

**Land adjacent to Balmerino Abbey, Fife
Archaeological Mitigation**

Data Structure Report

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1 Overview

- 1.1 This Data Structure Report presents the findings of archaeological investigative works required by Gilberts on behalf of Headon Developments Ltd in respect of the proposed housing development on land adjacent to Balmerino Abbey, Fife. The archaeological works were designed to inform the planning decision and develop mitigation of any identified adverse impact on the archaeological remains within their proposed development area. The area concerned is currently an open grassed area extending to roughly 1.1ha (NGR NO 357 246).
- 1.2 There were no known archaeological sites within the development area, although the site is immediately adjacent with the medieval Balmerino Abbey (NMRS NO32SE 2.00) and may have been within the precinct of the abbey. Consequently the development area has the potential of containing medieval sub surface archaeological features.
- 1.3 The findings presented below inform on the character of any archaeologically significant features within the proposed development areas. These investigative works were sufficient to inform on any archaeological hazard and allow the development of any necessary subsequent mitigation. The character of such further stages of work will need to be agreed with Fife Council and the Fife Council Archaeology Unit.
- 1.4 Rathmell Archaeology Ltd was appointed by Gilberts on behalf of Headon Developments Ltd, to act with regard to the archaeological issues. The Fife Council Archaeology Unit who advises Fife Council on archaeological matters, provided guidance on the character of archaeological investigations required on this site.

2 Project Works

- 2.1 The programme of works agreed with the Fife Council Archaeology Unit, commenced with a resistivity survey of the available ground followed by an archaeological evaluation through machine cut trenches extending to 5% of development area. In total some 422m² of trenches were opened (Figure 3).
- 2.2 These works were undertaken in keeping with the submitted Written Scheme of Investigation with the on-site works taking place between the 15th and 23rd March 2007 (intermittently). All works were conducted in accordance with the Institute of Field Archaeology's Standards and Policy Statements and Code of Conduct and Historic Scotland Policy Statements.
- 2.3 Trench positions were changed, with the agreement of Fife Archaeology Service, to enable the targeting of areas of low and high resistance identified during the geophysical survey.

3 Findings: Desktop Study

3.1 *Balmerino Abbey*

- 3.1.1 The name Balmerino has been suggested to either mean 'Sailors Town' (Thomson 1791-99), or may indicate an early religious settlement that was dedicated to St Merinac, who supposedly accompanied St Regulus to Scotland with the relics of St Andrew.
- 3.1.2 Balmerino Abbey was founded in the 1229 by Queen Ermengarde and her son, King Alexander II. Queen Ermengarde bought the land from Richard de Ruel in 1225. The abbey was a Cistercian monastery dedicated to the Virgin and to Edward the Confessor, who was a relative of Queen Ermengarde. The abbey was occupied by monks that were sent from Melrose Abbey.
- 3.1.3 King Alexander and his mother were frequent visitors to the abbey and gave generous endowments. The queen appears to have founded the abbey with the intention of being buried there, although her husband William the Lion was buried at the Tironensian Abbey he founded in Arbroath. Upon her death in 1234 she was buried before the high altar of the abbey church.

- 3.1.4 The abbey was attacked in 1547 by English forces under the Earl of Hertford during the 'rough wooing' of Henry VIII, which was intended to convince Mary 'Queen of Scots' to marry his son. The abbey appears to have suffered little or no damage during the attack. Sixteen monks were known to be at the monastery in 1561 as records show that the annual income of the abbey was £1773. The abbey was further attacked during the reformation in 1559, although extent of damage is uncertain.
- 3.1.5 Abbeys at this time were uniform in construction, at the centre were those structures pertaining to the monks religious and daily life. This would include the abbey church and the cloistral range (the chapterhouse, dormitory, refectory, kitchen, warming house, dayroom, parlour, sacristy and library) which was appended to the church. The position of the church relative to the cloistral range at Balmerino differs from the other nearby abbeys of Lindores, Culross and St. Andrews as it was situated to the south instead of the north. It has been suggested that this may have something to do with the location of the water supply (Omand et al 2000).
- 3.1.6 Outwith these buildings would be hospitals, guest accommodation and the abbot's quarters, beyond these would be ancillary structures and work areas. The entirety of the ground associated with the immediate activity of the abbey would be surrounded by a high stone wall or similar structure which would form the boundary of the precinct of the abbey.
- 3.1.7 The Abbey was self sufficient, as the lands around it were fertile, allowing for the growing of orchards and grains, there was also the River Tay for fish and the abbey garden would supply vegetables.

3.2 *Landuse within development area*

- 3.2.1 The medieval use of the development area is uncertain; some consideration of this is given within Section 2.3. No bibliographic source could be found from readily accessible sources that pertain to the specific development area
- 3.2.2 The earliest sound cartographic is the Roy Military Survey map (1747-55; Figure 1a) which shows the ground to be in arable cultivation, but with no structures or other activity shown. Interestingly the same mapping fails to identify the ruins of the abbey church which would have been visible. The later pre-Ordnance Survey mapping also contributes nothing substantive regarding the development area.
- 3.2.3 The historic Ordnance Survey mapping commences with the 1st edition in 1855 which shows the axial road through the development area to already be present. A ribbon development of structures exist on both north and south sides of the road; the only identified structures are a 'Smithy' and 'Draw Well' which are both at the western end of the development on the northern side of the road (Figure 1b).
- 3.2.4 While the well is consistently marked to the 3rd edition Ordnance Survey (1910; Figure 2b), the smithy is absent by the 2nd edition Ordnance Survey (1894; Figure 2a). The structures on the south side of the road remain in place until they are demolished and replaced by the modern farm building and hard standing currently present on the site. This modern structure will not overlie the well and probably does not overlie the whole of the Smithy. There is a minor potential for either of these structures to originate in the medieval period, although they are more likely to be post-medieval in origin.

