Wessex Archaeology

# Baliscate Chapel
# Isle of Mull

Archaeological Evaluation and Assessment of Results

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# Baliscate, Isle of Mull

# Archaeological Evaluation and Assessment of Results

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**Summary**

In May 2009 an archaeological evaluation was undertaken by Channel 4's 'Time Team' at the site of Baliscate (Coille Creag A'Chait), 1km south of Tobermory on the Isle of Mull, Argyll, Scotland (centred on NGR 149677 754068), in order to investigate a recently discovered early Celtic Christian chapel and possible associated cemetery within a square stone enclosure. The Site was discovered in March 2008, and following initial identification, the Royal Commission on the Ancient and Historical Monuments of Scotland (RCAHMS) carried out a survey of the remains in October 2008.

Time Team's work was able to confirm that the Site was a chapel, which consisted of a timber phase with at least one associated burial. The burial produced a radiocarbon date of 610-690 cal. AD, placing it potentially within the lifetime of St. Adomnán, the ninth Abbot of Iona and biographer of St. Columba. The timber phase was replaced by a stone phase with an associated *leacht*, a stone structure at the eastern end of the chapel. Similar structures have been observed on Iona and at Celtic Christian sites in Ireland, and this would once have held an upstanding stone cross. A fragment of the stone cross was recovered from the demolition material overlying the *leacht* and is considered to date to the 8th century AD.

The chapel was located within a larger monastic complex containing at least one other building. The surrounding monastic *vallum* (a physical and spiritual barrier separating the ecclesiastical from the secular) was identified, as well as an approaching hollow-way, and an entrance through the *vallum*, although none of these features were excavated. The chapel lies in the middle of an enclosure measuring approximately 210m by 100m wide and covering an area of 1.37 hectares.

The possible associated cemetery was investigated and was shown to be a sheep enclosure or 'fank' with an associated shieling for the shepherd. The fank and shieling had been constructed from the demolished material derived from the chapel.

Evidence of possible prehistoric activity was also revealed on the Site, through the identification of possible ard marks, pottery and a kerbed cairn.

Summary details of the Site have been submitted to *Discovery and Excavation in Scotland*, to appear in the volume for 2009. No further publication is proposed at this stage.

# Baliscate, Isle of Mull

# Archaeological Evaluation and Assessment of Results


**Acknowledgements**

This programme of post-excavation and assessment work was commissioned and funded by Videotext Communications Ltd, and Wessex Archaeology would like to thank the staff at Videotext, and in particular Tim Taylor (Series Producer), Michael Douglas (Series Editor), Jane Hammond (Production Manager), Ben Knappett (Assistant Producers), Tom Scott (Researcher), Anna Cosgrove (Production Coordinator) and Kerry Ely (Location Manager) for their considerable help during the recording and post-excavation work.

The geophysical survey was undertaken by John Gater, Jimmy Adcock and Emma Wood of GSB Prospection. The field survey was undertaken by Henry Chapman, University of Birmingham and the landscape study by Stewart Ainsworth of English Heritage. The excavation strategy was devised by Mick Aston. The on-site recording was co-ordinated by Steve Thompson with on-site finds processing by Helen MacIntyre, both of Wessex Archaeology.

The excavations were undertaken by Time Team's retained archaeologists, Phil Harding (of Wessex Archaeology), Ian Powlesland, Tracey Smith, Raksha Dave, Faye Simpson, and Matt Williams assisted by Fiona Baker, David Swan, Scott Coulter, Kevin Paton and Paul Murtagh (Firat Archaeological Services), Jacqueline McKinley (Wessex Archaeology), Matt Ritchie (Forestry Commission, Scotland), Michael Heaton (Michael Heaton Heritage Consultants), Derek Hurst and Cally Langhurst. On-site small finds and pottery identification were provided by Helen Geake and Julie Franklin respectively.

The archive was collated and post-excavation assessment undertaken by Wessex Archaeology, except for the pottery analysis (Derek Hall, freelance specialist). This report was written and compiled by Steve Thompson, with other specialist reports prepared by Nicholas Cooke (coin), Lorraine Mepham (other finds) and Ruth Pelling (palaeo-environmental evidence). The illustrations were prepared by Kenneth Lymer. The post-excavation project was managed on behalf of Wessex Archaeology by Lorraine Mepham

The work benefited from discussion with Mick Aston of Bristol University, Phil Harding of Wessex Archaeology, Stewart Ainsworth of English Heritage, Fiona Baker of Firat Archaeological Services, Matt Ritchie of Forestry Commission Scotland and Derek Hall.

Finally, thanks are extended to the Royal Commission on the Ancient and Historical Monuments of Scotland (RCAHMS); to Bev Langhorn and Hylda Marsh, volunteers on the RCAHMS's Rural Past Project and initial finders of the Site, for inviting Time Team to Baliscate; and finally to the Forestry Commission Scotland for allowing access to the Site for geophysical survey and archaeological evaluation.

# Baliscate, Mull

# Archaeological Evaluation and Assessment of Results

## 1 BACKGROUND

### 1.1 Introduction

1.1.1 Wessex Archaeology was commissioned by Videotext Communications Ltd to undertake a programme of archaeological recording and post-excavation work on an archaeological evaluation undertaken by Channel 4's 'Time Team' within an area of managed woodland to the southwest of Tobermory on the Isle of Mull known as Baliscate, (hereafter the 'Site') to investigate the remains of a previously unknown early chapel site and associated cemetery. (**Figure 1**).

1.1.2 This report documents the results of archaeological survey and evaluation undertaken by Time Team, and presents an assessment of the results of these works.

### 1.2 Site Location, Topography and Geology

1.2.1 Baliscate is located on the eastern side of the Isle of Mull, approximately 1km southwest of Tobermory, centred on NGR 149677 754068 and located at a height of 107m above Ordnance Datum (m aOD). The Site is currently owned by the Forestry Commission Scotland and is part of a managed woodland established in the late 1950s to early 1960s.

1.2.2 The underlying geology of the Isle of Mull is varied, and at Baliscate it consists of sedimentary mudstone overlain by regolith of degraded mudstone.

### 1.3 Historical Background

1.3.1 The arrival of Christianity in Scotland is traditionally associated with St. Ninian of Whithorn whom Bede (*c*. 673-735) recorded as having converted the southern Picts, perhaps as early as 397 AD, with a second mission by St. Columba to the northern Picts *c*. 565 AD.

1.3.2 The early date for the conversion of the southern Picts is now viewed with some scepticism, as recent work has possibly identified Ninian as Bishop Uinniau of Molville in Ulster, where Columba studied in his youth in the early 6th century. St. Adomnán, Columba's biographer, recorded Bishop Uinniau as both Finnian and Finnbarr. Excavations at Whithorn have identified a religious foundation of 6th century AD date as well as dedications to Finnian, but no early dedications to Ninian (Yorke 2006, 113-4).

1.3.3 The change of Uinniau/Finnian/Finbarr to Ninian occurred as Whithorn became a Northumbrian bishopric in the reigns of Oswald and Oswiu in the 7th century, and Whithorn was a Northumbrian bishopric when Bede was writing in 731 AD (Yorke 2006, 129).

1.3.4 St. Columba's conversion of the northern Picts *c*. 565 AD followed his training in the religious houses of the Irish kingdom of Dál Riata, which spread across the Irish Sea to the western coast of Scotland. The Dál Riatan King Bridei is recorded as donating the small island of Iona off the western coast of the Isle of Mull for the establishment of a religious community, and from the late 7th century St. Adomnán presents the Picts and the kingdom of Dál Riata as being under the protection of St. Columba, implying that there were a number of Ionan religious communities throughout Scottish Dál Riata and Pictland, although he does not name any of them (Yorke 2006, 130).

## 2 PREVIOUS ARCHAEOLOGICAL WORK

2.1.1 The Site was discovered in March 2008 by Bev Langhorn and Hylda Marsh, two members of the Scotland's Rural Past Project; a volunteer led survey by the Royal Commission on the Ancient and Historical Monuments of Scotland (RCAHMS) to identify and map previously unknown sites of archaeological interest.

2.1.2 Following the initial identification, the RCAHMS carried out a site survey of the remains in October 2008 (**Figure 2**) and recorded the Site under its alternative name of Coille Creag A'Chait (Monument No. NM45SE 25). The Site is visible on a 1958 aerial photograph (image ref.543/RAF/0402 F22: 0014) held by the RCAHMS (**Figure 3**).

2.1.3 The RCAHMS recorded the Site as comprising of a number of structures; the first is a rectangular building within a rectangular enclosure occupying an artificial terrace. The building is aligned east-west, with an entrance in the north wall, and measures approximately 8.7 m long by 6.8m wide with walls 0.9m wide.

2.1.4 At the eastern end of the building is a sub-rectangular structure 2m long by 2m wide. The surrounding enclosure is orientated NW – SE with an entrance in the east wall, and measures approximately 19.7m long by 15.7m wide with walls up to 1.2m wide.

2.1.5 The artificial terrace was recorded as 1.5m high on the north-eastern side and approximately 17m wide extending to the south.

2.1.6 This part of the Site was interpreted as the remains of a small chapel, which was abandoned long before the completion of the first estate map in 1840. The size and shape of the earthworks, and the positioning on a prominent terrace overlooking the settlement of Baliscate, support this interpretation.

2.1.7 To the west of the chapel is a roughly square structure recorded as approximately 12m long by 12m wide and formed of dry stone walls 0.9m wide and 0.6m high, with an entrance in the southern wall. This was interpreted as the surrounding enclosure to a possible cemetery, associated with the chapel although of a probable later date. In the north-west corner of this possible cemetery enclosure were the remains of a collapsed structure initially identified as the remains of a possible corn dryer, utilising the remains of the cemetery enclosure.

2.1.8 To the north-east of the Site there is a third apparent enclosure occupying a triangular section of land bounded by two rivulets. No archaeological survey of this enclosure has been undertaken.

## 3 AIMS AND OBJECTIVES

3.1.1 A project design for the work was compiled (Videotext Communications 2009), providing full details of the research aims and methods for the programme of works. The aims of the project were to ascertain the date, character, condition and extent of the earthworks and the underlying archaeological remains.

3.1.2 The project design outlined three targets for investigation following discussions with Tertia Barnett, Project Manager for Scotland's Rural Past (RCAHMS) and Matt Ritchie, Forestry Commission Scotland Archaeologist. It was proposed that the precise location of invasive trenches would be based on the results of detailed topographical, geophysical and landscape analysis and on-site discussion with relevant archaeological officers.

*Target 1: Primary 'Chapel' Enclosure*

3.1.3 The primary enclosure consists of a rectilinear terrace revetted with stone, enclosing a building aligned east-west. Stone wall remains are clearly visible.

