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CITY OF
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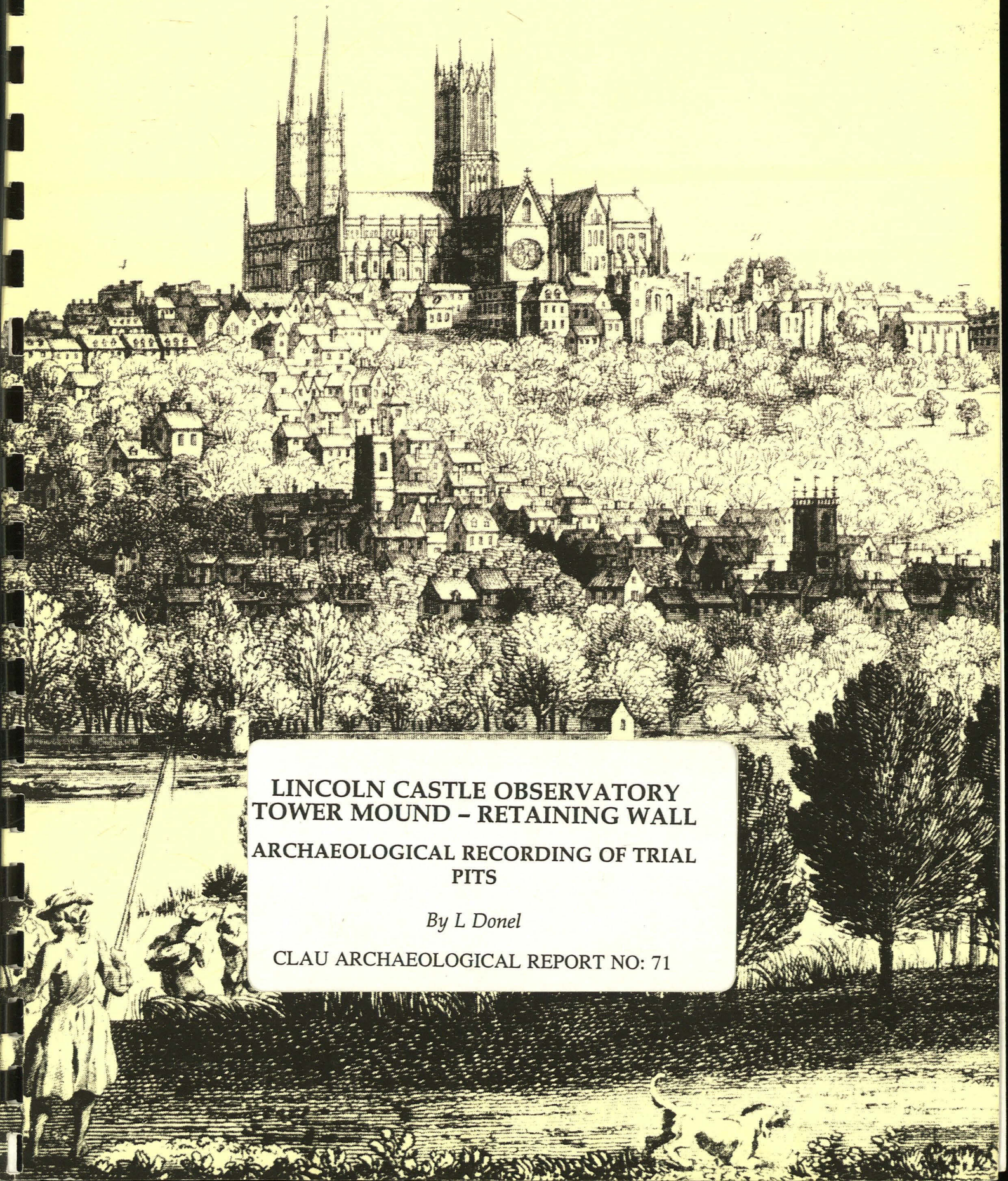
UNIT



LINCOLN CASTLE OBSERVATORY TOWER MOUND – RETAINING WALL

ARCHAEOLOGICAL RECORDING OF TRIAL PITS

By L Donel

CLAU ARCHAEOLOGICAL REPORT NO: 71

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A Report to Allott & Lomax, Consulting Engineers

November 1993

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Introduction

Following the decision to investigate the current state of the retaining wall at the base of the Observatory Tower mound, The CLAU was commissioned by Allott and Lomax, Consulting Engineers, Manchester on behalf of Lincolnshire County Council (Recreational Services) to carry out archaeological recording of trial pit excavation on the mound. Subsequent to the granting of Scheduled Monument Consent, the project was carried out between 20th and 24th September 1993.

