F468, C2494 / F475, C2526	
30	zoom	2m	n	14	В5	plan	F468, C2494 / F475, C2526	
31	zoom	2m	n	14	В5	plan	F468, C2494 / F475, C2526	

						i		Film No: S78	
Frame	Lens	Scale	Direction	Int. No.	Module	Subject	Details (F/C Nos)	Notes	
0									
1	Zoom	-	se	14	-	-		general working shot	
2	Zoom	-	e	14	-	-		general view	

Tarbat Discovery Programme Eiv

Frame	Lens	Scale	Direction	Int. No.	Module	Subject	Details (F/C Nos)	Notes
3	Zoom	-	ne	14	-	-		general view
4	Zoom	-	ne	14	-	-		general shot with Carver and Spall
5	Zoom	-	e	14	-	-		working shot - preparation for module photo
6	Zoom	-	e	14	-	-		working shot - preparation for module photo
7	Zoom	-	e	14	-	-		working shot - preparation for module photo
8	Zoom	-	e	14	-	-		working shot of trowellers
9	Zoom	2m	n	14	В7	plan	C2459	pre-excavation
10	Zoom	2m	n	14	В7	plan	C2459	pre-excavation
11	Zoom	2m	n	24	B4	plan	C2460	pre-excavation
12	Zoom	2m	n	24	B4	plan	C2460	pre-excavation
18								
19	Zoom	2m	n	24	B5-B6	plan	C? (too blurred)	pre-excavation

								Film No: S79
Frame	Lens	Scale	Direction	Int. No.	Module	Subject	Details (F/C Nos)	Notes
0								
1	zoom	2m	n	14	B5-B6	plan	C2456	working shot
2	zoom	2m	n	14	B5-B6	plan	C2456	
3	zoom	2m	n	14	B5-B6	plan	C2456	
4	zoom	2m	n	14	B5-B6	plan	C2456	
5	zoom	-	se	24	B4	-	F445	working shot
6	zoom	-	se	14/24	B4-B7			general working shot
7	zoom	0.5m	S	24	B4	plan	F446, C2470, C2471	
8	zoom	0.5m	w	24	B4	plan	C2478	
9	zoom	2m	n	14	В7	plan	C2480	
10	zoom	2m	n	14	В7	plan	C2480	
11	zoom	0.5m	nw	14	В5	plan	F467, C2486	
12	zoom	0.5m	nw	14	В5	plan	F467, C2486	
13	zoom	2m	se	14	В5	plan	F468, C2483, C2484	
14	zoom	2m	se	14	B5	plan	F468, C2483, C2484	
15	zoom	1m	se	14	В6	plan	F470	
16	zoom	-	e	14/24	B4-B7	-		general working shot
17	zoom	1m	w	14	В7	plan	F472	
18	zoom	0.5m	nw	14	B5	plan	F467, C2509	
19	zoom	0.5m	nw	14	B5	plan	F467, C2509	
20	zoom	1m	w	14	В7	section	F472	east facing section
21	zoom	1m	w	14	В7	section	F472	east facing section
22	zoom	1m	nw	14	В7	plan	F472	post excavation
23	zoom	1m	nw	14	В7	plan	F472	post excavation
24	zoom	2m	w	14	В7	plan	C2515	
25	zoom	2m	w	14	В7	plan	C2515	
26	zoom	2m	e	14	В7	plan	C2514	
27	zoom	2m	e	14	В7	plan	C2514	

Tarbat Discovery Programme Ev

28	zoom	0.5m	s	14	В7	plan	F473, C2512, C2513	
29	zoom	0.5m	e	14	B5-B6	plan	C2511	
30	zoom	0.5m	e	14	B5-B6	plan	C2511	
31	zoom	-	S	14	B5-B6	-	C2511	working shot during excavation of bone dump
32	zoom	-	S	14	B5-B6	-	C2511	working shot during excavation of bone dump
33	zoom	-	S	14	B5-B6	-	C2511	working shot during excavation of bone dump
34	zoom	-	S	14	B5-B6	-	C2511	working shot during excavation of bone dump
35	zoom	-	S	14	B5-B6	-	C2511	working shot during excavation of bone dump
36	zoom	-	S	14	B5-B6	-	C2511	working shot during excavation of bone dump
37	zoom	-	s	14	B5-B6	-	C2511	working shot