3.3 *Abbey archaeology*

- 3.3.1 The abbey church and a fragment of the cloistral range (lying to the immediate north of the abbey church) are a Scheduled Ancient Monument in the ownership of the National Trust for Scotland. This surviving fabric lies to the east of the development area.
- 3.3.2 The balance of the cloistral range, which is not extant above ground level, lies underneath the residential house and former farmyard to the north of the National Trust for Scotland property. The former farmyard buildings are known to incorporate architectural fabric which may derive from ancillary abbey structures, with one structure being postulated as a medieval barn (NMRS NO32SE.2.2).



Figure 1a: Roy's Military Map 1748-55

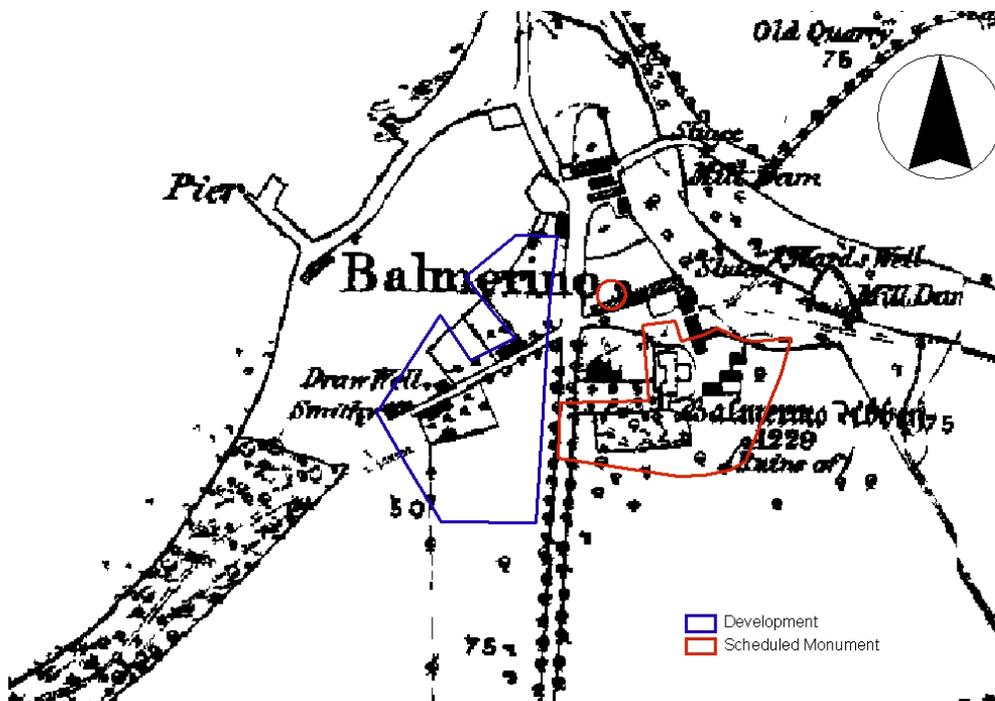


Figure 1b: 1ST Edition Ordnance Survey 1855

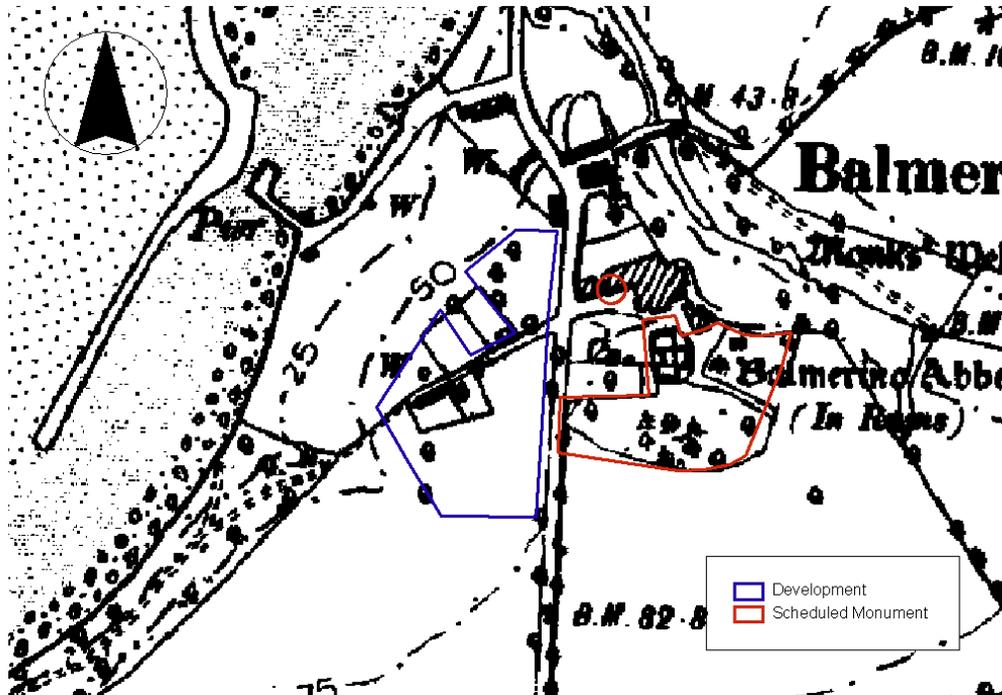


Figure 2a: 2nd Edition Ordnance Survey 1894

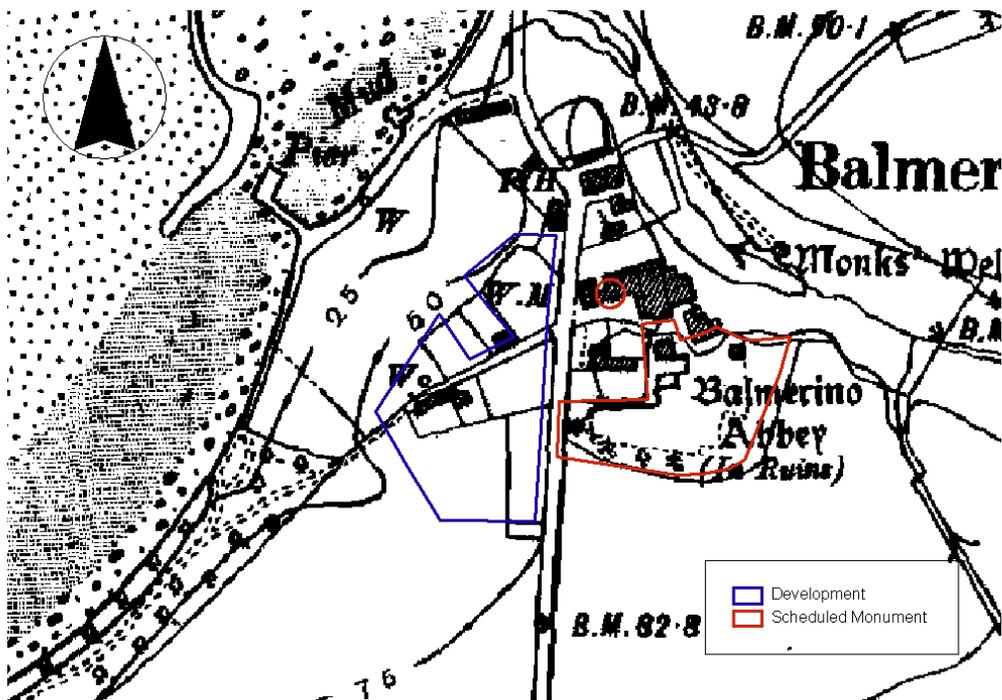


Figure 2b: 3rd Edition Ordnance Survey 1910

- 3.3.3 Recent archaeological excavations by Scotia Archaeology Ltd investigated the land unit that included the farm buildings to the north of the abbey church. These works identified a number of structural remains and a large cobbled surface. The latter was located to the immediate north of the westernmost element of the farm buildings and was interpreted as a road surface, running to the northwest. The possibility that this was a roadway to the shore (to a common point with the nineteenth century pier) was raised, although untested.