Previous Work

Lincoln Castle is unusual in having two mottes; the Lucy Tower on the south-west corner and the Observatory Tower on the south-east. In 1974 work was carried out within the latter tower showing that it was the later of the two, having been constructed in the mid 12th century (Reynolds 1975).

Prior to the excavation of the trial trenches, the CLAU was asked to survey and record the retaining wall, both graphically and photographically. A copy of this survey showing the state of the wall formed an element for the application for Scheduled Monument Consent.

The Evaluation

(i) Objectives and Methodology

This evaluation was carried out by means of three trenches excavated for the purpose of geotechnical investigation under the supervision of Allott and Lomax Ltd. Results were recorded by a team from the C.L.A.U. (site records are held in the C.L.A.U. archive under project ref: 93). The evaluation was designed to;

1. identify the depth, nature and condition of survival of any archaeological remains.
2. assess the importance of any remains encountered.
3. assess the probable impact of conservation work to the wall
4. assess the need for further archaeological excavation or recording prior to, or during the conservation works and recommend an appropriate course of action.
5. make recommendations as to the viability of conservation or reconstruction of the retaining wall.

However, this was not the final programme and most of the questions listed above remained unanswered.

Three trial trenches were excavated by hand by members of Geotechnical Engineering Ltd. in the locations shown in Fig. 1. Trenches were positioned in such a way as to be mutually beneficial to both the geotechnical and archaeological investigations. Each trench was approximately 1.5m long x 1.0m wide with depths between 400mm and 500mm.

Detailed recording of the stratigraphic sequence of deposits and archaeological features was undertaken by both graphic and photographic means, and artefactual material was collected for analysis and dating.

Because of the nature of the trial pit excavation and the need for non archaeologists to visualise the stratigraphy as well as archaeologists, the stratigraphy has been described in excavation rather than stratigraphical sequence.

(ii) The Results

Trial Pit 1

The overburden, a medium compact topsoil sealing a loose dark brown subsoil, was removed to the level of the top of the existing wall. Another stone wall was discovered running parallel to the present wall. The top of this wall, 1.0m wide, showed evidence of two different types of mortar bonding the limestone blocks. It was apparent that the top of the wall was an arbitrary level, the wall having been robbed at some date. The east face of the wall was made up of large squared limestone blocks laid flat but appearing to step slightly from the east to west. A series of flat laid limestone slabs with some loose dark grey soil lay packed between the two walls. Excavation proceeded to a depth of only 500mm as the front wall began to collapse as material was removed from behind it (Figs. 2 & 3).

Trial Pit 2

A second area was investigated to the south of TP1. The wall was once again revealed. However, the wall's width had decreased from 1.0m to 700mm. The wall was stepped as in TP1. There was no evidence for the two seperate examples of mortar. Packed between the two walls were flat laid limestone slabs with some loose grey soil. The stepped wall appeared to be incorporated into the new wall to the west, but as material continued to dislodge from the outer wall, excavation was halted for safety reasons (Fig. 4).

Trial Pit 3

The third trial pit revealed the same stratigraphy as the previous two. Overburden was removed to reveal a stepped stone wall approx. 700mm wide lying parallel to the present stone wall. Flat laid limestone blocks had been used as packing between the two walls (Fig. 5).

Discussion

Because of the unsafe nature of the outer wall at the Observatory Mound, it was decided that excavation would have to be halted at a depth of c.500mm. Some information had been obtained as to the width and nature of the upper part of the wall behind, but the limited works did not allow for investigation of the wall as a whole. It is impossible to say whether the wall continued to step out, whether its height matched the height of the current wall and what the condition of this new wall was.

