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Margam Abbey (SAM Gm5), Neath Port Talbot: archaeological evaluation

### April 2001

A report for Neath Port Talbot County Borough Council by Martin Locock BA MIFA



**Contracts Division** 



*Trench 1 at the east end of the presbytery, looking southwest. The wall is visible in the left foreground.* 

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#### Margam Abbey: archaeological evaluation

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### Summary

**GGAT Contracts** undertook an evaluation of Margam Abbey, Neath Port Talbot, in order to assess the likely effect of proposed landscaping works to enhance the appearance of the Scheduled Ancient Monument. Six trenches were excavated to establish the depth at which archaeological deposits survived intact.

It was found that the undisturbed deposits lay very close to the modern ground surface, with minimum depths of cover of:

- Trench 1 0.07m
- Trench 2 0.07m
- Trench 3 0.05m
- Trench 4 0.17m
- Trench 5 0.14m
- Trench 6 0.10m.

It is therefore apparent that any groundworks are likely to have a significant effect on the archaeological deposits.

The study has also clarified some details of the layout of the abbey, although the absence of a definitive archaeological survey of the standing remains has precluded full analysis. It is recommended that a Total Station survey of the archaeological elements should be undertaken in order to inform the presentation of the abbey ruins.

### Acknowledgements

The project was managed for **GGAT Contracts** by Andrew Marvell BA MIFA and undertaken by Martin Locock BA MIFA, with the assistance of Claire Davies BA MA and with additional research by J Kate Howell BSc. Finds analysis was undertaken by Natalie Swords MA. The figures were prepared by GGAT Illustration Department. The report was checked by Dr Edith Evans BA PhD MIFA.

The Trust is grateful to Nigel Ford of Capita Property Services Ltd, Malcolm Hall of Afan Landscapes, Ian Cadogan of Neath Port Talbot County Borough Council, Medwyn Parry of RCAHMW, and the staff of Margam Country Park for their help during the project.

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Fig. 1 is based on the Ordnance Survey 1:1250 mapping, reproduced under licence no. AL 100005976. Annotations are copyright GGAT.

### 1. Introduction

### 1.1 Proposal and commission

Neath Port Talbot County Borough Council are undertaking extensive landscaping works at Margam Country Park in order to enhance its appearance. It has appointed Capita Property Services to draw up landscape proposals, including improvements to the presentation of the ruins of the monastery of Margam Abbey, to include the construction of new pathways, the installation of seats and display boards, the construction of structures in the location of the high altar and abbot's chair, and the marking of the location of the removed monastic walls by hedging.

Since Margam Abbey is protected as a Scheduled Ancient Monument, these works would require Scheduled Monument Consent (SMC) from the National Assembly of Wales. In December 2000, Capita submitted an application for SMC to Cadw: Welsh Historic Monuments (an executive agency of the National Assembly), who concluded that, prior to determining the application, an evaluation was required to establish the depth (below present ground level) of the uppermost surviving archaeological deposits. Neath Port Talbot CBC therefore commissioned **GGAT Contracts** to undertake the evaluation. SMC for the evaluation was granted automatically in accordance with the *Ancient Monuments (Class Consents) Order 1994*.

### 1.2 Scope of the works

The scoping of the works was set out in a letter from Cadw: Welsh Historic Monuments (A-CAM1/2/1593/1, 17/1/2001), based on an annotated 1/125 plan of the Abbey submitted by Capita (reference no. AL(94)007) showing the presumed wall lines. A total of 6 trenches were required: Trench 1 (8m x 1m), at the east end of the presbytery, in the location of the east wall, high altar and abbot's chair; Trench 2 (2m x 2m), at the southeast corner of the presbytery; Trench 3 (2m x 1m), on the west wall of the eastern range (sacristy); Trench 4 (2m x 1m), at the south end of the upstanding masonry on the west wall of the eastern range (dorter); Trench 5 (2m x 1m), on the east wall of the eastern range (dorter); and Trench 6 (4m x 1m), in the cloister (see fig. 1).

### 1.3 Methodology

The trenches were laid out in the proposed locations, with minor amendments to take account of the position of standing masonry (variations included Trench 1 (shifted to east), Trench 2 (shifted to northeast), and Trench 4 (shifted to south)). The trenches were excavated by hand throughout, stratigraphically, until a horizon considered to constitute an intact archaeological deposit or structure was found. All layers were recorded prior to excavation, planned at 1:20, and photographed (using monochrome and colour slide film). The final exposed layer was cleaned, drawn, photographed (using digital and conventional photography), surveyed, and then backfilled.

Limited survey of parts of the site at 1:125 was carried out to enhance the base plan. All levels were reduced to Ordnance Datum, using a Temporary Bench Mark on the top of the stub of masonry to the northeast of the reredorter/infirmary (37.81m), which had been established by traverse from the OS benchmark on the northwest corner of St Mary's church (115.99 feet = 38.66m OD).

For this report, 1:125 plans of the relevant parts of the site have been prepared, based on the Capita plan, supplemented by data from additional survey and from other plans of the ruins. The report also includes 1:20 plans of the base level for each trench, marked with the OD heights of the archaeological horizons and the ground level.