								Film No: S80
Frame	Lens	Scale	Direction	Int. No.	Module	Subject	Details (F/C Nos)	Notes
0								
1	zoom	-	ne	14/24	B4-B7	-		general shot with church
2	zoom	2m	n	14	В5	plan	F468, C2494 / F475, C2526 / F477, C2520	
3	zoom	2m	n	14	В5	plan	F468, C2494 / F475, C2526 / F477, C2520	
4	zoom	-	e	14	В7	-		working shot
5	zoom	2m	se	14	B6	plan	F472	
6	zoom	2m	sw	14	В5	plan	F434, C2533	
7	zoom	2m	sw	14	В5	plan	F434, C2533	
8	zoom	0.5m	s	14	B5-B6	plan	F475, C2526, C2534	
9	zoom	0.5m	s	14	B5-B6	plan	F475, C2526, C2534	
10	zoom	2m	e	14	В7	section		west facing section
11	zoom	2m	e	14	В7	section		west facing section
12	zoom	2m	e	14	В7	-		working shot while taking samples
13	zoom	2m	e	14	В7	-		working shot while taking samples
18	zoom	2m	n	14	В5	plan	F468, C2494 / F475, C2526	
19	zoom	2m	n	14	В5	plan	F468, C2494 / F475, C2526	
20	zoom	2m	n	14	В5	plan	F468, C2494 / F475, C2526	

Tarbat Discovery Programme Fi

## APPENDIX F FINDS INDICES

INTERVENTION 14

Find No.	East	North	Ht.	Cont.	Feat.	Rec. Level	Material	Identity	Туре	Weight (g)	Box No.	Description
4050				2461	-	D	matrix	environ	soil	-	-	10l sample for flotation
4051				2462	-	D	matrix	environ	soil	-	-	10l sample for flotation
4052				2459	-	D	matrix	environ	soil	-	-	10l sample for flotation
4053				2467	-	D	matrix	environ	soil	-	-	21 sample for flotation
4054				2465	-	D	matrix	environ	soil	-	-	10l sample for flotation
4055				2466	-	D	matrix	environ	soil	-	-	10l sample for flotation
4056				2117	-	D	matrix	environ	soil	-	-	10l sample for flotation
4057				2473	-	D	matrix	environ	soil	-	-	10l sample for flotation
4058				2475	-	D	matrix	environ	soil	-	-	101 sample for flotation
4059				2474	-	D	matrix	environ	soil	-	-	101 sample for flotation
4060				2477	-	D	matrix	environ	soil	-	-	10l sample for flotation
4061				2481	-	D	matrix	environ	soil	-	-	10l sample for flotation
4062				2476	-	D	matrix	environ	soil	-	-	101 sample for flotation
4063				2489	-	D	matrix	environ	soil	-	-	101 sample for flotation
4064				2144	-	D	matrix	environ	soil	-	-	101 sample for flotation
4065				2483	-	D	matrix	environ	soil	-	-	101 sample for flotation
4066				2480	-	D	matrix	environ	soil	-	-	101 sample for flotation
4067				2475	-	D	matrix	environ	flot	26.9	X6	light fraction
4068				2473	-	D	matrix	environ	flot	9.9	X6	light fraction
4069				2477	-	D	matrix	environ	flot	13.1	X6	light fraction
4070				2481	-	D	matrix	environ	flot	3.7	X6	light fraction
4071				2476	-	D	matrix	environ	flot	3	X6	light fraction
4072				2484	-	D	matrix	environ	soil	-	-	11 sample for flotation
4073				2498	-	D	matrix	environ	soil	-	-	10l sample for flotation
4074				2500	-	D	matrix	environ	soil	-	-	101 sample for flotation
4075				2497	-	D	matrix	environ	soil	-	-	101 sample for flotation
4076				2499	-	D	matrix	environ	soil	-	-	10l sample for flotation
4077				2502	-	D	matrix	environ	soil	-	-	10l sample for flotation
4078				2462	-	D	matrix	environ	flot	5.6	X6	light fraction
4079				2465	-	D	matrix	environ	flot	4.3	X6	light fraction
4080				2474	-	D	matrix	environ	flot	26.2	X6	light fraction
4081				2177	-	D	matrix	environ	flot	9	X6	light fraction
4082				2461	-	D	matrix	environ	flot	7.4	X6	light fraction
4083	881.35	995.63	13.36	2464	-	D	bone (a)	mammal	vertebrae	36.1	B(A)15	2x cattle vertebrae
4084	881.52	995.95	13.38	2464	-	D	bone (a)	mammal	foot	55.3	B(A)15	
4085				2459	-	D	matrix	dating	c14	0.3	X6	sieved (charcoal)
4086				2459	-	D	shell	assemblage	mixed	18.5	B(A)15	sieved
4087				2459	-	D	bone (a)	assemblage	mixed	24.6	B(A)15	sieved



