

Glamorgan-Gwent Archaeological Trust Limited
Contracts Division

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Oystermouth Castle Repair Work
September 1997

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Summary

The City and County of Swansea (hereafter CCOS) has initiated a programme of repair and consolidation work at Oystermouth Castle with joint funding from Cadw: Welsh Historic Monuments, who are providing technical advice. As a condition of Scheduled Monument Consent(SMC) the Glamorgan-Gwent Archaeological Trust Contracts Division (hereafter GGAT Contracts) have been commissioned to monitor the works for their duration and to carry out recording as necessary.

Acknowledgements

The report was prepared by S H Sell with assistance from other members of GGAT staff, to whom thanks are due. The author is also grateful to the staff of City and County of Swansea, Cadw, and C B Watson Stonemasonry who were involved in the project for their assistance throughout, to Andrew Hulling for his help with clearance work and to Gerald Gregory for his help with the recording.

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1. Introduction

1.1 Development Proposal and Commission

This report covers the initial programme of repair work undertaken at Oystermouth Castle by CCOS in order to make good local areas currently causing the greatest concern over safety prior to the opening of the castle to the public. The works specified within the initial programme mostly consisted of repairs to discrete sections of masonry which are readily accessible to or used by the general public, but included two larger areas, one within the keep and one within the North Range of the West Block. Full details of the specifications for the initial programme of works are contained within Appendix One, p 7. Following meetings on site between CCOS, Cadw, the contractors and GGAT Contracts further tasks were identified, and these are given in Appendix Two. As part of the conditions of SMC GGAT Contracts was commissioned to undertake a programme of archaeological supervision for the duration of the works, and this report contains the results of this work.

1.2 Topography and Historical Background

Oystermouth Castle is situated on the western of two limestone ridges overlooking the coastal plain at the southern end of Swansea Bay. The ground falls away sharply to the south and west, less so to the east and north east. The approach is from the south; to the north the ridge is occupied by a depression thought to have been the source of stone for much of the Castle's fabric. There is a tradition of a castle here founded by Henry de Beaumont or Richard de Granville c1100, but the earliest surviving work is the keep, which was built by William de Breos in the late 12th century on the highest point of the ridge. Further construction to the north and north west took place in the early-mid 13th century, with a new curtain wall and gatehouse enclosing the southern and south eastern parts of the ridge in the late 13th century. The circuit was probably completed before the construction of the Chapel Block in the early 14th century, but this impressive building now fills the gap between the East Curtain and the Central Block. Major alterations to the existing buildings took place during the 14th century, which probably also saw the construction of further domestic buildings to the south and east of the central courtyard.

Oystermouth Castle was the seat of the Lords of Gower until at least 1350; in the later 14th century it was used as a prison and also as a residence of the Steward of the Seignory of Gower. It was apparently in a ruinous state by the mid 15th century but was refurbished at the time of the Civil War. The twin towers which must originally have flanked the gatehouse were probably removed by Cromwell when the Castle was slighted, and again fell into disrepair. In the 1840s the antiquarian George Grant Francis carried out clearance and restoration work on the remains, although the extent of his influence is disputed, and in 1927 Oystermouth Castle was purchased by the Borough of Swansea.

1.3 Layout of the Report

This report describes the repair work carried out within the initial contract, plus additional work commissioned during this contract (Section 2.1). Each task is described within the context of a description of the Castle by area which focuses on its present state of repair and current problems. The condition of the Castle is discussed in general terms (Section 2.2) and recommendations offered for future remedial work, and Section 3 outlines the methodology used during the watching brief. Appendix One gives the individual specifications for the initial programme of repairs, Appendix Two the specifications for the additional work, and Appendix Three gives details of an extra item which arose as an emergency during the course of the work.

(Appendix Two, N,) The vaulted undercroft in the South Range is generally sound apart from some voiding in the vaulting, but the earth floor becomes uneven and slippery underfoot after wet weather - here as elsewhere it is recommended that it be surfaced with chippings for safety. The access steps to the North Range of the West Block are mentioned under 8, below; most areas of this building are in poor condition and the west wall only is on the current schedule for repair (Appendix One, H). This and the north wall are in the poorest condition - there is masonry requiring repair above the south window and elsewhere all ledges and voids are heavily overgrown. The floor of this part of the West Block is littered with rubble and loose stone, and spoil has also accumulated here to a considerable extent - there is no apparent floor level or surface. It is recommended that access be closed until all work required (see also 8, below) has been completed and a reasonable surface provided within this building. The West Curtain, beyond the limit of access provided by the wall-walk, is heavily overgrown on its upper surfaces with the consequent deterioration of the stonework - it is areas such as these which, while posing no immediate danger, represent the long-term threat to the fabric of the Castle.