### 2. Location and historical background

Margam Abbey lies at the foot of the Glamorgan uplands, 5km southeast of Port Talbot, at the mouth of the Nant Cwmcaetreharn valley, overlooking the coastal plain of Margam Moor, in the parish of Margam, Neath Port Talbot (in the old county of Glamorgan and subsequently West Glamorgan). It now lies within Margam Country Park, dominated by the 19th century building of Margam Castle.

The abbey was a Cistercian house, with up to forty monks and a larger number of *conversi* (lay brothers), founded in a block of disputed territory between the Norman Lord of Afan and the unconquered Welsh lands to the northwest. The abbey's lands extended over a large area, farmed from a series of granges. A list of Margam's abbots is provided by Williams (1984, Appendix 1, iii).

1147	Foundation of Margam Abbey		
1536	Dissolution of the Abbey		
1540-1546	Sale by the Crown to Sir Rice Mansell	5	
1552	Construction of house adjoining the abbey		
1782	Demolition of Mansell house		
1793	Construction of Orangery		
1799	Collapse of Chapter House roof		
1841	Desertion of Margam Village	The second s	
	Table 1: Main historical avants		

*Table 1: Main historical events* 

The monastic buildings were probably set out to the standard Cistercian plan, with a large church on the north side of the cloister, with long aisled nave and presbytery, a dorter range and reredorter or infirmary on the east side, connected to the south transept, the refectory on the south, and the *conversi* dorter and abbot's lodging on the west. Entrance was probably from the southeast. Following the Dissolution, most of the nave of the church was retained as the parish church; the chapter house and vestibule of the dorter range were used as outbuildings to the new manor house (the vestibule used as a brewhouse); and the refectory was demolished and replaced by the manor house. The remainder of the church was probably ruinous. A small settlement (Margam village) grew up along a street running west from the church.

The manor house was later demolished and eventually replaced by Margam Castle; the village was also moved to the north when the walled orchard was laid out in the 19th century. The Orangery and other garden features were added in the late 18th-19th centuries. Extensive landscaping works were undertaken in the 1970s as part of the creation of the Country Park. Despite the wealth of documentary evidence, structural analysis of the evidence for the development of the site remains limited.

### 3. Previous work

In the 1970s, a series of infrastructure and landscaping projects were undertaken in the area of the Orangery, Abbey and walled garden, triggering archaeological excavations and watching briefs.

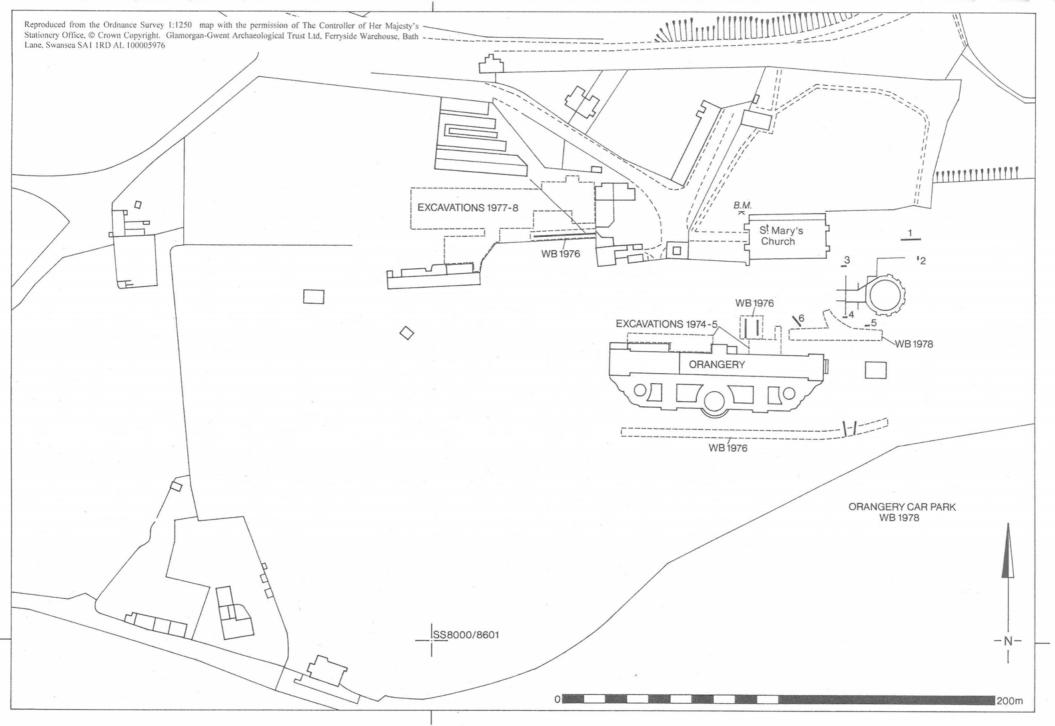
Date	Туре	Location	Reference
1974-5	Excavation	North of Orangery	Jones 1976; 1981
1976	Watching brief	Pipeline and access road	Dowdell 1976,
		(Site 7)	GGAT 1977
1976	Watching brief	Ivy Cottage	GGAT 1977
1977-8	Excavation	Margam Village (Site 6)	GGAT 1977; 1978,
			Hough 1977; 1979
1978	Watching brief	Orangery Car Park (Site 19)	Russell 1979
1979	Watching brief	Kitchen garden	GGAT 1979