Tarbat Discovery Programme Fii

Find No.	East	North	Ht.	Cont.	Feat.	Rec. Level	Material	Identity	Туре	Weight (g)	Box No.	Description
4089	881.05	994.60	13.3	2464	-	D	bone (a)	mammal	foot	6.4	B(A)15	2x phalanges
4090				2481	_	D	bone (a)	assemblage	mixed	22	B(A)15	
4091				2481	_	D	stone (o)	util pebble		12.9	S(O)7	1x quartzite pebble
4092	883 03	1000.25	13.93	2464	_	D	bone (a)	mammal	leg	172.4	. /	1x metapodial
4093	002.02	1000.20	10.70	2487	_	D	bone (a)	assemblage	mixed	1.4	B(A)15	m moupoului
	002 10	1001 21	14.02								` /	
4094	883.18	1001.21	14.02	2464	-	D	bone (a)	mammal	jaw	48.6	B(A)15	. •
4095				2461	-	D	stone (o)	util.pebble		87.6	S(O)7	sieved
4096				2461	-	D	bone (a)	assemblage	jaw	113.4	B(A)15	
4097				2473	-	D	bone (a)	assemblage	mixed	19	B(A)15	sieved
4098				2473	-	D	matrix	dating	c14	2.9	X6	sieved (charcoal)
4099				2473	-	D	ceramic	clay-		4.3	C(O)6	
4100	882.49	995.44	13.47	2464	-	D	bone (a)	mammal	jaw	20.1	B(A)15	
4102				2117	468	D	bone (a)	assemblage	mixed	27.1	B(A)15	
4103				2493	468	D	slag	ferrous	unspecified	22.6	SL26	
4104				2493	468	D	matrix	dating	c14	1.5	X6	charcoal
4105				2476	-	D	bone (a)	assemblage	mixed	73.9	B(A)15	
4106				2117	-	D	bone (a)	assemblage	mixed	1900	B(A)15	
4107	881.27	995.08	13.3	2464	-	D	bone (a)	mammal	jaw	82.2	B(A)15	
4108	880.19	995.54	13.19	2464	-	D	bone (a)	mammal	leg	16.9	B(A)15	
4109	881.62	997.68	13.48	2464	-	D	bone (a)	mammal	rib	46.2	B(A)15	
4110				2459	-	D	bone (a)	assemblage	mixed	110.4	B(A)15	sieved
4111				2459	-	D	shell	assemblage	mixed	19.1	B(A)15	sieved
4112				2459	-	D	slag	unid.	unspecified	32.2	SL26	sieved
4113				2474	-	D	bone (a)	assemblage	mixed	185.9	B(A)15	
4114				2462	-	D	bone (a)	assemblage	mixed	10.2	B(A)15	sieved
4115				2465	-	D	bone (a)	assemblage	mixed	104	B(A)15	
4116	881.37	994.5	13.36	2464	-	D	bone (a)	mammal	jaw	33.4	B(A)15	
4117	883.44	1001.07	13.99	2464	-	D	bone (a)	mammal	jaw	22.3	B(A)15	
4118				2475	-	D	bone (a)	assemblage	mixed	22	B(A)15	
4119				2502	-	D	matrix	environ	flot	1.1	X6	light fraction
4120				2497	-	D	matrix	environ	flot	3.9	X6	light fraction
4121				2500	-	D	matrix	environ	flot	4.7	X6	light fraction
4122				2498	-	D	matrix	environ	flot	1.1	X6	light fraction
4123				2480	-	D	matrix	environ	flot	16.5	X6	see 'soil sample processing record'
4125				2499	-	D	matrix	environ	flot	2.8	X6	see 'soil sample processing record'
4126				2459	-	D	matrix	environ	flot	10.8	X6	see 'soil sample processing record'
4127				2466	-	D	matrix	environ	flot	84.4	X6	see 'soil sample processing record'
4128				2117	-	D	bone (a)	assemblage	mixed	948.1	B(A)15	sieved
4129				2144	-	D	bone (a)	assemblage	mixed	883.5	B(A)15	
4130				2477	-	D	bone (a)	assemblage	mixed	331.9	B(A)15	



