Culross Palace Culross, Fife

Historic Building Recording and Analytical Assessment CUR/12/1

for

The National Trust for Scotland

January 2013



Culross Palace on a sunny March morning, 2012



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Historic Building Recording and Analytical Assessment

Acknowledgements

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Historic Building Recording and Analytical Assessment

Historic Building Recording and Analytical Assessment CUR/12/1

by Kenneth Macfadyen, Tanja Romankiewicz and Tom Addyman

for National Trust of Scotland

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1. Introduction

i. General

Addyman Archaeology were contracted by The National Trust for Scotland (NTS, contact Dr Shannon Fraser) to urgently respond to Historic Building Recording requirements during reharling works scheduled for the North Range of Culross Palace, Culross, Fife (NGR NS 98515 85951, NMRS No. NS98NE 12; Category A listed building HB No. 23983; Scheduled Ancient Monument site). Recording works were to include a full drawn record of the exterior elevations to the north, west and east, to be undertaken within a limited window of opportunity following removal of the existing cement harling and in advance of the reharling. The south elevation was not stripped as part of the current works; the north elevation had already been stripped in 2007 to allow time for the masonry fabric to dry out. An initial recording of the north elevation had been undertaken by Kirkdale Archaeology (Kirkdale 2012).

In order to fit in with the tight works schedule the archaeological recording works could only be undertaken within a short time frame. It was thus decided to limit the scope of works to the following tasks:

- Minimal desk-based research of readily available sources
- Drawn and photographic record of the scaffolded elevations of the west, east and north (main building and east extension), and the east gable of the east extension. In addition the east gable elevation (ground and first floor level) of the main building (north range) was recorded; this is now an internal elevation, within the east extension.
- Details (photographs or drawn as part of the main drawn record) of interesting features
- Monitoring of the opening of pockets at the eaves of the original roof structure to investigate for evidence of earlier roof treatments
- Analytical assessment of the building, identified through a *pro forma* description, context by context, and marked on at least one drawing complemented by a written account of the analytical assessment of building phases and development of the structure
- Recommendations for further work

A previously-established budget also limited the amount of post-fieldwork investigation possible, and it was only possible within the present report to assess readily available material. Further detailed research or ground investigations might be required in order to test some of the interpretations presented here, these based on current evidence.

ii. Methodology

Site works were undertaken between 6th - 30th March, involving various site visits programmed to coordinate with the stripping of the cement render that was being undertaken at the same time. However, the ongoing stripping works were never an obstruction to the archaeological recording and good co-operation with the contractor (Little and Davie, contact Alison Davie) allowed for sufficient time to record the building to the required detail.

A full photographic survey was undertaken of the stripped facades to the north, west and east of the main North Range, the latter being now within the eastern extension. The interior and exterior elevations of the east gable wall and the north wall of the eastern extension were similarly recorded photographically, see *Appendix B*. Because of the cement stripping works the building was fully scaffolded on all facades to be recorded, which meant that the photographic survey was rather piecemeal, and it was not possible to produce a full view of all the stripped facades. The cement harl also proved in places so strongly bonded that it could not be fully removed without substantial damage to the original stonework and surviving lime mortar underneath. In places small patches of cement mortar had to be retained, which occasionally obscured fully conclusive archaeological investigations. Underlying cement pointing generally remained in place, this reducing the ability to read the phasing complexities of the building considerably.

The scaffolding, however, allowed for detailed drawn recording of the stripped stonework. This was undertaken by hand, with field drawings on waterproof drafting film produced to a stone-by-stone level at 1:20. The scale of the field drawings was sufficient to record all architectural details within their contextual setting; no separate detail drawings at a different scale were required. Construction breaks, infilling, levelling and similar evidence documenting the development of the building were recorded in the field, directly on the field drawings. A detailed context record of all such features and associated building phases was produced and is appended (*Appendix C*).

The field record is complemented by a brief Desk-Based Assessment of readily available historical sources. The NTS, and William Napier in particular, have very helpfully provided additional historic photographs, drawings and documents, which were already part of the Trust's archive of the building. A brief summary is also given describing archaeological investigations at the site, as reported over the last twenty years, see *Appendix A*.

Based on the assessment of the readily available sources and in particular the physical evidence of the building fabric as exposed, the following interpretation of the development of Culross Palace has been produced. The new findings allow for some wider observations of the site's original layout and its 17th century extent, some of the evidence for which might still survive below ground and would best be tested by ground investigation. It is hoped that the results of the new archaeological analysis adds to our understanding of the site, and has demonstrated the potential for further research.

The report will be archived with NTS and RCAHMS, and an OASIS record (OASIS ID addymana1-136588) will be submitted on completion of the final report.

2. Analytical assessment of the development of the building

i. General

The complex of buildings at Culross Palace presents itself today as "a unique example of a merchant's house of the early seventeenth century" (Sked 2003, 5). However, the complex represents several phases of construction from the late 16^{th} century onwards, extensive remodelling, some reduction, and, from the 1920s onwards, a number of episodes of conservation works. The external harl finish in a matching colour scheme, the pantiled roofs throughout, and the courtyard enclosure wall gives the site a sense of 'historical unity' that is more apparent than real (*Figure 1* and *Figure 2*). John Gifford assesses this unity as "slightly spurious" and concludes that there was "no evidence of grand architectural intent" in the creation of the "compound of buildings" (1988, 154).

The Palace was built by the merchant and mine-owner Sir George Bruce of Culross in the late 16^{th} and early 17^{th} centuries. Gifford assumes that Bruce acquired and developed the site piecemeal to create his town mansion (ibid). The reference to the complex as a Palace is, according to the NTS (the current owner) a 19^{th} century misinterpretation of the title deeds (Sked 2003, 5) – perhaps a misreading of the word *place*. However MacGibbon and Ross assume that the 'palace' association appeared with James VI's visit in 1617 (1887, 432). The National Trust's information brochure on "Culross – a short history of a Royal Burgh" states:

"The house was never a royal residence, although King James VI was a guest of Sir George Bruce several times. Original title deeds refer to the building as the Great Lodging, and it certainly would have been the most impressive burgess tenement in the town at that time, with space for a courtyard, stable block and garden as well as a house with room to expand if necessary". Sked 2003, 5

The archaeological evidence of a series of small-scale ground investigations and the historic building recording exercise reported here (see below and *Appendix A* for discussion of archaeological investigations) certainly demonstrates that there had been successive expansion and contraction, this evidently reflecting both developing fashion and financial means.

The complex today consists of a roughly square plot with buildings bounding its northern and western sides and a garden beyond on the terraced up-sloping ground to the north. This L-shaped arrangement creates a rectangular courtyard to the southeast, accessed from the main street through a gateway in the centre of its south side. The two building ranges are, however, not physically connected, but separated by a small, almost square courtyard in the re-entrant angle in the northwest. The northern part of the western range and the two surviving elements that form the North Range lie at an almost perfect right angle, aligned with the cardinals.

The West Range is identified as the first of Bruce's buildings, its construction dated to 1597 by a carving (date and Bruce's initials) on its central dormer to the south, facing the main street. The North Range, the subject of the present building recording exercise, has been dated to 1611 according to the carving on the easternmost dormer of its south elevation.

However according to Gifford the oldest surviving fabric of the complex is earlier than these date stones suggest, and is contained within the present West Range. He identifies an earlier two storey building, "apparently consisting originally of a hall and chamber above a kitchen and store", which was remodelled by Bruce in the late 16th century. Gifford also assumes that the L-shaped block to its S, now creating a U-shaped ensemble together with the earlier West Range, was built at around the same time (1988, 154). The earliest building fabric on site is therefore assumed to be of mid-to-late 16th century date, if not earlier.

The buildings abutting the West Range to the north are most likely contemporary with Bruce's remodelling at the very end of the 16th century (Gifford 1988, 155). This involved the construction of a turnpike stair against the north elevation of the West Range, presumably directly associated with a raising of the original building. It seems likely that a short period elapsed between the construction of the turnpike stair and the addition of the kitchen and bake house block to the northwest and the northern jamb to the east; otherwise one might assume that the stair would have been incorporated somehow more elegantly within the northern jamb. However, MacGibbon & Ross comment on the turnpike stair arrangement for the West Range as very well organised:

"The turnpike stair at the back is so continued as to give access to the hall, the owner's room, and the back bedroom, while it also communicates directly with the kitchen, the wine-cellar and the back court on the ground floor." MacGibbon & Ross 1887, 435.

Although a detailed analysis of the western ranges of the building complex could not be included in the present work, it may hold some relevance for the understanding the construction history of the North Range.



Figure 1 – View of Culross Palace from SE. The 1597 West Range is the main building on the left, showing the three dormers. The North Range sits to the north / right with its south façade of four dormers.



Figure 2 – View of Culross Palace from NW, the rear garden, before the stripping of the W gable. The N elevation had already been stripped in 2007. The rear of the West Range complex and inner courtyard below are shown to the left.

Gifford's description of the North Range reads as follows:

"The main courtyard's N side is filled with a detached three-storey four-bay block. Pedimented dormerheads dressed up with scrolls and rose and thistle finials; one has the initials S G B (for Sir George Bruce), another the date 1611. Lower two-storey extension to the E. The interior is remarkable for the surviving wealth of its painted decoration." Gifford 1988, 155f.

When David MacGibbon and Thomas Ross visited Culross Palace before 1887, they commented on Bruce's remodelling of an apparently earlier building, now incorporated in the present structure:

"This part of the building, being of somewhat later date than the main mansion [i.e. the West Range], is probably an addition raised over the stables in order to provide enlarged accommodation. MacGibbon & Ross 1887, 435.

MacGibbon & Ross also comment on the then condition of the North Range in the 1880s. Their commentary corresponds well with the photographic evidence available for this period (see *Figure* 30)¹:

"This building has remained almost quite unaltered till the present day. It now stands untenanted and is rapidly going to decay. The roofs are fast falling in, and the old painting will soon be a thing of the past.

It is melancholy to see such an interesting structure thus left to its fate when a few pounds judiciously applied in time might save this valuable monument for many years. MacGibbon & Ross 1887, 435.

The National Trust took over the buildings in 1932. Architect Ian Lindsay commented on the Palace in 1959 as part of his survey of Culross for the NTS:

During this period [1931-1959] much has been done to restore and to rehabilitate the Royal Burgh. Soon after the National Trust for Scotland was founded in 1931 with its small legacy it acquired the Palace and asked the Ministry of Works to accept it under Deed of Guardianship thus securing its preservation. [...]. The Ministry of Works have through these years spent much on the Palace, the Pilgrim Trust has supported the National Trust [...]. That so much has already been expended on Culross is the strongest argument for planning and securing the necessary funds for completing the development of the Royal Burgh.

Lindsay 1959, 5-6 (note 16th July, 1959).

- *ii. Historical*
- a. Introduction

The constraints of the project dictated that little original research into primary historical sources could be undertaken. Readily accessible material examined as part of a more general Desk-Based Assessment included ground and first floor plans as published by MacGibbon & Ross in 1887, and a set of plans, sections, elevations and details of dormers now held by RCAHMS, dated 1904/14. Modern survey drawings of floor plans were made available by NTS.

¹ It may even be that the unprovenanced photographs of 1880s photographs relate to MacGibbon & Ross' visit.

An excellent sequence of historic photographs starting from about 1883 survives, showing the building at various stages through the late 19th century, 1920s, 1930s, 1940s, and in more recent times, before the most recent refurbishment occurred in the 1990s. Unfortunately a number of these photographs bear no particular dating information, and their period can only be estimated by circumstantial evidence.

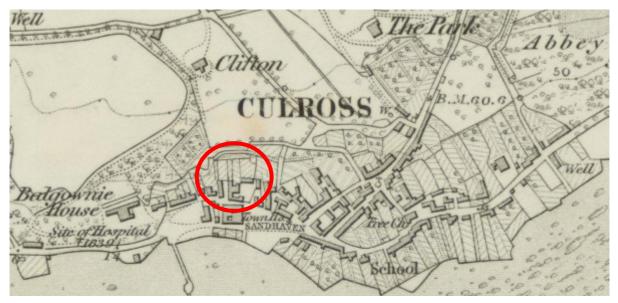


Figure 3: First Edition OS Map, six-inch scale, Perthshire, Sheet CXLII, surveyed 1861, published 1866. NLS.

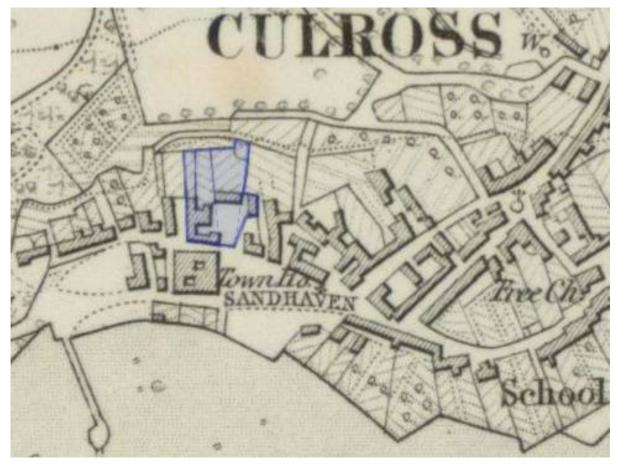


Figure 4: Detail of above : showing three plots. NLS.

b. Cartographic

A brief assessment of historic maps showing Culross was undertaken. The 1^{st} Edition Ordnance Survey Maps at six-inch scale and at 25-inch scale show the courtyard and the western and northern ranges to apperently form one building plot; the six-inch map and the upper part of the 25-inch map depict subdivisions of the cultivated area to the north, separated into three separate enclosures (*Figure 3, Figure 4* and *Figure 5*).² On the 1904 plan by RCAHMS, discussed below (*Figure 12, Figure 13* and *Figure 14*), the W wall of the North Range in particular corresponds with the NNE / SSW alignment of the easternmost enclosure boundary as shown on the 1^{st} Edition OS six-inch map. The western enclosure boundary, however, seems more NNW/SSE aligned. The surviving boundaries and alignments seemingly reflect Gifford's statement that the site was acquired and built up subsequently (see above). That the wider Culross Palace site is an amalgamation of a number of pre-existing burgage plots seems likely – maybe as many as four were conjoined. If this were the case the western 'plot' would still seem to be relatively intact in plan. Possibly the earliest stage of amalgamation was between this one and the plot on its eastern side. A further two plots – corresponding to the width of the present courtyard - may have been added subsequently, possibly at the beginning of the 17th century, as suggested by the dated dormer on the North Range.

While it is possible that the 1st Edition OS indicates that the terraced garden to the rear still preserved the original burgage plot boundaries until the last quarter of the 19th century, it is alternatively suggested that the enclosures as depicted represent different areas within an historic garden (e.g. a flower garden, a productive garden, orchard areas, etc.), or may simply illustrate the later subdivision of the palace into separate tenancies, some with discreet garden areas.

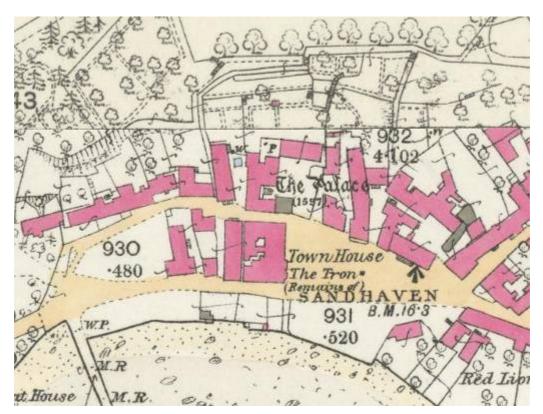


Figure 5 - First Edition OS Map, 25-inch scale, Perthshire, Sheets CXLII.8 and CXLII.4, surveyed 1861, published 1866. The more detailed map does not show the plot division in the garden area. NLS.

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 $^{^{2}}$ It seems that for the 25-inch scale the subdivision markers were left out, perhaps accidentally and were simply not continued down from the sheet above.

By the time the 1^{st} Edition OS map was revised (1895), the outbuilding to the E (the so-called Garage Bothy) had been separated from the courtyard ensemble and a small square structure had been built to the S of the E extension. The plot boundaries at the rear had been dissolved (*Figure 6* and *Figure 7*).

The 1904 plan also shows that the westernmost part of the western building complex surrounding the West Range, was separated by a narrow corridor; their alignment slightly off to the NW/SE similarly corresponding with the westernmost burgage plot boundary as depicted on the 1st Edition OS map. It is even possible that the narrow corridor mirrors the position of an earlier pend, that separated the westernmost from the central burgage plot.