Table 2: Previous work

The monastic ruins were not directly affected, apart from the 1974-5 excavation north of the Orangery, which located walls and drains which probably relate to the 17th century manor house, but may have been monastic, and a watching brief in 1978 in the area on the south end of the eastern range, which located an east-west wall (possibly the cloister arcade) and two north-south culverts.

Apart from these observations, there has been no previous archaeological work on the monastic site at all, and thus the details of chronology, use and layout remain largely conjectural. The most detailed surveys of the remains are those of David (1929) and Evans (1957), although both are at a small scale; they show details not now visible, but do not provide a comprehensive record of the standing structures.

The watching brief on the pipeline in 1976 located two culverts running from the north, between the Orangery and the reredorter/infirmary, which were assumed to be of post-medieval date.



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Figure 1: Margam Abbey showing location of excavations

Margam Abbey: archaeological evaluation

### 4. Evaluation results

#### 4.1 Presbytery (Trenches 1 and 2) (fig. 8, fold-out at end of report)

Two trenches were excavated to establish the depth of deposits in the area of the presbytery, at the east end of the abbey church. The ground level in this area is significantly higher than that elsewhere, with a marked drop at the crossing. The north and south walls of the presbytery survive partially, with some of the pillars for the vaulting of the aisles visible. There are (apparently *in situ*) grave slabs in the church. and floor tiles have been noted along the south wall (not now visible). The east wall does not survive.

#### Trench 1 (fig. 2, plates 1 and 2)

Trench 1 was laid out east-west to examine the area of the altar and abbot's chair and the east wall of the church. After removal of turf and topsoil, undisturbed archaeological deposits were noted at a depth of 0.07m.

At the east end of the trench, wall 013 ran north-south. It was 1.5m wide, built of unshaped local stone, with some traces of decayed yellow-brown mortar. It would appear to be wider than the wall at a higher level implied by the surviving stub of masonry at the northeast corner of the church, and thus may represent a broader foundation. The remainder of the trench was covered by layer 012, a firm surface of brown sandy clay with numerous angular stones, dipping slightly in the middle of the trench. Overlying both was topsoil and turf (011).

#### **Trench 2** (fig. 3, plate 3)

Trench 2 was laid out over the presumed corner of the east and south walls of the presbytery. After removal of turf, topsoil and loose gravel 002, undisturbed archaeological deposits were noted at a depth of 0.07m.

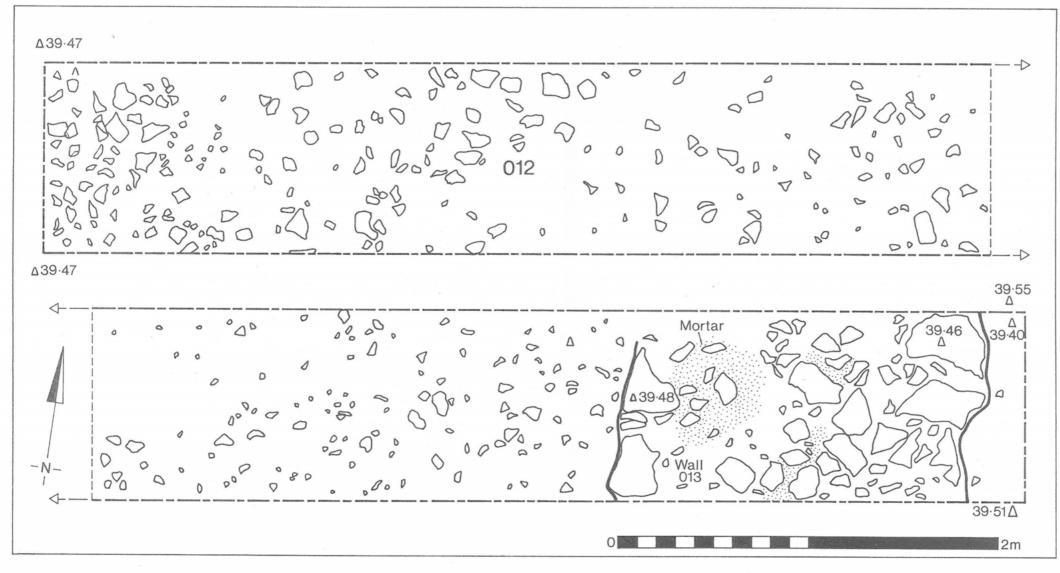
The entire trench (which would have included an area of the internal church floor, the walls, and the external surface) was covered by an irregular surface (003), comprising large angular local stones in a moderately compacted sandy clay matrix. Overlying the surface lay a layer of loose gravel and pebbles (002) and turf and topsoil (001).