Although there is no known date for the construction of the outer wall, it does appear to match the stone work used across the road for the prison. Reference to maps of the castle made in 1827 and 1832 show the area as a sloping bank. There is no evidence for a wall except at the northern end where the works yard and small chambers cut into the mound are situated at present (see Figs. 6 & 7). The 1827 map also shows a short stretch of wall at the south end of the mound where currently there is a flight of steps. It is possible that the current wall cut back into the bank, revealed the wall behind and incorporated it partially into the new structure. Certainly the current `retaining' wall appears to be little more than a cosmetic feature rather than acting as a necessary structure for the retention of the earthen mound. More investigation would be required to check this hypothesis.

Conclusions and Recommendations

The trial pits have created more questions about the outer wall, the mound and this new inner wall, than were originally posed. While it is a pity that further, deeper work could not have been carried out, the requirements of Health and Safety as well as a primary tenet for preservation must be considered. It has however, left both the geotechnical and archaeological trial work half completed.

There is a major archaeologcal feature lying behind the current wall at the Observatory Tower. It is possible that it is an earlier retaining wall. Certainly, the current wall does not appear to have ever been strong enough to act in a retaining capacity and probably was constructed sometime after 1832. Whether the presence and state of the earlier wall was known before the construction of the current wall is only conjecture, but the likelihood is that it probably was only seen when the bank was cut back to insert the new wall.

The next step would appear to be in the hands of the consulting engineers and whether they can devise an alternative method of establishing the state of the walls.

Acknowledgements

We would like to thank Allott and Lomax, Consulting Engineers, Manchester; Geotechnical Engineering Ltd., the staff of Lincoln Castle and the members of CLAU involved in the field and post excavation work on this project.

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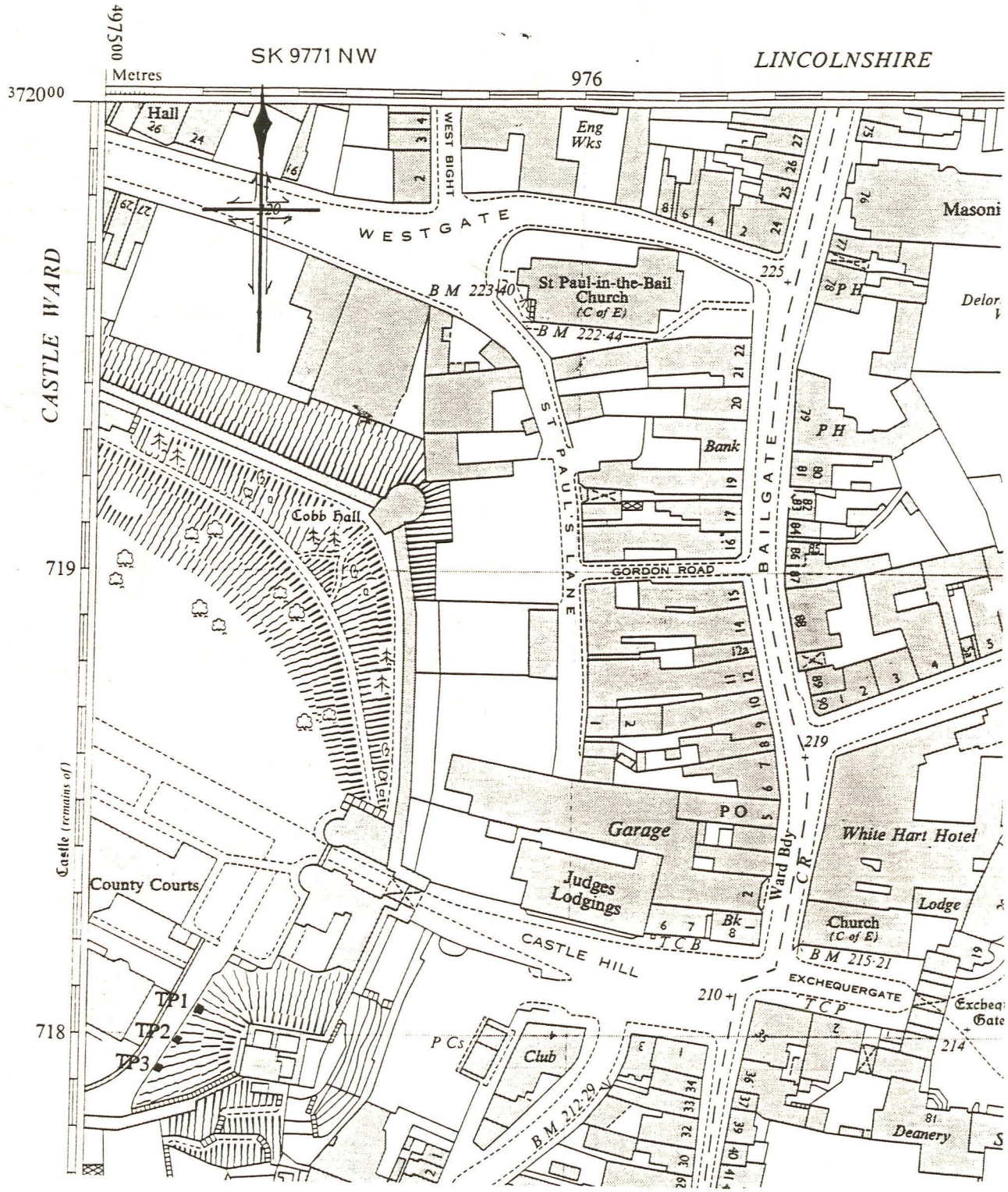