Tarbat Discovery Programme Fiii

Find No.	East	North	Ht.	Cont.	Feat.	Rec. Level	Material	Identity	Туре	Weight (g)	Box No.	Description
4131				2481	-	D	bone (a)	assemblage	mixed	756.9	B(A)15	
4132				2483	-	D	bone (a)	assemblage	mixed	316.1	B(A)15	
4133				2502	-	D	bone (a)	assemblage	mixed	443.5	B(A)15	
4134				2480	-	D	bone (a)	assemblage	mixed	86	B(A)15	sieved
4135				2480	-	D	shell	assemblage	mixed	70.7	B(A)15	sieved
4136				2480	-	D	matrix	dating	c14	0.8	X6	sieved (charcoal)
4137				2480	-	D	ceramic (o)	clay-mould	fragment	1	C(O)	sieved
4138				2480	-	D	slag	ferrous	unspecified	14.9	SL26	sieved
4139				2480	-	D	daub			79.2	D1	sieved
4141				2519	472	D	matrix	environ	soil	-	-	10l sample for flotation
4142				2516	472	D	matrix	environ	soil	-	-	10l sample for flotation
4143				2510	-	D	matrix	environ	soil	-	-	10l sample for flotation
4144				2493	468	D	matrix	environ	soil	-	-	10l sample for flotation
4145				2484	-	D	matrix	environ	flot	0.4	X6	light fraction
4146				2483	-	D	matrix	environ	flot	10.4	X6	light fraction
4147				2489	-	D	matrix	environ	flot	19.1	X6	light fraction
4148				2467	-	D	matrix	environ	flot	0.3	X6	light fraction
4149	872.97	997.48	13.18	2493	468	D	matrix	environ	soil	96.5	X6	30g grab sample for pollen
4150	876.1	997.51	13.83	2000	-	D	bone (a)	mammal	leg	175.3	B(A)16	1x broken metapodial
4151				2489	-	D	slag	fuelash	unspecified	0.5	SL26	
4153	876.14	997.5	13.83	2000	-	D	bone (a)	mammal	leg	137.5	B(A)16	1x metapodial
4154				2491	-	D	bone (a)	assemblage	mixed	221	B(A)16	
4155				2509	-	D	matrix	environ	soil	-	-	101 sample for flotation
4156				2000	-	D	matrix	environ	soil	-	-	101 sample for flotation
4157				2522	467	D	matrix	environ	soil	-	-	10l sample for flotation
4158				2518	467	D	matrix	environ	soil	-	-	101 sample for flotation
4159				2517	467	D	matrix	environ	soil	-	-	10l sample for flotation
4160				2523	472	D	matrix	environ	soil	-	-	10l sample for flotation
4161				2521	472	D	matrix	environ	soil	-	-	101 sample for flotation
4162				2524	476	D	matrix	environ	soil	-	-	101 sample for flotation
4163				2520	-	D	matrix	environ	soil	-	-	101 sample for flotation
4164				2512	473	D	matrix	environ	soil	-	-	101 sample for flotation
4165	876.06	997.49	13.82	2000	-	D	bone (a)	mammal	leg	140.6	B(A)16	1x metapodial
4166				2517	-	D	bone (a)	mammal	skull	47.3	B(A)16	1x horn-core
4167				2000	-	D	bone (a)	mammal	foot	27.5	B(A)16	2x carpal (articulated)
4168				2516	-	D	bone (a)	mammal	jaw	30.7	B(A)16	1x sheep mandible
4169				2507	-	D	bone (a)	mammal	jaw	118.3	B(A)16	sieved, 1x cattle maxilla
4170				2510	-	D	ceramic (o)	clay-mould		57.1	C(O)6	2x fragments
4171				2493	468	D	bone (a)	assemblage	mixed	495.8	B(A)16	
4172				2515	-	D	matrix	environ	soil	-	-	10l sample for flotation
4173				2525	476	D	matrix	environ	soil	-	-	101 sample for flotation
4174				2528	467	D	matrix	environ	soil	-	-	10l sample for flotation
4175				2527	-	D	matrix	environ	soil	-	-	10l sample for flotation
4176				2530	-	D	matrix	environ	soil	-	-	10l sample for flotation