#### Discussion

There is some evidence from the surrounding masonry to suggest the original floor height of the presbytery, notably the threshold of the door on the south wall (39.53m),<sup>1</sup> and the grave slabs (39.49-39.60m). This would suggest a floor height at present ground level, and thus would imply that the wall 013 is indeed a foundation level. If this is the case, then the layer 012 would be a make-up layer for the church floor (perhaps of stone slabs rather than tiles). There is no trace of foundations for the abbot's chair and altar structures.

It is thought that layer 003 represents a yard surface (perhaps 18th century in date) over a part of the structure which has been comprehensively robbed; the gravel 002 is probably a deliberate levelling layer from landscaping.

<sup>&</sup>lt;sup>1</sup> All heights are OD.

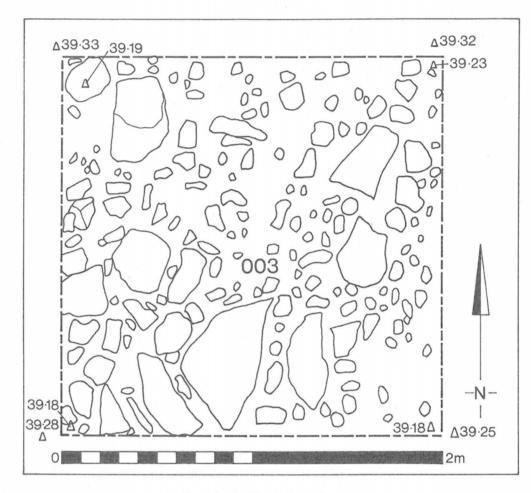


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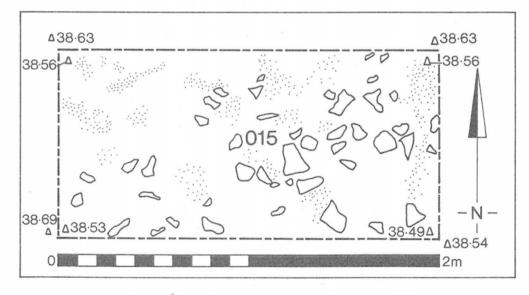
Figure 2: Trench 1 plan

Margam Abbey: archaeological evaluation

#### Margam Abbey: archaeological evaluation



### Figure 3: Trench 2 plan



### Figure 4: Trench 3 plan

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### **4.2** Eastern range (north end) (Trench 3) (figs. 4, 8 (fold-out at end of report); plate 4)

One east-west trench was excavated on the line of the west wall of the dorter range, to the west of the sacristy, north of an area of walling and doorway of probably 19th century date. After removal of turf and topsoil, archaeological deposits were noted at a depth of 0.05m.

Layer 015 was a poorly-compacted surface of clay loam with some pale mortar patches and numerous small angular stones. It was overlain by turf and topsoil 014.

There was no trace of a wall-stub associated with either the modern wall or the medieval wall. The deposit 015 is interpreted as a demolition layer, possibly medieval, but more likely to be associated with the 19th century building works in the vicinity.

### 4.3 Eastern range (south end) and cloister (Trenches 4-6) (fig. 9 fold-out at end of report)

Two trenches were excavated on the projected east and west wall-lines of the dorter range to the south of the standing masonry of the chapter house and vestibule, and one trench was excavated in the cloister area in the position of the proposed seat and information panel.

#### **Trench 4** (fig. 5, plates 5-6)

Trench 4 was laid out east-west across the projected line of the west wall of the dorter range, immediately south of the standing stub of walling and its associated stone plinth. The trench was shifted slightly to the south to avoid the stonework. After removal of the turf, topsoil and layer 005, an archaeological structure was noted at 0.17m.

The entire area of the trench was occupied by a culvert (009) running east-west, built into the remains of the main wall. The culvert was 0.3m deep x 0.5m wide, capped by local stone slabs with some mortar (samples \*001, \*002: see Appendix 3). Internal flash photographs revealed the structure of the culvert as a neatly-faced stone structure with white mortar. Overlying the culvert was a layer of stony clay, with numerous mortar flecks (005), and turf and topsoil (004).

#### Trench 5 (fig. 6, plate 7)

Trench 5 was laid out east-west across the projected line of the east wall of the dorter range, well to the south of the standing masonry. After removal of turf, topsoil and layer 008, archaeological deposits were encountered at a depth of 0.14m.

Layer 010 was a compacted surface of small local stones with many mortar flecks; on the west side of the Trench, the level dipped, perhaps representing a shallow cut feature, in approximately the position of the projected west wall face. Overlying the surface was a layer of stony clay loam (008) and turf and topsoil 006.

#### Trench 6 (fig. 7, plate 8)

Trench 6 was laid out northwest-southeast in the cloister area, in a location which may overlie the south arcade of the cloister. After removal of turf and topsoil, archaeological deposits were encountered at a depth of 0.10m.