5. The basement of the North West Block is reached from the North Range of the West Block; there is almost no natural light and it becomes slippery underfoot when the weather is wet, with the added hazard of loose rubble on the floor. The undercroft, reached from the passage between the West and Central Blocks, is generally sound although the vaulted ceiling is heavily voided. The west end of this room has been inadequately closed off; here the ceiling ceases in a break, and the room should be closed off for safety reasons behind this point. Access to the upper storey is from the northern part of the Central Block and via a wall-passage from the Keep, which is sound apart from some loose stonework in the vaulting. The upper storey is heavily overgrown but appears generally sound, and has had a floor of chippings laid relatively recently, which is now being overgrown from the margins. The dangerous west end is presently closed off by low railings, which are inadequate for the task. The fireplace arch on the east wall appears to have dropped.

Although no repair work within the present schedule is to be carried out within this part of the Castle, there are no major structural tasks assuming that the west end of this block is adequately closed off to public access. The provision of lighting and a surface of chippings is necessary for the basement, and to a much lesser extent, the undercroft, where the lighting is probably adequate.

6. Repairs to the fireplace on the south wall of this block come within the present schedule (Appendix One, J) and the steps to the basement have also been cleared and repaired (Appendix One, L). This involved the removal of spoil and recent accumulations to an acceptable level, but the need remains for a surface of chippings at the base of the steps, in the entrance passage and the basement itself, where the surface is especially uneven and littered with rubble. The basement otherwise appears sound but lighting, from the north wall, is poor. Vegetation growth is considerable in this part of the Central Block, particularly on the ledges and upper surfaces, and the masonry on the east wall in particular is voided and unsound. The arches, where they survive, are generally good apart from that of the ground floor window on the east wall. There is extensive ivy growth on the west wall.

7. In the Keep the fireplace which opposes that in the building to the north is in the current programme of works (Appendix One, J), although much has already been lost - the condition of the north and east walls in particular is poor with considerable loss of facing stone. The heavily overgrown ledge at first floor level is also in the current schedule for repair (Appendix One, K). Some work has recently been carried out on the east wall. There appears to be less destructive vegetation growth in general in the Keep than elsewhere, the first floor ledge excepted. The arches are good apart from that of the crudely blocked window in the east wall. Blockings such as these are recent work and, providing security is not compromised, should be removed, as should the large accumulation of rubble below this window, which could be taken, as other loose stone elsewhere in the Castle, to a central collection point for use as required.

There is a considerable quantity of render in the Central Block, much of it now in poor condition. It probably represents post-medieval restoration work but now serves to conceal the condition of the masonry it covers; where unsound it should be removed when repointing is carried out.

8. Repair work on the external steps to the upper room of the South Range (Appendix One, G) falls within the current schedule, but a handrail should also be provided. The usual vegetation growth has resulted in defective masonry along ledges and wall tops in the Guardroom and Porch, particularly the latter. The upper windows of the shared walls with the Keep have large areas of corework exposed on their arches, directly above an area of missing vaulting in the case of the Porch, whose ceiling elsewhere has a certain amount of voiding. The poor condition of the masonry of the first floor remnant above the porch should also be noted as a matter of some urgency given the exposed nature of its position. The area between Guardroom and West Block as far as the North West Block is generally sound apart from a small amount of ivy and other tree growth; the steps leading down to the North Range of the West Block (see 4, above) are inherently dangerous and should be protected with a guardrail and handrail, and perhaps also a warning notice.

9. The exterior of the Chapel Block appears to be generally in good condition although there is little mortar apparent and no recent repairs. There is, however, structural problems with the south corner of the main buttress on the south wall, where the quoins have been forced outwards probably by root action. Inside this block some work has been carried out recently on the masonry at the head of the closed-off stair, including provision of a concrete lintel, presumably for good structural reasons, but close inspection of this part of the building is not possible at the time of writing. The interior in general is in deteriorating condition with significant tree growth and areas of defective masonry, particularly on the north wall, with voiding around the putlogs etc. The arch of the large east window is causing concern with deterioration probably from tree growth on the ledge above - repair to this window forms part of the additional programme of works within the Castle (see Appendix Two, p 8).

10. Underpinning of the external buttress at the west end of the South West Range is on the current repair schedule (Appendix One, A). The West and South West Curtains are heavily overgrown with valerian, and the comments on the conditions of the parapet and crenellations should be noted (see 3, above). Valerian is also widespread on the East Curtain where there is considerable voiding; ivy growth is the main problem on the north wall of the Chapel Block, the north wall of the Central Block and particularly on the North West Block, where the masonry is poorest.

2.2 General

The main problem is the persistent vegetation growth, in particular valerian, whose woody root growth is actively penetrating the stonework, particularly on vulnerable ledges, niches and the tops of walls. Deterioration will occur whenever it is present from the admission of water into the joints and subsequent frost damage, loosening of exposed stonework and its eventual loss. The immediate danger lies in the occurrence of this problem above arches and other openings, as in the Chapel, over the Porch and in the North Range of the West Block. It is most important to prevent further deterioration of such areas of unsupported masonry which will eventually result in the loss of diagnostic features and the status of that part of the building in which they occur, quite apart from the risk to the general public. It would be regrettable if parts of the Castle were closed to the public for reasons of safety, but this is now or soon will be the case in areas of the Northwest and West Blocks, and tree growth in the Chapel may also cause it to fall into this category before long. Ivy is perhaps more of a long-term problem but still requires to be dealt with, in the same way that all areas presently covered by defective render or other mixes should be cleared.