- 3.3.4 This roadway should, unless there is a radical and immediate realignment, cross the northern portion of the development area. In addition there is the potential for a roadway running towards the west processional entrance to the abbey church. The roadway recorded consistently within the historic cartographic sources (see Section 2.2) may well be a continuation of this route
- 3.3.5 Any roadway is likely to have acted (or been formed because of) ribbon development of structures related to the abbey. In addition, should the roadway cross the precinct wall, this location would most likely have a gatehouse or port to formalise the passage through the wall.
- 3.3.6 The location of the precinct wall is unknown, although there is a reasonable likelihood that it may cross the development area. If so it is likely to be aligned either north to south or southwest to northeast.
- 3.4 *Potential for the development area*
- 3.4.1 There are a range of potential archaeological issues within the development area related the possible presence of:
- ancillary abbey structures (domestic and industrial);
 - roadways leading to the abbey church (west processional entrance) and/or ancillary buildings to north (farmyard);
 - the precinct wall (and any ports/gatehouses through the wall);
 - graveyards;
 - post-sixteenth century settlement (smithy, well etc)
- 3.4.2 While the range of potential archaeology is great, the ground has been substantially affected by prolonged agricultural use and the construction of modern farm buildings including hardcore standing ground. In addition the ground falls significantly from the area of the surviving abbey structures (abbey church and cloistral range) into the development area (which may suggest a tendency to soil loss).