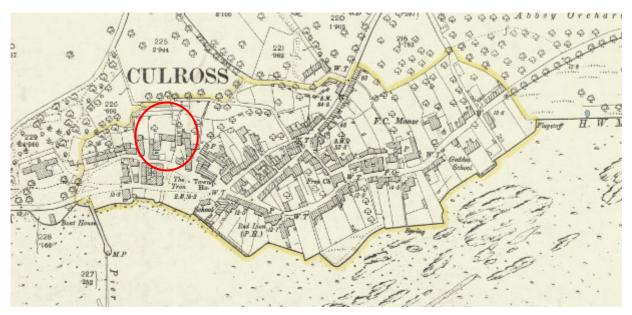


Figure 6: Second Edition OS Map, 25-inch scale, Fifeshire, Sheet 037.12, revised c1895, published 1896. NLS.

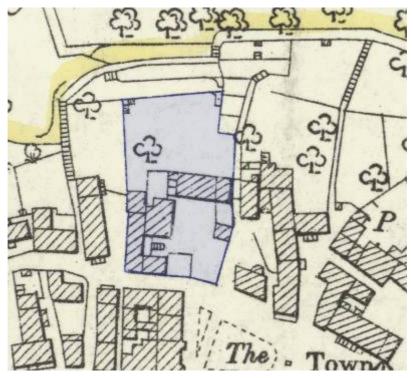


Figure 7 - Detail of above : showing one unified plot. NLS.

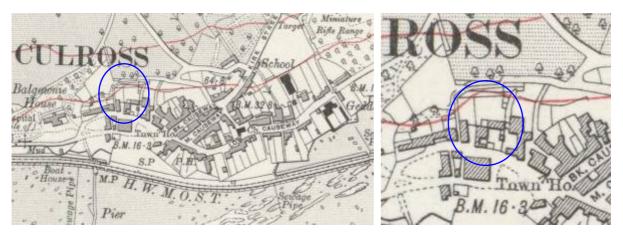


Figure 8 – Third Edition OS Map, six-inch scale, (general to right, detail to left). NLS.



Figure 9 – OS Map revised in 1948, six-inch scale, (general to right, detail to left). NLS.

c. Floor plan arrangements

The plans published by MacGibbon and Ross in 1887 show the North Range plan are rather schematic (*Figure 10* and *Figure 11*). At ground floor level these show a larger square room to W, identified as "STABLE" and the E part containing the stair just off the central axis and a "BYRE" to the E. The stair, stable and byre are all accessed by entrances off the courtyard to the S. The foot of the stair is also accessible through a small entrance from the stable to W. The byre to E contains a drain that does not directly exit through its S entrance. A small cupboard is built underneath the stair, accessed from the byre.

Their first floor plan shows two rooms divided by the off-centre stair, and a turnpike stair fitted into the NE corner of the W room. The two rooms on either side communicate across the stair landings, and via a an L-shaped chamber over the stair to the S. The W room has two windows to S, the chamber over the stair and the smaller E room one window each to S. The only opening at rear is the entrance leading out into the garden from the central stair.

The E extension is shown as a single room at ground floor, used as a stable, with an entrance and a window slot to S; the upper floor is marked as a "HAY LOFT".

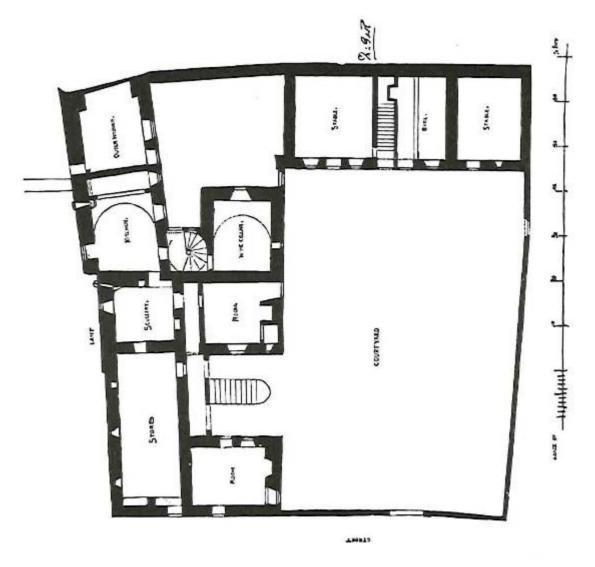


Figure 10 – Plan by MacGibbon & Ross, published 1887: ground floor.

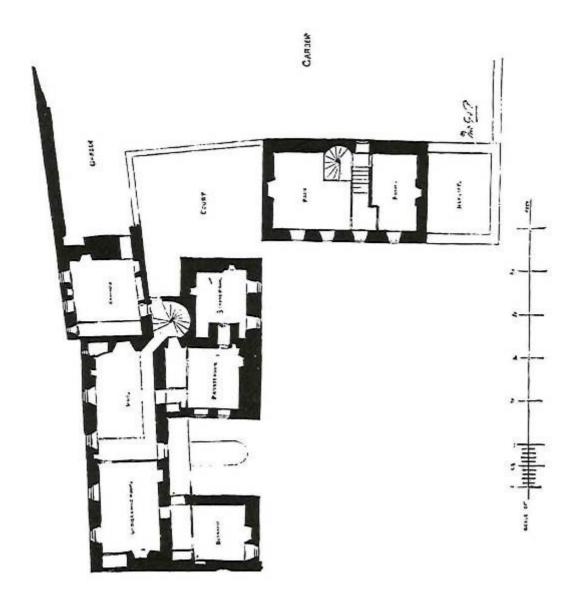


Figure 11 - Plan by MacGibbon & Ross, published 1887: first floor.

A plan set from 1904, surveyed by John S Hardie, held at RCAHMS, is more detailed and records three floor plans for the North Range, at ground, upper and attic floor level.³ The arrangement is, however, much as depicted by MacGibbon and Ross. The drain in MacGibbon and Ross' plan is identifiable today within the floor of the byre room, but is not recorded in the 1904 plan. There is only one room at attic level, the "HALL", accessed only via the turnpike stair from the W room at first floor level. The position of this stair suggests it perhaps to be a later insertion; at upper it extends into the area occupied by the central rear dormer window. The one-and-a-half storey E extension rooms are recorded as "STABLE" on ground floor, and as "LOFT" at upper level.

³ Some of the detail drawings in this series appear to be dated '1914'.

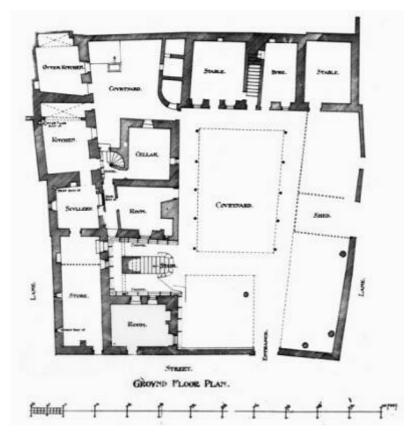


Figure 12 – Plan by John S Hardie, dated 1904, ground floor. ©RCAHMS [03_374372]. Licensor www.rcahms.gov.uk

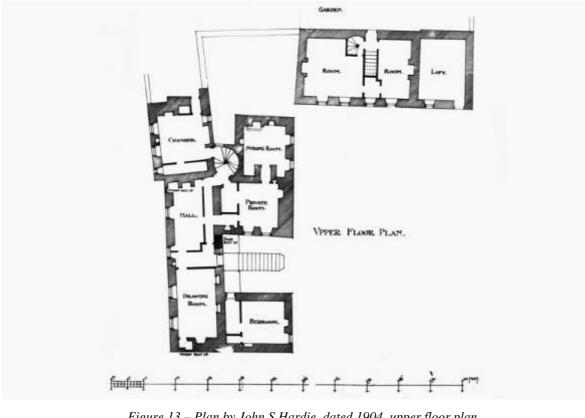


Figure 13 – Plan by John S Hardie, dated 1904, upper floor plan. ©RCAHMS [03_374373]. Licensor www.rcahms.gov.uk.

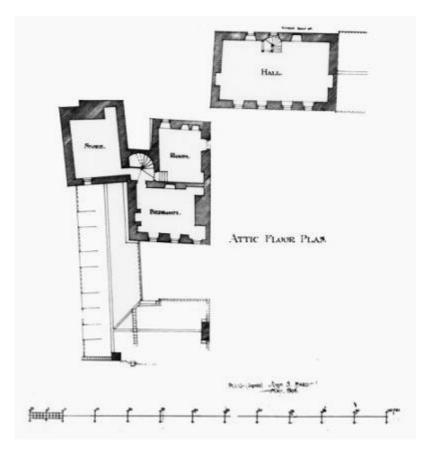
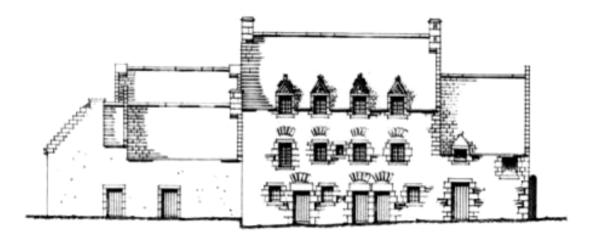


Figure 14 - Plan by John S Hardie, dated 1904, attic floor plan. ©RCAHMS [03_374374]. Licensor www.rcahms.gov.uk.

The ground floor of the 1904 plan also depicts a small three-roomed structure erected against the W gable wall of the main North Range. This building is absent from the 1^{st} Edition OS, and not depicted by MacGibbon and Ross' plan, but does appear at the time of the 1895/6 OS revision. It is also missing from the set of photographs dated to the 1880s. The building is also not recorded in elevation on the 1904 drawing set; given its layout, it must have been a low lean-to structure. The southernmost room, accessible from the short pend that connects the main and inner courtyards, has a notably rounded SW corner. The two further rooms to the N are interconnected by a small door within the W part of their partition wall. This internal door provides the only entrance into the rear room, only the central room is accessible from the inner courtyard. In contrast to the other rooms, the small lean-to structure rooms have no function assigned on the 1904 plans. It is possible, that they were all ready superfluous for the overall use of the building at that stage and seem to have been demolished shortly afterwards. It seems likely that this was a comparatively temporary and evidently short-lived ancillary structure. Early photographs collected before the 1930s depicting the rear facade with three dormers (see discussion below) seem to show the W gable already without the lean-to structure – and seemingly with a wall stump surviving to ground floor ceiling level (see *Figure 23*).

The greater accuracy of the 1904 plans show the main North Range building as a parallelogram, not as a true rectangle with the W wall as well as the internal partition walls aligned somewhat NE/SE off an axis perpendicular to the N and S walls. The E wall appears to be more perpendicular to the courtyard arrangement. This may have been influenced by the alignment of pre-existing plot boundaries.



SOVTH ELEVATION.



Figure 15 – South elevation of Culross Palace by John S Hardie, dated 1904. ©RCAHMS [03_374366]. Licensor www.rcahms.gov.uk

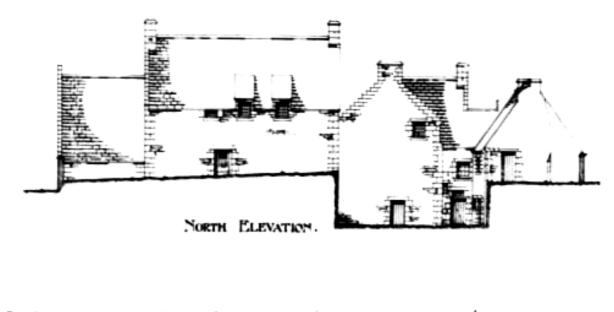




Figure 16 - North elevation of Culross Palace by John S Hardie, dated 1904. ©RCAHMS [03_374369]. Licensor www.rcahms.gov.uk



EAST ELEVATION.

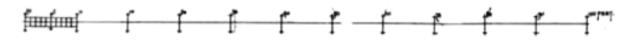


Figure 17 – East elevation of Culross Palace by John S Hardie, dated 1904. ©RCAHMS [03_374368]. Licensor www.rcahms.gov.uk



WEST ELEVATION.

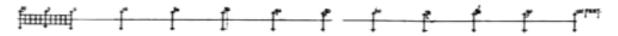


Figure 18 - West elevation of Culross Palace by John S Hardie, dated 1904. ©RCAHMS [03_374371]. Licensor www.rcahms.gov.uk

d. Roof alterations

MacGibbon and Ross published an engraved view showing the complex from SE with the S elevation of the North Range in full view (1887, Fig 871, see *Figure 20*). This records the notable detail that the southern gable head of the W gable wall is without crow-steps (presumably the northern as well). The E gable is in full view with both verges showing crow-steps. Photographs by Erskine Beveridge, dated c.1883 and 1896 also confirm the absence of crow-steps on the western gable head at about that time (*Figure 19* and *Figure 21*). They are also absent from the 1904 drawings of the south and north elevations (*Figure 15* and *Figure 16*), and from some photographs collected by RCAHMS upto the 1930s (*Figure 23*). Crow-steps only appear in photographs collected by the Royal Commission from c.1930 / 1939, and in an image published in 1948 (Francis Frith Collection Ref 527001 and 527002); evidently they had been added following the purchase of the property, in 1932, by the NTS (Watters & Glendinning 2006). However the weathering on the crow-steps as seen today suggests that the stones may have been reused. The survey by Addyman Archaeology in 2012 demonstrated the E gable verge has a noticeable bulge formed by its crow-steps – a deformation missing on the W gable. The bulging is confirmed by Erskine Beveridge's early photographs (*Figure 19* and *Figure 21*). Any alteration to this gable top must therefore pre-date Beveridge's late 19th century photography.



Figure 19 – Early photograph of Culross Palace, north elevation, by Erskine Beveridge, dated c1883. ©RCAHMS [11_1129143]. Licensor www.rcahms.gov.uk.

The 1880s photographs also document the poor state of repair of the roof at that time. The south roof pitch is shown to have contained some ten to twelve courses of slate at the eaves; substantial mortar fillets secure the slates against the crow stepped gable. The remaining part of the roof is covered with pantiles, as is the complete roof of the eastern extension with no lower slate courses there. The fact that the slate courses are not carried regularly across the roof suggests that they represent various phases of repair; the quality and resolution of the photograph make it difficult to identify these in detail. The eaves and wall-head to the W are completely finished in pantiles with no lower slate courses evident; this seemingly indicates that pre-existing crow-steps had been taken down and this part of the roof was finished at this time completely with tiles. From the evidence of the S elevation one might therefore speculate that the lower slate courses represent an early, possibly original feature that saw later repair. However, the photographs by Erskine Beveridge of c.1883 date show the rear

roof pitch to N essentially as a patchwork of different tiles, slates and patches of poor repair, with no particular pattern identifiable (*Figure 19*). The area of the removed crow-steps at the NW gable head has in fact been finished with slates here. The extent of repair and patching on the rear roof pitch casts doubt over the original state of the S roof pitch, and questions in particular whether the lower slate courses to S definitely represent an early phase rather than a 19th century repair.



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Figure 20 – Engraved view by MacGibbon & Ross, published 1887.



Figure 21 – Early photograph of Culross Palace, south elevation, by Erskine Beveridge, dated c1896. ©RCAHMS [11_1129178]. Licensor www.rcahms.gov.uk.

The late 19th century photographs show another interesting detail that again demonstrates the various elements of repair and rebuilding of a seemingly little-altered structure (compare MacGibbon and Ross 1887, 435). The rear elevation only shows two dormer windows, with the dormer to the E removed and only the lower sill and jamb stones surviving up to eave's height, with the opening blocked up in brick (*Figure 19*). This evidence is also shown on the 1904 drawing, recording the sill and first courses of a margin for a third dormer to the E of the two western ones (compare *Figure 16*).

Two black-and-white photographs of the rear elevation, held by RCAHMS (*Figure 23* and SC12_1205856) with no date information attached, show the three dormers fully intact. The character of the photograph suggests a pre 1970 date for these images. The series of photographs implies that the third dormer must have been dismantled at some point prior to the 1880s and was reinstated in the first half of the 20^{th} century.