Oystermouth Castle is infested with nesting pigeons which should be actively discouraged by reason not only of the mess and nuisance they cause but by their contribution to the creation of humus and conditions suitable for plant growth. They may in certain circumstances cause stonework to become loose but this merely serves to demonstrate the poor condition of parts of the Castle fabric.

Floor surfaces, particularly in undercrofts and cellars, would be greatly improved by the removal of loose materials, accumulations of spoil etc., and the provision of a layer of chippings.

Handrails are needed in a number of places - the adverse effect on the appearance or feel of the Castle is outweighed by considerations of safety; guardrail requirements are similarly specified elsewhere in this survey.

The overall position is that Oystermouth Castle is still generally sound but does face major problems which need to be addressed before they reach the stage of presenting a hazard to the public and to the survival of parts of the Castle itself. It is a wonderful monument, in a magnificent position, and every effort should be made to preserve it for future generations.

3. Methodology

The individual areas where work was to be undertaken were fully recorded photographically, and the repair programme monitored on a regular basis. Following the completion of repairs each area was photographed as closely as possible from the same angles, with more detailed coverage in certain cases. Most of the repairs involved either cleaning and repointing or removal and replacement of existing masonry using compatible mortar mixes, in places with additional strengthening using local stone. The only item of repair involving any quantity of new face work was the reconstruction of one of the blocked window arches within the west wall of the West Block (Appendix One, H). This was undertaken as a structural safety measure following discussion with Cadw, who advised throughout the programme of work. Additional repairs (see Appendix Two) were agreed between Cadw and CCOS to follow on from the original schedule of work, and were also monitored as necessary, with final visits to check and supplement the photographic record following completion of the work programme.

One additional item of repair (see Appendix Three) arose as the result of a break-in at the Castle during the summer, and thus fell within the conditions of the watching brief.

Appendix One

The following areas of the Castle were scheduled for repair within the initial programme (see Fig.2) :

A. (South West Curtain). Part of the base of the external buttress here had dropped, and required underpinning and rebuilding. Local stone and compatible mortar was used to effect this repair.

B. (South West Curtain). Two areas were identified a) on the modern wall-walk surface, where some of the stonework required rebedding and repointing, using a compatible mortar mix, and b) on the inner face of the curtain, just below a), the wall had voided - possibly erosion to a putlog - and here local stone was used to make good this repair.

C. (South wall of the West Block, South Range). An area of masonry on the left hand jamb of the window in this wall was in an unsafe condition. This piece appears to have been a relatively modern restoration, inconsistent with the line of the jamb, and was removed and the core made good.

D. (North wall of the South West (Kitchen) Block). This wall now consists of free-standing piers, parts of which had become unsound as the result of root and water penetration. These were removed and rebuilt as far as possible keeping to the original form, but some reduction was inevitable for consolidation to be effective.

E. (West wall of East (?Barracks) Range). The situation here was similar to D, above, and was treated in a similar way.

F. (On the original specification, the west side of the projecting bay in the south east corner of the Chapel Block, but in effect an area of the upper part of the west wall of the Lookout Post). A patch of this wall was in particularly poor condition, and was grouted and repointed using compatible mortar and where necessary local stone. Subsequently the whole of this wall was similarly treated (see Appendix Two).

G. (External steps on the east wall of the West Block, South Range). These steps were in an unsafe condition and were rebedded, consolidated and repointed using a compatible mortar mix and local stone where necessary.

H. (West wall of the West Block, South Range). The entire wall, which was in poor condition generally, was cleaned, grouted and repointed to its full height, but excluding the uppermost surfaces, using an approved mortar mix. Repairs were effected to all openings where unsound masonry occurred, using local stone as necessary. As a matter of structural safety and following consultation with Cadw the arch over one of the blocked windows was rebuilt with new lias limestone blocks. This was the only instance of facework being undertaken using dressed stone, and the appearance is at once sympathetic and distinctive.

J. (Back to back fireplaces in the wall between the Keep and the later extension to the north (Central Block)). The fireplace on the north side is in good condition with its hood intact and only required cleaning and repointing; that to the south was much less complete and was consolidated using local stone where necessary. A horizontal strengthening bar to support the remains of the hood has not been provided, however, and the poor condition of the wall immediately to the east has already been noted (see above, 2.1.7).

K. (First floor ledges in the east and south east parts of the Keep). Unsound masonry on and immediately below these ledges was rebedded and consolidated using local stone, with the removal of major vegetation growth, but the area treated is probably too localised for anything other than short term benefit (see above, 2.1.7).