*Target 2: Secondary 'Cemetery' Enclosure*

3.1.4 The secondary, square enclosure is defined by the remains of a stone wall. Similar structures in the area led to the hypothesis that the wall enclosed a cemetery.

*Target 3: North-eastern Enclosure*

3.1.5 The north-eastern enclosure is defined by a triangular platform bounded by two streams. Examination of this area revealed several possible artificial earthwork features, but it was unclear whether it related to the rest of the Site.

## 4 METHODS

### 4.1 Landscape Survey

4.1.1 A walkover survey of the surrounding area to the Site, and analysis of the cartographic and aerial photographic evidence was undertaken by Stewart Ainsworth of English Heritage. The summarised results of his findings are presented below.

### 4.2 Geophysical Survey

4.2.1 Prior to the excavation of evaluation trenches, a geophysical survey was carried out across the Site by GSB Prospection Ltd using a combination of resistance and ground penetrating radar (GPR) survey. The survey grid was set out by Dr Henry Chapman and tied in to the Ordnance Survey grid using a Trimble real time differential GPS system and an S Series (S6) Robotic EDM.

### 4.3 Evaluation Trenches

4.3.1 Eight trenches of varying sizes were excavated, following the geophysical survey and walkover survey and positioned to answer the research aims stated in the project design (**Figures 1-3**).

4.3.2 The trenches were all hand excavated and archaeological deposits investigated. All archaeological deposits were recorded using Wessex Archaeology's *pro forma* record sheets with a unique numbering system for individual contexts. Trenches were located using a Trimble Real Time Differential GPS survey system and Total Station. All archaeological features and deposits were drawn at an appropriate scale (typically plans at 1:20 and sections at 1:10). All principal strata and features were related to the Ordnance Survey datum.

4.3.3 A full photographic record of the investigations and individual features was maintained, utilising digital images. The photographic record illustrated both the detail and general context of the archaeology revealed and the Site as a whole.

4.3.4 At the completion of the work, all trenches were reinstated using the excavated soil.

4.3.5 The work was carried out between the 19th and 22nd May 2009. The archive and all artefacts were subsequently transported to the offices of Wessex Archaeology in Salisbury where they were processed and assessed for this report.

## 5 RESULTS

### 5.1 Introduction

5.1.1 Details of individual excavated contexts and features, the full geophysical report (GSB 2009) and details of artefactual assessments, are retained in the archive. Details of the excavated sequences can be found in **Appendix 1**.

### 5.2 Landscape Survey

5.2.1 The walkover survey identified that the Site under investigation (the proposed chapel and associated cemetery) lay within the centre of a much larger enclosure surrounded by a low earthwork (**Figure 3**). The enclosure utilised the natural topography and so was an irregular polygon in shape. Only certain limits were defined by the earthwork, with natural scarps and sloping land defining the remainder of the enclosure. The enclosure was divided into two areas by a near vertical cliff-face, creating an upper and lower terrace. The artificial platform with the chapel and cemetery is located on the lower of the two terraces.

5.2.2 The surrounding low earthwork is most evident at the eastern limit of the enclosure where it survives to a height of *c.* 0.70m high and was *c.* 1m wide; at this point there are a number of breaches through the earthwork, one of which is in alignment with a roughly east-west aligned hollow-way, the approach into the enclosure. The breaches were investigated by the

excavation of Trench 6. The low earthwork continues to the south before crossing to the west, so creating the upper terrace. The western limit of the enclosure is less well defined, with the northern edge demarcated by the land sloping away to the north-east. The larger enclosure, hollow-way and artificial platform on which the chapel is built are clearly visible on the 1958 aerial photograph.

5.2.3 This enclosure contained a much larger complex of structures, but much damage had occurred in the eastern portion of the enclosure on the lower terrace north of the cliff-face due to the planting of trees in the late 1950s and early 1960s. A series of large plough marks were evident on the lower terrace and one clearly impacted on a previously unidentified building. This area was investigated in Trench 4. A second structure - a possible cairn or stone mound - was also identified, and this was investigated by the excavation of Trench 5.

5.2.4 The low earthwork was interpreted as surrounding a monastic complex, acting as the *vallum monasteria* - a conceptual barrier separating the ecclesiastical from the secular. The siting of a monastic community at a location such as Baliscate is not unprecedented: the chapel of St. Blane at Kingarth on the Isle of Bute reveals a similar complex of structures situated at the base of a cliff face (M. Aston pers comm.), as does St. Patrick's Chapel, Ceann a' Mhara on Tiree (RCAHMS 1980, 165).

### 5.3 Geophysical Survey

*Introduction*

5.3.1 Geophysical survey was conducted across the chapel and surrounding enclosure, and over part of the square enclosure to the south-east (**Figure 1, inset**). Conditions for survey were not ideal as the extant structures made data collection tricky for both resistance survey and ground penetrating radar (GPR).

5.3.2 Gradiometer data were not collected due to the very restricted survey area and the local igneous geology.

*Resistance Survey Results*

5.3.3 Resistance data were collected at 0.5m intervals along traverses spaced 0.5m apart in order to gain a higher resolution of the surveyed area. The data have also been subjected to a high pass filter in order to suppress the background geology.

5.3.4 Areas of high resistance correspond to the northern, western and parts of the enclosure surrounding the chapel. The southern section of the enclosure is not shown within the data, possibly indicating that this site comprised an outer bank with no stone revetting.

5.3.5 The chapel can be seen within the data as areas of high resistance. There is a slight difference in the data along the northern section which corresponds to the break in the earthworks.

5.3.6 High resistance responses correspond to the extant wall remains of the smaller square enclosure. A mound of stones has caused the response in the very south eastern limits of the data.

*GPR Survey Results*

5.3.7 A very small area immediately north of the chapel was surveyed with radar in order to identify any abutting structures or possible burials. Given the age of interments in this area, the detection of the latter would, in reality, only be possible if they were stone-lined or buried in solid caskets (as opposed to wood or a simple shroud).

5.3.8 The pattern of response across the survey area is characterised by sporadic zones of increased amplitude and areas of diminished response. These are assumed to be a facet of varying soil composition within the material used to level the site and natural features below. Low amplitude linear trends may be shallow drainage cuts running away from the main structure toward the boundary wall.

5.3.9 Trench 3 was positioned to investigate the seemingly more coherent reflector which, given the depth of approximately 1.40m+, could have indicated a collapsed, stone-lined grave or other solid feature. The excavated material contained a number of large stones, suggesting an origin for the random high amplitude responses recorded across the site. The trench bottomed-out on a former ground surface at around 0.8m with dating evidence recovered suggesting this was a prehistoric level. Anomalies beyond this are therefore natural reflectors.

*Conclusions*

5.3.10 High resistance responses relate to the earthworks of the chapel and that of the smaller square enclosure; they indicate stone revetments on three sides of the chapel. GPR data have potentially discovered a prehistoric buried surface but due to the difficult ground conditions and natural features no definite features associated with the chapel were discovered.

## 5.4 Evaluation Trenches

*Introduction*

5.4.1 The evaluation concentrated in two main areas of the Site. Area 1 consisted of the artificial terrace occupied by the chapel structure and the enclosure immediately surrounding the chapel (Target 1). Area 1 also included the proposed associated cemetery enclosure (Target 2). No trenches were excavated in Target 3 (the north-eastern enclosure) due to time constraints.

5.4.2 Area 1 was investigated through the excavation of five trenches:

- Trench 1 - the chapel, the rectangular structure at the east end of the chapel and the enclosure eastern entrance
- Trench 2 – the ‘cemetery’ north wall and the later ‘corn dryer’
- Trench 3 – the artificial terrace revetment
- Trench 7 – the ‘cemetery’ east wall
- Trench 8 – the chapel entrance in the north wall

5.4.3 Area 2 consisted of the lower terrace to the south of the cliff-face identified in the walkover and was investigated through the excavation of three trenches;

- Trench 4 – the building below the cliff-face
- Trench 5 – the possible cairn
- Trench 6 – the enclosing monastic *vallum*

5.4.4 The results of the evaluation are presented below by Area. Due to the lack of diagnostically datable finds, the phasing of the Site derives from the identified stratigraphic relations, a single radiocarbon date, and the stylistic nature of the structures observed. The pottery recovered included wares of the 'organic tempered/Craggan' tradition which remained unchanged from the late prehistoric period to the 19th century and which is therefore particularly unhelpful for dating.

**5.5 Area 1**

*Trench 1 (**Figure 4**)*

5.5.1 Trench 1 was positioned to investigate the southern and eastern wall of the probable chapel, the stone structure at the chapel's eastern end and the entrance into the chapel complex through the surrounding earthwork.

5.5.2 A series of deliberate landscaping events created the artificial platform on which the chapel sits. Sealing the natural bedrock of decayed mudstone were deposits (139) and then (109/121/129/137/138/140), the latter a deposit observed across the trench. These deposits were laid down behind the large stone revetment (303) in Trench 3 and are contemporary if not equivalent to deposits (302/306) and (307).

5.5.3 The earliest structural remains overlay (140); two deposits of decayed wood (127) and (128) were revealed beneath collapsed southern wall material (126), and perhaps represent the remains of the timber phase of the chapel's construction. This early phase was associated with at least one inhumation grave - (120), containing skeletal remains (122). This grave clearly extended beneath the eastern wall (105) of the later stone phase and was sealed beneath floor surface (118), also associated with the stone phase. The skeletal remains (122) were subjected to radiocarbon dating and produced a calibrated date of 610-690 cal. AD (see **Appendix 2**).

5.5.4 Several more inhumation graves were identified on the southern side of the chapel, but due to the lack of stratigraphic relationships to the timber phase, they have been viewed as contemporaneous with the later stone phase of the chapel (see below). No further remains were identified that could be interpreted as belonging to the earlier chapel

5.5.5 A stone-built chapel was subsequently erected over the earlier structure, sealing the timber remains and the earlier inhumation grave. The stonework of the chapel had been heavily robbed for the creation of the rectangular structure to the west identified as a shieling and sheep fank on excavation (see below, Trenches 2 and 7).

5.5.6 The stone chapel was constructed of walls (104) and (105) with an earthen core (126), giving a sub-rectangular appearance to the chapel building (**Figure 5, Plates 1 and 2**). The curved corners may be due to the extent of collapse and demolition and the robbing of useable stone work, rather than truly reflecting the original shape. Located at the eastern end of the chapel

was a rectangular stone structure (106) infilled with deliberate stone packing (131). This stone packing had a clear central void, interpreted as a mortise hole to receive the base of an upstanding stone cross. This structure was identified as a *leacht*, an external altar or shrine often associated with a stone cross (**Figure 5, Plate 3**). The interpretation was supported by the recovery of a fragment of stone cross (**Figure 9**) from demolition material (116), dated on the basis of traces of grid-patterned incised decoration to the 8th century (I. Fisher, pers. comm.). This itself suggests that the stone phase of the chapel may have been constructed around one hundred years after the timber phase.