Figure 22 – Two early photographs (right one collected before 1930s, left dated 1926), showing the missing crowsteps on the W gable, S façade. ©RCAHMS [11_1106693 left and 12_1205882 cropped]. Licensor www.rcahms.gov.uk



Figure 23 – Early photograph, probably mid to late 1930s⁴, showing north elevation with three dormers and the crowsteps on the W gable reinstated. The small lean-to structure to W has seemingly been demolished. ©RCAHMS [11_1104524]. Licensor www.rcahms.gov.uk.

e. General fabric

Though not very detailed MacGibbon and Ross' perspective suggests harl still preserved on the S façade of the North Range, harl surviving in patches on the West Range, and the E extension to the North Range to be without harl. Erskine Beveridge's photographs from 1896 show the harl on the North Range as heavily deteriorated with rubblework visible in places. This condition is presumably as MacGibbon and Ross would have found the buildings. The elevation drawings of 1904 date show the buildings without harl, but only record occasional details within the rubble masonry. The drawing of the S elevation of 1904 records relieving arches over the openings which are all present today. With the aligned arrangement of four dormers over four first floor windows the drawing portrays the facade of the main range as a single phase without recording any evidence for incorporated earlier fabric. However, the three entrances and three small square windows on ground floor are less regularly arranged, this possibly reflecting the incorporation of parts of a pre-existing building at that level.

The upper openings within the eastern extension occur as of reduced height, in particular the doorsize opening to the E, this as it survives today. Inspection of this opening as part of the present recording exercise demonstrated that the lower fittings for a door still survive (*Figure 24*). The 1904

⁴ The item has no date of origin attached; it was supposedly collected by RCAHMS between 1900 and 1930, but must have been taken after the restoration work by the NTS who acquired the building in 1932.

drawing and the late 19th century photographs suggest that at some point before the 1880s this entrance, presumably for loading goods into the loft above the E extension, was reduced. Whether the wallhead was lowered at the same time or whether the loft entrance and window had always been built as dormers could not be established on presently accessible evidence.



Figure 24 – Evidence for a much taller opening into loft of E extension.

iii. Earlier archaeological investigation

A number of small-scale archaeological investigations have been undertaken at Culross Palace over the last 20 years, primarily in the area of the main courtyard. These revealed a series of small buildings bounding the E side of the courtyard. The E boundary wall of the courtyard clearly incorporates evidence for these structures. These buildings were associated with cobbled and metalled surfaces and a later cobbled access path (Lewis & Reed 1992, 30; Lewis 1994, 16; Murdoch 1995, 25); the structures are all assumed to have been roughly contemporary and to date to the 17th or more likely 18th century, with the path and later drains probably of 19th century date.

Investigations related to the 19^{th} century so-called "Garage Bothy" to the E of the site revealed the foundations of two unknown walls, associated with 16^{th} to 17^{th} century finds. The conclusion was that previously unknown structures of at least 17^{th} century date seemingly existed underneath the present bothy structure. These may relate to a putative East Range, perhaps related to blocked openings and earlier fabric apparently surviving within the E boundary wall of the main courtyard. A summary of the reported investigations (as of October 2012) is given in Appendix A (compare later map regression for survival of structures on E side of main courtyard, e.g. *Figure 8* and *Figure 9*).

The investigations as described in the Appendix A concentrate on the main courtyard area to the S and in particular on evidence for structures of a putative East Range. Most interesting for the present investigations are the works undertaken in the rear courtyard and at Bessie Barr Hall, as they give an indication of the ground make-up at the northwestern part of the site, and of the potential for archaeology surviving below ground. The excavations associated with Bessie Barr Hall indicated that wall foundation levels varied significantly, from substantial towards the S and E, but being "*virtually nil*" at the N end, which might be a response to the site's sloping topography and the demonstrably restricted depth of ground (*cf* Murdoch & Lewis 1994, 16). The excavations also demonstrated that only the deposits in the NW area of investigations survived uncontaminated. The upper built-up in the inner / rear courtyard consisted of 0.2-0.35m of soils and rubble redeposited fairly recently (Murdoch 1997, 36).

3. Analysis of the North Range – physical evidence recorded in 2012

The archaeological recording and analysis identified four main phases of construction and alteration, with one further phase of demolition and modern repair – the latter is subdivided into a general phase 5 of demolition works and of phase 5 modern indicating recent repairs. The evidence for these latter two has been grouped together as dating and differentiation between phase 5 and phase 5 modern could not always be conclusively established.

i. Phase 1 : original structure (?later 16th century)

Early fabric 001 survives within the lower part of the W gable and to a lesser extent within the E gable 043 that indicates the present building incorporates remains of a pre-existing structure. The fabric employs distinctive masonry, of smaller and flatter stones, that is comparatively less well coursed than is seen elsewhere. The difference is particularly notable on the W gable where a construction break is visible at about 2.5m above present inner courtyard level. The earlier fabric does not extend across the entire width of the present building; rather it extends from the northern side of the North Range (where it is built into the sloping ground) to about two thirds of the present width, an original N/S dimension of about 5.5m. The southern side of this earlier building survives as a straight edge and substantial stones 002 within the present W gable. Evidence indicates robbed-out quoining that was in-filled with small-scale rubble 003 when the building was extended southwards in phase 2. It is possible that at this stage the original SW corner was reused as the northern jamb for entrance 009, but it seems more plausible that the 009 entrance was inserted as part of the construction of the W extension in phase 3 (see below).

The different character of the surviving earlier masonry is less visible in the E gable, but a construction break may be identified on a line corresponding with the southwards extent of the early fabric in the W gable. However this is only visible at first floor level; at ground floor level the lower part of the E gable remained harled and was thus inaccessible. A straight joint 047 at ground floor level might indicate the position of an external entrance to NE. The extent of the earlier fabric outlines the original gable, which was apparently one-and-a-half storeys in height.

Evidence in the N elevation for surviving earlier fabric is less readily apparent above ground (indeed the earlier structure may never have extended above the present level on that side). The lower masonry courses and jamb stones 031 around the rear entrance 042 might represent remains of this earlier structure, in particular since the entrance head seems to have been raised at a later stage (see phase 5 below). However, no further associated early fabric could be identified within the N wall, and it seems thus unlikely that the entrance opening is any earlier than phase 2. Evidence of how access was provided into the loft above the early building is not preserved (if any had existed on the N side), but it seems likely that this may have been through a hatch directly cut through the roof, from the sloping ground at rear. Evidence for any such opening will have been lost when the building was heightened in phase 2 (see below).

Interpretation

The earliest structure incorporated in the North Range was seemingly a relatively small structure, probably of 1½ storeys, based on the surviving parts at the east gable. Its E/W extent seems to have been the same as that of the existing main block of the North Range; however, it was significantly less deep to S, at only about 5.5m, compared to the depth of the present North Range of 7m.

MacGibbon and Ross must also have noted this earlier surviving fabric as they interpreted the 1611 North Range as "an addition raised over the stables in order to provide enlarged accommodation" (1887, 435). Their recognition is not surprising as early photographs from around 1888 show the building with some rubble stonework exposed, and the evidence may have been more apparent then.

Given MacGibbon and Ross' knowledge and expertise their interpretation seems plausible, and they may even have seen further evidence for the earlier structure and the later southward extension on the interior elevations or on the S façade, evidence that was not exposed at the time of the present analysis.

The combined evidence from the North and West Range present a strong case that Bruce redeveloped an existing arrangement of buildings on the site. These probably consisted of a smaller merchant's house to the southwest (the later West Range) with associated stables to the north (the later North Range) and further outbuildings to east as recent ground investigations might suggest (the putative East Range; Lewis 1994, 16, Murdoch 1995, 25). The earlier buildings are therefore at least of mid-to-late 16th century date, if not earlier.

Sir George Bruce's economic success and social ambition – he had been knighted in 1610 (Houston 2004) – seemingly allowed him to remodel the existing buildings into much grander accommodation, this consecutively according to the date stones. For a short period between 1597 and 1611, the main accommodation in the West Range must have been completed while the building to the north was still a smaller stable block in the process of alteration.

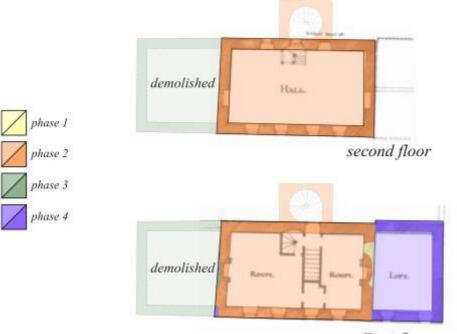
The earlier, smaller-scale arrangement of the site may indicate underlying earlier property boundaries, as perhaps still shown on the 1st Edition OS Map. This would imply that the western part of the site consisted originally of two separate plots, and that at some stage these two plots were married together with the wider eastern plot to form one very large and almost square site. It is curious that the older plot boundaries seemingly survived at rear, in order to be illustrated on the 1st Edition OS Map, it may be more likely that they represent 19th century partitioning. The plot partitions are not particularly shown on the 2nd Edition OS Map.

While this scenario sounds conclusive on current evidence, ultimate confirmation about the nature and the extent of the earlier structure can only be gained when the S elevation is stripped off the present harl and ideally combined with investigations into the interior elevations.

ii. Phase 2 : Sir George Bruce's alterations and enlargements (c.1611)

The main construction of the Culross Palace complex was started by Sir George Bruce at the end of the 16th century. For the North Range, whose dated dormers suggest this was completed c.1611, he seemingly incorporated and enlarged the earlier building. The earlier building was expanded southwards and an apparently deliberate right-angled arrangement was formed by the junction of the new southern elevation and the E wall the West Range, this framing what may have been a newly laid-out courtyard established (or rearranged) at this time. The existing structure received a full additional storey and a well appointed loft level to create a stable and byre arrangement at ground floor level, two rooms at first floor and an upper hall. Presumably the central straight stair was inserted at this stage to connect ground with first floor.

Evidence for the keying-in of two walls running perpendicularly out from the north elevation (036 and 037) was recorded, located on either side of the existing rear entrance 042. These suggest the former presence of a rear extension at this point. This had been comparatively narrow, the perpendicular walls lying about 2.5m apart. They were evidently associated with the existing entrance, and also with two sill-stones (034 and 035) within the upper masonry directly above, these apparently indicating paired entrances. The rear extension may thus have formed a stair tower (compare *Figure 13*), this perhaps necessary to access the newly created 'hall' at attic level. The upper sill stones (034 and 035) would have provided for a double-door arrangement – one from the stair into the attic hall. Two wooden beams beneath the westernmost sill (032 and 033), would presumably have supported the floor of a small chamber or press above the stair, accessed by the other entrance.



First floor

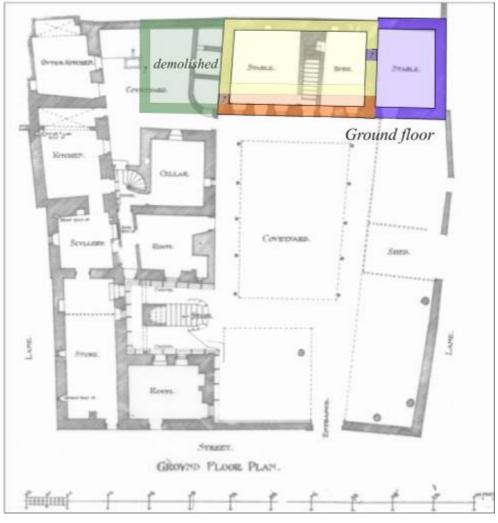


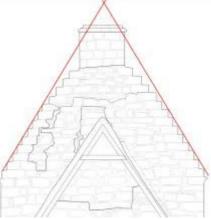
Figure 25 – Suggested phasing of Culross Palace.

Another, perhaps more likely possibility given the small size the chamber or press would have had, is that the attic floor was subdivided into two rooms and the joists would have supported a landing. A similar arrangement is known from Drum Castle, Aberdeenshire, built only slightly later in 1615-20 (S Fraser pers. comm.). Evidence to confirm the attic floor arrangement might survive in the painted panelling in the upper room; further investigations within the interior would be desirable.

The fabric 039 in this area is notably less substantial than the main masonry (029, 030 and 031) of the 1611 North Range, with smaller and thinner stones employed because it was built simply as internal walling. The general masonry of the rear elevation was neatly coursed consisting of large angular blocks (029 and 030), identical to the masonry of that period of the gables (014 and 015 for W gable; 046 and 048 for E gable). In this proposed arrangement, the central stair within the building from ground floor level would have directly connected with the spiral stair tower at rear, through the central door (042).

The upper crow-steps of the E gable are not in an alignment with the lower ones. The upper third of the gable is inclined at a somewhat shallower pitch. This upper part corresponds to an area of secondary rebuilding. It seems the chimney was rebuilt in a slightly lower position. The particular reason and dating for this remains unclear.

Figure 26 : Sketch outlining how far the top of the E gable diverges from projected straight-lines.



Interpretation

From the end of the 16th century Sir George Bruce evidently remodelled existing town buildings, each associated with their respective burgage plots, into one large townhouse complex. He started with the West Range, and some fifteen years later remodelled the North Range by enlarging existing smaller structures into 2 ½ storey buildings with accommodation at first and attic floor level. It seems likely that the lost stair tower for the North Range formed part of this phase 2 construction as it would represent a typical access arrangement for the attic hall, with a similar construction of stair tower at rear built by Bruce for the West Range. The West Range arrangement was probably simply replicated at the North Range, given the short period of alterations between the two structures, and thus both new ranges were seemingly accessed via respective stair towers at rear.

The new accommodation was apparently still too small as further extensions were constructed against the original west and east gables of the North Range in phases 3 and 4. However, it is possible that the W extension was constructed already as part of phase 2, part of Bruce's original building programme. As a matter of ease and clarity of description, however, the W and E extensions are discussed as separate phases here (W extension: phase 3, E extension: phase 4). There is though no conclusive evidence that the W extension necessarily needs to be later than Bruce's original building programme of 1611, or that it could not be contemporary with the E extension.

iii. Phase 3 : W extension (early 17th century?)

Evidence within the present W gable of the North Range strongly suggests that there had been an extension to the W at some point in the history of the building. This extension is identified as phase 3 here, however, it may well have been part of Bruce's 1611 remodelling of the site, or (although less likely) could have been contemporary with the extension built to the E (here separately discussed as phase 4).

The removal of quoins 011 that seemingly formed the original SW corner of the main North Range, the cut-back cross-tie 012, the insertions of flues 017, and the possible evidence of blocked fireplaces (018 and 024 indicate later blockings) all suggest that a 2 ½ storey extension was built against the W gable of the main North Range. As part of the construction of the W extension the quoins 011 were removed or reset as cross-ties (012) to form part of the extended S façade surviving in the masonry stumps 013 and 027. Possible blocking of fireplaces at first and attic floor level (018 and 024 respectively) would imply that this extension was of similar height to the existing North Range. However, no communicating entrances between the main North Range and the W extension could be identified at these upper levels. Only at ground level was the original SW outer corner of the earliest building reused as a jamb for an internal entrance (009), this later blocked (023). Its lintel 010 survives in parts. The roof was extended from the main North Range over the W extension; substantial beam slots for the purlins were later blocked in phase 5 demolitions (019 and 020).

Built to a similar height as the main North Range, the original crow-step stones of its W gable were removed and perhaps reset within the W gable of the new extension. Historic drawings and photographs discussed above show that these crow-steps were still absent on the original North Range in the late 19^{th} / early 20^{th} century. This means that they had not been reinstated after the demolition of the W extension.

Interpretation

The W extension was seemingly built as a westward continuation of the existing North Range, and might have taken up most of the rear courtyard. It is likely that its W gable aligned with the NW corner of the N jamb (cellar at ground floor) of the West Range and thus forming a very narrow N / S aligned courtyard area. Given the possible evidence for inserted flues and fireplaces at the upper level, the rooms in the W extension were presumably used as heated accommodation.

iv. Phase 4 : E extension (early 17th century)

The construction of the E extension has been identified as a separate building phase, although it could possibly have been built at the same time as the W extension of phase 3. It seems unlikely that the E extension was part of Bruce's original remodelling though, as its N wall steps forward slightly from the line of the North Range (compare photographs 581 and 582 in photographic survey) and its lower height is also suggestive of it being a later extension. One would expect that these details would have been more neatly resolved had the E extension been part of the original 1611 scheme.

The fabric of its E gable (053) is very homogenous and apart from later repairs discussed in phase 5 modern (below), presents itself as a single phase construction. The lower crow-step stones of the front and rear verges are different in colour and stone type than the uppermost ones (055 and 056, see below). With their grey-weathered appearance these are very similar to the crow-step stones surviving on the E gable of the original North Range.

The E extension has seen more alteration than its superficial appearance initially suggests. Inspection of the upper opening in its eastern S façade demonstrated that the lower fittings for a door still survive (*Figure 24*). These details suggest that at some point before the 1880s a much taller door opening, presumably for loading goods into the loft above the E extension, was lowered to the present wall head height.