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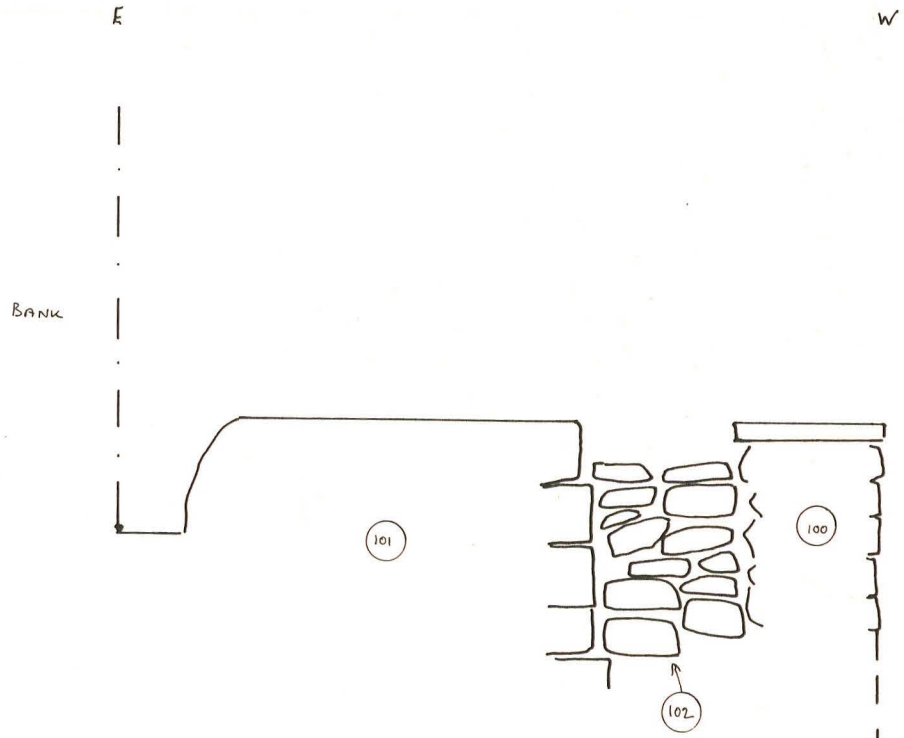
Fig.1