4 Findings: Geophysical Survey

- 4.1 Based on the archaeological potential of the site Fife Council Archaeology Service asked for a resistivity survey to be carried out to obtain information that would contribute to a greater understanding of the archaeological potential of the site and inform the placement of the trenches. Resistance surveying has a good proven record in detecting such monastic features (Clark 1990; Gaffney and Gater 2003) and so was deemed the most cost-effective rapid large area assessment technique for this project.
- 4.2 The resistivity survey was conducted using a Geoscan RM15 resistance meter mounted on an adjustable PA5 electrode frame with a twin-electrode system. The electrodes on the frame will be at the standard 0.5m spacing (target depth up to 1.2m). The survey was carried out in two 30m by 30m grids on a 1m interval basis.
- 4.3 The data produced from the field survey was downloaded and processed using Geoscan Geoplot 3.0p. The individual survey grid results were rendered into a composite grid before being clipped to -1.5 and +1.5 standard deviations either side of the mean to provide better contrast. The data was then interpolated to provide a smoother plot.

4.4 *Survey Grid A*

- 4.4.1 Against a mid-range and relatively constant background resistance reading across the survey grid suggesting no structural archaeological deposits, two specific areas bucked the overall trend.
- 4.4.2 The first of these areas was a large, vaguely sub-rectilinear area of high resistance bordered to the E by a line of low resistance and then a line of high resistance. This anomaly was at first interpreted as a possible building or collapsed masonry scatter with walkway and wall bordering its E side.
- 4.4.3 The second area of interest was a large linear area of low resistance some 4m wide and at least 15m in length which ran in a roughly N-S direction parallel to the road. This anomaly was at first interpreted as a possible ditch or even possibly a trench left by the robbing out of the precinct wall.

4.5 *Survey Grid B*

- 4.5.1 A mid-range and relatively constant background resistance reading across the survey grid suggested no structural archaeological deposits and no large negative cut features. The resistance survey could not in itself describe the formation processes or illustrate the exact composition of the sub-surface deposits but the results did indicate that the sub-surface matrix had a common resistance signature which suggested no specific areas of activity and no features of note.
- 4.5.2 This grid was thus interpreted as being devoid of both structural archaeological features and devoid of significant negative cut features. This interpretation was later supported by the results of excavation.

5 Findings: Evaluation trenches

- 5.1 Most of the trenches (Figure 3) within the development area exhibited a fairly common stratigraphic sequence with mid brown gray slightly sandy silt with frequent small stone inclusions, varying in depth from 100mm to 400mm [101], [201], [301], [401], [501], [601] and [701] over a slightly varying gravel raised beach deposit subsoil [102], [203], [302], [303], [402], [403], [503], [504], [603], [702] and [706].
- 5.2 Trenches 2, 4 and 6 were devoid of any features, however trenches 1, 3, 5 and 7 did contain some features. Trench 1 had an area of what appeared to be a roughly cobbled surface [103] at +4.2m, which consisted of eight stones of varying size. An extension was excavated to establish if the cobbled surface continued. The stones did not continue, however a roughly built rectangular structure [104] was uncovered. The interior of the structure was filled with modern debris and ash.
- 5.3 Trench 3 had three linear features, the first [304] at +21.7m, was aligned north northwest to south southeast and measured 1.3m wide and 110mm deep and had a gravel fill with a mid brown silty matrix. At +25m the second linear [305] was 400mm wide and contained a red ceramic drain pipe in the bottom, it was also aligned north northwest to south southeast. [306] was a possibly palaeo-channel at +31.8m, it was aligned north to south and was 4.1m wide and had a fill similar to the subsoil [302] though was darker brown in colour.
- 5.4 Trench 5 had two linear features within it, [505] at +17.6m and [506] at +20m both were aligned east to west. [505] was 1.6m wide with a V section and had a mid brown silt fill that also contained the earthing cable from nearby overhead electric service. [506] was quite ephemeral being approximately up to 50mm in depth, with a U shaped section and a mid brown silt fill.
- 5.5 Also worthy of note was a band of coarse gravel [203] in trench 2 at +40m, which corresponded with an area of high resistance from the geophysical survey.