Layer 017 formed a moderately compacted surface of stony clay loam marked by white mortar fragments and lumps, coal fragments and stones; at the northwest end, some of the layer had been cut away by more recent disturbance, exposing cleaner clay, perhaps an underlying layer. Overlying the surface was turf and topsoil 016. There was extensive root activity in the southeast end of the trench.

#### Discussion

The culvert is probably at too high a level to have been of monastic origin. The style of construction and type of mortar would be consistent with an early post-medieval date, and the use of the vestibule as brewhouse for the Mansell manor house may suggest a function. Culverts of this type have been found in numerous locations (see fig. 1), forming a complex system of drainage.

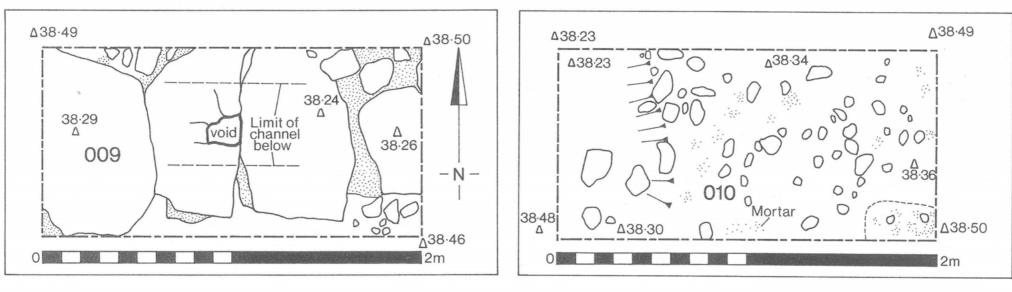


Figure 5: Trench 4 plan

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Figure 6: Trench 5 plan

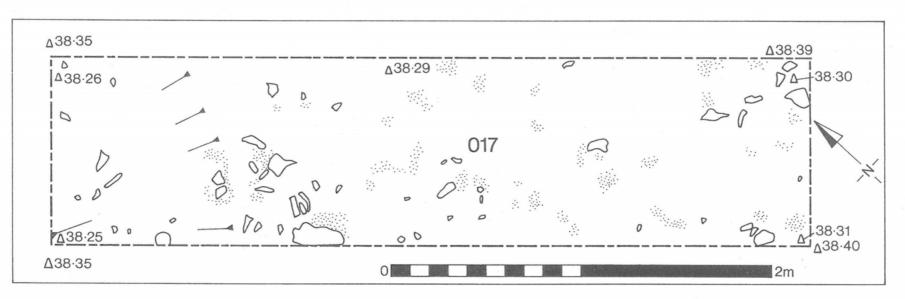


Figure 7: Trench 6 plan

The surface in Trench 5 may have been a cobbled yard surface north of the Mansell manor house; clearly the monastic wall had been cleared to a low level.

The layout of the cloister remains uncertain. The density of 18th-19th century finds from Trench 6 suggests that the surface encountered was exposed in the 17th century. It is possible that the medieval deposits survive below this surface.

### 5. Conclusion

Ground level (OD) Area Top of archaeological Minimum depth of deposits (OD) cover Trench 1 39.47-39.55m 39.35-39.48m 0.07m Trench 2 39.25-39.33m 39.18-39.23m 0.07m Trench 3 38.54-38.69m 38.49-38.56m 0.05m Trench 4 38.46-38.50m 38.24-38.31m 0.17m Trench 5 38.48-38.50m 38.23-38.36m 0.14m Trench 6 38.35-38.40m 38.25-38.30m 0.10m

The evaluation has determined the depth of surviving archaeological deposits across the site, in all cases close to the surface.

Table 3: Summary of depths

With such little depth of cover, the archaeological deposits are potentially vulnerable to a wide range of below-ground impacts, and any removal of the turf would merit an archaeological watching brief.

The limited fieldwork and related survey has also clarified some of the details of the plan of the monastic buildings and their later history. Detailed analysis is precluded by the absence of a full archaeological survey of the standing remains, and it is therefore recommended that in order to produce a definitive plan of the Abbey for presentation purposes, a Total Station survey and related building analysis should be undertaken.

## 6. References

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Williams, D H	1984	The Welsh Cistercians (Cyhoeddiadau Sistersiaidd, Caldey Island, Tenby).	

Context	Trench	Туре	Description	Finds?	Samples
001	2	Layer	Turf and topsoil		
002	2	Layer	Stony layer		
003	2	Layer	Rubble surface	Y	
004	4	Layer	Turf and topsoil	Y	
005	4	Layer	Stony clay layer with mortar flecks	Y	
006	5	Layer	Turf and topsoil	Y	
007	-	-	Duplicate of 008		
008	5	Layer	Stony layer	Y	
009	4	Structure	Culvert		*001; *002
010	5	Layer	Stony layer with much mortar		
011	1	Layer	Turf and topsoil	Y	
012	1	Layer	Stony layer		
013	1	Structure	Wall		
014	3	Layer	Turf and topsoil		
015	3	Layer	Loose stony layer with mortar flecks		
016	6	Layer	Turf and topsoil	Y	
017	6	Layer	Stony layer		

# Appendix 1: Context catalogue

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## Appendix 2: Finds

Finds were recovered from seven contexts, quantified below. The vast majority of the finds were of late post-medieval and modern date. There was significantly more material from the south and west areas (Trenches 4 and 6) than in the abbey ruins.