5.5.7 The chapel and the *leacht* were surrounded by a large, sub-rectangular, earthen enclosure with an entrance at the eastern side. The southern side of the entrance was observed as a stone revetment (107). The location of the entrance was such that anyone coming to the chapel would face the stone cross erected within the *leacht* as they approached. Within the interior of the chapel was a possible metalled surface (117/118) formed of fragments of the local mudstone (schist), the natural bedrock.

5.5.8 On the southern side of the chapel, against the remains of wall (104), a number of inhumation graves were found, although only two were excavated - grave (123), containing skeletal remains (124), and empty grave (132). The geological conditions were not conducive to the preservation of bone. The backfill of (132) contained a single water-worn pebble of non-local red granite, very similar to the geology at Fionphort in the south-west of Mull, overlooking Iona. At the western end of grave (132) was a header marker stone, possibly of Iona marble (from Port na Curaich on the south coast of Iona). The marble source on Iona is recorded as St. Columba's landing site (Fisher 1997, 184).

5.5.9 Three further probable inhumation graves were observed but not excavated, comprising (141) and (143), and possible cist grave (134) with stone lining (135).

5.5.10 The final phase of activity observed within Trench 1 comprised the collapse/demolition of the chapel and the robbing of reusable stonework. The rubble remains of the chapel, derived from (104) and (105), were recorded as (114) and were concentrated in the southern corner of the chapel. Pottery recovered from the demolition deposits was identified as of the 'organic tempered/Craggan Ware' tradition and Scottish Redware, the latter with a date range of late 12th to 15th century. There was very little tumbled stone work within the interior of the chapel.

5.5.11 Overlying the initial demolition deposits was (110/112), material laid down following and during the demolition of the chapel which included a silver long cross penny, probably of Edward II, struck between 1320 and 1335.

5.5.12 The rubble overlying the remains of the *leacht* was recorded as (116) and contained numerous white quartz pebbles and other water worn beach pebbles, as well as the fragment of stone cross.

*Trench 3 (**Figure 4**)*

5.5.13 Trench 3 lay across the edge of the artificial terrace on which the chapel was built. The earliest recorded archaeology comprised feature (310), which was only partially revealed and was not excavated. This feature appeared to be

overlain by a possible buried ground surface (308), and this was sealed in turn by (303), the large stone revetment bounding the terrace (**Figure 5, Plate 4**). To the west of the terrace repeated deposits were banked up against the revetment to create the terrace (**Figure 5, Plate 5**). Pottery sherds from these deposits were identified as 'organic tempered/Craggan Ware', not closely datable, but there was also a single sherd, probably intrusive, of Scottish Redware (late 12th to 15th century). The terrace deposits were overlain by wall collapse deposits (304) and (305).

*Trench 8 (**Figure 4**)*

5.5.14 Trench 8 was placed across the entrance through the northern wall of the chapel, and revealed a stone block (803) forming the western side of the doorway, and possible floor surface (804), sealed beneath rubble layer (802) (**Figure 5, Plate 6**); due to the narrow constraints of the small evaluation trench no further interpretation or clarification of the archaeology was gained.

*Trench 2 (**Figure 6**)*

5.5.15 Trench 2 was positioned to investigate the possible cemetery and what was initially thought to be a later corn dryer which overlay the north-west corner of the enclosure. It soon became clear, however, that this was neither a cemetery nor a corn dryer.

5.5.16 The earliest identified archaeology comprised a group of four possible prehistoric ard marks (212), which cut the natural subsoil (**Figure 6, Plate 9**). In the southern arm of the trench the natural was cut by gully (207) (**Figure 6, Plate 8**), but to what phase of the Site use this ditch relates is unclear. Fragments of iron slag were recovered from the fill, and an environmental sample yielded grains of barley and oats, and hazelnut shells.

5.5.17 The walls of the enclosure were investigated on the northern and western sides. The three walls (204), (210) and (211) formed a small structure in the north-western corner, with (210) bonded to (204). The walled enclosure was interpreted as a 'fank' (a Scottish term for a sheep enclosure) with an associated 'shieling' (shepherd's hut).

5.5.18 The collapsed material from the shieling and fank walls was recorded as (303); layers sealing the wall collapse contained a number of sherds of 19th century tin glazed earthenware, indicating the late date of the structure.

*Trench 7 (**Figure 6**)*

5.5.19 Trench 7 was placed within the interior of the sheep fank, against the eastern wall (705). The underlying natural geology was recorded as (704). No other features or deposits of archaeological origin were identified.

### 5.6 Area 2

*Trench 4 (**Figure 7**)*

5.6.1 Trench 4 was positioned to investigate a structure identified from the landscape survey as a possible building. The natural geology was cut by the foundation trench for wall (404). The wall was double skinned with a rubble and clay core, and had collapsed to form rubble deposit (403) (**Figure 7, Plate 10**). No interior flooring for the building was identified.

*Trench 5 (**Figure 7**)*

5.6.2 Trench 5 investigated a possible cairn or stone mound, identified in the landscape survey. The structure was not excavated and was only cleared of topsoil material. The structure was formed largely of a large natural glacial erratic boulder. This boulder was the focus for the mound of stones which had built up around it (**Figure 7, Plate 11**). A possible kerb (504) appeared to encompass the main stone deposit of the mound (505). The nature of this structure is unclear as it was not excavated. It is uncertain whether the structure represents the remains of kerbed burial cairn or a clearance cairn, a simple mound of stones.

*Trench 6 (**Figure 8**)*

5.6.3 Trench 6 lay across two breaches through the earthen bank which surrounds the monastic complex on the eastern side. A possible old ground surface (605) was observed, on which the stone revetment of the *vallum* was constructed. Revetment (602) had deposit (603) banked up against it to form the main body of the bank. The northern breach through the *vallum* possibly marked the original entrance into the monastic complex, leading from the hollow-way to the east, as a possible metalled surface (604) composed of mudstone fragments was revealed overlying (605). At the southern breach no such surface was observed.

# 6 FINDS

## 6.1 Introduction

6.1.1 Finds were recovered from five of the eight trenches excavated (all within Area 1); no finds were recovered from Trenches 4-6 (Area 2), and finds from Trenches 7 and 8 were minimal. Some unstratified items were also recovered. The assemblage is largely of medieval date, with some prehistoric and post-medieval material. Human remains were uncovered but largely recorded *in situ* and reburied, with the exception of some skull fragments that were retained for radiocarbon dating.

6.1.2 All finds have been quantified by material type within each context, and totals by material type and by trench are presented in **Table 1**. Following quantification, all finds have been at least visually scanned, in order to ascertain their nature, probable date range, and condition. Spot dates have been recorded for datable material (pottery). This information provides the basis for an assessment of the potential of the finds assemblage to contribute to an understanding of the Site, with particular reference to the construction and use of the chapel.

## 6.2 Pottery

*Introduction*

6.2.1 The pottery assemblage is made up of 44 sherds ranging in date from the early medieval period through to the 19th century. It has been examined by eye and where possible sherds have been identified using accepted fabric names.

*Organic-tempered wares and unidentified wares*

6.2.2 There are four sherds which fit the parameters of the Scottish West Coast and Island ‘organic-tempered/Craggan Ware’ tradition (Cheape 1993; Lane

2007). This pottery type remains unchanged from late prehistory through until the 19th century and the introduction of industrial ceramics. The 18 unidentified sherds are probably part of a similar tradition although they do not appear to contain organic tempering; they are instead tempered with a so far unidentified mineral (possibly granite). All of the sherds from Baliscate are from vessels that have been used for cooking. A single sherd from possible old ground surface (308) is decorated with incised lines.

*Scottish Redwares*

6.2.3 There are 14 sherds, all from jugs, which appear to belong to the identified mainland Scottish Redware tradition (Hall 1998; Haggarty *et al.* forthcoming). This pottery type appears to have been produced in the vicinity of all of the major Scottish river systems and probably dates from between the late 12th/early 13th century until the late 15th century. The sherds from Baliscate may all be from the same vessel, and their presence here is of interest, but it is not possible to suggest a production centre.

*Tin-glazed earthenwares*

6.2.4 There are eight sherds from a tin-glazed earthenware teacup of 19th century date. This vessel is decorated with butterflies and floral patterns and is probably a product of one of the Glasgow factories (G. Haggerty pers. comm.). The teacup can almost certainly be linked to Victorian picnicking activity in the vicinity of the Site, prior to the forestry plantation.

### 6.2.5 Stone

6.2.6 Stone was recovered in some quantity, mostly from Trench 1. Very little of the stone was obviously worked or utilised in any way, but the majority of pieces comprise rounded beach pebbles in a variety of stone types which appear to be non-local to the Site, i.e. possibly deliberately collected from elsewhere, although not necessarily from any great distance. Most of these came from contexts associated with the construction, use and demolition of the chapel in Trench 1. Most are of igneous or metamorphic origin, and include various granites and schist, but there are also a number of quartz pebbles, and one of sandstone. One or two show possible wear around the edges, but this does not have a necessarily anthropogenic origin. A number of quartz pebbles could relate to the connection of white pebbles with the healing of the sick within the teachings of St. Columba, and a red quartz pebble found within the backfill of probable grave (132) may have had a similar connotation.

6.2.7 Of particular interest is a small fragment of a carved stone cross from demolition material (116). The fragment shows very abraded traces of grid-petterned incised decoration, and has been tentatively dated on this basis to the 8th century (I. Fisher, pers. comm.).

6.2.8 A second small worked stone fragment from (116) is in an unknown stone type, but could be part of a quern, or possibly a vessel of some form.

### 6.2.9 Worked Flint

6.2.10 Three pieces of struck flint were recovered, comprising two waste flakes and a possible chip. These are presumed to be of prehistoric date, but are not chronologically distinctive within that period.

## 6.3 Slag

6.3.1 A small quantity of slag was recovered; this is characteristic of iron-smithing. This material derived from several contexts within Trenches 1-3, including layers pre-dating the chapel (from the terrace on which the chapel was built (306), and from a possible earlier ground surface (308) below the terrace), a possible floor surface within the chapel (117), and from a later demolition rubble layer (116).

## 6.4 Metalwork

6.4.1 The metalwork includes one coin, as well as objects of copper alloy and iron.

6.4.2 The coin, from post-demolition deposit 110, is a hammered silver medieval long cross penny of Edward II from London, struck between 1320 and 1335 (North 1975, no. 1067).