L. (Steps descending to the undercroft of the northern part of the Central Block). These steps were unsafe, overgrown and to some extent buried. Repairs were carried out as G, above, with clearance of overburden to expose the complete flight being undertaken under archaeological conditions. The handrail on the original specification has not been provided, however, despite the facility for placing it on the made ground to the eastern side of the flight

Appendix Two

Additional works agreed, to follow on from the original programme, were as follows:

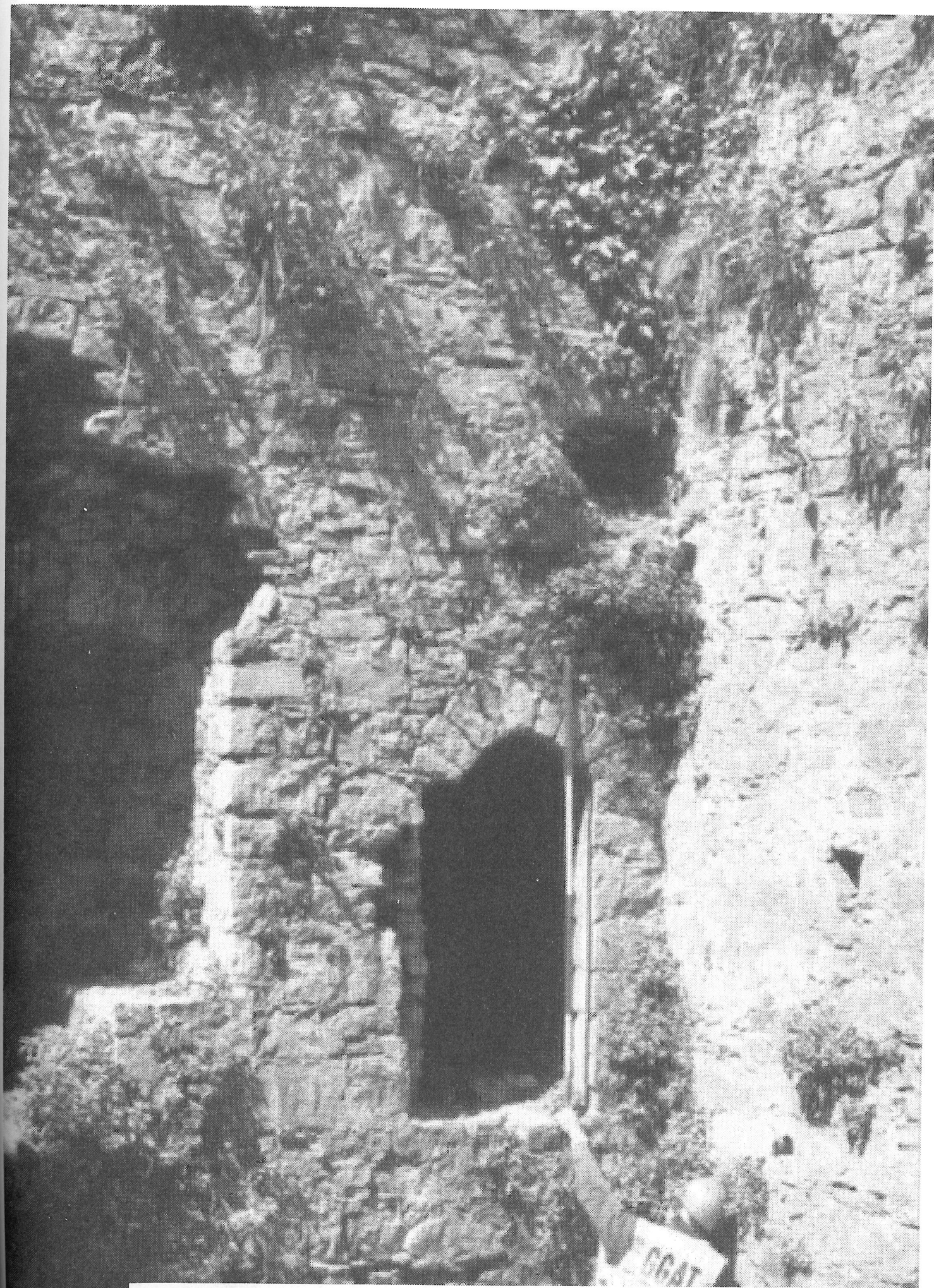
F. (see Appendix One, above). In addition to the small area on the original schedule, the whole of the west wall of the Lookout Post was cleaned, grouted and repointed with a compatible mortar mix and local stone as necessary.

M. (Main east window, Chapel Block). The head of the arch of this major feature appeared to have moved out of the vertical, probably as the result of vegetation growth from above having forced the stones outwards. It was carefully dismantled, cleaned out and reassembled using a former and compatible mortar mix. The remainder of the east wall of the Chapel Block was not included within the schedule of additional works.