Interpretation

The E extension was built to provide further accommodation at ground level and storage space in its loft. A substantial door opening must have originally facilitated the lifting of goods on the attic floor. No evidence that could help shed light on the use of the ground floor has been identified; however the

walls at ground level remain fully plastered and evidence might survive underneath the plaster. It is also unclear when the E extension was built, whether contemporary or later than the W extension; however given the similarity of its construction to that of the main block of the North Range it cannot be too much later in date.

v. Phase 5 : demolitions

At some point before the middle of the 19^{th} century the building complex was significantly reduced and the W extension and the rear stair tower were demolished. It is unclear whether this demolition phase was earlier or contemporary with the construction of the E extension, but for a matter of simplicity it is discussed here as a separate and, likely, considerably later phase.

On the W gable the S wall of the W extension was completely demolished bar the remaining stumps 013 and 027 which may have been incorporated in the later lean-to structure that is depicted on the 1904 plan, but not on the earlier plan of the 1880s. The original SW corner of the North Range was reinstated, but with poorer masonry (021), only a few quoins (011) or cross-ties (012) survived, albeit as cut-back remnants. The N wall was much reduced in height to form the present retaining wall (027) against the raised ground to rear. Possible fireplaces were removed and blocked (018 and 024) and some of the stones used for the repair and blocking within the W gable contained remains of plaster or limewash, some even with paint residues remaining – multiple coasts of pale limewash (*Figure 27*). It seems likely that these stones had been part of the W extension and were reused for the repairs as part of the demolition. Purlins that had evidently existed were also removed and the beam holes filled in (019 and 020) and the entrance 009 at ground level was blocked off with rubble masonry 023.



Figure 27 – Remains of painted plaster on the underside of stones used for the flue repair and blocking of fireplaces (017, 018, 024 – here 017) of the W gable.

On the N elevation the stair tower was demolished and the remains of the cross-walls were clawed back and patched over (036 and 037). The timber beams (032 and 033) supporting the small press above the stair were cut off, their stumps remaining *in situ*. The eastern opening of the double-door at attic level was blocked off, and the western opening was remodelled into a dormer. Two further dormers were constructed symmetrically to its west and east; this work also involved the rebuilding of parts of the wall top (038). In order to retain access to the attic hall a turnpike stair was inserted into the W room at first floor level at its NE corner, this still extant.

It seems that following the demolition of the stair tower the rear ground level was raised. As a result of this it was necessary to raise the head of the rear entrance (042). Masonry patching (041) and the resetting of the original lintel (040) with small pinnings (part of 041) indicate that the entrance head was heightened by more than a course.

vi. Phase 5 modern : modern repair and rebuilding

The demolition of the stair tower might have caused structural problems as the N wall displays a considerable outwards bulge. This might have caused deformation and cracking throughout the structure. Various small-scale patchings and repairs to the E (052) and W gable walls (025 and 026), might be the result of this although the 026 repair is possibly more likely associated with the rebuilding after the demolition of the W extension. The rebuilding of the chimney on the E gable (050) might also relate to this. The E extension was seemingly also affected by structural problems as the upper part of its N wall (060) has been rebuilt with cement relatively recently and small-scale patching along the N edge of the gable (054) might indicate structural movement. The latter could, however, also represent earlier repair, similar to the rebuilding of the E gable top (049) of the main range. It is also possible that the E dormer in the N wall was affected by these structural problems and was subsequently removed. It was only re-installed in the earlier part of the 20th century (061). Some of these repairs had seemingly been undertaken before the 1880s as they appear on historic photographs of that time (and may thus technically be part of the general phase 5); others are clearly modern repairs (052).

The weathered crowsteps on the W gable were seemingly a late introduction, as photographs collected before the 1930s document missing crowsteps. It seems likely that this was undertaken as the first improvements by the NTS when they acquired the building in 1932. The roof was over-hauled and the ensemble completed with crowsteps – however, from where the weathered stones had been salvaged could not be established.

In the 1990s the roofs were overhauled and retiled as part of Historic Scotland's maintenance programme, which seemingly removed evidence of the earlier roof structure.

4. Roof investigations

i. The detailing of the lower courses of the roof of the North Range

The archaeological recording works during the recent cement harl stripping and repairs to the roof structure also allowed for an investigation into the form of the early roof and the materials originally used for its lower parts. It was hoped that physical investigations into the surviving fabric would show evidence as to how the eaves detail had originally been executed.

It has been assumed that the original 17th century roof had been pantiled with no gutter or downpipes fitted. Eydman describes that traditionally, the lower tile courses would "overhang the eaves without gutters" with the lower part of the pitch often "flattened or 'bellcast' near the eaves", this bedded on lime mortar. Some examples preserve "a final row of pantiles [...] set under the second with a deep

overlap to protect the wallhead." Such detailing would help shed water (all quotes 2010, 145). In this detailing, the water drained off from the pantiles directly onto the main façade resulting in dirt markings and in the case of a lime harl finish with a detrimental effect on the durability of the lime harling. The impact of this can be seen at Culross Palace on historical photographs of late 19^{th} to early 20^{th} century date, with conditions certainly worsening as indicative by comparing *Figure 21* dated 1896 with the later images of *Figure 22*.

To prevent early decay and erosion of the lime harling this problem has often been solved by constructing the lowest courses in slate. Eydman refers to this as "an 'easing course' or 'skirt' of slates or plain tiles'; however, he interprets this as a detail that was retained from an earlier thatching practise (2010, 145). He refers to the Great House of Pittenweem Priory, or formerly at Fordell's lodging, Inverkeithing, as examples where "the slates cover as much as half of the roof, [...] and this is probably an echo of the fact that the upper section was previously thatched but pantiled at a later date." Slates have the advantage of distributing the rain water run-off more evenly compared to the channelling effect of the pantiles. The slate courses are now regarded as a typical vernacular detail, particularly in Fife and the eastern coastal areas where pantile roofs are more common than in the highland areas of Scotland or the west coast. Examples are best known from the historic villages in the East Neuk, and NTS for example has restored this traditional detail there, already in 1961, for example at Nos. 5-7 Rumford, Crail (Figure 31 and Figure 32) as per the existing evidence – there, however, with gutter and downpipes. Some examples survive without gutters and downpipes. Eydman is though sceptical about the authenticity of this 'skirt of slates'. He admits that such detailing is now "standard practice" but feels that this "has become something of an architectural fashion emulated self-consciously by restorers and designers of new buildings seeking 'authentic' detailing."

In early photographs, dating to c1888 (*Figure 30*), ca 10-12 courses of slate can be seen along the lowest part of the southern roof, forming the eaves of the North Range, a feature now missing. The photographs show evidence for substantial mortar patching in the slated area to apparently secure the slates against the crow-stepped gable. The remaining part of the roof is covered with pantiles, as is the complete roof of the eastern extension with no lower slate courses there. The slate courses and rows of pantiles are, however, not carried regularly across the roof. The area between the two central dormers has at least one further lower course of pantiles, compared to the eastern parts.

The historic photograph does not show the western part of the roof. Another photograph of approximately the same date (*Figure 21* and compare *Figure 22*) does show the western edge of the roof, but unfortunately not in any great resolution. From what can be seen it could be suggested that the tiles are carried down to the eaves at this point, but this only on the westernmost part of the roof, to the west of the western dormer. The tiles seem to cover the verge area only where the crowsteps had been removed when the W extension was added. It is therefore unlikely that this detail of tiling along the verge is original, but shows a later repair after the demolition of the W extension.

Photographs of the rear elevation also show a mixture of pantiles and slates. However, while the S front appears as an almost regular pattern of tiles with slates along the eaves, the rear roofing reveals the extent of repair and patching, in a piecemeal manner, and seemingly unconcerned about the use of matching materials. The patchwork of different tiles and slates of different sizes is indicative of quick, temporary repairs with whatever material had been (cheaply?) available at the time. This character of uncoordinated patching casts doubt on the survival of original slate courses at the front. In the light of the quantity of repairs at rear it cannot be ruled out that the slate courses on the front elevation are also the result of piecemeal repairs; there, however, less uncoordinated, presumably to retain a relatively orderly appearance for the street facade.

A drawing held by RCAHMS dated May 1914 records the lowest courses as slates around the dormers of the 1597 West Range. The remaining parts of the roof, as far as shown, are pantiled

(*Figure 28* and *Figure 29*). The drawing from the same series, showing the S dormers of the 1611 North Range, records the pantiles as carried down to the eaves with no slate courses. It seems that within the ca. 30 years between the historic photographs and the drawn record the lower slate courses of the North Range were replaced by tiles. Given the poor condition of the roof as evident in 1888, in particular for the N side, such overhauling of the roof seems very plausible. It may even be that the record drawings of the 1914 date were undertaken as part of a repair scheme, a possibility to be investigated further. From current knowledge it is not clear why the lower slate courses were replaced by tiles.

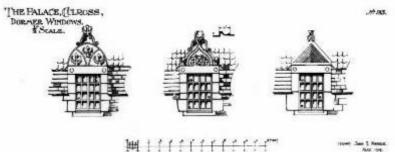


Figure 28 – Drawing of the dormer windows of the 1597 West Range, in 1914, indicating slates for the lowest course of the roof. ©RCAHMS. Licensor www.scran.ac.uk.

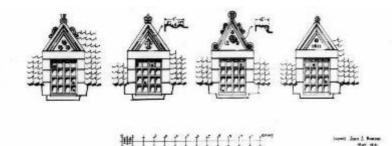


Figure 29 – Drawing of the dormer windows of the 1611 North Range, in 1914, indicating that tiles were carried all the way down to the eaves with no slates used for the lowest course of the roof. ©RCAHMS. Licensor www.scran.ac.uk.



Figure 30 - Photograph of the North Range in ca. 1888, showing the lowest courses of the roof as slated. ©National Museums Scotland. Licensor www.scran.ac.uk.



Figure 31 – Nos. 5-7 Rumford Cottage, Crail, before restoration in 1961 by The National Trust for Scotland. ©National Trust for Scotland. Licensor www.scran.ac.uk.



Figure 32 – Nos. 5-7 Rumford Cottage, Crail, after restoration by The National Trust for Scotland in 1961. ©National Trust for Scotland. Licensor www.scran.ac.uk.

ii. Archaeological monitoring of the physical investigations

Three small areas were opened up by the roofing contractors on 30 March 2012 and the openings were examined by archaeologist Kenneth MacFadyen in order to recover evidence for the early arrangement of roofing material at eaves level and the general roof treatment. It was hoped, given the evidence for heavy mortar patching on the late 19th century photographs, to finds at least remains of the mortar against the crow stepped gable wall, perhaps even slate impressions within, confirming the evidence for lower slate courses.

Within the openings only relatively modern roofing materials (20th century roofing felt, sarking and batons) were exposed. The modern materials were not lifted further to see beneath the sarking, as the sarking was already visible from inside the building.

Any evidence of the historical roofing method of the eaves details seems to have been lost when the roof was repaired and reroofed in the 1990s.

a. Opening 1

The investigations for Opening 1 comprised a small area of four by four tiles, exposed at the NW corner of the main roof of the North Range. The tiles lifted off easily and exposed the underlying modern fabric. This fabric was fresh, modern looking sarking boards (exposed in a small area), covered with a layer of roofing felt. The tiles sat on modern batons nailed onto the sarking against the crowsteps with a lead flashing below the tiles. The modern fabric was not removed any further but an attempt to peer between the lead flashing and the crow steps revealed no evidence for former roofing on the sides of the gable wall.



Figure 33 - Opening 1 at lowest level of investigation Figure 34 - Opening 1, detail of sarking below tile.

b. Opening 2

A small area of three by four tiles was investigated at the northeast corner of the main building (North Range). Again, as seen in the first opening, modern sarking, felt and lead flashing was exposed. Attempts to see underneath or behind the lead flashing only exposed more modern sarking. No evidence for slates or mortar patching to secure the slates could be seen against the rear of the gable crow steps.



Figure 35 – Opening 2 at LOE.



Figure 36 – detail of modern sarking below lead flashing at Opening 2

c. Opening 3

This Opening 3 was an even smaller area, two by three tiles exposed, at the NE of the E extension. Within this exposure no sarking was seen. The batons on which the tiles sat on were modern and a further lead flashing sat against the crow steps. Exposed beneath the roof structure was rubble stone running up from the wallhead (rebuilt in cement?) to the tiles. No early roof evidence was noted.

iii. Conclusive remarks

It is somewhat unfortunate that all evidence for earlier roofing methods and materials was seemingly removed by modern re-roofing. This leaves the 19^{th} century photographs as our best and earliest evidence for the early roof at Culross Palace North Range. It may be tempting to suggest that the original roof had been slated given the evidence in *Figure 19* which shows that the patch covering the area of the lost eastern dormer had been tiled, clearly indicating a repair in pantiles. The slate courses at the western ridge are very small and appear heavily weathered, suggestive of an early date.

Historically, the practise of roofing with pantiles is noted from the early 17th century (details in Shaw 1990). Eydman refers to a patent granted in England in 1636 for the first British-produced pantiles, which implies that non-British tiles had been known and were in use before this date, also in Scotland (2010, 146). However, with the construction date of the North Range placed at around 1611, and with its similarities in design and construction with the even earlier West Range, it may be open to doubt whether the original roof was already pantiled. Eydman referring to Shaw (1990, in particular p.27), concludes:

"Precisely, how and when the pantile came to be adopted as a common roofing material on Scottish dwellings is not known. The burghs of the east coast enjoyed a construction boom during the seventeenth century [...]. While thatch was [the] common roofing material [for the more modest houses], with stone or slate on the high-status and expensive houses, it might be assumed that the first pantiles found favour with those who had first-hand knowledge of their use in Europe and who sought to emulate their continental counterparts. Subsequently, as tiles became more plentiful and less expensive, they might also have been used on the lower-status houses." Sir George Bruce, the merchant, may well have wanted to use pantiles at an early stage to show off his contacts with and knowledge of the fashions on the continent, and if so this would suggest that Culross Palace was one of the earliest pantiled buildings in Scotland. As Slezer's engravings published in 1693 of Culross suggests – if one interprets the continuous vertical lines on the roofs as indicative of pantiles – large parts of Culross were indeed pantiled at the end of the 17^{th} century. Unfortunately, Slezer's image is not detailed enough to identify The Palace without doubt (see *Figure 37 and detail below*). Given the lack of definite archaeological or historical evidence, we may have to admit that current knowledge does not permit to identify without doubt the original roofing material or the original detailing at the eaves for the 17^{th} century North Range at Culross Palace.

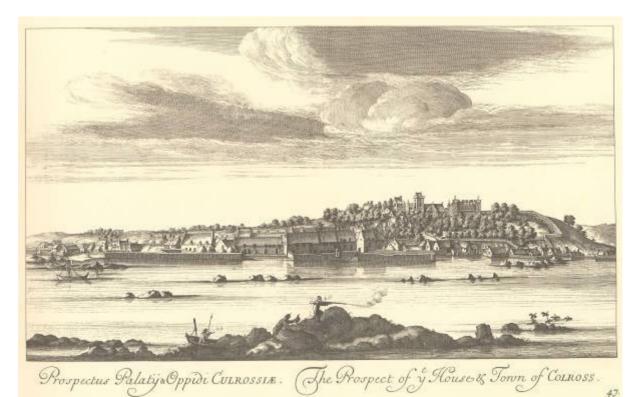
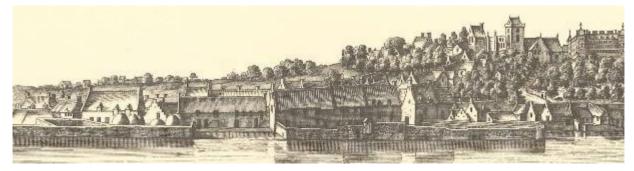


Figure 37 – Slezer's engraving of Culross, published 1693. Detail below.



5. Discussion, recommendations and future work

The building recording and archaeological analysis, together with a brief desk-based assessment of readily available historical sources and secondary literature has considerably advanced the understanding of the development of the North Range of Culross Palace. MacGibbon and Ross' statement that an earlier structure existed that was enlarged by Bruce in 1611 was confirmed and the extent of its surviving fabric has been mapped.

Evidence for a rear stair tower and associated entrances at first and attic levels permits new insight into the construction and internal arrangements of the range as remodelled by Sir George Bruce at the beginning of the 17th century. As is the case within the existing West Range of the Palace complex, original access to the attic floor was apparently via an external spiral stair, a much grander and better designed solution than the present internal staircase, which awkwardly breaks up the spatial unity of the western room at first floor level; this rather cumbersome arrangement can now be identified as a later addition, rather than an original inelegant design.