Material	No.	Weight
Medieval		
Pottery	2	0.028kg
Tile	. 3	0.090kg
Post-medieval		
Glass, bottle	9	0.030kg
Clay pipe	5	0.014kg
Brick and tile	1	0.004kg
Local Coarseware	30	0.152kg
Stoneware	2	0.012kg
Yellow glazed buff ware	1	0.002kg
Creamware	1	0.002kg
White earthenware (transfer printed)	2	0.004kg
White earthenware (other)	11	0.012kg
Modern		<u> </u>
Glass, bottle	9	0.030kg
Glass, window	7	0.020kg
Coarseware	5	0.042kg
Undated		0
Iron nail	6	0.136kg
Iron, other	6	0.156kg
Aluminium	2	0.002kg
Animal bone	14	0.066kg
Shell	1	0.008kg
Slate	54	0.406kg
Worked stone	4	0.790kg
Non-local stone	24	0.524kg
Brick/tile	14	0.046kg
Daub	4	0.016kg
Slag	1	0.010kg
Clinker	3	0.006kg
Coal	7	0.012kg

Table 4: Finds by material

Contexts 003, 004 and 011 contained no modern material, and can be considered sealed post-medieval contexts. Contexts 005, 008 and 016 contained both modern material and residual post-medieval finds. Context 006 yielded no dateable finds.

Consistent throughout the site was the presence of small fragments of slate, especially in the upper levels, perhaps associated with 18th century rebuilding. A small quantity of residual medieval pottery and tile was found, but in general it would appear that medieval deposits have suffered little subsequent disturbance.

### Appendix 3: Mortar analysis

In many cases, it is possible to establish a relative chronology for structures by examination of the constituents of the mortar, since there are characteristic types of early 18th century, late 18th century and 19th century mortar mixes. For earlier structures, the pattern is much less uniform, although similar mixes can be used to suggest probable contemporary construction.

Two samples of mortar were retained for subsequent examination from the capping of culvert 009 in Trench 4. In addition, mortar flecks were noted from many of the layers encountered elsewhere.

#### \*001 Context 009

Mortar (mixed with dark brown soil) comprising moderately hard-hard pale yellow mortar.

### \*002 Context 009

Soft yellow-brown sandy mortar.

#### Mortar noted during excavation

Patches of decayed yellow-brown sandy mortar
Small lumps of loose pale yellow mortar
(Culvert interior) Lumps of pale yellow lime mortar as
part of structure
Patches of loose pale mortar
Areas of decayed yellow-brown sandy mortar on wall
Small lumps of loose pale yellow mortar
Small lumps of pale yellow mortar

### Discussion

It will be noted that only two types of mortar are recorded: a pale yellow, lime-rich mortar, and a soft yellow-brown mortar. Typically, the pale yellow mortar would be interpreted as the degraded remains of an early 18th century lime mortar, while the soft mortar would be interpreted as a pre-1700 (possibly medieval) mortar. Such a chronology would fit in with the evidence from the east wall of the church (013), and the widespread occurrence elsewhere may reflect demolition and re-use.

The later mortar may be associated with the construction of the Mansell house (although it is of generally later character), or else with 18th century landscaping works.

Critical to the chronology is the evidence of the culvert, which has elements of both mortars, perhaps best interpreted as a structure extensively rebuilt in the 18th century, using earlier materials (possibly largely *in situ*).