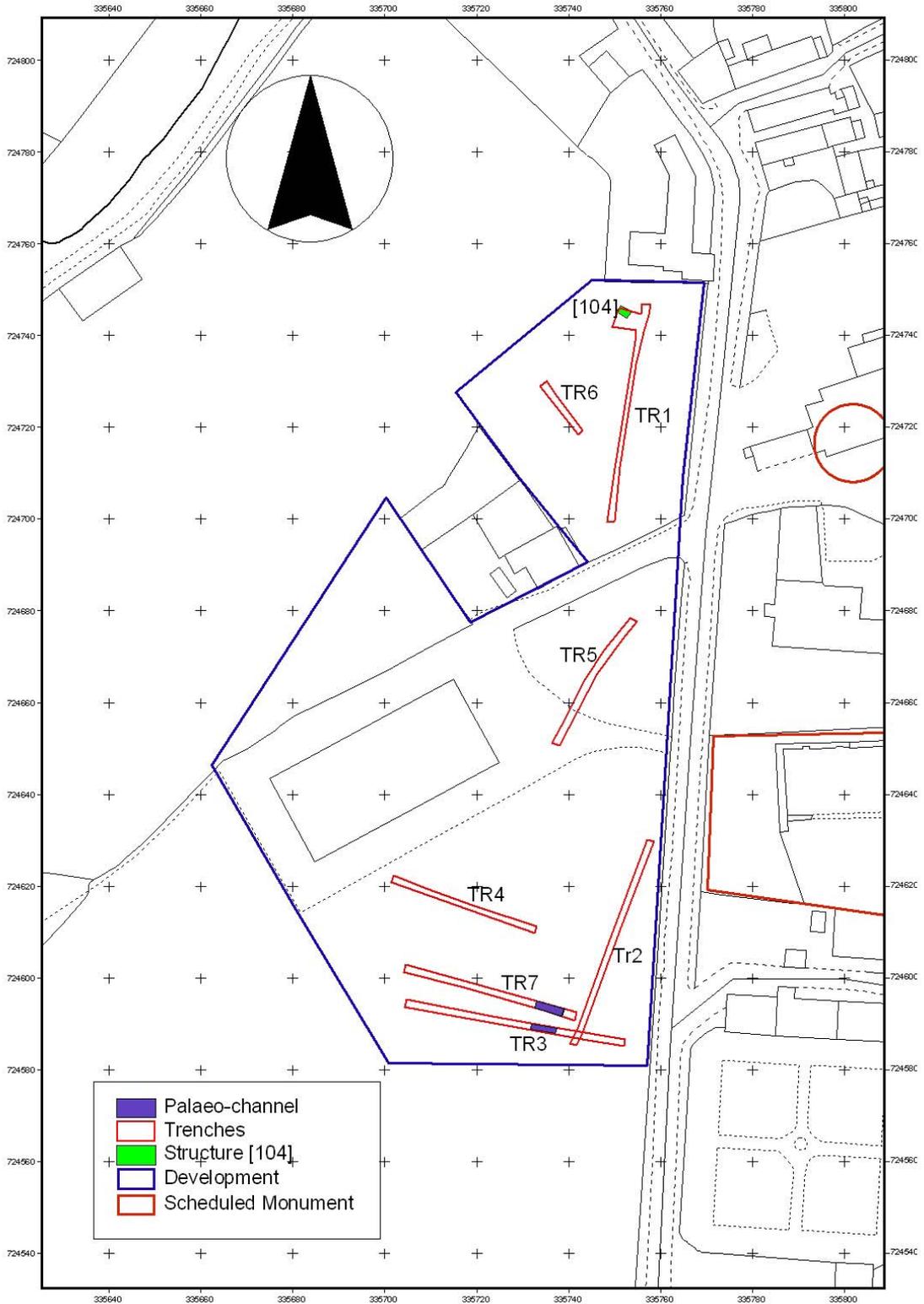


Figure 3: Trench Layout

6 Discussion

- 6.1 A number of apparently interesting anomalies were revealed by the geophysical survey with the possible presence of structural remains and a large linear ditch-like feature being of particular interest. Accordingly, the intrusive evaluation of the site was implemented in such a way that exploratory trenches were placed across these anomalies. As described above, a number of trenches were also placed in areas that revealed no striking geophysical results.
- 6.2 Suffice to say, it quickly became apparent that the results of the geophysics were highly misleading, or more accurately, the results were open to misleading interpretation. In every case, excavation revealed that the areas of high resistance that revealed the characteristic signature marks of buildings and masonry scatters turned out to be natural patches of hard packed gravels [203] whilst the linear high resistance anomaly thought to be a small enclosure wall turned out to be a modern clay field drain [305].
- 6.3 The low resistance features which returned the characteristic signature marks of pits and ditches also turned out to be natural variations in the drift geology. Indeed, the long linear low resistance anomaly that had been interpreted as a possible ditch or even the robbed out precinct wall trench turned out to be a natural palaeo-channel [306], that is, an old river course.
- 6.4 Indeed, the evaluation trenches quickly revealed that the drift geology of the entire area was composed solely of raised marine deposits of Devensian age. That is to say, the entire area is basically a gravel beach that was produced as a result of sea-level change at the end of the last Ice Age.
- 6.5 No significant archaeological features were identified during the course of the evaluation works undertaken on land adjacent to Balmerino Abbey, Fife. Those features that were uncovered appear to be only 19th to early 20th century in age. The structure [104] in trench one appears to be specifically built to be a coup, which is shown by its poor construction and being filled with ash and relatively modern detritus (within the last 150 years). The area of stones [103] beside [104] were initially thought to be a roughly cobbled surface, but given the stones are similar in size and material to those in the [104] are more likely to be the base of a stone stack from the construction of [104].
- 6.6 Despite the potential for significant archaeology - given the relative closeness of Balmerino Abbey only 19th and early 20th centuries features were located. No evidence of any significant archaeological features or artefacts were located.

7 Recommendations

- 7.1 The archaeological works failed to identify any significant archaeological features or artefacts within the study area. However, as explored above, the development does most probably lie within the precinct of Balmerino Abbey.
- 7.2 Consequently, we recommend that should a planning consent be granted for this site then we consider there to be a potential hazard for the presence of significant archaeology and it would be appropriate to require an archaeological response within any planning consent. However, the archaeology present is likely to be minor or limited in extent given the failure of the geophysical survey and evaluation to locate this material. Consequently we recommend a programme of archaeological monitoring within the development area during the course of the build to ensure the investigation and recovery of any archaeology exposed.
- 7.3 The appropriateness and acceptability of our recommendations rest with Fife Council and the Fife Council Archaeology Unit, their advisors. Confirmation that the above recommendations are acceptable should be confirmed with these bodies.