Tarbat Discovery Programme Fiv

Find No.	East	North	Ht.	Cont.	Feat.	Rec. Level	Material	Identity	Туре	Weight (g)	Box No.	Description
4177				2529	-	D	matrix	environ	soil	-	-	101 sample for flotation
4178				2510	-	D	matrix	environ	flot	135.8	X6	light fraction
4179				2493	468	D	matrix	environ	flot	5.8	X6	light fraction
4180				2519	472	D	matrix	environ	flot	32.6	X6	light fraction
4181				2516	472	D	matrix	environ	flot	9.5	X6	light fraction
4182				2517	467	D	matrix	environ	flot	2.2	X6	light fraction
4183				2511	-	D	matrix	environ	flot	2.8	X6	light fraction
4184				2509	467	D	matrix	environ	flot	4	X6	light fraction
4185				2520	-	D	matrix	environ	flot	6.2	X6	light fraction
4186				2512	473	D	matrix	environ	flot	1.4	X6	light fraction
4187				2523	472	D	matrix	environ	flot	1.5	X6	light fraction
4188				2522	467	D	matrix	environ	flot	0.4	X6	light fraction
4189				2518	467	D	matrix	environ	flot	1	X6	light fraction
4190				2524	476	D	matrix	environ	flot	6.2	X6	light fraction
4191				2521	472	D	matrix	environ	flot	5.8	X6	light fraction
4192				2117	-	D	stone (o)?			5.7	S(O)7	2x fragments - lignite disc?
4193				2511	-	D	bone (a)	mammal	pelvis	120.1	B(A)16	
4194				2084	-	D	bone (a)	assemblage	mixed	164.5	B(A)16	
4195				2057	-	D	bone (a)	assemblage	mixed	218.4	B(A)16	
4196				2493	468	D	bone (a)	assemblage	mixed	157.4	B(A)16	
4197	875.99	997.39	13.82	2000	-	D	bone (a)	mammal	leg	181.5	B(A)16	1x cattle metapodial
4198	875.96	997.43	13.81	2000	-	D	bone (a)	mammal	leg	163.8	B(A)16	1x cattle metapodial
4199	876.0	997.44	13.82	2000	-	D	bone (a)	mammal	leg	183.7	B(A)16	1x cattle metapodial
4200	875.9	997.48	13.81	2000	-	D	bone (a)	assemblage	mixed	154.9	B(A)16	1x cattle metapodial, 1x vertebrae fragment
4201	875.69	997.07	13.8	2000	-	D	bone (a)	mammal	leg	118.5	B(A)16	1x cattle metapodial
4202	875.55	997.49	13.79	2000	-	D	bone (a)	mammal	leg	113.9	B(A)16	1x cattle metapodial
4203	875.93	997.39	13.82	2000	-	D	bone (a)	mammal	leg	181.1	B(A)16	1x cattle metapodial
4204	875.7	997.13	13.84	2000	-	D	bone (a)	mammal	leg	138.2	B(A)16	1x cattle metapodial
4205	875.66	997.08	13.83	2000	-	D	bone (a)	mammal	leg	118.5	B(A)16	1x cattle metapodial
4206	875.85	997.42	13.82	2000	-	D	bone (a)	mammal	leg	212.4	B(A)16	1x cattle metapodial
4207	875.96	997.33	13.81	2000	-	D	bone (a)	mammal	leg	152.4	B(A)16	1x cattle metapodial
4208	875.85	997.35	13.8	2000	-	D	bone (a)	mammal	leg	120.4	B(A)16	1x cattle metapodial
4209	875.71	997.12	13.84	2000	-	D	bone (a)	mammal	leg	138.4	B(A)16	1x cattle metapodial
4210	875.68	997.09	13.87	2000	-	D	bone (a)	mammal	leg	143.2	B(A)16	1x cattle metapodial
4211	875.69	997.21	13.82	2000	-	D	bone (a)	mammal	leg	140.7	B(A)16	1x cattle metapodial
4212	875.69	997.17	13.82	2000	-	D	bone (a)	mammal	leg	123.2	B(A)16	1x cattle metapodial
4213				2532	-	D	matrix	environ	soil	-	-	10l sample for flotation
4214				2531	-	D	matrix	environ	soil	-	-	10l sample for flotation
4215	875.87	997.48	13.83	2000	-	D	bone (a)	mammal	leg	158.7	B(A)16	1x cattle metapodial
4216	875.49	997.46	13.78	2000	-	D	bone (a)	mammal	leg	118.9	B(A)16	1x cattle metapodial
4217	875.62	997.07	13.79	2000	-	D	bone (a)	mammal	leg	160.2	B(A)16	1x cattle metapodial
4218	875.52	996.9	13.81	2000	-	D	bone (a)	mammal	leg	124.3	B(A)17	1x cattle metapodial
4219				2515	-	D	bone (a)	assemblage	mixed	129.2	B(A)17	sieved
4220				2515	-	D	shell	assemblage	mixed	52	B(A)17	sieved