6.4.3 The single copper alloy object is a modern button; this came from a subsoil context (202) in Trench 2.

6.4.4 All of the nine iron objects are heavily corroded. Six are probably nails (Trench 1 topsoil, possible floor surface 118, Trench 2 subsoil, redeposited layer beneath chapel in Trench 3). Two could be diamond-shaped rove plates (unstratified, and possible floor surface 117). The final object is a short, D-profiled bar (Trench 2 topsoil). None of the iron objects are chronologically distinctive.

## 6.5 Human Bone

6.5.1 From the grave (120) at the eastern end of the chapel, a small quantity of *in situ* human remains were recovered, comprising fragments of skull vault and one tooth (crown only), all very fragile and degraded. The skull sutures are unclear but appear to be unfused; the individual has been aged as juvenile or subadult (*c.* 10-15 years) on the basis of tooth wear. The skull fragments were submitted for radiocarbon dating, and produced a calibrated date of 610-690 cal. AD (see **Appendix 2**).

## 6.6 Other Finds

6.6.1 Other finds comprise two pieces of burnt, unworked flint (unknown date and origin), some modern glass, and a few tiny fragments of burnt animal bone (unidentifiable to species).

# 7 PALAEOENVIRONMENTAL EVIDENCE

## 7.1 Introduction

7.1.1 Five bulk samples were taken from features and deposits within the chapel enclosure for the retrieval of charred plant remains. Samples were taken from a ditch (207) in Trench 2 and layers within Trench 1 and 3. In addition two samples were taken from deposits of possible decayed wood in Trench 1 and were artefact sieved.

7.1.2 Bulk samples were processed by standard flotation methods; the flot retained on a 0.5 mm mesh, residues fractionated into 4 mm, 2mm and 1mm fractions and dried. The coarse fractions (>4 mm) were sorted, weighed and discarded. Flots were scanned under a binocular microscope at x10 to x40 magnification. Charred plant remains noted were given approximate counts and provisional identification. Nomenclature and taxonomic order follow Stace (1997). Samples which were artefact sieved were wet sieved through a stack of sieves from 1mm to 9.5mm.

## 7.2 Results

7.2.1 The results of the assessment are presented in **Table 2**. The samples produced moderate sized flots containing much charcoal. Recent roots were also noted in the samples, some of which were quite substantial and are likely to derive from the tree cover present on the Site. The presence of roots raises the possibility of mixing and contamination of the deposits.

7.2.2 Cereal remains were present in three samples: one sample from ditch (207), and one each from deposits encountered in Trenches 1 and 3. All three samples produced the same range of material: grains of barley (*Hordeum vulgare*) and oats (*Avena* sp.) and nutshell fragments of hazel (*Corylus avellana*). The deposit from Trench 1 (layer 115) produced a relatively large number of grains, most of which (139) were of barley. Charcoal was present in all five samples in fairly abundant amounts. A range of taxa were noted although identification of charcoal was not attempted. In addition a large number of fungal spores were present in all samples.

7.2.3 The two samples of possible decayed wood from deposits in Trench 1 produced charcoal only (40ml in context 127, 10ml in context 128). Charcoal from context (128) included round wood.

## 7.3 Discussion

7.3.1 Barley and oats are the staple traditional cereal crops of the Western Isles of Scotland and are recorded from deposits from the prehistoric period to the present day. The identification of these cereals is therefore to be anticipated from the Site. No evidence of cereal processing debris (weeds or chaff) was present, suggesting the grain was brought into the Site in a fully processed state, as might be expected of a monastic community. The presence of hazelnut shells suggests that the diet was supplemented by wild food resources.

7.3.2 While no cereal remains have been recovered from the *vallum* on Iona, pollen indicates the community cultivated its own cereals during the 8th and 9th century (Dickson and Dickson 2000). Excavation at a Cathedral Priory in Whithorn, Wigtownshire in south-west Scotland produced a remarkably pure deposit of about 200 barley grain and ten oat grains, sealed below timber of a church burnt between AD 840 and 845 (Dickson and Dickson 2000, 138). This deposit was presumably derived from fully processed grain ready for use. While scant, the evidence from Baliscate would appear to mirror those from other early monastic sites in Scotland, which suggests the religious communities were growing their own cereals of which barley appears to be the major cereal supplemented by oats. In this respect the religious communities reflect cereal economy of much of the secular population of Scotland. Waterlogged faecal material from the earliest, pre-Northumbrian

monastic deposits at Whithorn (AD 500-730) demonstrate that more exotic spices including coriander and dill were imported, possibly from the Mediterranean region as suggest by fragments of wine amphorae (Dickson and Dickson 2000, 137). It is possible that the barley and oats based cereal diet of the early monks was supplemented by more exotic flavours.

# 8 DISCUSSION

## 8.1 Prehistoric

8.1.1 The earliest phase of activity observed on the Site may be prehistoric in date, comprising evidence of agriculture in the form of the ard marks recorded in Trench 2, and a possible stone cairn in Trench 5. The ard marks were distinctively narrow (less than 0.05m wide), which is not particularly diagnostic of medieval or later ploughing, and these are therefore perhaps Neolithic or Bronze Age in date. The function of the cairn is unclear; it may be a burial cairn or it may be just a clearance cairn. The structure is slightly irregular as the possible kerb does not encompass the whole structure, and the position of stones may be purely coincidental, but it is possible that material was taken from the cairn to use in the construction of the buildings of the monastic complex. Without further excavation, a date or function for the cairn is unclear.

8.1.2 A number of prehistoric sites are known from Mull, including the Baliscate standing stones (NM499541) *c*. 280m to the east of the Site and a flint arrowhead recovered from near the stones (WoSASPIN 566), with several other standing stones and stones circles located around the island, including Ardalanish (NM378189), Ardnacross (NM 542491), Dervaig (NM439520) and Lochbuie (NM618252, NM617255).

## 8.2 Early Christian

8.2.1 Time Team were invited to Baliscate to investigate what would turn out to be just a small part of a much larger monastic complex. The identification of the surrounding monastic *vallum*; a physical and spiritual barrier separating the ecclesiastical from the secular, the approaching hollow-way, and entrance through the *vallum*, put the chapel in the middle of an enclosure measuring approximately 210m by 100m and covering an area of 1.37 hectares. The enclosure is tiny when compared to such as that on Iona, where by the 8th century the *vallum* surrounded an area of approximately 8 hectares (Fisher 1997, 185-6).

8.2.2 It is clear that Baliscate was never a large religious community, but considerable effort went into the preparation of the Site, to create a level platform for the chapel, by the construction of a *c*. 1m high revetment and the dumping of tons of earth to level the Site, and surround it with stone and turf bank for over half of its 500m perimeter.

8.2.3 The construction of the terrace provided not only a level construction platform but an elevated position, providing a vista across the Sound of Mull to mainland Scotland and Ardnamurchan, where St. Adomnán recalled St. Columba baptising the inhabitants (Smyth 1989, 113).

8.2.4 The earliest phase of the chapel comprised a timber sill beam structure, with one associated inhumation burial, radiocarbon dated to 610-690 cal. AD; this potentially places the burial within the lifetime of St. Adomnán (*c*. AD 627-704). The full extent of the timber chapel is unclear, as it was overlain by later construction. The timber chapel was perhaps smaller than the stone chapel that replaced it, or perhaps on a slightly different alignment or position - the associated grave was clearly sealed beneath the later walls.

8.2.5 Information regarding early Celtic Christian timber chapels is sparse – few have been excavated because they are generally found below existing stone structures; however, one has been excavated beneath the oratory at Illaunloughan in Munster (http://www.excavations.ie/).

8.2.6 On the Brough of Deerness off mainland Orkney, excavation revealed a pre-Norse timber-built chapel clad on two sides in stone, which as the site developed was rebuilt or consolidated in stone on all sides (Morris and Emery 1986, 301-74). It would appear that the nature of the stone structures was dependent on the acquisition of usable stone. At Deerness, stone that could be shaped was available, whereas at Speke Keeill on the Isle of Man, a probable 9th century chapel excavated in 2006 (Wessex Archaeology 2007) revealed use of unshaped stones, revetted with turf, and it is likely that a similar construction technique was utilised at Baliscate. The walls of the chapel appeared to have an earthen core, but it is also possible that the structure was partially revetted in turf as well.

8.2.7 The stone chapel appears to have been an entirely new build, sealing the earlier grave, with the construction of the *leacht* at the east end and a series of graves against the southern wall. No date was obtained for this phase of building although the stone cross fragment has been tentatively dated to the 8th century. The identification of the *leacht* is extremely rare in Scotland; most information on these structures comes from Ireland. This is not unexpected as the chapel probably has a probable association with St. Columba. However, on Iona, excavations on top of Tòrr an Aba to the west of the Abbey revealed a cross base not dissimilar in appearance to the *leacht* at Baliscate (Fowler and Fowler 1988, 18, illust. 6).

8.2.8 A number of *leachta* have been identified throughout Ireland, for example at Illaunloughan (Munster), Skelling Michael (Kerry), and Innishmurray (Sligo). The function of the *leacht*, however, is still not entirely understood and a number of uses are possible, from external altar to a founder's shrine or reliquary (Monk and Sheehan 1998, 105; O'Sullivan and Ó Carragáin 2008). The identification of the mortise hole to take an upstanding stone cross within the fabric of the *leacht* at Baliscate implies that they also acted as foundation bases for such crosses. This is confirmed by the association between *leachta* and stone crosses at Skellig Michael in Co. Kerry (http://www.environ.ie/en/Publications/Heritage/ManagementPlans/FileDownLoad,14828,en.pdf).

8.2.9 Like Baliscate, the *leacht* at Illaunloughan was covered with white quartz pebbles left as offerings (Monk and Sheehan 1998, 105). At Baliscate it was clear that the water worn pebbles, not all of them white quartz, had been left on top of the *leacht* and had been later incorporated into the overlying rubble layer as the structure collapsed or was demolished. No stones were found within the material of the structure; they were clearly brought in after its construction. The deposition of white pebbles is known from prehistoric

contexts although they are also intrinsically linked with St. Columba and the Celtic church throughout Dal Riata, the Isle of Man and the Western and Northern Isles of Scotland; St. Adomnán recounted the teachings of the founder and first Abbot of Iona and also recorded his travels, and in one particular chapter the use of a sacred white stone for healing the sick.

8.2.10 The chapel at Baliscate is likely to have had an association with Iona and was founded by followers of the teachings of St. Columba. One of the inhumation graves showed evidence of the Iona connection - the head end was marked by a headstone of Iona marble, and from the grave backfill came a fragment of red granite, similar to that found at Fionphort, on the south-west coast of Mull, facing Iona.