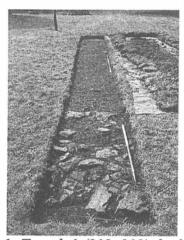


Plate 1: Trench 1 (012, 013), looking E

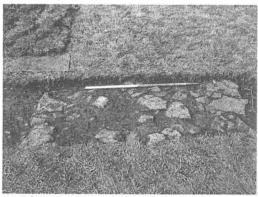


Plate 2: Trench 1 (013), looking N

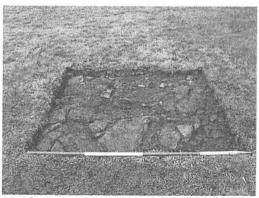


Plate 3: Trench 2 (003), looking N

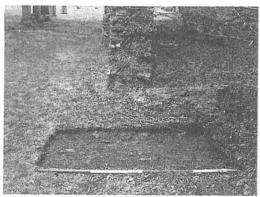


Plate 4: Trench 3 (015), looking S

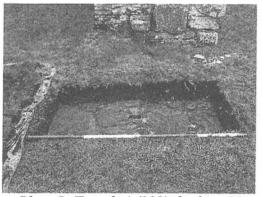


Plate 5: Trench 4 (009), looking N

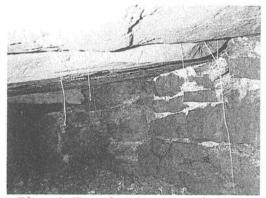


Plate 6: Trench 4 (interior of culvert 009), looking W

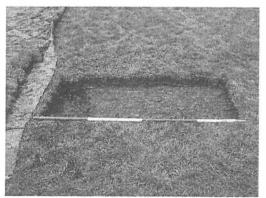


Plate 7: Trench 5 (010), looking N

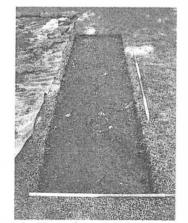
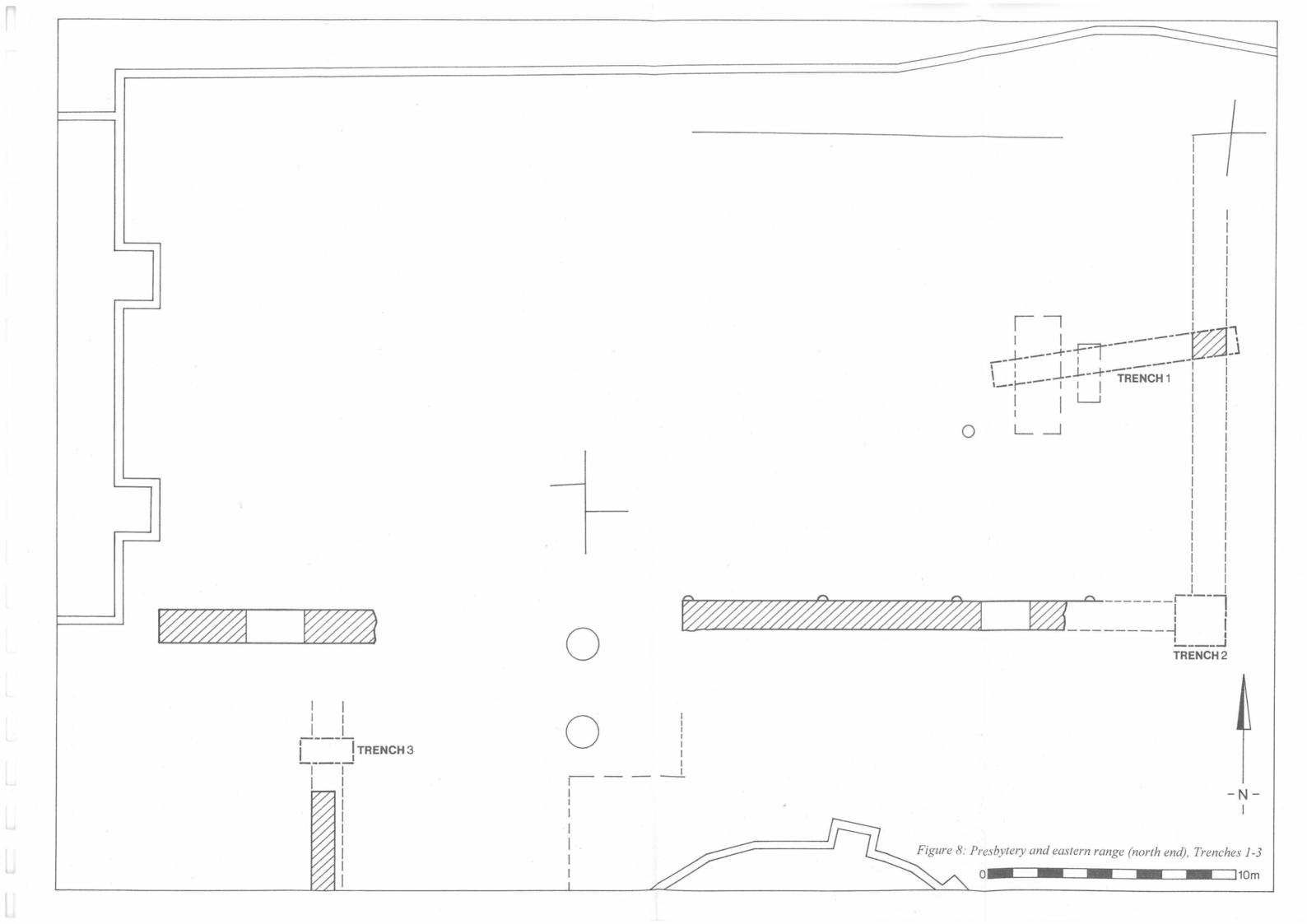
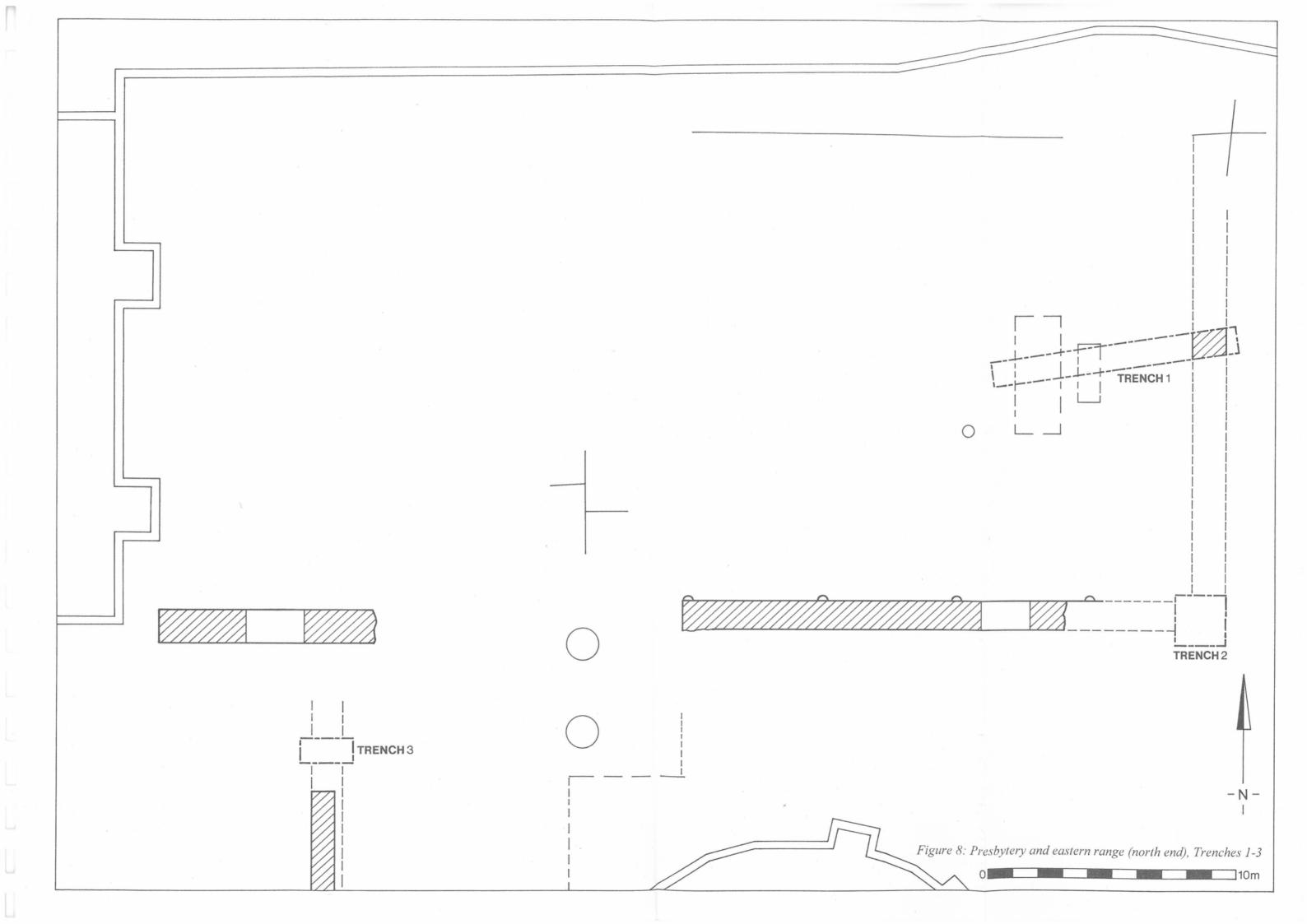