Tarbat Discovery Programme Fv

Find No.	East	North	Ht.	Cont.	Feat.	Rec. Level	Material	Identity	Туре	Weight (g)	Box No.	Description
4221				2515	_	D	mortar?			103.2	X6	sieved
4222				2515	_	D	slag	ferrous	unspecified	1.1	SL26	sieved
4223				2515	_	D	matrix	dating	c14	0.9	X6	sieved (charcoal)
4224				2515	_	D	flint	waste	flake	0.7	F1	sieved
4225				2515	-	D	bone (a)	assemblage	mixed	589.7	B(A)17	
4226				2515	-	D	shell	assemblage	mixed	51.8	B(A)17	
4227				2515	-	D	stone (o)	whetstone		33.5	S(O)7	
4228				2521	-	D	bone (a)	assemblage	mixed	2.8	B(A)17	
4229				2521	-	D	slag	ferrous	unspecified	7.9	SL26	
4230				2510	-	D	matrix	dating	c14	8	X6	charcoal
4231				2510	-	D	bone (a)	assemblage	mixed	1.5	B(A)17	
4234				2523	472	D	stone (o)	whetstone		83.6	S(O)7	
4235				2523	472	D	stone (o)			6.1	S(O)7	red sandstone
4236				2523	472	D	stone (o)	whetstone		7.1	S(O)7	
4237				2523	472	D	bone (a)	mammal		1	B(A)17	
4238				2527	-	D	bone (a)	assemblage	mixed	85.5	B(A)17	
4239				2527	-	D	matrix	dating	c14	13.6	X6	charcoal
4242				2497	-	D	slag	ferrous	unspecified	1800	SL26	
4243				2535	467	D	matrix	environ	soil	-	-	101 sample for flotation
4244				2534	475	D	matrix	environ	soil	-	-	101 sample for flotation
4245				2493	468	D	bone (a)	assemblage	mixed	694.2	B(A)17	
4246				2534	475	D	bone (a)	assemblage	mixed	163.5	B(A)17	
4247				2520	477	D	bone (a)	assemblage	mixed	6.8	B(A)17	
4248				2532	-	D	bone (a)	assemblage	mixed	99.1	B(A)17	
4249				2535	467	D	bone (a)	assemblage	mixed	3.1	B(A)17	
4250				2534	475	D	matrix	dating	c14	2.9	X6	charcoal
4251				2535	467	D	matrix	dating	c14	2.9	X6	charcoal
4252				2493	468	D	matrix	dating	c14	2.9	X6	charcoal
4253				2515	-	D	matrix	environ	flot	2.9	X6	
4254				2530	-	D	matrix	environ	flot	2.9	X6	
4255				2527	-	D	matrix	environ	flot	2.9	X6	
4256				2528	467	D	matrix	environ	flot	2.9	X6	
4257				2525	476	D	matrix	environ	flot	2.9	X6	
4258				2529	-	D	matrix	environ	flot	2.9	X6	
4259				2534	475	D	flint	waste	flake	2.6	F1	
4260				2534	475	D	stone (o)	util. pebble		16.2	S(O)7	
4261				2534	475	D	slag	ferrous	unspecified	49.8	SL26	
4262				2493	468	D	slag	ferrous	unspecified	48.4	SL26	
INTER	VENT	ION 24										
Find No.	East	North	Ht.	Cont.	Feat.	Rec. Level	Material	Identity	Type	Weight (g)	Box No.	Description
5480				2104	-	D	slag	unid.	unspecifie	90.7	SL19	
5489				2468	445	D	matrix	environ	flot	0.1	X7	light fraction
5490				2470	-	D	matrix	environ	flot	0.2		light fraction
ショラひ				27/0	-	D	muun	CHVIIOH	1101	0.2	21/	115111 114011011