8 Conclusion

- 8.1 A programme of archaeological investigative works was undertaken in respect of the proposed development of land adjacent to Balmerino Abbey, Fife (NGR ref: NO 357 246). An evaluation was carried out between the 15th and 23rd March 2007 (intermittently). The evaluation comprised a geophysical survey and seven trenches covering approximately 5% of the development area with 422m² of trenching being opened.
- 8.2 A common stratigraphic sequence was exhibited across all of the trenches within the development area, with a mid brown slightly sandy silt over a slightly varying gravel subsoil, which was a raised marine deposits of Devensian age.
- 8.3 Despite the potential for significant archaeology - given the relative closeness of Balmerino Abbey only 19th and early 20th centuries features were located. No evidence of any significant archaeological features or artefacts were located.

9 References

Documentary

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HSMO 1960 *Scottish Abbeys*, Edinburgh

Omand *et al* 2000 *The Fife Book*, Edinburgh

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SODev 1994 *National Planning Policy Guideline 5, Archaeology and planning*, Scottish Office Development Department.

SOEnv 1994 *Planning Advice Note 42, Archaeology*, Scottish Office Environmental Department.

Cartographic

1747-55 Roy

Roy's Military Survey of Scotland

1855 Ordnance Survey

Fifeshire, 1st Edition Ordnance Survey Map 1:10560

1894 Ordnance Survey

Fifeshire, 2nd Edition Ordnance Survey Map 1:10560

1910 Ordnance Survey

Fifeshire, 3rd Edition Ordnance Survey Map 1:10560

Appendix 1: Trench Details

Within this appendix a standardised set of data pertaining to the evaluation trenches is presented.

All measurement distances quoted along the trench measure based on the quoted orientation of the trench. See Figure 2 for trench locations.

Trench 1

Orientation:	North-northeast to South-southwest
Size:	49m by 1.6m (78.4m ²).
Topsoil depth:	310mm to 390mm.
Subsoil character:	Subsoil [102], mid brown slightly sandy silty clay with moderate amounts of small stone inclusions and occasional fragments of animal bone. This covered the floor of the trench, but became slightly stonier at approximately 28m. It then became less stony again at roughly 42m.
Modern features:	None.
Significant features:	Rectangular stone structure [704]. Measures approximately 2.20m long by 1.70m wide. Walls are two courses in height with degraded lime mortar surrounding small sub-angular and angular rubble. Walls measure 330mm wide and 330mm in height. Filled with midden material containing white glazed china, metal, glass and ash.
Artefacts:	None.

Trench 2

Orientation:	North-north-east to south-south-west.
Size:	48.50m by 1.6m (77.6m ²).
Topsoil depth:	220mm to 300mm.
Subsoil character:	Subsoil [202], brown/orange fine-slightly coarse gravel with a silty matrix, is present for the extent of the trench, excluding a 1m wide band of [203], coarse brown/orange gravel present at 40.50m.
Modern features:	Occasional plough scars visible cutting across the trench at a slight angle.
Significant features:	None.
Artefacts:	None.

Trench 3

Orientation:	West to east
Size:	52m by 1.6m (83.2m ²).
Topsoil depth:	340mm to 400mm.
Subsoil character:	Subsoil [302], medium gravel with a mid brown silty matrix, is present until 11.30m. Subsoil [303], brown/orange fine-slightly coarse gravel with a silty matrix, is then present until 32m. However, [304] is present at 22m, this is a 1.5m band of medium gravel with a mid brown matrix. [302] is then visible again at 32m until the end of the trench, excluding a 3.5m band of [303] present at 36m.
Modern features:	None.
Significant features:	None.
Artefacts:	None.

Trench 4

Orientation:	West-north-west to east-north-east
Size:	34m by 1.6m (54.4m ²).
Topsoil depth:	160mm to 400mm.
Subsoil character:	Subsoil [402], brown/orange gravel composed of small-medium sized stones with a silty matrix, is present at the start of the trench. At 4.10m the subsoil changes to [403], a mid-dark brown slightly sandy gravel silt, which becomes slightly lighter at approximately 11m. At roughly 27.50m the subsoil changes back to [402]; this is present until the trench end.
Modern features:	None.
Significant features:	None.
Artefacts:	None.

Trench 5

Orientation:	North-east to south-west
Size:	32m by 1.6m (51.20m ²).
Topsoil depth:	100mm to 370mm.
Subsoil character:	Subsoil [503], brown/orange gravel composed of small-medium sized stones with a silty matrix, is present at the start of the trench. At 9.50m the subsoil changes to [504], a bright orange very slightly clayey sand. This becomes slightly stonier at approximately 13.5m for 2.5m, after which the subsoil is less stony again. At 28m the subsoil changes back to [503]; this is present until the end of the trench.
Interface character:	Interface [502] is composed of dark brown stony silty clay. It is present at the north-eastern end of the trench and is present until approximately 27m. It measures up to 400mm in depth.
Modern features:	Linear shaped cut [505] is present at 18m. This feature has a U-shaped profile and measures 1.7m wide; it is filled with mid brown silt.
Significant features:	None.
Artefacts:	None.