Further evidence for the grandness of the Palace has been identified in the former existence of a W extension; the possible position of fireplaces suggests that additional accommodation had been provided, probably to a similar standard as for the West and main North Range. It could not be demonstrated that this extension was built under Sir George Bruce; however, it underpins the large scale to which the Palace site had been developed by the Bruce family.

The investigations have, however, also shown the limit of original fabric surviving. What presents itself as a homogenous and largely original complex today has seen much more rebuilding than at first identifiable. The overhaul of the roof in the 1990s has removed (almost?) all evidence of the original roof structure and roofing material. The W gable has seen substantial rebuilding and the weathered crowsteps that convey an original layout are in fact re-used stones from an earlier structure and were rebuilt in the 20th century, as was the E dormer at rear. The cement harl had a detrimental effect on the readability of the fabric, as it could not fully be removed, even by the substantial stripping works of the present reharling.

The area of roof investigations as part of this present recording exercise was, however, very restricted. Evidence, even if only partially surviving or in small pockets may be encountered elsewhere underneath the present roof. It would therefore be recommendable to undertake further, larger-scale investigations to establish whether in fact *all* evidence of previous roofing had been lost as part of the drastic 1990s roofworks. Furthermore, investigation of the other roofs in the palace complex, for example the West Range, might be carried out to establish the degree of survival of earlier roof materials there. Such investigations could by comparison help to inform our understanding of the original roof finish of the North Range.

Although the overall physical evidence as discussed above appears conclusive, the exact dimensions of the W extension and the stair tower at rear could not be determined by building recording alone. To test the conclusions of the analytical survey and to confirm the dimensions of the now demolished structures it is recommended to excavated trial trenches across the rear, internal courtyard, which should expose the W gable of the putative W extension. A similar trial trench in the garden to the N, across the area immediately in front of the central part of the N elevation should reveal footings for the stair tower, perhaps demonstrating a similar layout as for the West Range stair tower. A detailed interior survey, in particular of the upper and attic floor might also help to shed more light onto the original layout of the rooms served by the stair tower.

Previous investigations in the rear courtyard have already provided an indication of the ground makeup at the northwestern part of the site, and of the potential for archaeology surviving below ground. Wall foundation levels are expected to have varied significantly, from substantial towards the S and E, to "*virtually nil*" at the N end (*cf* Murdoch & Lewis 1994, 16). The apparent survival of uncontaminated deposits in the NW area would perhaps allow for conclusions with regard to the function of the W extension and the rear courtyard area.

The layout of the site reflecting earlier property boundaries indicate that the site consisted originally of at least three separate burgage plots. With this in mind, and with assumption that the North Range was originally the stables for a separate plot (not part of the West Range), then there must have been an associated dwelling house, most likely to its south, in the area of the putative E range or where

structures had been discovered in the 2011 excavations in relation to the Garage Bothy. Further ground investigations in the main courtyard might be able to identify the earlier burgage plot boundaries and any associated structures.

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Appendix A : Archaeological evidence (as per 2011) – 1973.00 Culross Palace

Summary of archaeological investigations and discoveries as reported in DES:

"Trial trenching in the courtyard area revealed the foundations of what appear to be two masonry buildings, one of which overlies a well-laid cobbled surface. The relationships between these features and the extant buildings of the palace [sic] are yet to be determined." Lewis & Reed 1992, 30.

"Excavations were carried out within the ground floor of the building known as Bessie Barr Hall and in the precinct between the hall and the W range of Culross Palace. [...]

A series of surfaces, of various composition, were uncovered within the building, virtually all containing a range of finds indicating redeposition. A cross 'wall' feature predated the hall itself and the original ground contours had led to the depth of the wall foundations of the building varying from virtually nil at the N end to substantial construction on the S and E.

Excavation in the precinct revealed a complex of drains and cobbled surfaces. The area was split into three by two fireclay drain trenches, probably laid down earlier this century [i.e. 20^{th} century]. This truncation made surface relationships more difficult to assess across the site. Part of the drainage was related to the overflow from the Bessie Barr Well, located in the covered recess in the wall bounding the N end of the site. Cobbling varied from functional to cosmetic in quality and none thought to be contemporary with the surrounding buildings of c1600.

A large, well-constructed, sandstone tank (3m long, surviving to 0.3m high) at the N end of the site probably indicates some light industrial activity in the late 18th/early 19th century. The excavated depth on site was restricted and only in the NW corner did contexts uncontaminated by Georgian/Victorian/later material appear."

Murdoch & Lewis 1994, 16.

"Excavations by Scotia Archaeology Limited of the 'palace' courtyard [sic], which measures 23m N-S by 17m E-W, revealed structures and other feature dating from the 18^{th} (and perhaps the 17^{th}) to the 19^{th} century.

In the SE corner and towards the NE corner of the area were the well-constructed cobbled floors of two chambers which may have formed elements of a range of buildings along the E side of the courtyard. Much of the remaining area was covered with a rude metalled surface, consisting of small stones and flags set into thick clay. Although not physically linked to the putative E range, the two features are thought to have been contemporary and perhaps dating to the 18th century. Overlying the metalled surface were the remnants of a substantial, kerbed path which led from an entrance in the S wall of the courtyard to the main buildings on its W and N sides.

There was considerable evidence of 19th-century occupation towards the NE corner of the area – paths, drains, pits and the remains of a small building which overlay one of the earlier cobbled floors. Excavation is still underway." Lewis 1994, 16.

"The investigation of the courtyard, begun in autumn 1994 [see above], was completed [...] in March 1995 following the removal of a flowering cherry tree from the E side of the palace [sic] precinct. Further evidence was uncovered of a range of buildings set against the multi-phased E precinct wall, elements of which are thought to date from the 17^{th} to the 19^{th} centuries." Murdoch 1995, 25.

"A new drain was installed within the inner courtyard of the palace [sic] to remove rainwater from the N end of the W range. The 0.35m wide trench for this drain cut through 0.2-0.3m of soils and rubble, deposited during the installation of another drain (probably earlier this century); nothing of archaeological interest was uncovered."

Murdoch 1997, 36.

"[...] A further watching brief was carried out during the excavation of a service trench in a small courtyard area close to the Culross Palace. External ground surfaces were uncovered, including a cobbled track." Daly 2003, 77.

"In advance of repointing on the N wall of the Palace, four trial trenches were excavated at the base of the wall. [...] This exercise demonstrated that the present ground level is associated with the current kitchen garden and had been raised. The height of an earlier external ground surface was not revealed in the trenches excavated (maximum depth 600mm). A further trench was excavated up to a depth of 1.20m in the sloping pathway immediately W of the Palace in order to reveal any earlier pathway surfaces. No evidence of an earlier surface was found." Ewart 2007, 96f.

"A test excavation and watching brief were carried out prior to and during ground disturbance associated with the conversion of the 19th century building known as the 'Garage Bothy' [...] directly E of Culross Palace [...].

Two test pits $(1 \ x \ 1 \ m)$ [...] uncovered a sandstone paved surface directly below current ground level [inside] and a layer of cobbles at the entrance to the Garage Bothy.

The watching brief [...] during the excavation of a small waste water pipe trench [...] uncovered [two unknown walls] c2m S of the Garage Bothy. The S wall was oriented N-S along its long axis and consisted of seven sandstone blocks in a single course. [...] The N wall was oriented E-W along its long axis and consisted of a single course of one large sandstone block (c1.20 x 0.65m in plan) standing to a height of 0.35m [...].

Activity at the site in the 17th century is [...] indicated by the finds, though they are too few to draw any conclusions about the nature of that activity. Rhodes 2011, 87.

Nos.	Direction facing	Building part	Elevation	General contexts	Description	Date	Initials
001- 005	Ν	North Range	N exterior	029, 030	General view	06-03- 2012	TR
006- 009	Ν	North Range	N exterior	038	General view roof, dormer from E to W.	06-03- 2012	TR
010- 015	Ν	North Range	N exterior	029, 030	General view, lower part from E to W.	06-03- 2012	TR
016- 022	N	North Range	N exterior	034, 035, 038, 039	General view, upper part from E to W.	06-03- 2012	TR
023- 034	N	North Range	N exterior	040, 041, 042	Details of rear door	06-03- 2012	TR
035- 052	N	North Range	N exterior	030, 037, 042, 031, 036, 029	Details of lower wall from E to W – at current ground level	06-03- 2012	TR
053- 066	N	North Range	N exterior	030, 037, 042, 031, 036, 029	Details of lower wall from E to W – ca. 3 courses above current ground level	06-03- 2012	TR
067- 070	N	North Range	N exterior	030	Detail of upper walling at NE corner of main North Range, from door lintel height to eaves	06-03- 2012	TR
071- 084	N	North Range	N exterior	030, 034, 035, 036, 037, 029	Detail of upper walling from E to W, following on from photo no. 068)	06-03- 2012	TR
085- 093	N	North Range	N exterior	039, 036, 029	Detail of upper wall to W of door: boundary between internal walling (039) at possible stair tower and patch (036) after demolition of W wall of possible stair tower and continuation of (029), from E to W to NE corner	06-03- 2012	TR
094	N	North Range	N exterior	030	Detail of upper walling and eaves at NE corner	06-03- 2012	TR
095- 097	W	North Range	W exterior	-	W gable of North Range before cement harl stripping	06-03- 2012	TR
098- 100	NNE	North Range, E extension	N & E exterior	-	Detail of roof E extension and joining onto E gable of North Range before cement harl stripping	06-03- 2012	TR
101- 103	SSE	North Range, E extension	S exterior	-	Detail of roof E extension and joining onto E gable of North Range before cement harl stripping	06-03- 2012	TR
104- 105	W	North Range	E exterior	047	View of external E gable, now within E extension, showing straight joint 047	06-03- 2012	TR
106- 128	W/E	North Range / E extension	Loft of E extension	043, 044, 045, 046 and general roof structure	General photographs of loft of E extension incl. E gable (exterior) of North Range, now within E extension	06-03- 2012	TR

Appendix B: Photographic Register – 1973-CRP12 Culross Palace

Nos.	Direction facing	Building part	Elevation	General contexts	Description	Date	Initials
129- 134	S	North Range	S exterior	-	General views	06-03- 2012	TR
135- 136	W	North Range	W exterior	-	W gable of North Range before cement harl stripping, lower part	06-03- 2012	TR
137	W	North Range	W exterior	-	W gable of North Range before cement harl stripping, upper part	06-03- 2012	TR
138- 144	Ν	North Range	N exterior	029, 030	General view with garden	07-03- 2012	KM
145- 146	SW / SE	Garden	-	-	General view: upper garden	07-03- 2012	КМ
147- 150	NE	North Range	N exterior	-	General view with garden	07-03- 2012	КМ
151	NW	To NW of site	-	-	Hen house	07-03- 2012	КМ
152- 154	N	North Range	N exterior	-	General views from top of garden	07-03- 2012	KM
155- 160	NW	North Range	N and W exterior	-	General views from garden	07-03- 2012	КМ
161- 168	Ν	North Range	N exterior	-	General views from top of garden	07-03- 2012	KM
169- 171	Ν	North Range	N exterior	060	Details of N façade from E to W	07-03- 2012	КМ
172	NE	North Range	N exterior	-	View along N elevation of E extension	07-03- 2012	КМ
173- 174	N	North Range	N exterior	040, 041, 042	Rear door	07-03- 2012	KM
175- 177	N	North Range	N exterior	032-038	Detail of area of possible stair tower	07-03- 2012	KM
178- 180	ENE	North Range	N exterior	-	General views along N elevation	07-03- 2012	KM
181	WNW	North Range	N exterior	-	General views along N elevation	07-03- 2012	KM
182- 184	S	North and West Range	S exterior	-	General views of site	07-03- 2012	KM
185- 186	S	North and West Range	S exterior	-	Window details	07-03- 2012	KM
187- 198	-	General	-	-	General shots of Culross	07-03- 2012	KM
199	ENE	E extension	N exterior	-	View along N wall of E extension	07-03- 2012	KM
200- 225	Various	North Range	E gable	049-052	Details of chimney and roof / gable top of E gable	07-03- 2012	KM
226- 231	W	North Range	E gable	048, 049	Details of S part of E gable, upper part and joining of roof of E extension	07-03- 2012	KM

Nos.	Direction facing	Building part	Elevation	General contexts	Description	Date	Initials
232- 388	W	E extension	E gable	053-060	Details of E gable wall from bottom to top, S to N.	07-03- 2012	KM
389	S	E extension	N elevation	056, 057	View of crowsteps to N	07-03- 2012	KM
390- 400	E	North Range	W gable	General	General view of scaffolded gable	28-03- 2012	КМ
401- 447	W	North Range	E gable	048-052	Gable top / chimney of E gable	28-03- 2012	KM
448	Е	North Range	W gable	017	Detail of stone with painted plaster adhering on underside	28-03- 2012	KM
449	Е	North Range	W gable	017	Detail of stone with limewash adhering on underside	28-03- 2012	KM
450	S / up	North Range	E gable	051	Detail of crowsteps and "thackstane" at E gable – N elevation	28-03- 2012	KM
451	W	North Range	N elevation	038	Dormers on N elevation	28-03- 2012	KM
452	E	North Range	E gable	048	Pre-ex of eaves detail at NE corner of E gable	28-03- 2012	KM
453- 454	W / S	North Range	W gable	016	Pre-ex of eaves at NW corner of W gable	28-03- 2012	KM
455	E	North Range	S elevation	-	View along dormers to S	28-03- 2012	KM
456	Е	North Range	W gable	016	Erosion at chimney on W gable	28-03- 2012	KM
457- 539	Е	North Range	W gable	001-026	Details of W gable wall from top to bottom, N to S.	28-03- 2012	KM
540- 543	W	North Range	E gable exterior	045-046	E gable of North Range, now within E extension	28-03- 2012	КМ
544- 546	W / E	E extension	S door to E	-	Details of door into loft of E extension – evidence for reduction of door height	28-03- 2012	KM
547- 548	W	North Range	E gable	047	Detail of E gable exterior, now within E extension, ground floor	28-03- 2012	KM
549- 551	W	North Range	W gable	016	Post-ex of eaves detail at W gable	28-03- 2012	KM
552, 556	Е	North Range	E gable	048	Post-ex of eaves detail at E gable	28-03- 2012	KM
553- 555	Е	North Range	E gable	-	View under lead sheet at eaves detail, see photo nos. 552, 556	28-03- 2012	KM
557- 568	W	North Range	E gable	046	Upper part of E gable, now within E extension	30-03- 2012	KM
569- 571	S	E extension	S elevation, interior	-	Detail of lowered door, see photo nos. 544-546	30-03- 2012	KM
572	S	E extension	S elevation, interior	-	Dormer window to S	30-03- 2012	КМ

Nos.	Direction facing	Building part	Elevation	General contexts	Description	Date	Initials
573- 576	W	North Range	E gable	047	Lower part of E gable, now within E extension	30-03- 2012	КМ
577- 580	Е	E extension	N elevation	060	Post-ex of eaves detail at NE corner of N elevation of E extension	30-03- 2012	KM
581- 582	Е	North Range / E extension	N elevation	030, 060	Junction and step out between N elevation of E extension and main North Range, detail at eaves	30-03- 2012	KM

Appendix C Contexts Register : - 1973.00 Culross Palace, North Range, Culross, Fife : **Building Recording**

Analytical survey March 2012 after removal of cement harling

- Phase 1 : Early, pre-1611 building on site, probably single story with similar foot print as 1611 North Range, but smaller in its extent to S. This may have either seen some repair to the gable / wall head or the upper part was rebuilt as part of phase 2. Possibly contemporary with early structure identified within West Range; MacGibbon & Ross interpret earliest phase as stables (1887, 435).
- Phase 2 : Construction of the 1611 main North Range, two storey plus attic, on current footprint, incorporating earlier phase 1 structure, and extending further S. Most likely built with external stair tower, centrally at rear, to access hall at attic floor level.
- Phase 3 : Extension to W of 1611 North Range, possibly covering most of the present courtyard area, leaving only a small pend to west and south. Apparent remains of flue insertion and possible fireplaces in W gable suggest that W extension was two storey plus attic providing heated accommodation.
- Phase 4 : Addition of E extension as presently extant with only minor repair. A larger opening was originally built to allow loading goods into loft; this later reduced to height of present wallhead.
- Phase 5 : Demolition of W extension and stair tower; making good of SW corner of North Range, but without replacing crowsteps at gable top; making good of rear wall after stair demolition and insertion of three dormers at attic level. Construction of internal spiral stair to access attic hall and external staircase to W.
- Phase 5 : Demolitions in phase 5 seems to have caused structural problems which required repairs on W and E gable of 1611 main range and E extension. Later modification, reroofing and modern repairs. modern

AA context No.	Location	Summary	Description and Interpretation	Phase
001	W gable	Surviving masonry of W gable of earliest structure	Well-coursed snecked rubble masonry construction using medium-sized, squared-off angular blocks, surviving from seven to fourteen major courses.	phase 1
			Surviving masonry of earliest structure, interpreted as stables.	
002	W gable	Surviving quoins at SW corner of earliest structure	Four large squared-off rectangular quoins surviving, forming straight edge / S end of earliest structure. Compare to 003.	phase 1
			002 have been interpreted as the original SW corner of earliest building rather than N jamb of an original door entrance (009), as there is no indication for an entrance or opening on inside of this gable wall. Compare (009) for insertion of later entrance.	