8.2.11 It is possible that there would have been more ancillary buildings within the monastic complex, but only a single building was observed. Constructed in a similar manner to the chapel with stone and earthen walls, the building in Trench 4 is likely to have been contemporaneous, but the lack of datable material makes this difficult to prove.

### 8.3 Medieval to Post-medieval

8.3.1 The abandonment and subsequent demolition of the chapel is not firmly dated, but activity in the medieval period (late 12th to 15th century) is implied by the pottery and the coin of Edward II. There is a possibility that the chapel was reused as a domestic structure, but the paucity of finds implies only temporary use of the Site, most probably only during demolition.

8.3.2 The chapel was extensively robbed of usable material to form the sheep fank and shieling to the west. No dating for this structure was recovered.

## 9 RECOMMENDATIONS

9.1.1 Summary details of the Site have been submitted to *Discovery and Excavation in Scotland*, to appear in the volume for 2009. No further publication is proposed at this stage. An on-line OASIS report will be completed for the project.

## 10 ARCHIVE

10.1.1 The excavated material and archive, including plans, photographs and written records, are currently held at the Wessex Archaeology offices under the project code 71503. The paper archive will be submitted to the National Monuments Record for Scotland. The artefacts are subject to Scottish Treasure Trove law, and will be reported to the Scottish Archaeological Finds Allocation Panel. It is hoped that the Panel will make the finds available to the Mull Museum, Columba Buildings, Main Street, Tobermory.

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**Table 1: Finds totals by material type and by trench (number / weight in grammes)**

| Material | Tr 1 | Tr 2 | Tr 3 | Tr 7 | Tr 8 | unstrat. | Total |
|---|---|---|---|---|---|---|---|
| Pottery | 23/200 | 7/76 | 13/34 | 1/7 | 1/5 | - | 45/322 |
| *?Prehistoric* | - | - | *2/8* | - | - | - | *2/8* |
| *Medieval* | *22/197* | - | *11/26* | *1/7* | *1/5* | - | *35/235* |
| *Modern* | *1/3* | *7/76* | - | - | - | - | *8/79* |
| Stone | 67/31821 | 3/867 | 1/68 | - | 1/166 | 10/976 | 82/33,898 |
| Worked Flint | - | 1/1 | 2/8 | - | - | - | 3/9 |
| Burnt Flint | - | 2/8 | - | - | - | - | 2/8 |
| Glass | - | 4/30 | - | - | - | - | 4/30 |
| Slag | 9/593 | 2/192 | 4/321 | - | - | - | 15/106 |
| Metal (no. objects) | 6 | 3 | 1 | - | - | 1 | 11 |
| *Coin* | *1* | - | - | - | - | - | *1* |
| *Copper Alloy* | - | *1* | - | - | - | - | *1* |
| *Iron* | *5* | *2* | *1* | - | - | *1* | *9* |
| Human Bone | frags | - | - | - | - | - | frags |
| Animal Bone | 6/3 | 4/3 | 2/1 | - | - | - | 12/7 |

**Table 2: Charred plant remains noted in the bulk samples**

| | Sample | 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|---|---|
| | Context | 208 | 307 | 115 | 209 | 210 |
| | Trench | 2 | 3 | 1 | 2 | 2 |
| | Feature | 207 | - | - | 207 | - |
| | Feature Type | Ditch | Deposit | Deposit | Ditch | ?wall? |
| | Volume (l) | 12 | 7 | 10 | 2 | 10 |
| | Flot volume (ml) | 200 | 350 | 350 | 250 | 60 |
| | % roots | 20 | 5 | 20 | 2 | 50 |
| | | | | | | |
| *Hordeum vulgare sl.* | Barley grain | 2 | 1 | 139 | - | - |
| *Avena* sp. | Oats, grain | 1 | 9 | 9 | - | - |
| Cerealia indet | Indeterminate grain | - | - | 3 | - | - |
| *Corylus avellana* L. | Hazelnut shell fragment | 5 | 20 | 5 | - | - |
| Fungal spore | | ++++ | +++ | +++ | ++ | +++ |
| Charcoal >4mm/2mm (ml) | | 40/30 | 120/50 | 80/40 | 80/30 | 20/10 |

## APPENDIX 1: Trench Descriptions

bgl = below ground level
CBM = ceramic building material (brick and tile)

| **TRENCH 1** | | | Type: Hand excavated |
|---|---|---|---|
| **Dimensions:** 12.5 by 6.2 | **Max. depth:** 0.60m | | **Ground level:** 106.78m aOD |
| **Context** | **Description** | | **Depth** |
| 101 | *Topsoil* | Current ground surface material, topsoil, and turf, dark brown loam with rare small granite pebbles and mud stone fragments. Identical to (102) and (103), overlies (110) and (112). Concentrated above main chapel structure. | 0-0.20m |
| 102 | *Topsoil* | Current ground surface material, topsoil, and turf; dark brown loam with rare small granite pebbles and mud stone fragments. Identical to (101) and (103), overlies (116). Concentrated above rectangular stone structure at eastern end of chapel. | 0.20m thick |
| 103 | *Topsoil* | Current ground surface material, topsoil, and turf; dark brown loam with rare small granite pebbles and mud stone fragments. Identical to (101) and (102), overlies (108). Concentrated above outer enclosure earthwork. | 0.20m thick |
| 104 | *Wall* | Southern wall of chapel building, heavily disturbed and robbed for reuseable material, most likely for the square structure to the east investigated in Trenches 2 and 7, (204) and (705). 3m long by 0.60m wide and 0.30m high within the trench and constructed of unworked granite boulders with inner core of mid reddish clay (126). Joined at its eastern end to south end of eastern chapel wall (105); there is no clear corner and it appears that chapel is sub-rectangular (with rounded corners) as opposed to rectangular (with squared corners). True dimensions of the wall difficult to ascertain; this was not resolved with the excavation of exploratory sondages. | 0.30m high |
| 105 | *Wall* | Main eastern wall of chapel, heavily disturbed by robbing in the same manner as (104). 3m long by 0.80m wide and 0.30m high, but again dimensions not clear due to the degree of robbing. | 0.30m high |
| 106 | *Structure* | Rectangular structure located at eastern end of chapel adjacent to wall (105) but not butting it. 2.20m long by 1.30m wide and 0.43m high (two visible courses), and constructed of unworked but natural squared granite blocks on average 0.40m x 0.28m x 0.17m in size, to create a rectangular stone box. Interior of structure packed with stone rubble (131), with clear evidence of a socket or rebate within the centre of the structure. (106) was interpreted as a *leacht*, a square platform outside the chapel, used as an altar or perhaps a shrine. Socket within packing (131) interpreted as the mortise hole to receive base of upstanding stone cross, confirmed following recovery of fragment of stone cross from (116), the demolition material overlying the *leacht*. | 0.43m high |
| 107 | *Wall* | Part of eastern wall of outer enclosing earthwork surrounding chapel; forms south side of eastern entrance into enclosure. Entrance would face directly towards *leacht* and upstanding stone cross situated above it. 1.40m long by 1.70m wide and a maximum of 0.70m high; survived to three rough courses of unworked granite blocks. No bonding material observed; wall was either dry stone or utilised local clay as bonding. Overlies (109/138); sealed by (108). | 0.70m high |
| 108 | *Subsoil* | Mid brown silty loam deposit with rare small mudstone inclusions, overlying wall (107), and sealed beneath (103). | 0.20m thick |
| 109 | *Deposit* | Mixed and mottled mid grey-brown clay sand with patches of yellow silty clay and rare small granite and mud stone inclusions. Material on which outer enclosure wall (107) is constructed, identical to (121/129/137/138/140). Revealed in sondage excavated against (107). Material is redeposited natural geology, repeated depositions | 0.50m thick |

| | | | |
|---|---|---|---|
| | | over a short period of time to create homogenous layer; part of artificial platform on which chapel and surrounding enclosure were constructed. Material banked behind the stone revetment structure recorded as (303) in Trench 3 just to the north. (109) is very similar to deposit (306) in Trench 3. Artificial terrace make-up layer, overlies (139) and sealed by (107). | |
| 110 | *Deposit* | Dark brown silty loam with common charcoal fragments. Post-demolition accumulation deposit following the robbing of useable stonework from chapel building, most likely to construct enclosure to west. Possibly incorporates material deposited at time of demolition and robbing. Paucity of domestic finds recovered implies only temporary activity and no reuse of site as settlement. Possibly identical to (112). Sealed by (101); overlies (111) and (114). | 0.22m thick |
| 111 | *Deposit* | Mid reddish-brown silty clay loam, material observed overlying possible floor surface (118) within interior of chapel. Probably derived from wall core material (126) of walls (104) and (105) and deposited during demolition. Identical to (113) and (115). Sealed by (110) and overlies (118). | 0.20m thick |
| 112 | *Deposit* | Dark brown silty loam with common charcoal fragments. Possibly identical to (110) but located on exterior of wall remains (104). Sealed by (101) and overlies (114) and (113). | 0.15m thick |
| 113 | *Deposit* | Mid reddish-brown silty clay loam, possibly identical to (111/115) but located on the exterior of wall remains (104). Sealed by (112). | 0.22m thick |
| 114 | *Rubble* | Mixed dark reddish-brown, derived from (110), (112) and (126), abundant large unworked granite blocks. Large rubble deposit of unrecyclable stonework from robbing of walls (104) and (105). Sealed by (110) and (112); overlying (105), (104), (126), (117/118). | 0.40m thick |
| 115 | *Deposit* | Mid reddish-brown silty clay loam, identical to (111/113), butts (105), observed in sondage and given separate context number for finds retrieval, | 0.23m thick |
| 116 | *Rubble* | Mixed dark reddish-brown, derived from (110), (112) and (126), abundant large, unworked granite blocks. Large rubble deposit of unrecyclable stonework derived from robbing of walls (104), (105) and *leacht* structure (106). Sealed by (102); overlies (106) and (131). | 0.40m thick |
| 117 | *Layer* | Light to mid reddish-brown silty clay with common mudstone fragments; possible floor surface located within interior of chapel. Equivalent to (118), sealed by (114). | - |
| 118 | *Layer* | Light to mid reddish-brown silty clay with common mudstone fragments, possible floor surface located within interior of chapel. Equivalent to (117), sealed by (111), and overlies (119), fill of grave (120). | 0.20m thick |
| 119 | *Grave fill* | Mid to dark reddish-brown silty clay; deliberate backfill deposit of grave (**120**); overlies skeletal remains (122). Redeposited material derived from (121) through which (**120**) is cut. Sealed by (118). | 0.30m thick |
| **120** | ***Grave*** | **Cut of partially revealed inhumation grave, rectangular in shape, 0.36m long and 0.30m wide and aligned either NW – SE or NE – SW (true alignment not ascertained in small sondage). Grave cuts (121), clearly earlier than chapel as it would extend beneath the eastern wall (105); possibly part of earlier timber phase of chapel. Contains skeletal remains (122) and backfilled with (119).** | **0.30m deep** |
| 121 | *Deposit* | Compact reddish-brown silty clay deposit; possibly identical to (109/129/137/138/140). Deliberate deposit of material to create artificial terrace on which chapel is situated. Cut by grave (**120**). | - |
| 122 | *Skeletal remains* | Remains of inhumation burial within grave (**120**); only skull fragments observed, and these were heavily degraded due to acid soil conditions. Appeared to be supine, with head at west, facing east. | - |
| **123** | ***Grave*** | **Cut of inhumation burial; cuts layer (137), appears rectangular,** | **-** |