Trench 6

Orientation:	North-north-west to south-south-east
Size:	11.60m by 1.6m (13.2m ²).
Topsoil depth:	380mm to 400mm.
Subsoil character:	Subsoil [603], mid sized gravel surrounded by a brown-grey slightly clayey silt matrix, covers the extent of the trench, excluding a small patch of [604], a clean orange/brown gravel. This is present from approximately 7m to 9m on the east-north-east side of the trench.
Interface character:	Interface [602] is composed of dark brown stony silty clay. It is present at the north-north-western end of the trench and is present until approximately 6.70m. It measures up to 200mm in depth.
Hill wash:	Hill wash [605] is composed of a mid brown silt with very occasional small stone inclusions and fragments of animal bones. It measures up to 700mm in depth and is present from 6.70m from the start of the trench until the end of the trench.
Modern features:	None.
Significant features:	None.

Artefacts: None.

Trench 7

Orientation: East-south-east to west-north-west

Size: 40m by 1.6m (64m²).

Topsoil depth: 360mm to 450mm.

Subsoil character: Subsoil [702], medium sized gravel surrounded by a brown-grey clayey silt matrix, is present until 31.20m. subsoil [706], a coarse clean gravel composed of sub-rounded and sub-angular stones, is present for the last 2.6m of the trench.

Modern features: Linear cut [704] for a red ceramic field drain is present at approximately 20m. This cut has steeply sloping sides and is filled with mid brown slightly stony silt.

Significant features: Large natural channel [705] measuring approximately 5m wide and 900mm in depth. It is filled with a series of naturally accumulated deposits: [707], [708] and [709]. The uppermost layer is composed of subsoil [702].

Artefacts: None.

Appendix 2: Registers

Context Summaries

No.	Trench	Interpretation	Description
101	1	Topsoil	Mid-dark brown/grey slightly sandy silt with frequent small stone inclusions. Fairly compacted.
102	1	Subsoil	Mid brown slightly sandy silt with moderate amounts of very small stone inclusions. Contains occasional fragments of animal bone.
103	1	Group of stones	8 stones of varying sizes; measure from 120mm by 150 to 250mm by 250mm. All the stones have a flat upper surface. Two of the larger stones are embedded in the subsoil [102], whilst the smaller stones are only slightly inset into it.
104	1	Possible 20 th century coup	Rectangular shaped stone structure. Walls are 2 courses in height with lime mortar bonding. Composed of rubble composed of small sub-angular and angular unshaped stones. Measures approximately 2.20m long by 1.70m wide. Filled with midden like material containing white glaze china, metal, glass and ash. May represent an earlier structure re-used as a dump for waste material.
201	2	Topsoil	Mid-dark brown/grey slightly sandy silt with frequent small stone inclusions. Fairly compacted.
202	2	Subsoil	Brown/orange fine-slightly coarse gravel with a silty matrix. Occasional plough scars visible cutting across the trench at a slight angle.

203	2	Subsoil	Band of coarse brown/orange gravel. Corresponds with the area of high resistance from the resistivity survey.
301	3	Topsoil	Mid-dark brown/grey slightly sandy silt with frequent small stone inclusions. Fairly compacted.
302	3	Subsoil	Medium gravel with a mid brown silty matrix.
303	3	Subsoil	Brown/orange fine-slightly coarse gravel with a silty matrix. Occasional plough scars visible cutting across the trench at a slight angle.
304	3	Ditch	Possible ditch filled with medium gravel with a mid brown silty matrix. Very shallow with irregular edges. Measures 110mm deep.
401	4	Topsoil	Mid-dark brown/grey slightly sandy silt with frequent small stone inclusions. Fairly compacted.
402	4	Subsoil	Brown/orange fine-slightly coarse gravel with a silty matrix. Occasional plough scars visible cutting across the trench at a slight angle.
403	4	Subsoil	Mid-dark brown slightly sandy gravelly silt. Occasional plough scars visible.
501	7	Compacted upper surface	Very compacted layer composed of larger sub-angular and angular stones with a mid-dark brown/grey slightly sandy silt matrix (debris from stacking yard).
502	5	Interface	Dark brown stony silty clay measuring up to 400mm in depth.
503	5	Subsoil	Brown/orange fine-slightly coarse gravel with a silty matrix. Occasional plough scars visible cutting across the trench at a slight angle.
504	5	Subsoil	Bright orange very slightly clayey sand
505	5	Cable trench	Linear shaped cut with a U-shaped profile. Measures 1.7m wide. Filled with mid brown silt.
506	5	Linear feature	Linear shaped cut. Very shallow with a U-shaped profile. Measures 300mm wide. Filled with mid-brown silt.
601	6	Topsoil	Mid-dark brown/grey slightly sandy silt with frequent small stone inclusions. Fairly compacted
602	6	Interface	Dark brown stony silty clay measuring up to 200mm in depth.
603	6	Subsoil	Medium sized gravel surrounded by a brown-grey clayey silt matrix.
604	6	Interface	Patch of clean orange/brown gravel.