In situ elements

AA context No.	Location	Summary	Description and Interpretation	Phase
003	W gable	Patch to fill gap of robbed quoin (part of 002)	Lowest quoin of SW corner of earliest building was apparently robbed as part of phase 2 alterations and patched with triangular boulder and small stone material. Size of patch suggests substantial quoin at lowest course.	phase 2
004	W gable	Wall head repairs above 001 original masonry	Well-coursed snecked rubble masonry construction using medium-sized, squared-off slabs rather than angular blocks as for 001, surviving to a maximum of five major courses. Different in character from 001, this may represent repair to original gable and could thus be part of phase 1. Similarly this could be levelling of wall head for construction of two storey building of phase 2, after original gable had been taken down. The latter seems more likely. Quoins to S later robbed (compare 008).	phase 1 or phase 2
005	W gable	N sockets for timber beam	Pair of small sockets (with 006) within 004 masonry; to receive small joist 6 by 14 cm; 005and 006 are ca. 70 cm apart. Either remains of joists for western extension, inserted during phase 3, or associated with 007 socket for an external stair, then post-phase 4 demolition of west extension. The latter seems more likely as one would expect to see more sockets surviving within 004.	most likely phase 5 modern
006	W gable	S sockets for timber beam	Pair of small sockets (with 005) within 004 masonry; to receive small joist 6 by 14 cm; 005 and 006 are ca. 70 cm apart. Compare 007 and 022 for interpretation as external stair after demolition of western extension in phase 4.	most likely phase 5 modern
007	W gable	Upper socket for timber beam	Socket within 013 masonry; to receive joist or cross-beam 9 by 14 cm; Compare 005, 006 and 022 for interpretation as external stair after demolition of western extension in phase 4.	most likely phase 5 modern

AA context No.	Location	Summary	Description and Interpretation	Phase
008	W gable	Masonry to extent original S wall of earliest structure or patching to insert entrance into W extension	Irregularly coursed rubble masonry (re?-)using some medium-sized, squared-off slabs and irregular smaller stones, the latter primarily to patch out robbed quoins from 004.	phase 2; more likely phase 3
			Could be par of 1611 enlargement of original phase 1 structure and its extension to S; but more likely patching as part of insertion of entrance 009 and lintel 010 as part of W extension	
009	W gable	Entrance formed between 1611 / phase 2 structure and inner courtyard	Possible entrance formed by original SW corner of phase 1 structure and phase 2 quoining of 1611 S façade.	phase 3 or less likely phase 2
			The entrance was probably created to allow access from the inner courtyard into the western stable of the North Range. Alternatively this entrance was later inserted in phase 3 when an additional range was built to W, latter seems less likely.	
010	W gable	Lintel stump over 009 entrance	Remains of a substantial lintel over the entrance 009 from the North Range into the inner courtyard and later into the W extension. Lintel was probably cut down in phase 5 when phase 3 W extension was demolished and entrance 009 was infilled with 023.	phase 3 original construction; demolished phase 5
011	W gable	Quoins forming original SW corner of 1611 building	Substantial rectangular blocks of blond sandstone that formed original SW corner for 1611 building. Of the original quoins only three survive; replaced by later patching 021 that replaces the tie-stones (e.g. 012) for the W extension; the removed tie- stones would have been part of 013.	phase 2
012	W gable	Protruding quoin, originally part of cross- walling (013) for W extension	Now squarish angular block protruding ca. 0.10m from present W façade, ca. 3m above present ground level of inner courtyard.	phase 2 stone, re- used in phase 3 , reduced in phase 5
			Original tie-stone to link S façade of 1611 building with S façade of W extension, inserted as part of construction of W extension, perhaps re-using original 1611 quoins from SW corner. Hewn off after demolition of W extension in phase 5.	

AA context No.	Location	Summary	Description and Interpretation	Phase
013	W gable	Masonry stump, ca 2.5m high now forming projecting wall buttress	Well-coursed masonry of large angular blocks and thinner slabs: wall top finished with several courses of thin slabs.	phase 3
			Remains of cross-wall that was constructed as the S wall of the W extension, built in phase 3.	
014	W gable	Main masonry fabric of W gable of 1611 North Range (S part)	Well-coursed snecked rubble masonry construction using medium to large squared-off rectangular and squarish blocks; surviving mainly to S at upper and attic level. Same as 015 to N.	phase 2
			Surviving original masonry of the 1611 North Range construction of phase 2.	
015	W gable	Main masonry fabric of W gable of 1611 North Range (N part)	Well-coursed snecked rubble masonry construction using medium to large squared-off rectangular and squarish blocks; surviving mainly to N at upper and attic level. Same as 014 to S.	phase 2
			Surviving original masonry of the 1611 North Range construction of phase 2.	
016	W gable	Reused crowsteps stones to N and S	Resetting of reused crowsteps, heavily weathered, but historic photographs show that these were not extant before late 1930s.	phase 5 modern
017	W gable	Masonry containing re- used stones indicating insertion of flue	Coursed masonry consisting of large angular slabs and re-used stones, built in less regular courses than 014 and 015.	phase 3; re-using stone
			Making good of masonry after insertion of flue for fireplaces in phase 3. The stone material includes medium-sized grey sandstone blocks with diagonal tooling, obviously reused and blonde sandstone with remains of plaster and paint on underside.	
			Flue and fireplaces were seemingly inserted in phase 3 when W extension was added, but it is unclear where the re-used stone for 017 is likely to have come from.	

AA context No.	Location	Summary	Description and Interpretation	Phase
018	W gable	Masonry patch to infill blocked / removed fireplace	Small to medium squared-off angular grey sandstone blocks with tooled surfaces. Inserted to patch up masonry to block possible fireplaces; stone material	phase 5
			seemingly derived from demolition of W extension. Compare tooled stones within 017 for making good after insertion of flue.	
019	W gable	Masonry patch of former purlin for W extension – N side	Masonry patch of small flat stones. Infill of gap left after removal of purlin for roof covering W extension.	phase 3 purlin; removed and infilled in phase 5
020	W gable	Masonry patching of former purlin for W extension – S side	Masonry patch of irregular medium- sized blocks with small pinnings. Infill of gap left after removal of purlin for roof covering W extension.	phase 3 purlin; removed and infilled in phase 5
021	W gable	Masonry patching of SW corner of 1611 building after demolition of W extension	Predominantly small slabs used to fill in and remodel SW corner after removal of tie-stones 012 as part of demolition of W extension, that had replaced original quoins of SW corner 1611 North Range.	phase 5
			Occasional original 1611 quoins survive in situ or incorporated, particularly at ground floor level (011); 012 tie-stone still in place, but hewn off.	
022	W gable	Socket in large quoin of NW corner of 1611 North Range	Substantial socket cut into large quoin of NW corner of 1611 building, ca. 4m above present inner courtyard level, and about 1m above present garden terrace level.	most likely phase 5 modern
			Possibly Associated with 005, 006, 007 to form a later staircase, inserted as part of or after-phase 5 demolition of W extension.	
023	W gable	Masonry patch to block door 009 from North Range into inner courtyard	Mix of well-coursed masonry consisting of large angular blocks and of small patches using fist-size infillers.	phase 5
			Blocking of doorway 009 and patching after removal of lintel 010 after demolition of W extension in phase 5	

AA context No.	Location	Summary	Description and Interpretation	Phase
024	W gable	Masonry patch to infill blocked / removed fireplace	Small to medium squared-off angular grey sandstone blocks with tooled surfaces. Inserted to patch up masonry to block fireplaces; stone material seemingly derived from demolition of W extension. Compare tooled stones within 017 for making good after insertion of flue.	phase 5
025	W gable	Masonry patch for reforming wallhead following demolition of west range	Small angular and pinning stones to patch up / level of wall head of west gable north side, the current crow steps are either contemporary or secondary to this levelling Structural problems after demolition of stair tower (028) : N wall seemingly bulged outwards, which may have caused cracking in upper S part of W gable. Compare bulge in crowstep stones on E gable without repair 048.	phase 5 modern
026	W gable	Masonry patch for reforming wallhead following demolition of west range	Small angular and pinning stones to patch up / level of wall head of west gable south side; the current crow steps are seemingly secondary to this levelling.	phase 5
027	W gable	Masonry stump similar to 013, remains of original north wall of W extension	Original wall of W extension, no used as a retaining wall against slope. While this seems the likely interpretation, there is no evidence for a wall having been tied into the upper fabric of the W gable NW corner	phase 3
028	N elevation	Lost rear stair tower (speculative)	Speculative rear stair tower, now demolished. N elevation contains evidence for removed cross-wall to form E and W wall of lost stair tower (compare 036 and 037)	phase 2 construction, phase 5 demolition
029	N elevation	Main masonry to NW of 1611 building	Well-coursed snecked rubble masonry construction using medium to large squared-off rectangular and squarish blocks; masonry to W. Surviving original masonry of the 1611 North Range construction of phase 2. Masonry identical in character with 030, but coursing not continuous. Masonry bulges outwards / northwards in its upper part. Because of the bulging of the rear wall the alignment is also slightly different.	phase 2

AA context No.	Location	Summary	Description and Interpretation	Phase
030	N elevation	Main masonry to NE of 1611 building	Well-coursed snecked rubble masonry construction using medium to large squared-off rectangular and squarish blocks; masonry to E. Surviving original masonry of the 1611 North Range construction of phase 2. Masonry identical in character with 029, but coursing not continuous. Masonry bulges outwards / northwards in its upper part. Because of the bulging of the rear wall the alignment is also slightly different.	phase 2
031	N elevation	Masonry of 1611 building at stair tower	Small surviving patch of well-coursed snecked rubble masonry construction using medium to large squared-off rectangular and squarish blocks. Surviving original masonry of the 1611 North Range construction of phase 2 in area of now lost stair tower. Masonry identical in character with 029 and 030, coursing generally continuous, but interrupted by cross- walling for stair tower (compare 036 and 037).	phase 2
032	N elevation	Cut-off timber beam originally supporting landing for rear stair; E beam	Timber stump to E, incorporated in surviving 1611 masonry 031. Original floor beam supporting landing of rear stair; part of stair tower 028; presumably supporting floor of small press above stair, compare 033.	phase 2 construction, cut off in phase 5 demolition
033	N elevation	Cut-off timber beam originally supporting landing for rear stair; W beam	Timber stump to W, incorporated in surviving 1611 masonry 031. Original floor beam supporting landing of rear stair; part of stair tower 028; presumably supporting floor of small press above stair, compare 032.	phase 2 construction, cut off in phase 5 demolition
034	N elevation	Sill / threshold stone of entrance into hall of North Range at attic floor level; W sill	Long thin slab, forming sill stone for entrance into hall of North Range at attic floor level, accessed via landing (compare 032 and 033) from stair tower 028. Position of central dormer inserted in phase 3 might coincide with original position of lintel for this upper entrance	phase 2

AA context No.	Location	Summary	Description and Interpretation	Phase
035	N elevation	Sill / threshold stone of entrance into room in N	Long thin slab, forming sill stone for entrance from room in North Range at	phase 2
		jamb at attic floor level; E sill	attic floor level into a press over the stairs, possibly accessed via landing (compare 032 and 033) from stair tower 028.	
036	N elevation	Remains of / patching after removal of cross- walling; W wall of lost stair tower	Medium-sized slabs and small pinning stones, part of 1611 cross-wall or later patching after demolition.	phase 2 cross-wall, phase 5 demolition and patching
			Cross-wall would have been original W wall of stair tower, part of 1611 construction of North Range and demolished in phase 5	
037	N elevation	Remains of / patching after removal of cross- walling; E wall of lost stair tower / W wall of N	Medium-sized slabs and small pinning stones, part of 1611 cross-wall or later patching after demolition.	phase 2 cross-wall, phase 5 demolition and patching
		jamb	Cross-wall would have been original E wall of stair tower, part of 1611 construction of North Range, demolished in phase 5.	
038	N elevation	Infill masonry after removal of stair tower and N jamb, creation of three upper dormer windows	Masonry consisting of medium-sized slabs and small pinning stones. Blocking rear wall after demolition of stair tower and creation of three	phase 5
			dormer windows; central dormer seemingly reusing existing entrance from stair into hall at attic floor level of North Range.	
039	N elevation	Internal masonry between main North Range and stair tower as built in	Well coursed masonry using smaller stones than 029, 030 and 031.	Phase 2
		1611	Internal wall of stair tower, originally build as part of 1611 enlargements; containing timber beams 032 and 033, and sill stones 034 and 035.	
040	N elevation	Original lintel of rear entrance associated with 1611 stair tower	Substantial slab, with dressed margin, having formed the original lintel for original entrance 042 into 1611 North Range	<i>phase 2, reset in phase 5</i>
			Lintel reset in phase 5, when height of entrance raised as part of phase 5 demolition of stair tower.	
041	N elevation	Raising of original lintel into current position and rebuilding around door	Masonry of internal wall between N wall of North Range and stair tower; different in character to external masonry 029, 030 and 031, and small pinnings levelling reset lintel.	phase 5
			Door raised as part of demolition of stair tower and possible change in external ground level.	

AA context No.	Location	Summary	Description and Interpretation	Phase
042	N elevation	Jamb stones of original rear entrance to 1611 North Range	Substantial squared-off angular blocks with dressed margins forming W and E door jambs of original entrance to 1611 North Range.	phase 2
043	E gable	Surviving masonry of E gable of earliest structure	Well-coursed snecked rubble masonry construction using medium-sized, squared-off angular blocks, surviving to a maximum of seven major courses. Surviving masonry of earliest structure, interpreted as stables; remains visible on E wall are seemingly remains of original gable.	phase 1
044	E gable	Masonry to extent original S wall of earliest structure	Well-coursed rubble of medium-sized, squared-off slabs and some irregular smaller stones and pinnings. Part of 1611 enlargement of original phase 1 structure and its extension to S; compare 014 in W gable.	phase 2
045	E gable	Masonry to level original E gable of earliest structure	Masonry patch of medium-sized squarish angular blocks and small pinning's to level up original E gable to be incorporated into 1611 North Range	phase 2
046	E gable	Main masonry fabric of E gable of 1611 North Range within E extension	Well-coursed snecked rubble masonry construction using medium to large squared-off rectangular and squarish blocks; surviving within E extension and less weathered than exposed masonry 048; compare 014 ands 015 on W gable.	phase 2
			Surviving original masonry of the 1611 North Range construction of phase 2.	
047	E gable	Straight joint in fabric of original phase 1 structure	Stretch of straight joints indicative of a jamb for an opening, fireplace or similar feature now blocked / lost; surviving within original masonry of earliest structure; compare 053 and 054.	phase 1
			Original opening or feature within early stables, perhaps connecting entrance from inner courtyard at E, now within E extension.	