100 (19th WALL

101 EARLIER WALL

102 L/S BLOCK INFILL

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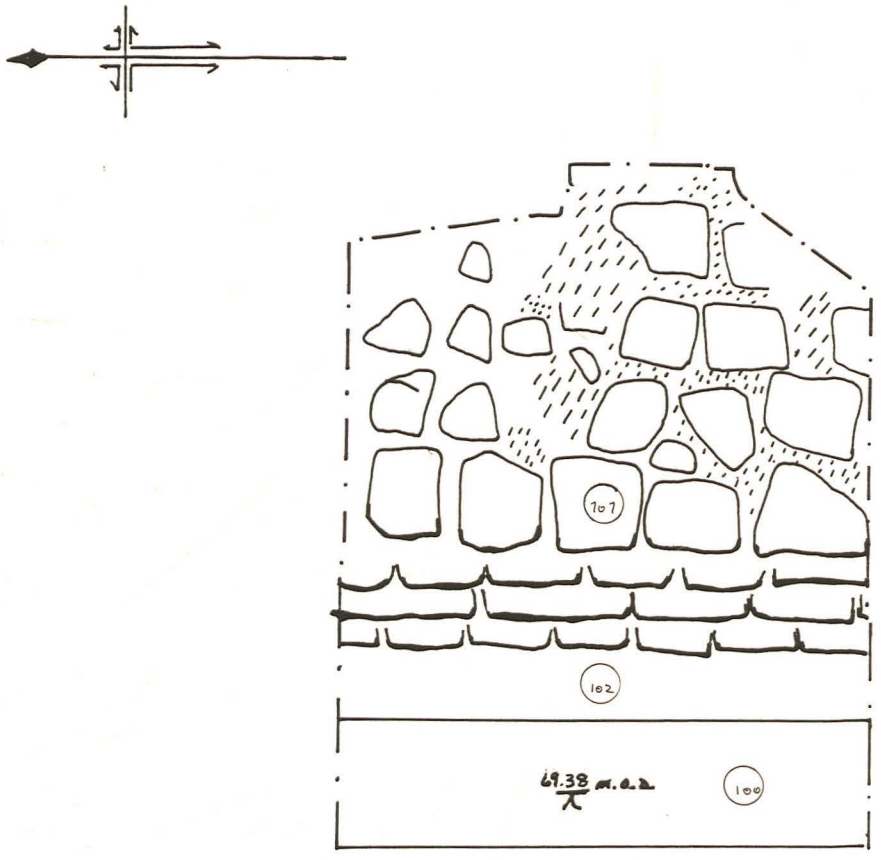
Fig.2