605	6	Hillwash	Mid brown silt with very occasional small stone inclusions and fragments of animal bone.
701	7	Topsoil	Mid-dark brown/grey slightly sandy silt with frequent small stone inclusions. Fairly compacted
702	7	Subsoil	Medium sized gravel surrounded by a brown-grey clayey silt matrix.
703	7	Possible stone hole	Elongated oval feature filled with brown-grey clayey silt with gravel inclusions. Very shallow.
704	7	Drain cut	Linear shaped cut with steeply sloping sides. Filled with mid brown slightly stony silt. Contains a red ceramic field drain.
705	7	Palaeo-channel	Large linear shaped feature measuring approximately 5m wide and 900mm in depth. Filled with a series of naturally accumulated deposits: [702], [707], [708] and [709].
706	7	Subsoil	Coarse clean gravel composed of sub-rounded and sub-angular stones.
707	7	Deposit in [705]	Orange/brown pea gravel.
708	7	Deposit in [705]	Very fine gravel.
709	7	Deposit in [705]	Dark brown grit with medium sized gravel.

Drawing Register

Sheet	No.	Title	Scale	Date	Author
1	1	Trench 1	1:100	22/03/07	AG
1	2	Trench 4	1:100	22/03/07	AG
1	3	Trench 5	1:100	22/03/07	AG
1	4	Trench 6	1:100	22/03/07	AG & DG
1	5	Trench 2	1:100	22/03/07	AG
2	6	Trench 3	1:100	23/03/07	AG & DG
2	7	Trench 7	1:100	23/03/07	AG
2	8	Section of [705]	1:100	23/03/07	AG & DG

Photographic Register

Image	Description	From	Date
1	Shot of trench 1	SSW	22/03/07
2	Detail of stones [103]	ESE	22/03/07
3	Detail of stones [103]	SSW	22/03/07
4	Detail of stones [103]	NNE	22/03/07
5	Detail of stones [103]	SSW	22/03/07

6	Shot of trench 2	NNE	22/03/07
7	Shot of trench 3	E	22/03/07
8	Shot of trench 4	WNW	22/03/07
9	Shot of trench 5	SW	22/03/07
10	Shot of trench 6	SSE	22/03/07
11	Shot of feature [104] and stones [103]		23/03/07
12	Shot of feature [104] and stones [103]	NW	23/03/07
13	Shot of feature [104] and stones [103]	SW	23/03/07
14	Shot of feature [104] and stones [103]	S	23/03/07
15	Shot of feature [104] and stones [103]	SE	23/03/07
16	Shot of trench 7	ESE	23/03/07
17	Palaeo-channel [703] section	NNE	23/03/07
18	Palaeo-channel [703]	ESE	23/03/07
19	Palaeo-channel [703]	SE	23/03/07
20	Palaeo-channel [703]	WNW	23/03/07
21	Palaeo-channel [703]	WSW	23/03/07
22	General site shot	ESE	23/03/07
23	General site shot	S	23/03/07
24	General site shot	E	23/03/07
25	General site shot	NNE	23/03/07
26	General site shot		23/03/07
27	General site shot		23/03/07
28	General site shot		23/03/07
29	General site shot		23/03/07
30	General site shot		23/03/07
31	General site shot		23/03/07

Appendix 3: Discovery & Excavation in Scotland

LOCAL AUTHORITY:	Fife
PROJECT TITLE/SITE NAME:	Balmerino Abbey
PARISH:	Balmerino
NAME OF CONTRIBUTOR:	Douglas Gordon, Thomas Rees
NAME OF ORGANISATION:	Rathmell Archaeology Limited
TYPE(S) OF PROJECT:	Geophysical Survey; Evaluation
NMRS NO(S):	None
SITE/MONUMENT TYPE(S):	None
SIGNIFICANT FINDS:	None
NGR (2 letters, 6 figures)	NO 357 246
START DATE (this season)	15 th March 2007
END DATE (this season)	23 rd March 2007
PREVIOUS WORK (incl. DES ref.)	None
PROPOSED FUTURE WORK:	Uncertain
MAIN (NARRATIVE) DESCRIPTION: (may include information from other fields)	<p>A programme of archaeological investigative works was undertaken in respect of the proposed development of land adjacent to Balmerino Abbey, Fife (NGR ref: NO 357 246). An evaluation was carried out between the 15th and 23rd March 2007. The evaluation comprised a geophysical survey and seven trenches covering approximately 5% of the development area.</p> <p>A common stratigraphic sequence was exhibited across all of the trenches within the development area, with a mid brown slightly sandy silt over a slightly varying gravel subsoil, which was a raised marine deposits of Devensian age.</p> <p>No significant archaeological features were identified during the course of the archaeological evaluation.</p>
PROJECT CODE:	06028
SPONSOR OR FUNDING BODY:	Gilberts on behalf of Headon Developments Ltd
ADDRESS OF MAIN CONTRIBUTOR:	10 Ashgrove Workshops, Kilwinning, Ayrshire KA13 6PU
E MAIL:	contact@rathmell-arch.co.uk
ARCHIVE LOCATION (intended/deposited)	Report to Fife Council Archaeology Unit and archive to National Monuments Record of Scotland.

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