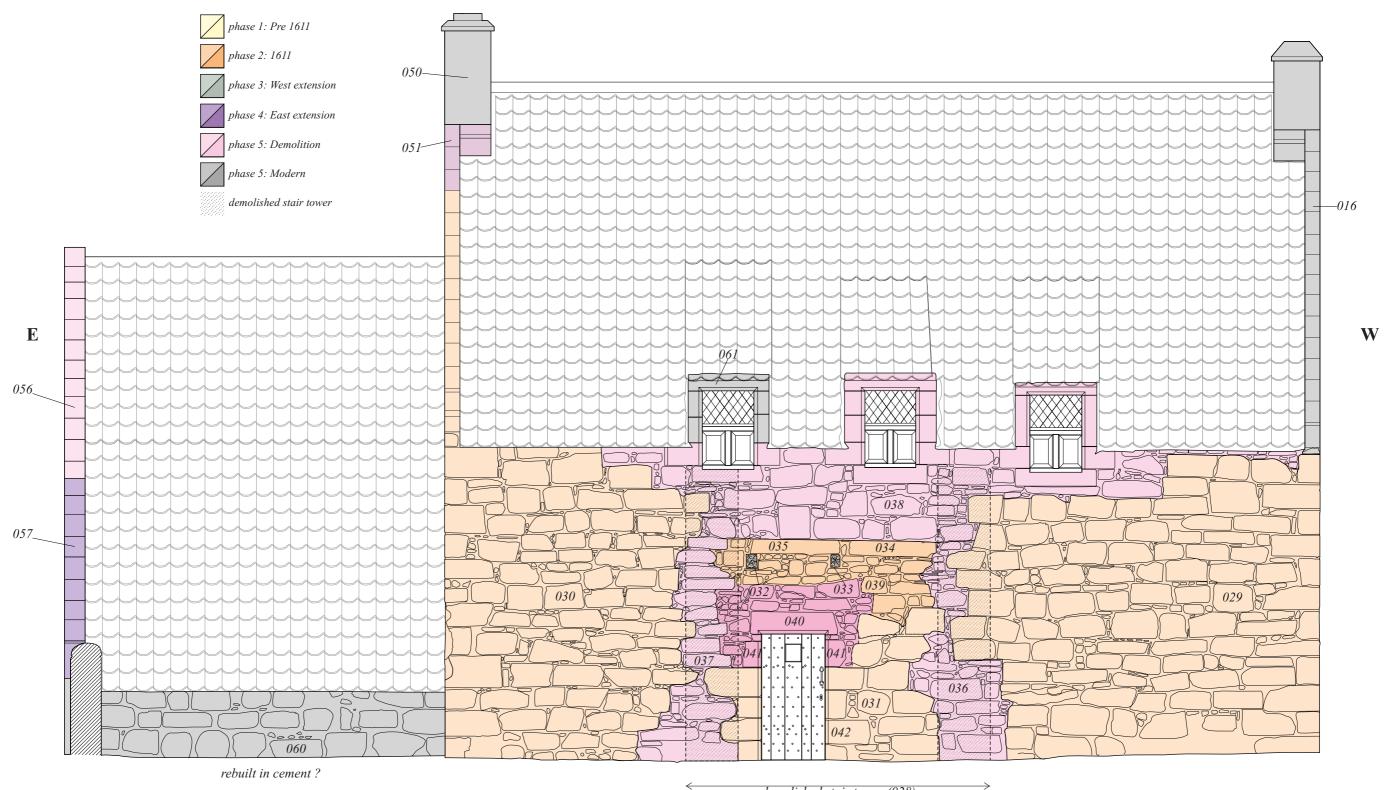
AA context No.	Location	Summary	Description and Interpretation	Phase
048	E gable	Main masonry fabric of E gable of 1611 North Range above / outside E extension	Well-coursed snecked rubble masonry construction using large squared-off rectangular and squarish blocks; surviving above roof of E extension and therefore more weathered than masonry within E extension; compare 046 and 014 and 015 in W gable	phase 2
			Surviving original masonry of the 1611 North Range construction of phase 2.	
			Crowstep stones in particular of N wall head seem to be in original position and were not reset in contrast to crowstep stones of W gable (see 016) – notable bulge within wall head suggest structural problems that were counteracted on W side, but not on E side; compare 025 and 026.	
049	E gable	Masonry patch at wall head to S and below chimney	Masonry patch / repair of upper part of S wall head and gable top below chimney, consisting of few medium- sized slabs and predominantly small pinnings.	phase 5 or phase 5 modern
			Repair of southern top of E gable and associated chimney, suggests repair / access to chimney flues; compare resetting of uppermost crowsteps 051; date unsure, perhaps part of phase 5 modern, although compared to 052 no modern tool marks identified.	
050	E gable	Repair / lowering of chimney	Evidence for repair or resetting of E chimney, probably as part of 1930s roof repairs, but could also be earlier repair; compare 026.	phase 5 or phase 5 modern
051	E gable	Reset copestones to N and S gable top	Resetting of three uppermost copestones to N, and four to S associated with repair 049.	phase 5 or phase 5 modern
052	E gable	Modern masonry patch central to the upper E gable	Mix of rubble including some possibly machine cut blonde sandstone. Probably modern flue repair.	phase 5 modern
053	E gable E extension	Main masonry fabric of E gable of E extension	Very well-coursed rubble masonry construction using medium to large squared-off rectangular and squarish blocks. Main fabric of the E extension.	phase 4

AA context No.	Location	Summary	Description and Interpretation	Phase
054	E gable E extension	Masonry patch to repair crack in N part of E gable	Masonry repair / patch consisting of very small pinnings to fill crack in uppermost part of N side of E gable of E extension.	phase 5
			Upper part of chimney has seemingly cracked / moved, either because of storm damage or structural problems associated with North Range and demolition of stair tower; compare 055 and 056.	
055	E gable E extension	Reset original copestones after repair to gable top; S side	Resetting of ten original crowstep stones of E extension on S side plus top crowstep stones after repair of gable 054; compare 056.	phase 5
			Stones appear more yellow / less grey than 057 and 058, but no significant difference in degree of weathering suggests reuse – unclear when exactly these repairs were undertaken.	
056	E gable E extension	Reset original copestones after repair to gable top; N side	Resetting of ten original crowstep stones of E extension on N side after repair of gable top 054; compare 055.	phase 5
			Stones appear more yellow / less grey than 057 and 058, but no significant difference in degree of weathering suggests reuse – unclear when exactly these repairs were undertaken.	
057	E gable E extension	Grey weathered coping stones at lower part of gable; N side	Heavily weathered copestones, grey on surface.	phase 4
			Nine copestones in situ, part of original E extension; N side.	
058	E gable E extension	Grey weathered coping stones at lower part of gable; S side	Heavily weathered copestones, grey on surface.	phase 4
			Nine copestones in situ, part of original E extension; S side.	
059	E gable E extension	Masonry stump of original boundary wall	Remains of cut-off boundary wall to E, protruding ca. 0.5m from original E gable wall of E extension.	phase 4
060	E gable and N wall E extension	Main masonry fabric of E gable of E extension	Very well-coursed rubble masonry construction using medium to large squared-off rectangular and squarish blocks.	phase 4 original; rebuilt phase 5 modern
			Cement mortar and regular appearance of masonry suggest rebuilding of wall part visible above ground level at rear in recent times.	
061	N elevation	Rebuilt E dormer	Rebuilding of E dormer above in situ sillstone – the dormer had been lost pre 1880s, as indicated by historic photographs	phase 5 modern

AA context No.	Location	Summary	Description and Interpretation	Phase
062	E gable	Previous roof line of E extension	Outline of previous roof line of the N pitch of the E extension	phase 4 original roof line

Appendix D: Drawings Register – 1973.00 Culross Palace

Dwg No.	Sheet	Туре	Scale	Description	Date	Drawn by
001	1	Elevation	1:20	N elevation, main North Range building	28/03/2012	KM
002	2	Elevation	1:20	E elevation, east extension	28/03/2012	TR
003	3	Elevation	1:20	E elevation, main North Range building, gable top	28/03/2012	KM
004	4	Elevation	1:20	W elevation, main North Range building, gable top	28/03/2012	KM
005	5	Elevation	1:20	W elevation, main North Range building, upper floor level (lower part)	28/03/2012	TR
006	6	Elevation	1:20	W elevation, main North Range building, ground floor level	28/03/2012	КМ
007	7	Elevation	1:20	E elevation, main North Range building, from within east extension	27/03/2012	КМ
008	6	Elevation	1:20	N elevation, east extension	26/03/2012	KM

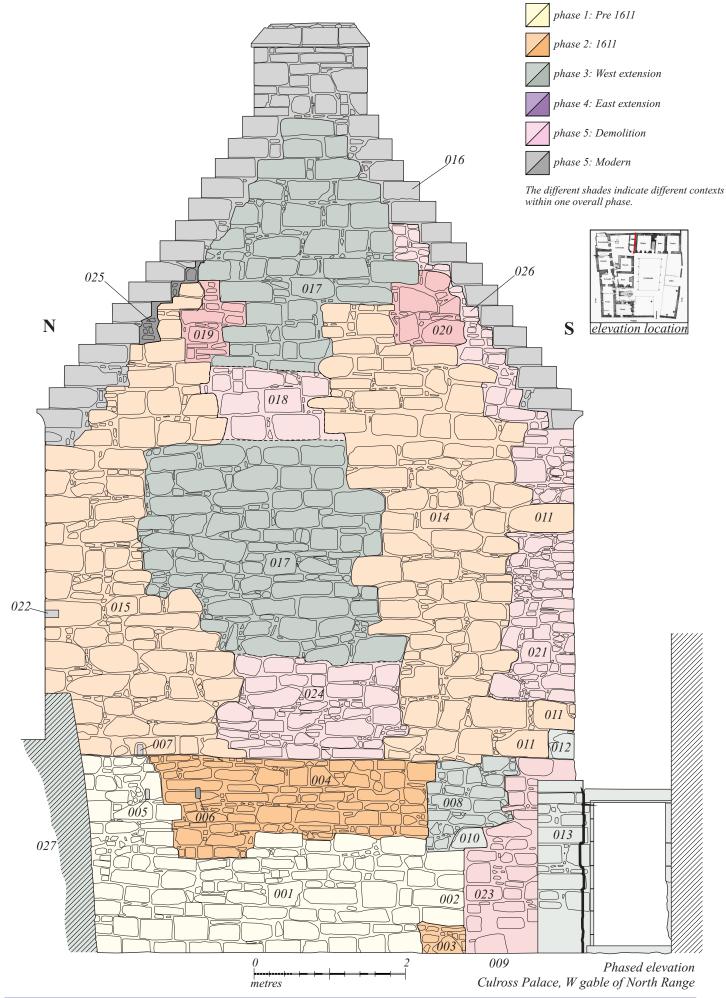


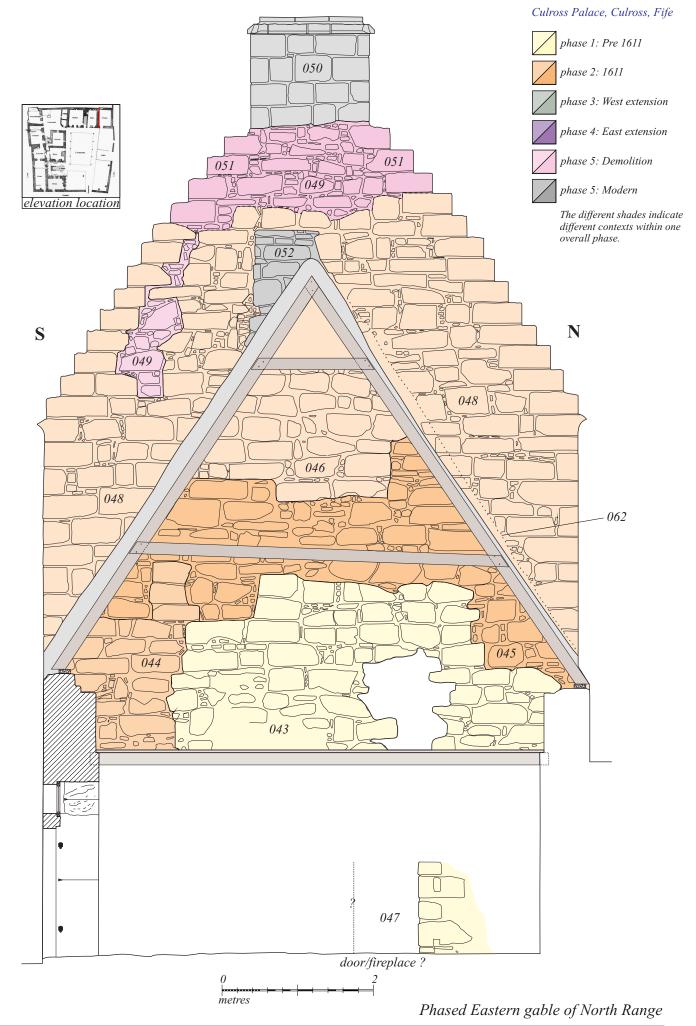


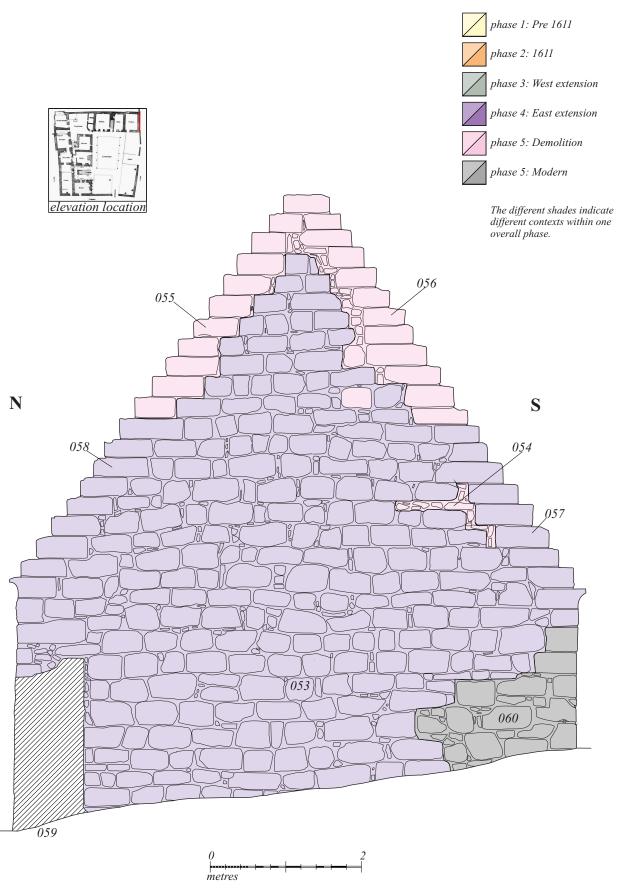
demolished stair tower (028)

metres

Phased North elevation of North Range







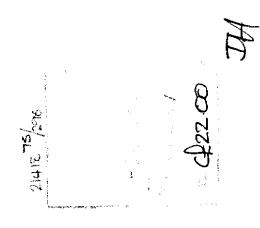
Phased Eastern gable of North Range extension to east

LOCAL AUTHORITY:	Fife		
PROJECT TITLE/SITE NAME:	Culross Palace		
PROJECT CODE:	1973.00 (AA); CUR/12/1 (NTS)		
PARISH:	Culross		
NAME OF CONTRIBUTOR:	Tanja Romankiewicz and Kenneth Macfadyen		
NAME OF ORGANISATION:	Addyman Archaeology		
TYPE(S) OF PROJECT:	Historic Building recording		
NMRS NO(S):	NS98NE 12		
SITE/MONUMENT TYPE(S):	Early 17 th century merchant's town house incorporating earlier structure and later alterations.		
SIGNIFICANT FINDS:	North Range: Previously unknown W extension and stair tower to N		
NGR (2 letters, 8 or 10 figures)	NS 98515 85951		
START DATE (this season)	March 2012		
END DATE (this season)	October 2012		
PREVIOUS WORK (incl. DES ref.)	Lewis & Reed 1992, 30; Murdoch & Lewis 1994, 16; Lewis 1994, 16; Murdoch 1995, 25; Murdoch 1997, 36; Daly 2003, 77; Ewart 2007, 96f; Rhodes 2011, 87.		
	Kirkdale Archaeology : "Culross Palace – Standing building recording" for NTS 6 th June 2012.		
MAIN (NARRATIVE) DESCRIPTION: (May include information from other fields)	An analytical building survey of Culross Palace was undertaken in advance of reharling works for the N, W and E elevations of the North Range, and of the N wall and E gable of the lower extension to E. A full drawn stone-by-stone survey was prepared for the three elevations that were stripped off the existing cement harl; the S elevation retains its harling. The survey also included small-scale roof investigations to detect any evidence for earlier roofing materials and for eaves and verge details; however no evidence survived. A brief desk-based study informed the analytical assessment.		
	Construction breaks and remains of quoining indicated the survival of an earlier structure, incorporated and enlarged by Sir George Bruce's remodelling of the North Range in 1611. The earlier building generally corresponds with the footprint of the existing structure, but was smaller in its S extent. MacGibbon & Ross recognised similar evidence in the 1880s, which they interpreted as an earlier stable.		
	The new survey also identified crosswall remains and sill stones that suggest the previous existence of a stair tower at rear. This would have provided access to the hall at attic level in a more elegant manner than the extant internal turnpike stair within the W room on first floor. A rear stair tower would also mirror the arrangement of the West Range, remodelled by Bruce only 15 years earlier.		
	Evidence for reset quoins, inserted flues and apparently blocked fireplaces combine to suggest a now lost W extension; this apparently of similar height than the extant North Range. Historic photographs underpin the evidence for a pre-existing W extension because the W gable of the extant North Range is shown without crowsteps. This implies that the roof had at some point continued further W – the present crowsteps must have been rebuilt with reused stones, probably after the NTS acquired the building in 1932. Some of the stones used to block flues and fireplace serving the W extension retained internal plaster and paint on their underside – a possible resource for paint analysis, as they were most likely reused from a demolished building on site, perhaps even from the demolished W extension. Further details such as the removal and		