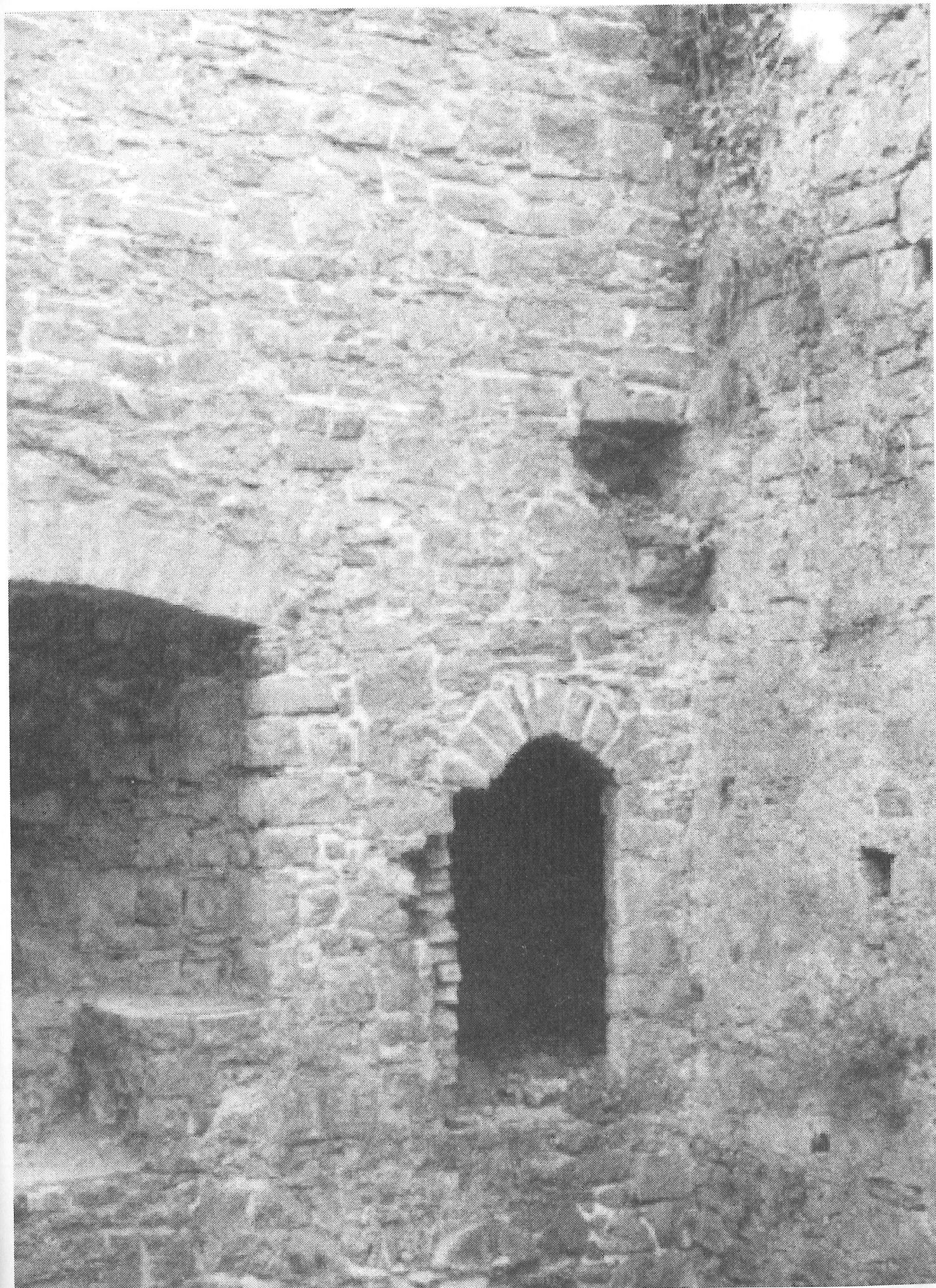
N. (Fireplaces). The stonework to the rear of the fireplace arches in the South West (Kitchen) Block (three) and in the West Block, South Range (one) contained unsound and voided masonry, and this was consolidated using local stone. Defective fireplace arches on the East Curtain, however, have not been so treated, but appear relatively stable at the moment.