Plate 8: Trench 6 (017), looking SE





#### Margam Abbey: archaeological evaluation



Plate 1: Trench 1 (012, 013), looking E

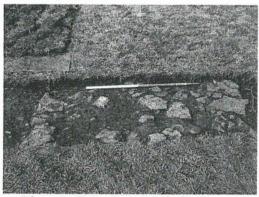


Plate 2: Trench 1 (013), looking N

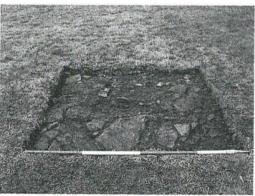


Plate 3: Trench 2 (003), looking N

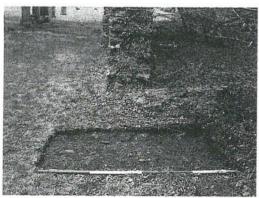


Plate 4: Trench 3 (015), looking S

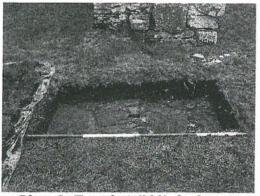


Plate 5: Trench 4 (009), looking N

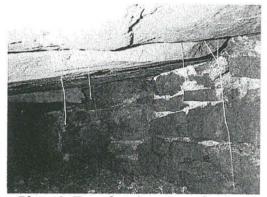


Plate 6: Trench 4 (interior of culvert 009), looking W

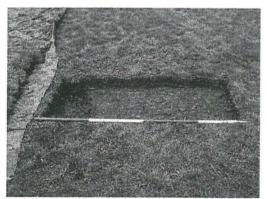


Plate 7: Trench 5 (010), looking N

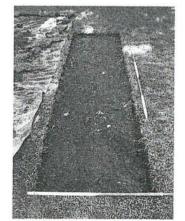


Plate 8: Trench 6 (017), looking SE