Appendix E: DES entry of present work – 1973.00 Culross Palace

	rebuilding of the E dormer at rear, the reduction in height of the loading door to the E extension loft and the complete reroofing in pantiles all combine to reveal that Culross Palace's North Range has a far richer building history than the overall presentation of a homogenous structure might suggest at first glance.
PROPOSED FUTURE WORK:	Possible reharling of the S elevation.
CAPTION(S) FOR ILLUSTRS:	Culross Palace, Fife: Analytical survey of the N elevation after removal of cement harl showing evidence for earlier structure, possibly a stable, the demolished stair tower and the (re-)built dormers.
SPONSOR OR FUNDING BODY:	National Trust for Scotland
ADDRESS OF MAIN CONTRIBUTOR:	Simpson & Brown/Addyman Archaeology St Ninian's Manse Quayside Street Edinburgh EH6 6EJ
EMAIL ADDRESS:	tromankiewicz@simpsonandbrown.co.uk
ARCHIVE LOCATION (intended/deposited)	NTS / RCAHMS

Appendix F: Designations – 1973.00 Culross Palace



THE ANCIENT MONUMENTS AND ARCHAEOLOGICAL AREAS ACT 1979

Amended Entry in the Schedule of Monuments

1**9**92

Re: The Monument known as Culross Palace, palace and gardens

in the Parish of Culross and County of Fife

File Ref:

Solicitor to the Secretary of State for Scotland New St Andrew's House Edinburgh

F2102635.112

REGISTERS OF SCOTLAND GENERAL REGISTER OF SASINES COUNTY OF FIFE

THE ANCIENT MONUMENTS AND ARCHAEOLOGICAL AREAS ACT 1979 AMENDED ENTRY IN THE SCHEDULE OF MONUMENTS

The entry in the Schedule of monuments appearing to the Secretary of State for Scotland to be of national importance compiled and maintained by him under Section 1(1) of the above Act in respect of the monument known as Culross Palace, palace and gardens, forming part of the

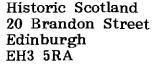
is hereby in accordance with the provisions of section 1(5) of the above Act amended to describe the area of the scheduled monument as comprising the three main blocks, two forming the Palace and the third Bessie Bar, together with all associated courtyards, the gardens to the north and all boundary walls as shown delineated in red on the plan annexed and executed as relative hereto.

Given under the Seal of the Secretary of State for Scotland



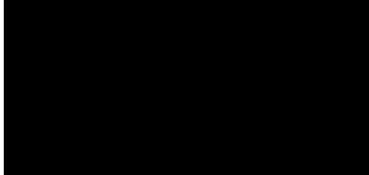
÷ 12

Assistant Secretary Date 20 NOVEMBER 1992





Register on behalf of the Secretary of State for Scotland in the Register of the County of Fife.



F2102735.112 Fi9 2 1774



CULROSS BURGH

STATUTORY LIST

HISTORIC SCOTLAND

FIFE COUNCIL

Information Supplementary to the Statutory List (This information has no legal significance)

HB Number 23983 Item Number: 81 -Group with Items: Map sheet: Category: A Group Category: Date of Listing 12-JAN-1972

Description:

1597. 3-storey, 3-bay T-plan house (West building); pedimented dormer windows, dated 1597. L-plan wing attached to W comprises kitchen, pantry and further accommodation including hall, laigh hall and garden room. Sandstone rubble with orange coloured harl. Separate building to NE (North building); 1611. 3-storey, 4-bay house; 2-storey, 2-bay section to E. Pedimented dormer windows. Sandstone rubble clad in orange coloured harl.

W ELEVATION: hall and pantry to right; taller kitchen wing and garden room to left. Hall and pantry; 3 narrow ground floor windows to right; slight bulge in ground floor wall to left. 2 windows to left; small ventilation hole to far left. 4 catslide dormer 1st floor windows; small window below eaves to far left. Kitchen and garden room wing advanced to far left. Hole at ground floor with stone channel (drains into water trough in kitchen). 2 1st floor windows; blocked door to left (covered by harling); small 1st floor window to right. Attic window to right return. Tall, harled wall extends westwards from left concealing circular, stone-lined Bessie Bar Well. Wide door in wall provides access to well.

S ELEVATION

Hall and laigh hall: hall gable wall to left; ground floor door to right, rounded margins; roll-moulded 1st floor window to left. The laigh hall to right; 1st floor catslide dormer window to left. West building: ground floor window to centre right; small, narrow window to far right. Doorway to far left leads into ground floor service passage. 2 1st floor windows; blocked door to left (covered by harling). 3 2nd floor pedimented dormer windows; rounded window margins; stone to upper half; harled to lower half. Decorative carving to each dormer; arched dormerhead to left window; split into 3 with crescent carving to each segment; surmounted by crescent resting on projecting scrolls. Ogee-arched decoration to central dormerhead; shield with flanking initials 'GB' (George Bruce) and date '1597'. Surmounted by crescent, flanking projecting scrolls. Triangular pediment to right window; triangular reeded carving within; thistle finial.

CULROSS, SANDHAVEN, CULROSS PALACE INCLUDING COURTYARD WALLS, GARDEN WALLS AND BESSIE BAR WELL

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E ELEVATION

Laigh hall: ground and 1st floor window in E gable wall to left. Hall: central stone steps; semi-circular shape to bottom step. Steps lead up to 1st floor entrance door and platform. Blocked window to left of door; blocked door to right; moulded surround; blocked horizontal window above. Ground floor flat arch to right and left of stairs below platform. Horizontal window behind stairs; chamfered surrounds; metal grille. Door to right leads into present exhibition room. Cobbled courtyard area surrounds central steps; ashlar drainage channel runs along 3 sides of yard.

West building: gable wall to left; ground floor window to right (former door); small, narrow blocked attic window to right. Later accommodation wing to right; off-centre ground floor window. 2 1st floor windows. 2nd floor catslide dormer window to right. Eaves course.

Kitchen and garden room wing: ground floor kitchen window to left; 1st floor window to right. Former bakehouse to far right; ground floor door; ground floor window to far right. Traces of wall of former room remain above bakehouse at 1st floor.

N ELEVATION

Laigh hall: ground floor window to left; door to right. 1st floor pedimented dormer window above ground floor window; scroll decoration within pediment. 1st floor door to far right opens onto platform and provides direct access to the principal stranger's room.

W Building: inverse U-shape to rear Palace elevation. Gable wall to left; off-central blocked ground floor door; 2nd floor window to right. Plain section to right return; 2nd floor set back slightly. Section containing staircase and kitchen passage set back to right; ground floor door to right; horizontal window above door. Stair window above to left; 1st floor window to right. Rear of garden room advanced to right; door to left; projecting chimneybreast to right.

Replacement lattice glazing to upper window pane, timber shutters to lower panes. 16-pane timber sash and case windows to hall W elevation. Timber studded doors. Tirling pin to Hall entrance door. Pitched roofs; crowstepped gables. Terracotta pantiles. Truncated crowstep gable to Hall S gable. Gable end stacks to West building; kitchen and garden room wing. Gable end stack to laigh hall E gable and Hall, S gable.

INTERIOR: laigh hall (currently NTS ticket office); stone fireplace in E gable wall. Niche in N wall to far right. Remains of paint on ceiling. Principal stranger's room above laigh hall; vaulted roof;

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replacement timber panelling. Painted panelling to walls: setting sun on W wall; rising sun on E gable wall. Fireplace in E gable wall; moulded panelling around fireplace. Hall (W wing) formerly one room with adjacent withdrawing room; split into 2 rooms in earlier 18th century. Timber vaulted ceiling; timber lined walls. Large fireplace to N wall; stone roll-moulding to fireplace; 1588 cast-iron fire grate. Garderobe to left of fireplace; chamfered stone pedestal seat. Timber lining to walls and ceiling in withdrawing room to S; early 18th century marbelled panelling, coved ceiling. Built-in buffet in E wall. Lugged and moulded timber surrounds to buffet door and doorways and to stone moulded fireplace in S wall. Timber floor. Turnpike stair leads out of hall into laird's room in earlier (1597) building. Early 18th century panelling. Stone fireplace to E wall. Arched stone porch leads into vaulted strongroom to N. Vaulted stone ceiling; walls partially timber clad; tiled floor. Fireplace to N: small book-case niche in N wall to right of fireplace and W wall; timber panelled doors. Garden room to W of laird's room; earlier 18th century panelling. 1780's hob grate; chamfered, flat arch to stone fireplace surround with stops. Lugged timber architrave to stone fireplace. Built-in cupboard between windows to W. Door leads to closet to S. Corridor oustside garden room leads into garden to N. Remains of former room outside (above bakehouse). Turnpike stair leads to the painted chamber above the laird's room at 2nd floor. Timber lined room; painted wagon ceiling. 16 paintings, probably early 17th century; moral maxim in Latin at top of each painting; rhyming couplet below in English, painted in distemper. Stone moulded fireplace to W. Blocked window to E of door. Attic room to W, above garden room currently holds exhibition space; open to rafters; chimney flue in N gable projects into room. Empty attic room to right above strongroom, open to rafters. Fireplace in N gable; niche to E of fireplace. Exposed stone walls; remains of panelling and plaster visible (plaster red in colour). Barrel vault construction of painted chamber to S visible including blocked dormer window. Ground floor; room (former kitchen) not seen to E; vaulted cellar to N. Room to SW not seen, exhibition room to N: door connects to pantry to N of exhibition room; niches in E and S walls; door leads to kitchen to N of pantry. Kitchen; blocked door in W wall; niche in W wall; large arched fireplace to N spans width of room. Drain in stone flagged floor to S and W. Hole in W wall with stone trough below runs into inside left of fireplace and northwards through wall into bakehouse. Service cross passage runs between kitchen and pantry to W and store and former kitchen to E. Doors lead from these rooms into corridor. Vaulted bakehouse interior not seen.

NORTH BUILDING

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S (PRINCIPAL) ELEVATION: door to left; flanking windows. 2 doors to right; window to right; (small windows to ground floor). 4 regularly spaced 1st floor windows. Stone sundial to centre; missing gnomon. 4 finialled 2nd floor dormer windows centred above. Carved pediments to dormers. 3 roses in tympanum to left dormer; fleur-de-lis to 2nd dormer. Initials 'SGB' (Sir George Bruce) grouped around rosette to 3rd dormer; quatrefoil and date 1611 to right dormer. Single storey stable with hayloft to right; ground floor door; horizontal window above door; ventilation slit to right; pedimented dormer window above door; 1st floor loft door to far right, below eaves.

W ELEVATION: plain gable.

N ELEVATION: off-centre door provides direct access to 1st floor (due to slope of ground to N). 3 central 1st floor catslide dormer windows.

E ELEVATION: plain gable.

Timber boarded doors. Replacement lattice glazing to upper window pane, timber shutters below. Pitched roofs; crowstepped gables. Coped gable apex stacks to 3-storey building. Clay pantiles. Tall steeply pitched roof to 2-storey building.

INTERIOR: S elevation, 2nd door opens into corridor; steps at end of corridor lead up to N entrance door (at rear garden level). 3rd door leads to former stable; drain in ground to right. 2 rooms at 1st floor; fireplace in both gable walls; timber lined W room; tempera painted ceiling to both rooms. Small room above off-centre ground floor corridor to S. 2 rooms to 2nd floor; tall rooms; painted timber vaulted ceilings; geometric design. Internal timber newel stairs to W of rear door provides access to 2nd floor.

COURTYARD WALLS

Rubble wall runs eastwards from E gable of the laigh hall and turns N to meet E gable of North building. Gate to S; ashlar gatepiers; ball finials; iron gates. E wall swept to S. Flat coping stones to wall. Turfed and flagstoned front courtyard; exposed cobbled area to SE.

GARDEN WALLS

Sandstone rubble walls; rounded coping stones extend from E gable of North building and W gable of Garden Room. Walls bound rear garden and connect to Bessie Bar Hall garden walls; swept in places (see separate listing). Sandstone rubble walls; flat coping

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stones create 3 terraces to N. Stone steps to E and W lead to terraces. 3 niches in middle terrace wall; re-used 17th century carved dormerheads inserted into wall and above niches.

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Notes:

SCHEDULED MONUMENT. National Trust for Scotland property. Culross Palace is an excellent example of a 16th century town mansion with many interesting surviving features including the fine painted ceilings, which are prime examples of Scottish Renaissance interior decoration. The increasing prosperity of the owner, George Bruce, is clearly indicated in the development of the buildings and the later ownership is also evident in the changes to the interior decoration. Prior to George Bruce's involvement in 1597, it is thought that there was a 2-storey house with kitchen and store to ground floor and hall and chamber above. In 1597, George Bruce reconstructed this building (West Building) and added an extra storey. The original entrance was probably in the S elevation to the left at 1st floor, reached by a forestair. At about this time or slightly later he also incorporated an L-plan wing to the S (i.e. gallery and laigh hall). The original forestair also served the (now

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blocked) door to the right of the present entrance door. At a later date, the present door was inserted and the central forestair added. Slightly later additions were the turnpike stair to the N, the new kitchen and the bakehouse. In 1611, George Bruce's wealth had increased from his prosperous coal mining and salt manufacture ventures and he had now become Sir George Bruce. This new status is indicated in the addition of the North building and the initials SGB (Sir George Bruce) in one of the pediments. The stable with hayloft was added later on to the E. The N wing to the main West building was built on either early 1600 or after 1611. There are many interesting features at the Palace including the fine painted ceilings and the precautions taken to make the strongroom fireproof (i.e. the tiled floor and inner door of sheet iron). The strongroom held documents over land tenure, thus the safety of these, was very important. The kitchen water supply is also noteworthy; water was taken from Bessie Bar Well and poured by hand through the hole in the kitchen wall. The channel feeds into the stone trough inside the kitchen and bakehouse. The well was ordered to be built by the Burgh Council in 1598. The laigh hall was designed for visitors and has a separate entrance so that quests can enter without disturbing the household. The Erskines acquired Culross Palace from the Bruces in the early 18th century and made alterations; they divided the gallery into two, creating the hall and withdrawing room and replaced the late 16th century scheme (tempera painted walls and ceiling) with early Georgian panelling in the Laird's Room. Colonel John Erskine of Carnock was the great grandson of Sir George Bruce and he lived here until 1743, which led to the former name of the Palace; 'Colonel's Close'. Captain James Ker later acquired the Palace, although he did not live in it. 2 door lintels in the walls which line the wynd between Bessie Bar's Hall and the Old School are dated 1807 and bear the initials 'J K' (possibly James Ker). It was supposedly through Captain Ker misreading the Latin word palatium (implying courtyard) in the title deeds that 'Palace' became the name of the former Great Lodging. George Bruce of Culross, later of Carnock was a notable figure. He bought the disused colliery from the abbey in 1575 and exploited the coal (including the first underwater mine seam) and developed the salt panning industry to create a large and profitable business. He is said to have introduced the chain and bucket system to drain mains and is credited with being the first to sink a pit under the sea. He was also influential in getting James VI to grant Culross the royal burgh status in 1588, so that he could trade abroad and enjoyed 50 years of prosperous trading in coal and salt. The wane of the burgh's success began with the flooding of George Bruce's moat pit in 1625. Salt panning declined in the 1660's due to cheaper and purer foreign salt and girdle making also lost out to

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cheaper competition, especially from the Carron Iron Company. The harbour was filled in to form the Sandhaven in the late 19th century and the population of Culross decreased until it had dropped from several thousand people in the 17th century to only 578 in 1951. By the late 19th century many of the buildings were condemned and faced demolition. The Palace was bought by the National Trust for Scotland in 1932 as their first building in Culross, and from which the regeneration of Culross began.

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