Appendix Three

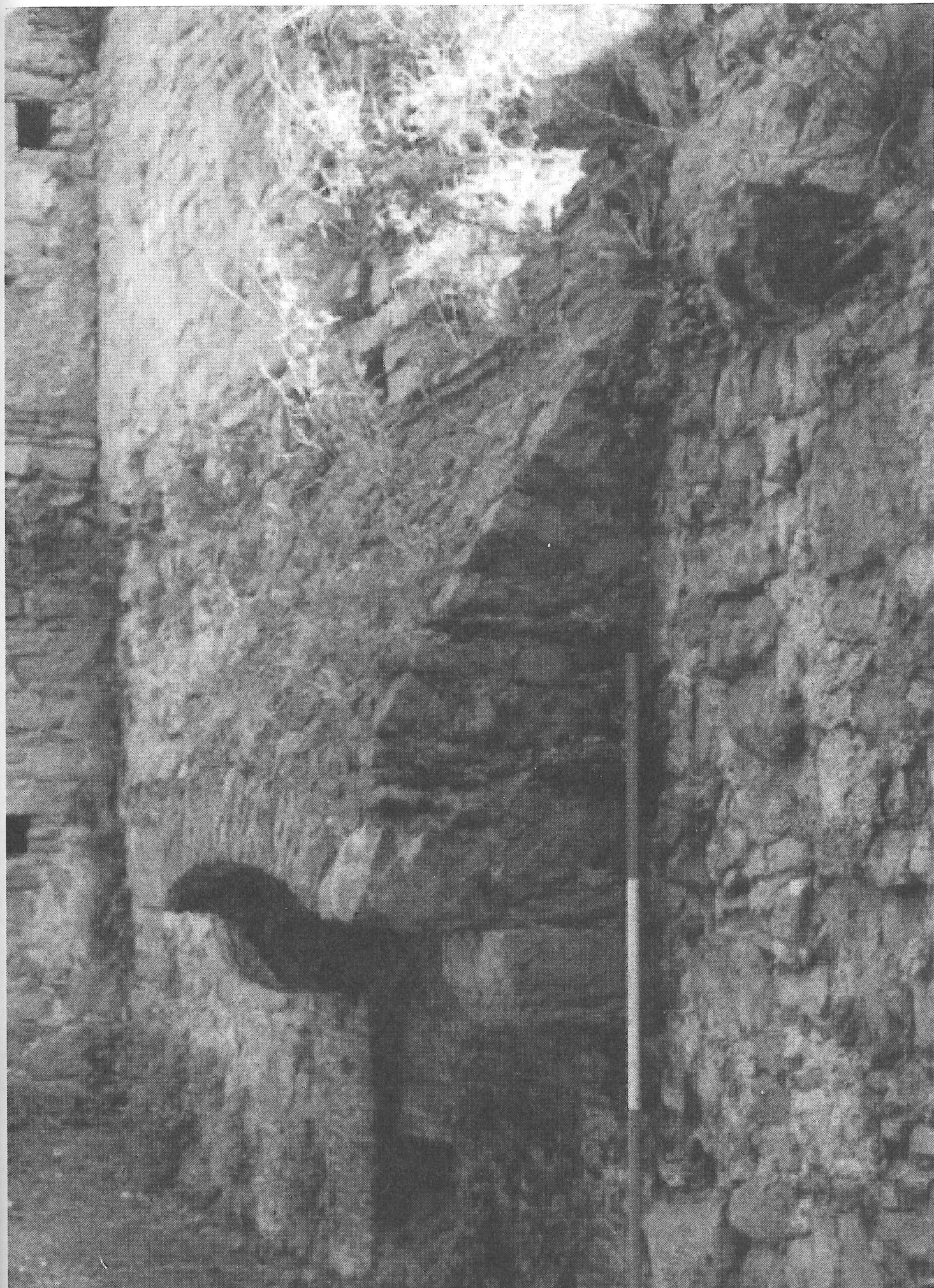
P. Repairs were also carried out following an incident in which the Castle was forcibly entered through the slit window in the external buttress in the North Range of the West Block. This involved considerable damage to the jamb and although most of the stone which was removed to effect entry was recovered and used in the repair work, the damage to the quoins of one jamb is now very apparent. This window, previously protected by a vertical iron bar which was severed in this incident, has now been blocked up to prevent further such attempts. A photographic record of this repair was made following completion of work, but cannot of course be compared with the original condition of this window.