| | | | |
|---|---|---|---|
| | | **1m long by 0.30m wide, depth unknown. Contains fragmentary skeletal remains (124); backfilled with (125). Possibly associated with number of burials located on southern side of wall (104).** | |
| 124 | *Skeletal remains* | Remains of inhumation burial within grave (**123**); heavily degraded with only teeth surviving. Sealed by (125). | - |
| 125 | *Grave fill* | Mid reddish-brown silty clay; deliberate backfill deposit to cover skeletal remains (124) within grave (**123**). Derived from (137). | - |
| 126 | *Deposit* | Mid reddish-brown silty clay layer interpreted as wall core material of walls (104) and (105), the robbing of which led to deposition of (111/113/115), 0.60m long by 0.65m wide in sondage through wall (104). | - |
| 127 | *Deposit* | Deposit of possible decayed wood, very dark brown-black, charcoal or decayed wood; 0.50m long by 0.30m wide and 0.08m thick; identical to (128). This linear spread of material is possibly evidence of earlier timber phase to the chapel, as sealed beneath (126), wall core of later stone-built phase. | 0.08m thick |
| 128 | *Deposit* | Deposit of possible decayed wood, very dark brown-black, charcoal or decayed wood, 0.50m long by 0.30m wide and 0.08m thick; identical to (127). This linear spread of material is possibly evidence of earlier timber phase to chapel, as sealed beneath (126), wall core of later stone built phase. | 0.08m thick |
| 129 | *Deposit* | Mid reddish-brown silty clay material, identical to (109/121/137/138/140); deliberate material laid down to create artificial terrace. Cut by (123), | - |
| 130 | *Structure* | Stone (possible Iona marble) grave marker, associated with E – W aligned grave (132), located at western end of grave. | - |
| 131 | *Structure* | Rubble core material within interior of *leacht* (106). Deliberately packed granite rubble used to create socket or mortise to receive an upstanding stone cross; mortise hole measured 0.52m long by 0.12m wide and 0.15m deep. | - |
| **132** | ***Grave*** | **Cut of a partially exposed probable grave, though no skeletal remains were observed, backfilled with (133). 0.80m long by 0.32m wide and 0.30m deep. Cuts (129).** | **0.30m deep** |
| 133 | *Grave fill* | Mid to dark reddish silty clay; deliberate backfill of grave (**132**). | 0.30m thick |
| **134** | ***Grave*** | **Cut of possible unexcavated cist grave located to the south of wall (104); contains stone lining (135) and backfill (136).** | **-** |
| 135 | *Stone lining* | Possible stone lining of unexcavated cist grave (**132**). | - |
| 136 | *Grave fill* | Mid to dark reddish silty clay; deliberate backfill of unexcavated cist grave (**134**). | - |
| 137 | *Deposit* | Mid reddish-brown silty clay material, identical to (109/121/129/138/140); deliberate material laid down to create artificial terrace. | - |
| 138 | *Deposit* | Mid reddish-brown silty clay material; identical to (109/121/129/137/140); deliberate material laid down to create artificial terrace. Overlies (139) and sealed by (107). | 0.50m thick |
| 139 | *Deposit* | Light grey clay sand; deliberate landscaping deposit. Sealed by (138) and overlies natural bedrock, decayed mudstone. | 0.29m thick |
| 140 | *Deposit* | Mid reddish-brown silty clay material, identical to (109/121/129/137/138); deliberate material laid down to create artificial terrace. | - |
| **141** | ***Grave*** | **E-W aligned grave; unexcavated.** | **-** |
| 142 | *Fill* | Deliberate backfill of grave (**141**). | - |
| **143** | ***Grave*** | **E-W aligned grave; unexcavated** | **-** |
| 144 | *Fill* | Deliberate backfill of grave (**143**). | - |

| **TRENCH 2** | | | Type: Hand excavated | |
|---|---|---|---|---|
| **Dimensions:** 5m by 2.6m | | **Max. depth:** 0.98m | **Ground level:** 105.80m aOD | |
| **Context** | **Description** | | | **Depth** |
| 201 | *Topsoil* | Topsoil, and turf, dark brown loam with rare small granite pebbles and mud stone fragments. Overlies (202) and (203). | | 0-0.15 |
| 202 | *Subsoil* | Mid reddish yellow-brown silty clay; probable subsoil deposit built up over time, adjacent to rubble dump (203); overlies (208). | | 0.21m thick |
| 203 | *Rubble* | Stone rubble deposit derived from 'fank' enclosure wall (204) and shieling walls (210) and (211). Spread initially interpreted as possible corn dryer, but on excavation proved incorrect. Layer overlies (211), (202), (204) and (210), and is sealed by (201). | | 0.35m thick |
| 204 | *Wall* | Main northern E-W aligned wall of the rectangular enclosure, observed to east of chapel. Initially thought to be remains of a cemetery enclosure but now interpreted as a fank (Scottish colloquialism for sheep enclosure). Approximately 12m long in total and 1.10m wide and 0.50m high, and built of unworked but smooth granite blocks on face, with rubble core. Fank wall bonded to shieling wall (210) and also bonded at eastern end to northern end of fank wall (705) recorded in Trench 7. (204) overlies (213) and is sealed by (203). | | 0.50m high. |
| 205 | *Layer* | Mid brownish-yellow sandy silt clay with small stone fragments, sealing (206), possibly reworked or variable natural. Cut by ditch (207). | | 0.05m thick |
| 206 | *Natural* | Mottled mid brown clay silt; sealed by (205), possibly equivalent to (213), and also possibly to (702) in Trench 7. | | - |
| **207** | ***Cut*** | **Cut of NW - SE aligned ditch cutting (205), 0.80m long by 0.68m wide and 0.55m deep; filled with (215), (214), (209) and (208). Unclear date or function, and unclear whether associated with chapel phase of Site or later use as animal stockade.** | | **0.55m deep** |
| 208 | *Fill* | Mid reddish-brown clayey silt, upper fill of ditch (207), overlies (209). Appears to be natural erosion/silting deposit into the ditch. | | 0.20m thick |
| 209 | *Fill* | Dark grey-brown clay silt fill of (207), overlies (214) and sealed by (208); possible evidence of wood decaying *in situ*. | | 0.02m thick |
| 210 | *Wall* | Eastern wall of small hut located in north-west corner of sheep fank,1.40m long by 0.60m wide and 0.69m high, formed of 3-4 random courses of unworked granite blocks. Corresponds with (211) to form shepherd's hut or shieling. | | 0.69m high |
| 211 | *Wall* | Southern wall of small hut located in north-west corner of sheep fank, 2.1m long by 1.08m wide and 0.43m high, formed of 3-4 random courses of unworked granite blocks. Corresponds with (211) to form shepherd's hut or shieling. | | 0.43m high |
| 212 | *Group* | Group number for three or possibly four ard marks observed cutting (213), roughly aligned north-south. Date unclear, but possibly prehistoric. | | - |
| 213 | *Natural* | Mottled mid brown clay silt, cut by (212), possibly equivalent to (206) and also possibly to (702) in Trench 7. | | - |
| 214 | *Fill* | Mid orangey-brown silty clay fill of (**207**), 0.45m thick, possibly natural erosion material. Sealed by (209) and overlies (215). | | 0.45m thick |
| 215 | *Fill* | Lowest recorded fill of (**207**), orange-brown silty clay fill. | | 0.05m thick |

| **TRENCH 3** | | | Type: Hand excavated | |
|---|---|---|---|---|
| **Dimensions:** 4m by 2m | | **Max. depth:** 0.80m | **Ground level:** 106.39-105.49m aOD | |
| **Context** | **Description** | | | **Depth** |
| 301 | *Topsoil* | Dark grey silty loam with occasional small angular stones; overlies (304). | | 0.20m thick |

| | | | |
|---|---|---|---|
| 302 | *Deposit* | Mid brown silty clay; redeposited layer banked up against southern side of revetment structure (303). Homogenous deposit of repeated layers of material to create artificial terrace on which chapel and associated enclosure were constructed. Equivalent to (306). | 0.29m thick |
| 303 | *Revetment* | Stone-built revetment wall, creating an artificial terrace, constructed of unworked granite blocks with no mortar; 2.03m long by 2.20m wide and 1m+ high. Revetment overlies (308); deposits (307) and (306) banked up against it. | 1m high |
| 304 | *Rubble* | Stone rubble tumble deposit derived from revetment structure (303), which overlies (306) to south of revetment. | - |
| 305 | *Rubble* | Stone rubble deposit derived from (303) and located to north of revetment; sealed by (301). | - |
| 306 | *Deposit* | Mid brown silty clay, compact deposit. Repeated depositions of similar material over a short phase of time to create artificial terrace on which chapel was built. Equivalent to (302), Seals layer (307). | 0.30m deep |
| 307 | *Deposit* | Dark grey silty clay with charcoal patches. Earlier layer of redeposited material to create artificial terrace, sealed by (306) and banked up against (303). | 0.20m thick |
| 308 | *Layer* | Light brown friable silty clay with no inclusions. Possible earlier ground surface on which terrace was constructed, overlain by revetment structure (303), and seals (309). | 0.10m thick |
| 309 | *Natural* | Light brown, very firm, compact silty clay natural below (308). | -` |
| **310** | ***Cut*** | **Cut of possible feature revealed in plan, cutting (309). Unexcavated; 0.60m long by 0.30m wide and oval in shape.** | **-** |
| 311 | *Fill* | Light to mid reddish-brown silty clay; upper fill of unexcavated feature (**310**). | - |