Tarbat Discovery Programme Fvi

Find No.	East	North	Ht.	Cont. No.	Feat.	Rec. Level	Material	Identity	Type	Weight (g)	Box No.	Description
5491				2478	_	D	bone (a)	asemblage	iaws	1375	B(A)24	
5492				2490	_	D	stone (o)	whetstone	3	79.1	S(O)7	
5493				2490	_	D	matrix	dating	c14	0.5	X7	charcoal
5494				2490	_	D	bone (a)	asemblage	mixed	45.4	B(A)24	
5505				2485	_	D	matrix	environ	res	494.8	X6	dense fraction
5506				2485	_	D	bone (a)	asemblage		22.6	B(A)24	
5507				2485	_	D	shell	asemblage		0.4	B(A)24	
5508				2485	-	D	slag	ferrous	hammer- scale	1.8	SL19	
5509				2485	-	D	stone (o)	mica	sheet	0.3	S(O)7	
5510				2485	-	D	flint	waste	flake	0.6	F1	
5511				2485	-	D	matrix	dating	c14	2.8	X7	
6263				2468	445	D	matrix	environ	soil	-	-	21 sample for flotation
6264				2463	-	D	matrix	environ	soil	-	-	10l sample for flotation
6265				2470	-	D	matrix	environ	soil	-	-	11 sample for flotation
6266				2485	-	D	matrix	environ	soil	-	-	10l sample for flotation
6267				2478	-	D	matrix	environ	flot	3.4	X7	light fraction
6268				2478	-	D	matrix	environ	soil	-	-	10l sample for flotation
6269				2482	-	D	matrix	environ	soil	-	-	11 sample for flotation
6270				2482	-	D	matrix	environ	flot	0.3	X7	light fraction
6272				2490	-	D	matrix	environ	soil	-	-	21 sample for flotation
6273				2463	-	D	matrix	environ	flot	5.3	X7	light fraction
6274				2485	-	D	matrix	environ	flot	3.4	X7	light fraction
6275				2490	-	D	matrix	environ	flot	1.3	X7	light fraction
6276				2468	445	D	stone (o)	assemblag e		46.4	S(O)7	
6277				2472	-	D	bone (a)	assemblag e	mixed	141.7	B(A)24	
6278				2472	-	D	metal (fe)	nail?		5.1	M7	
6279				2472	-	D	slag	assemblag e	mixed	7.1	SL19	
6280				2472	-	D	matrix	dating	c14	1.5	X7	
6281				2472	-	D	metal (fe)	unid.		22	M7	
6282				2472	-	D	stone (o)	util. pebble		160.5	S(O)7	
6283				2479	-	D	stone (o)	body sherd		14.4	S(O)7	
6284				2479	-	D	daub			2.5	D	
6285				2478	-	D	bone (a)	mammal	jaw	8.6	B(A)24	small dog?
6286				2468	445	D	bone (a)	mammal	unidentifi ed	4	B(A)24	
6287				2468	445	D	bone (a)	assemblag e	mixed	57	B(A)24	
6288	871.5 9	998.66	13.37	-	-	D	flint	waste	flake	0.7	F1	strike-a-light?
6289	872.0 6	998.79	13.42	-	-	D	metal (fe)	nail		20.6	M7	



Tarbat Discovery Programme Fvii

Find No.	East	North	Ht.	Cont. No.	Feat. No.	Rec. Level	Material	Identity	Type	Weight (g)	Box No.	Description
6290				2463	-	D	slag	ferrous	unspecifie d	2.2	SL19	
6291				2485	-	D	flint	waste	flake	0.5	F1	strike-a-light?
6292				2468	445	D	ceramic (o)	claymould		0.5	C(O)	
6293	869.9 8	997.62	13.28	2468	445	D	stone (o)	util. pebble		5.2	S(O)7	red jasper pebble
6294				2472	-	D	stone (o)	util. pebble		136.6	S(O)7	8x white quartzite pebbles
6295				2472	-	D	stone (o)	whetstone		85.9	S(O)7	
6296				2472	-	D	stone (o)	whetstone		530	S(O)7	