Area H North corner of west wall before repair work



Area H North corner of west wall after repair work



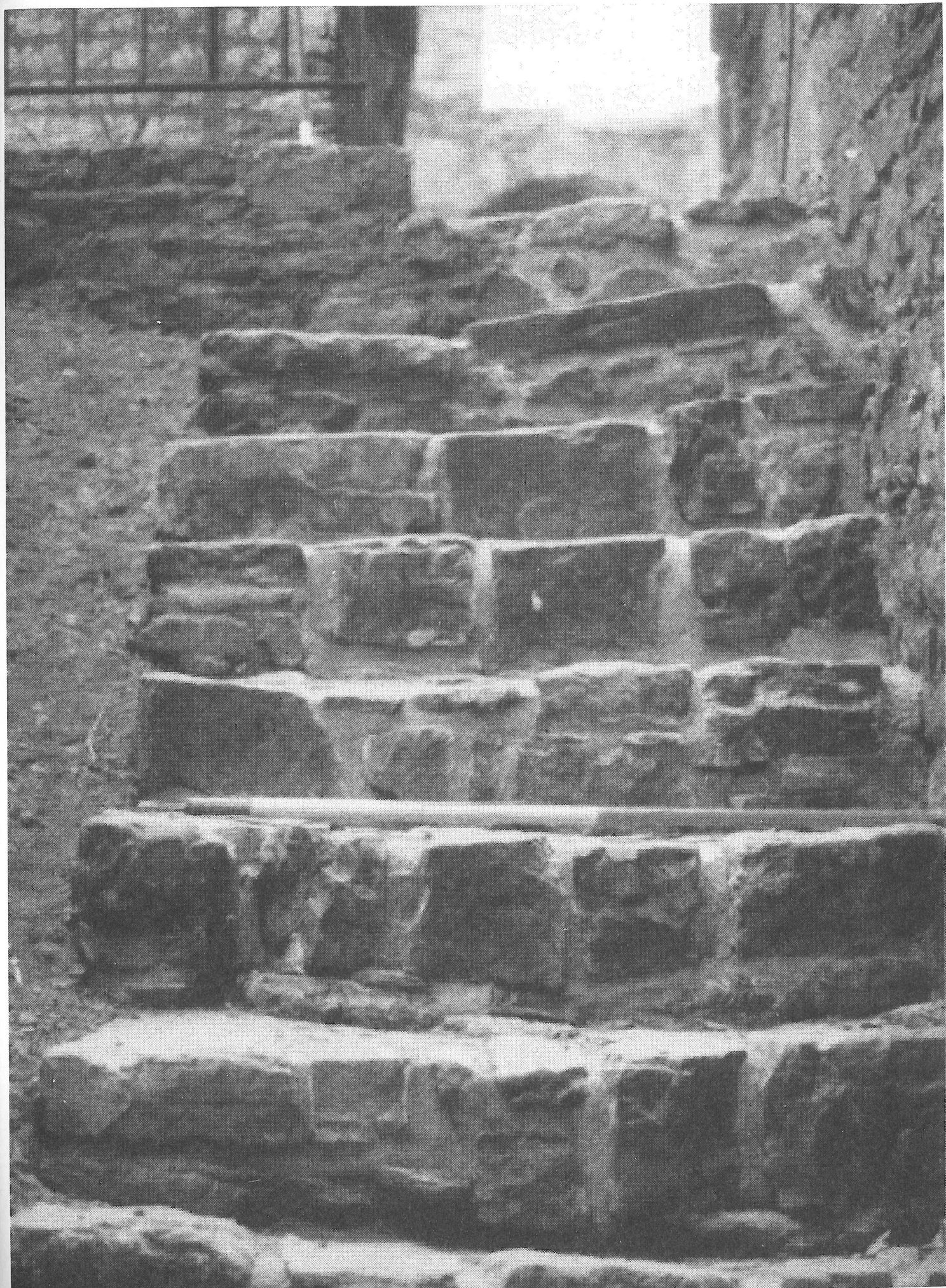
Area J North fireplace before repair work