| **TRENCH 4** | | | Type: Hand excavated |
|---|---|---|---|
| **Dimensions:** 4.7m by 3.5m | **Max. depth: 0.35m** | | **Ground level:** 104.64m aOD |
| **Context** | **Description** | | **Depth** |
| 401 | *Topsoil* | Mid reddish-brown silty loam; current topsoil and ground surface material within area of managed woodland. Overlies (402). | 0.22m thick |
| 402 | *Subsoil* | Light reddish-brown loose silty clay, mix of degraded bedrock (regolith) and overlying material, seals (403). | 0.10m thick |
| 403 | *Rubble* | Loose rubble material derived from wall (404), unworked granite stones and blocks. Sealed by (402). | - |
| 404 | *Wall* | South-western corner of roughly NW – SE aligned building. Walls are slightly curving, indication that building was sub-rectangular (with rounded corners) in shape and not rectangular. Formed of unworked granite blocks; two parallel faces with rubble and clay core. 2.6m long by 1.02 m wide and 0.58m high. No associated floor surface observed. Sealed by (403), built with construction cut (**405**). | 0.58m high |
| **405** | ***Cut*** | **Possible construction cut for wall (404), only partially revealed cutting through (406), cutting into natural to create level construction area, wall flush with edge of cut terrace.** | **-** |
| 406 | *Natural* | Light reddish compact silty clay natural. | - |

| **TRENCH 5** | | | Type: Hand excavated |
|---|---|---|---|
| **Dimensions:** 3.6m by 2.5m | **Max. depth:** 0.12m deep | | **Ground level:** 106.14m aOD |
| **Context** | **Description** | | **Depth** |
| 501 | *Topsoil* | Mid reddish-brown humic silt of current ground surface material; overlies large mound of stones, including deliberate placed stones around a large glacial erratic boulder. | 0.12m thick |
| 502 | *Subsoil /natural* | Reddish-brown with orange mottling; fine-grained silty sand layer, possible subsoil or maybe regolith, degraded bedrock underlying (503). | - |
| 503 | *Glacial* | Large natural glacial erratic boulder which had become the focus | 0.93m high |

| | | | |
|---|---|---|---|
| | *erratic* | point for a mound of stones. Unclear whether mound simply clearance cairn with stones banked up around (503), as aspects of structure point to possible kerbed cairn with (503) incorporated into the kerb (504). 0.77m long by 0.90m wide and 0.93m high. | |
| 504 | *Structure* | Possible kerb (of kerbed cairn?) incorporating glacial erratic (503). Curving line of unworked granite stones, infilled with smaller stones (505) and earthen make-up (506) to form the main body of ?cairn. | - |
| 505 | *Structure* | Deposits of small *c*. 0.20m by 0.20m by 0.10m granite stones to form the main body of ?cairn structure, held in place by possible kerb (504). Main body 14.60m by 1.60m and roughly oval in shape. | - |
| 506 | *Deposit* | Mid to dark reddish-brown silty sand; overlies (504) and sealed by (505). Possible earthen core to the ?cairn, which would be unusual if the cairn is Bronze Age in date. | - |

| **TRENCH 6** | | | Type: Hand excavated |
|---|---|---|---|
| **Dimensions:** 5.8m by 2.40m | **Max. depth:** 0.20m | | **Ground level:** 106.90m aOD |
| **Context** | **Description** | | **Depth** |
| 601 | *Topsoil* | Current topsoil and moss covering earthwork. Dark brown silty loam with reddish hue; 0.20m thick. Overlies (603). | 0-0.20m |
| 602 | *Structure* | Stone revetment structure, 7m long by 1.20m wide and 0.60m high, formed of unworked granite blocks, creating a stone revetment. Deposit (603) banked up against it. (602) and (603) form north-south earthwork which can be traced on the ground and seen on a 1958 aerial photograph to surround the chapel complex. This is monastic *vallum* separating the ecclesiastical from the secular. There are two breaches through the earthwork; one appears to be a later breach, but earlier is potentially original entrance into monastic enclosure. | 0.60m high |
| 603 | *Deposit* | Mid brown silty loam material; deliberately banked up against stone revetment (602) to form the monastic *vallum*. | 0.70m high |
| 604 | *Layer* | Light to mid grey mudstone fragment layer; overlies (605), located at northern breach through *vallum*. Possibly metalled surface leading to hollow-way which extends away to west, visible on ground and on 1958 aerial photograph. | - |
| 605 | *Layer* | Mid reddish-brown silty loam; possible old ground surface on which *vallum* earthwork constructed. | - |
| 606 | *Rubble* | Rubble collapse associated with later breach through *vallum*; overlies (603). | - |

| **TRENCH 7** | | | Type: Hand excavated |
|---|---|---|---|
| **Dimensions:** 1.20m by 1m | **Max. depth:** 0.43m | | **Ground level:** 106.07m aOD |
| **Context** | **Description** | | **Depth** |
| 701 | *Topsoil* | Dark brown humic silty clay with frequent stones. Overlies (705). | 0.20m thick |
| 702 | *Layer* | Mid brown clay silt; possible old ground surface material; overlies (703), with (705) constructed upon it. | 0.13m thick |
| 703 | *Layer* | Mid orange-brown clay silt; possible subsoil deposit; overlain by (702) and seals (704). | 0.10m thick |
| 704 | *Natural* | Mid yellow-brown silty clay natural deposit; sealed by (703). | - |
| 705 | *Wall* | Eastern wall of sheep fank. 1m wide and 0.50m high; built from unworked, naturally squared or rounded granite blocks, two skins infilled with rubble. Bonded at northern end to east end of wall (204). | 0.50m high |

| **TRENCH 8** | | | Type: Hand excavated |
|---|---|---|---|
| **Dimensions:** 3.10m by 1m | **Max. depth:** 0.40m | | **Ground level:** 106.65m aOD |
| **Context** | **Description** | | **Depth** |
| 801 | *Topsoil* | Dark brown silty clay topsoil/ground surface material; overlies stone rubble (802) at entrance into chapel through northern wall. | 0.20m thick |

| | | | |
|---|---|---|---|
| 802 | *Rubble* | Dark grey brown silty loam with abundant granite blocks. Collapse/demolition material from northern wall of chapel. Suggested that rubble is a deliberate blocking of entrance, but this is unclear. Rubble butts doorway structure (803); seals possible floor surface (804). | 0.20m thick |
| 803 | *Structure* | Unworked but roughly rectangular stone block located on western side of entrance into chapel through northern wall. Only partially revealed, possible door jamb. Two courses visible but could not be investigated due to time constraints. | 0.20m high |
| 804 | *Surface* | Possible floor surface; flat mudstone flags; only partially revealed below rubble collapse (802). | - |

## APPENDIX 2: Radiocarbon report

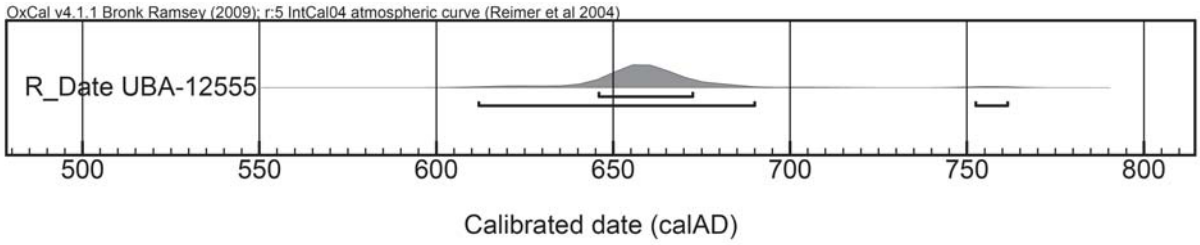
A fragment of skull from an inhumation burial grace (120) was submitted for radiocarbon dating at $^{14}$CHRONO Centre, Queens University, Belfast. The burial was seen to be associated with an earlier timber phase of the Chapel, predating the stone built structure.

The radiocarbon determination (UB-12555, 1365±29 BP; **Table 3**; Fig. 1) was calibrated within OxCal4.1.1 (Bronk Ramsey 2001; 2009). The calibrated date for the burial, 610-690 cal. AD (at 93.9% probability), suggests that the earlier timber phase dates to around the 7th century AD.

**Table 3: Radiocarbon measurements from the inhumation in Grave 120**

| Feature/ Context | Material | Id. | Lab ref. | $\delta^{13}C$ | Date BP | calibration AD | | |
|---|---|---|---|---|---|---|---|---|
| | | | | | | 1 sigma 68.2% | 2 sigma (94.4%) 93.9% | 1.5% |
| Grave 120 (119) | human bone | Skull cranium fragment 5.7 | UB-12555 | -22.1‰ | 1365±29 | 645-675 cal. AD | 610-690 cal. AD | 750-765 cal. AD |

**Figure 10: Probability distribution for date UB-12555 from Grave 120**

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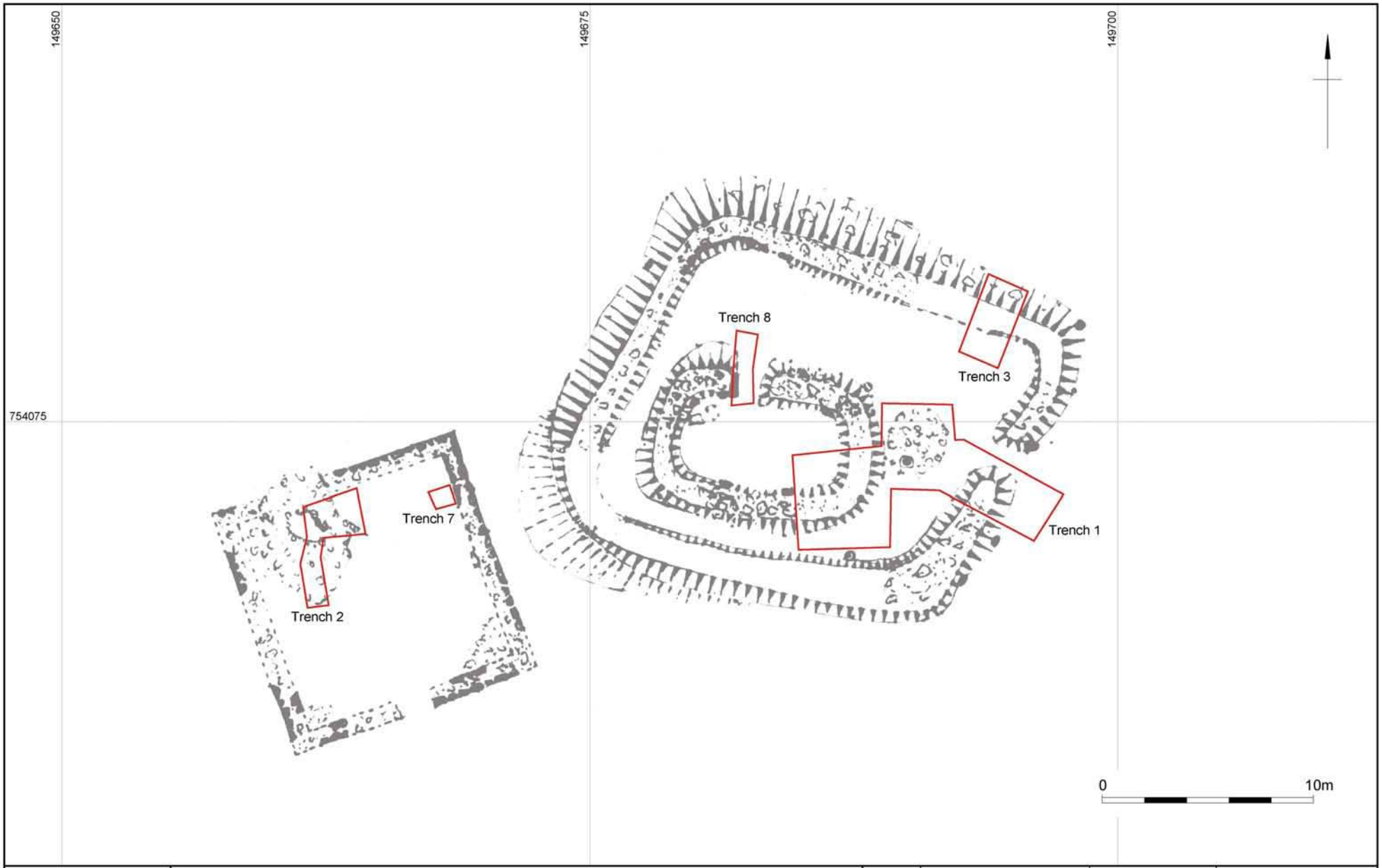
Site location and trench plan, showing geophysical survey

Figure 1

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Site survey image NM45SE25 courtesy of RCAHMS.