GREY MORTAR

LT. BROWN SANDY MORTAR

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Fig.3

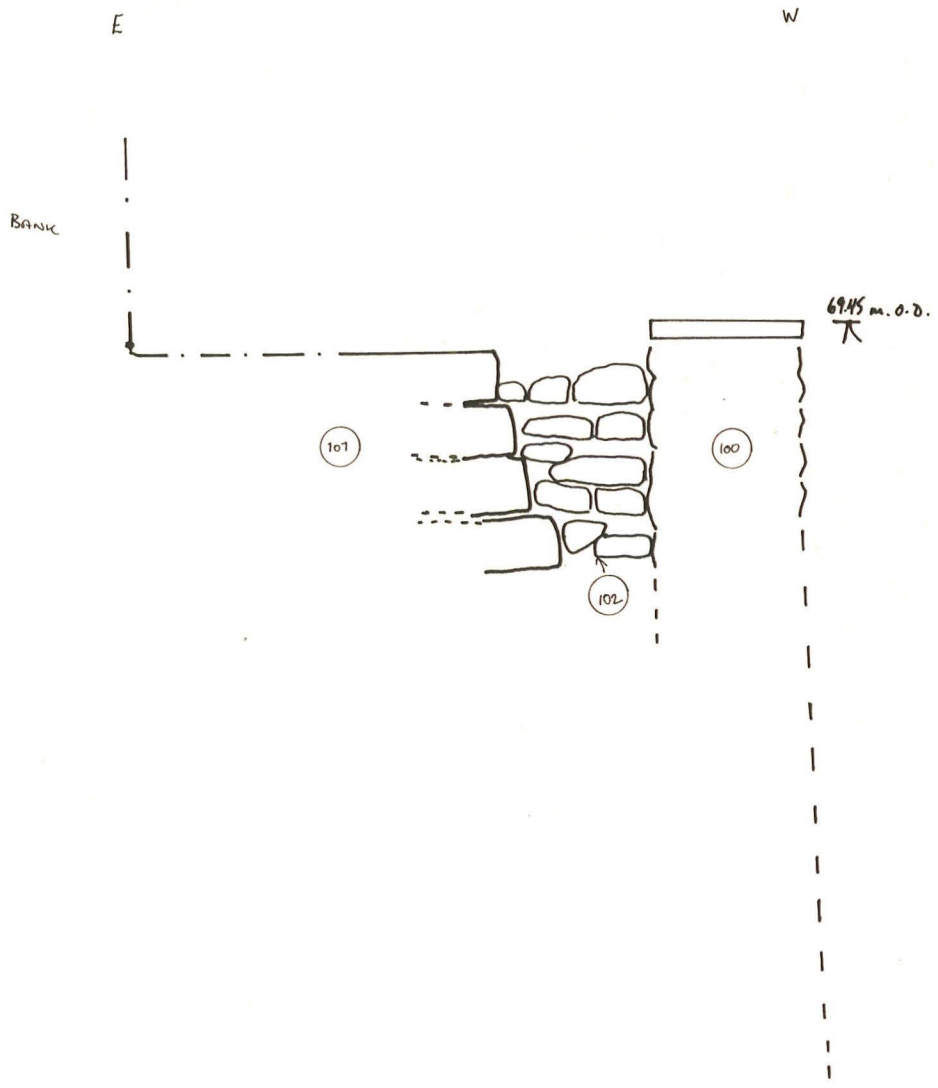

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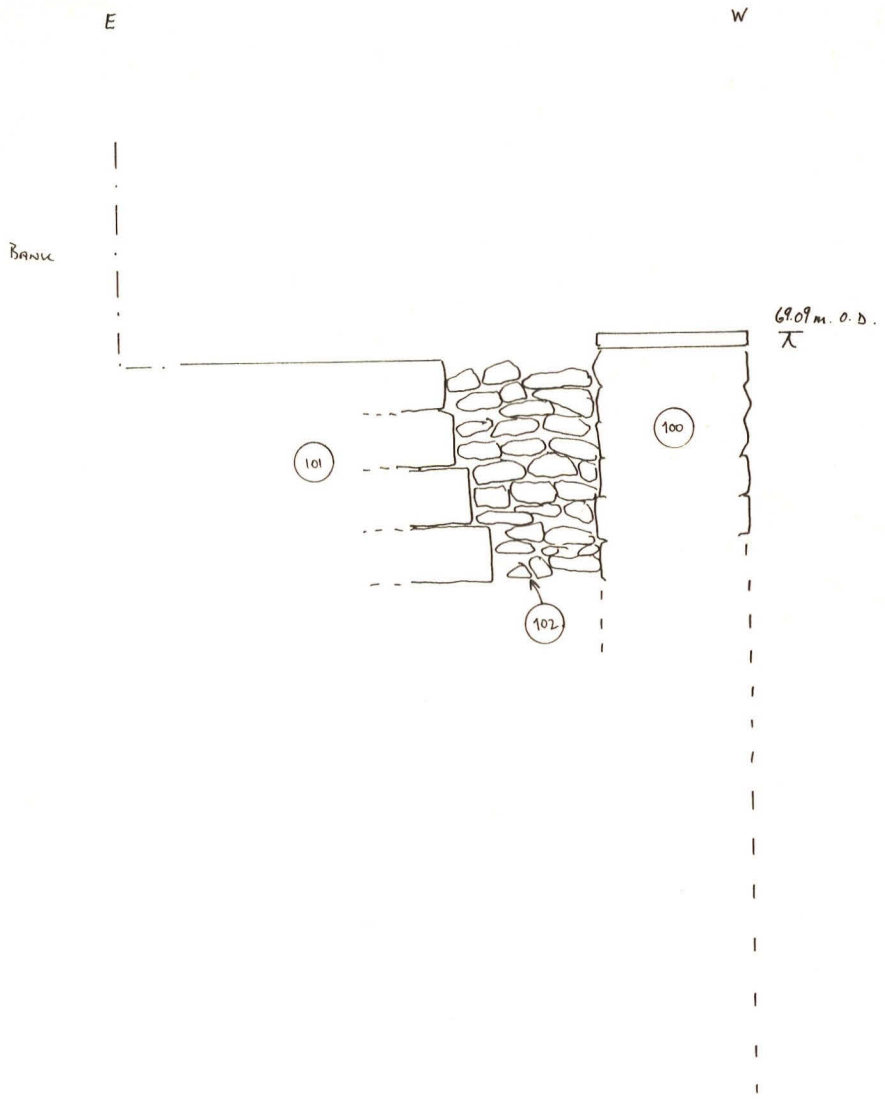
Fig.4



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DRAWN BY: LGD	CHECKED:	DATE: 28/09/93

Fig.5