Area J North fireplace after repair work



Area L Steps before repair work



Area L Steps after repair work

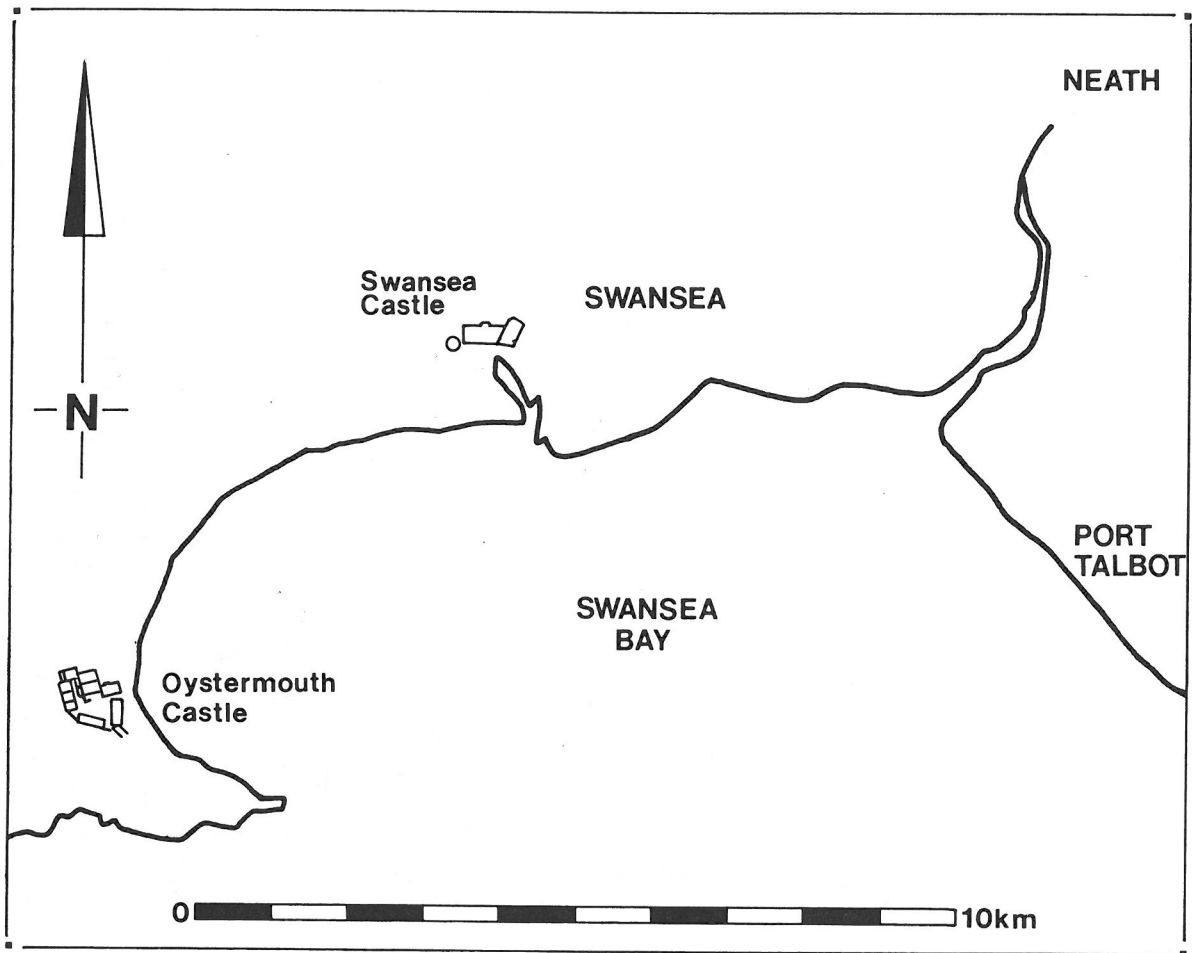


Fig One Location plan

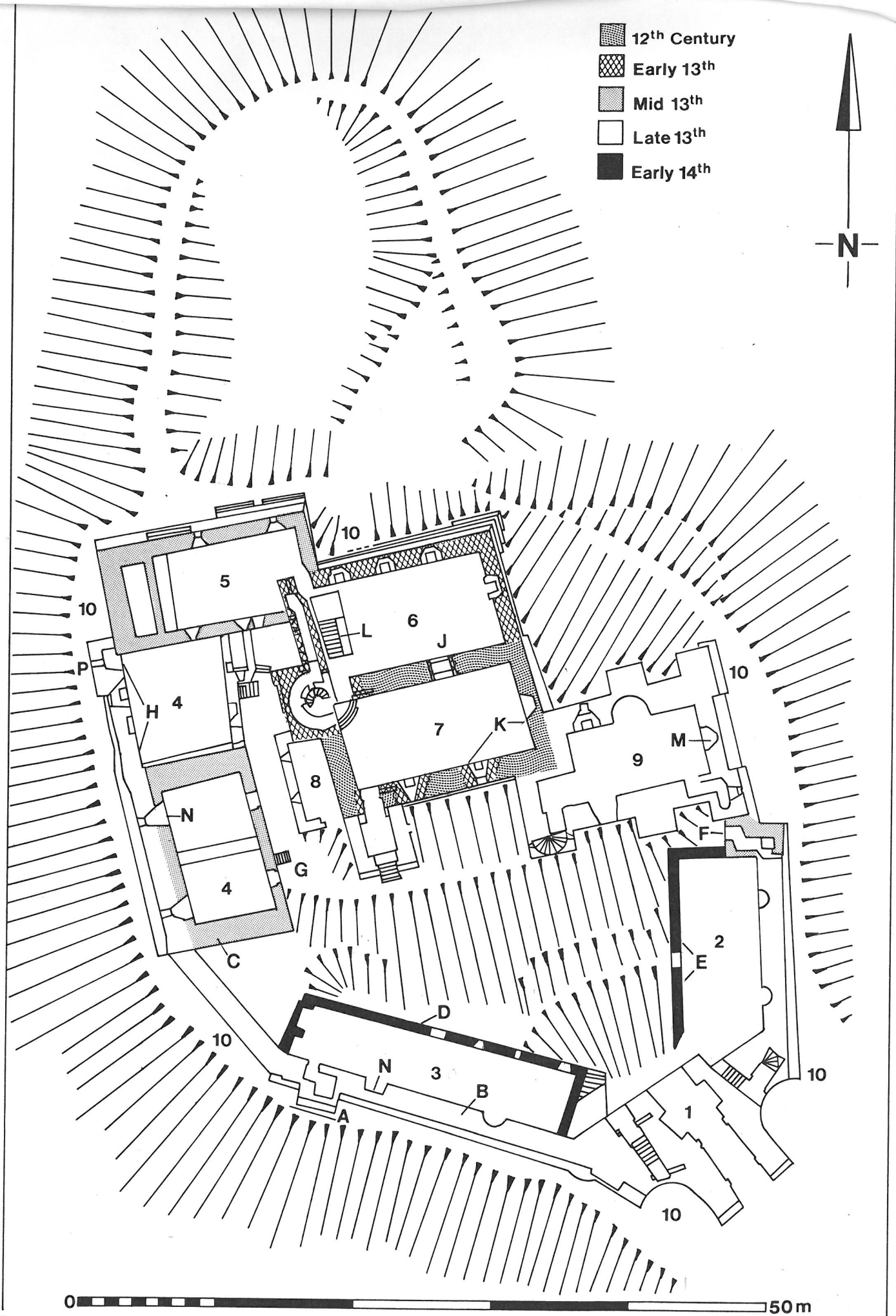


Fig Two Oystermouth Castle, showing phasing, areas surveyed (1-10) and locations of repair programme (A-P)