Evaluation trench

RCAHMS survey

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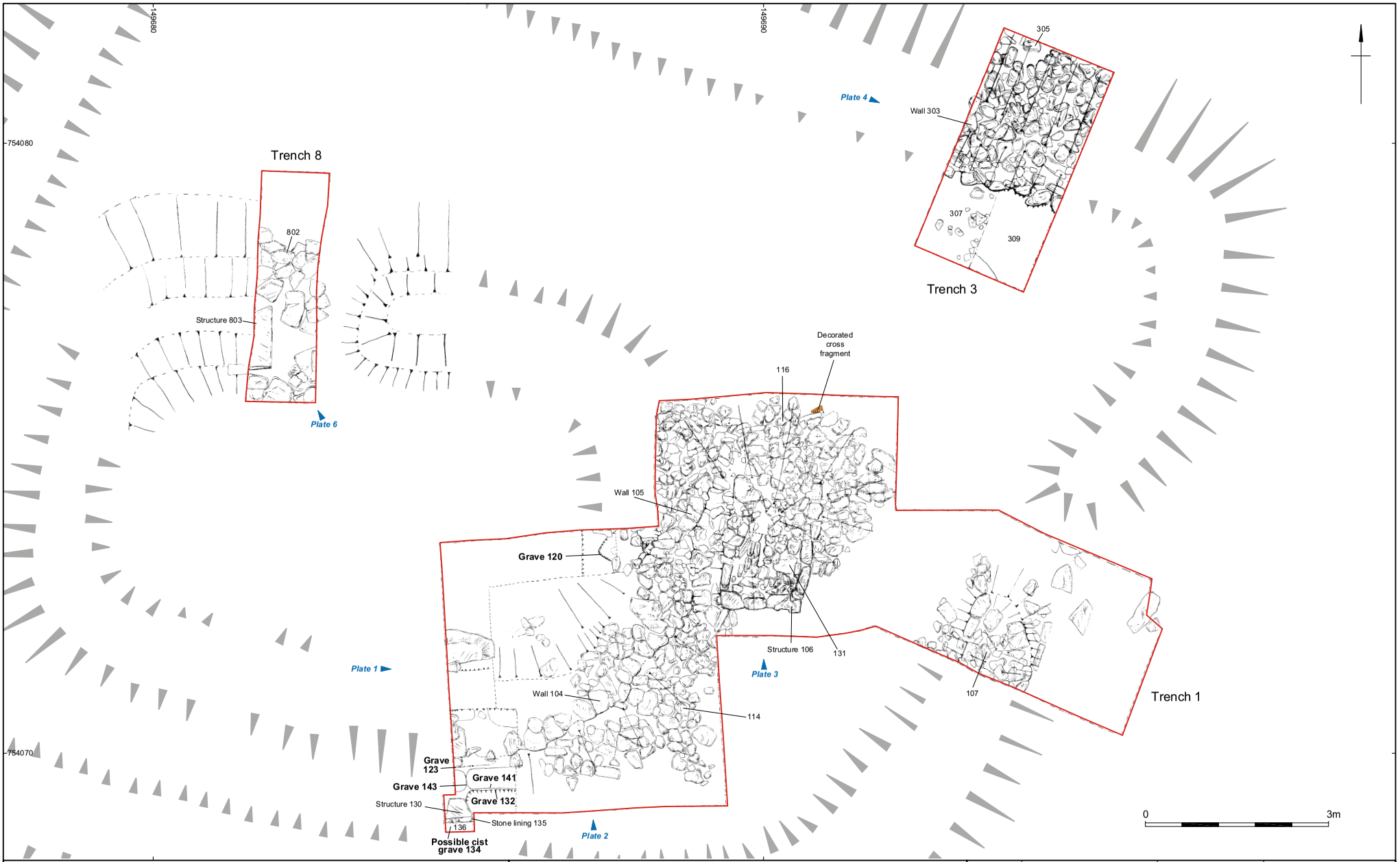
Trenches and the RCAHMS survey of October 2008

Figure 2

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Evaluation trench
Plate direction
RCAHMS survey

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Trenches 1, 3 and 8: plan

Figure 4

Plate 1: Pre-excavation plan of Trench 1, view from west

Plate 2: Pre-excavation plan of Trench 1, view from south

Plate 3: Post-excavation plan of *leacht* 106 showing mortise hole, view from south

Plate 4: Pre-excavation plan of Trench 3, view from west


Plate 5: West-facing section of Trench 3

Plate 6: Trench 8, view from south-east

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Trenches 1, 3 and 8: photographs

Figure 5


Plate 7: Trench 7, view from west

Plate 8: Gully 207, view from south-west

Plate 9: Ard marks 212, view from south-east

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Evaluation trench
RCAHMS survey
Plate direction
Ard marks

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Trenches 2 and 7: plan and photographs

Figure 6

149720

149730

149740

149750

754060

754050

Plate 11

Trench 5

Structure 505

Structure 504

Plate 10: Trench 4, view from south-west

Plate 11: Trench 5, view from north-east

Trench 4

Wall 404

Plate 10

0

5m

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Evaluation trench

Plate direction

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Trenches 4 and 5: plan and photographs

Figure 7

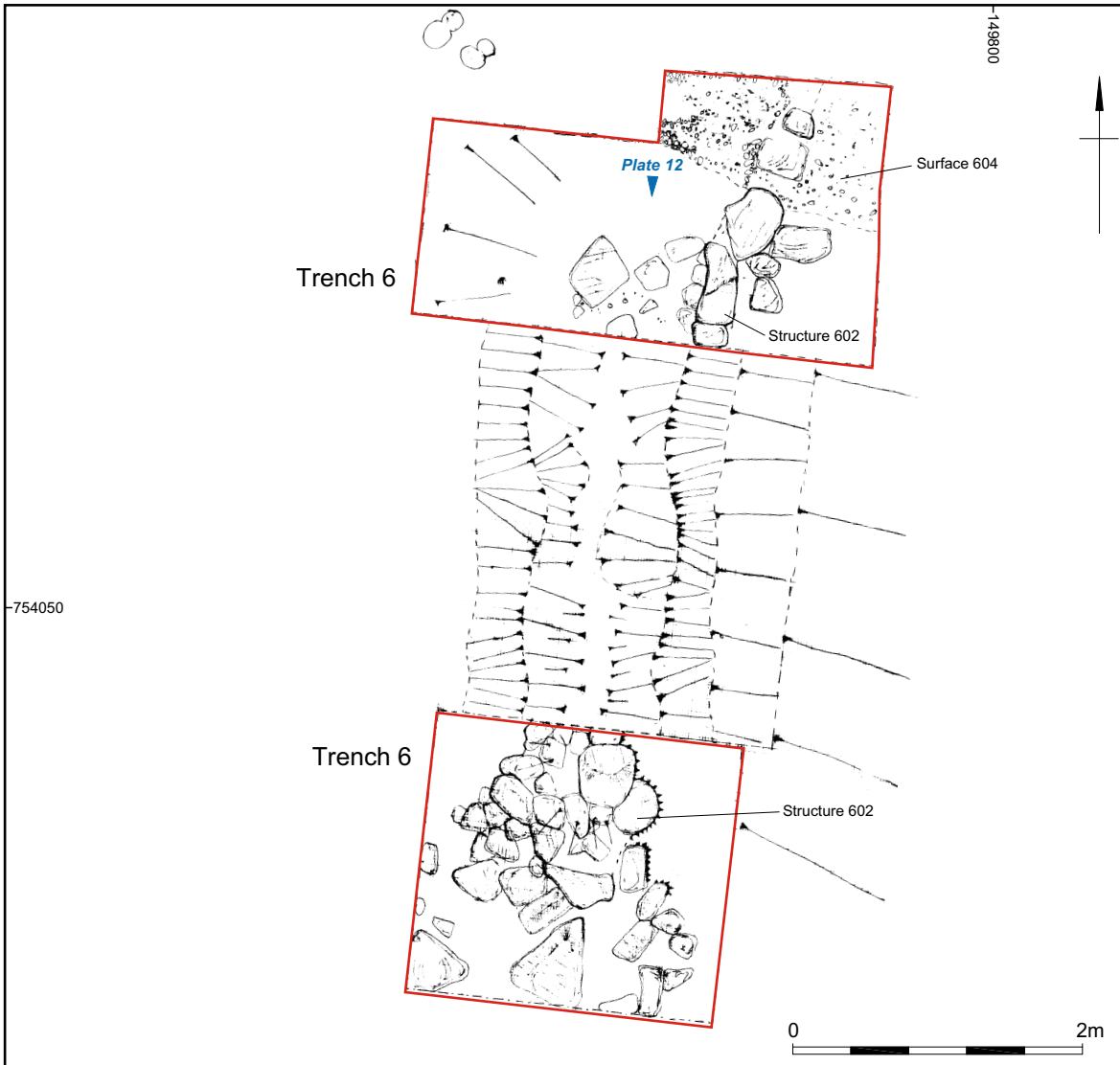


Plate 12: North facing section through *vallum* 602

Evaluation trench

Plate direction

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Trench 8: plan and photograph

Figure 8


Plate 13: Fragment of decorated cross (object 149)



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Figure 9

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