Tarbat Discovery Programme Gi

## APPENDIX G SAMPLE REGISTER

## INTERVENTION 14

Find No.	Sub - Sampled?	Context	Feature No.	Identity	Туре	Box No.	Purpose	Processed
4050	-	2461	-	environ	flotation	-	gba	/
4051	_	2462	_	environ	flotation	_	gba	/
4052	_	2459	_	environ	flotation	_	gba	/
4053	_	2467	_	environ	flotation	_	gba	/
4054	-	2465	_	environ	flotation	_	gba	/
4055	_	2466	_	environ	flotation	_	gba	<i>,</i>
4056	_	2117	-	environ	flotation	_	gba	√
4057	_	2473	-	environ	flotation	_	gba	✓
4058	_	2475	-	environ	flotation	_	gba	√
4059	_	2474	-	environ	flotation	_	gba	<i>'</i>
4060	-	2477	_	environ	flotation	_	gba	<b>√</b>
4061	-	2481	_	environ	flotation	-	gba	<b>√</b>
	-							
4062	-	2476	-	environ	flotation	-	gba	<b>√</b>
4063	-	2489	-	environ .	flotation	-	gba	<b>√</b>
4064	-	2144	-	environ .	flotation	-	gba	/
4065	-	2483	-	environ	flotation	-	gba	<b>✓</b>
4066	-	2480	-	environ	flotation	-	gba	<i>\</i>
4072	-	2484	-	environ	flotation	-	gba	/
4073	-	2498	-	environ	flotation	-	gba	/
4074	-	2500	-	environ	flotation	-	gba	1
4075	-	2497	-	environ	flotation	-	gba	1
4076	-	2499	-	environ	flotation	-	gba	1
4077	-	2502	-	environ	flotation	-	gba	✓
4141	-	2519	472	environ	flotation	-	gba	1
4142	-	2516	472	environ	flotation	-	gba	<b>✓</b>
4143	-	2510	-	environ	flotation	-	gba	<i>\</i>
4144	-	2493	468	environ	flotation		gba	1
4149 4155	-	2493 2509	468	environ environ	pollen flotation	x6 -	- gba	- /
4156	- -	2511	-	environ	flotation	_	gba	<b>√</b>
4157	-	2522	467	environ	flotation	_	gba	✓
4158	-	2518	467	environ	flotation	-	gba	/
4159	-	2517	467	environ	flotation	-	gba	✓
4160	-	2523	472	environ	flotation	-	gba	✓
4161	-	2521	472	environ	flotation	-	gba	✓
4162	-	2524	476	environ	flotation	-	gba	✓
4163	-	2520	-	environ	flotation	-	gba	✓
4164	-	2512	473	environ	flotation	-	gba	✓
4172	-	2515	-	environ	flotation	-	gba	<b>✓</b>
4173	-	2525	476	environ .	flotation	-	gba	<i>\( \)</i>
4174	-	2528	467	environ	flotation	-	gba	/

Tarbat Discovery Programme Gii

Find No.	Sub - Sampled?	Context No.	Feature No.	Identity	Туре	Box No.	Purpose	Processed
4175	-	2527	-	environ	flotation	-	gba	✓
4176	-	2530	-	environ	flotation	-	gba	✓
4177	-	2529	-	environ	flotation	-	gba	✓
4213	-	2532	-	environ	flotation	-	gba	✓
4214	-	2531	-	environ	flotation	-	gba	✓
4243	-	2535	467	environ	flotation	-	gba	✓
4244	-	2534	475	environ	flotation	-	gba	✓
4177 4213 4214 4243	- - -	2529 2532 2531 2535	- - - 467	environ environ environ	flotation flotation flotation flotation		gba gba gba gba	/ / /

## INTERVENTION 24

Find No.	Sub - Sampled?	Context No.	Feature No.	Identity	Туре	Box No.	Purpose	Processed
6263	-	2468	445	environ	flotation	-	gba	✓
6264	-	2463	-	environ	flotation	-	gba	✓
6265	-	2470	-	environ	flotation	-	gba	✓
6266	-	2485	-	environ	flotation	-	gba	✓
6268	-	2478	-	environ	flotation	-	gba	✓
6269	-	2482	-	environ	flotation	-	gba	✓
6272	-	2490	-	environ	flotation	-	gba	1

