

32

Feb 89

60

BIRMINGHAM UNIVERSITY
FIELD ARCHAEOLOGY UNIT

THE STABILITY OF
HISTORIC STRUCTURES ON PRIDE HILL,
SHREWSBURY.

B.U.F.A.U.



SUMMARY.

Battresses added to historic buildings, the archaeological investigation of the medieval town wall, and the construction of terraces in the 18th and 19th centuries to support the town wall, suggest that ground conditions along the Pride Hill/Castle Street escarpment have caused instability in structures in the area since at least the sixteenth century.

Introduction. (Fig. 1)

Archaeological fieldwork (scientific excavation, the detailed examination of historic buildings, and the intensive monitoring of construction sites) in the town centre of Shrewsbury over the last twenty years has, largely in response to pressures of redevelopment, concentrated in particular on one area of the town: the north-western fringe of the high ground, in particular, properties on the north side of Pride Hill and Castle Street occupying the top of the slope overlooking the low-lying alluvial area known since the medieval period as Raven Meadows.

Individual sites have been investigated, in detail, in this area since the early 1970's. These are, from north-east to south-west:

SITE 1. Rigg's Hall, 1978.

A timber-framed building forming part of the Castle Gates Library complex. A small-scale excavation took place under the standing building, before restoration, immediately inside the medieval town wall that forms the base of the building's north elevation.

SITE 2. The Charles Darwin Centre/20-22 Pride Hill, 1987.

Extended monitoring of the construction process, on behalf of John Laing Developments Ltd. The investigation concentrated on the point at which the development breaks through to the Pride Hill frontage, at 20-22 Pride Hill, the site formerly occupied by the Topshop premises, and to the rear of Menzies, 24-26 Pride Hill.

SITE 3. Pride Hill Chambers/MacDonald's, 10-12 Pride Hill, 1972-1974

Excavation, and the detailed recording of a medieval building with, like Rigg's Hall, the town wall incorporated in its rear elevation. 10-12 Pride Hill.

SITE 4. The Bennett's Hall Site/The Pride Hill Centre, 1986.

Excavation to the rear of Lloyd's Bank (1-2 Pride Hill), and monitoring of construction work here, and to the rear of the properties immediately north-east (behind Nos.3, 4 and 5, and Boots- Nos.6-9), on behalf of Hardanger Properties PLC.

SITE 5. 14-16 Pride Hill, 1987.

Investigation of a medieval stone building, found during a cellar-survey.

SITE 6. The Post Office, St. Mary's Street, 1875.

Observation of building work revealed deep deposits of made-ground containing archaeological material.

HISTORICAL SUMMARY.

1. The Natural System.

The high ground in this area of the town has been found to consist of a variable red-brown silty sand, with black, waterlogged alluvial deposits in the lower Raven Meadows area, particularly towards the south-west end of the area, where an infilled prehistoric river-loop is assumed to have cut most deeply into the high ground.

There is some evidence for the drainage of surface water off the high ground, northwards, into Raven Meadows. A series of historic maps show a ditch or small stream running across Raven Meadows to the Severn, from a point roughly opposite the rear of the present Menzies premises. This probable watercourse may correspond with a redundant culvert recorded in the Raven Meadows area during groundworks for the Charles Darwin Centre. Further indications of the movement of water in this area may be seen in running sand located by underpinning work to the rear of Lilley & Skinner's in 1987. Finally, there is some archaeological evidence for a natural hollow or defile on the high ground above the slope in the same area. Excavations in 1875 for the foundations for the predecessor of the present Post Office, on the corner of Pride Hill and St. Mary's Street, found 'black oak', presumably preserved by waterlogging, in a 'bog' twelve feet below the present ground surface, with quantities of other archaeological material from even greater depths (e.g. pottery at 15.75 ft below ground level). This strongly suggests the presence of an infilled, wet, hollow that may be the source of surface water draining into Raven Meadows (1).

Similar features may have been responsible for running sand reported on the southern side of Site 3 in 1972-4. Topographical research now in progress also indicates an irregularity in the drainage measurement of otherwise consistently laid out properties at this point (2). The only other known points at which the high ground drains westwards towards the Severn, are to the north, in the area of the present Gateway Community Centre, and to the south, where a watercourse known in the medieval period as the Gullet or Cripple Lode, runs from the Square, westwards to the south of Mardol, entering the river in the Welsh Bridge area.

2. Early Exploitation: 10th-13th century.

There is some evidence (pits containing Anglo-Saxon pottery on Sites 1 and 3) that the Castle Street/ Pride Hill area was settled before the Norman Conquest, though the impact of the settlement on the environment is not likely to have been great. The present system of properties and property boundaries was probably established in the 11th or 12th centuries. A short stretch of ditch, representing an early property boundary, was excavated at Site 4 (behind Lloyd's Bank). If all the properties in this area were demarcated in the same way (with ditches), this is perhaps the most likely way in which drainage down the slope was controlled in this early period, with ditched property boundaries laid out to coincide with natural drainage lines, or modest diversion of natural drainage to accommodate the (demonstrably) planned system of property division. The form of housing and other structures in this period is unknown.

3. The Town Wall: 13th century (c.1220-1242)

(See Fig. 1)

Between c.1220 and 1242 Shrewsbury was enclosed within a new circuit of town walls. In the area in question, the town wall has been examined archaeologically, or is otherwise known at the following points, from north-east to south-west again:

SITE 1. (Rigg's Hall)

Here, the town wall was thoroughly examined, inside and outside the standing building, and was found to consist of a raft, about 1.95m wide, of Keele Beds sandstone rubble set in a greenish gritty mortar, cut into an earlier earth rampart at the crest of the slope. The superstructure of the wall had been largely rebuilt, and its original thickness is unknown.

SITE 2. (The Charles Darwin Centre) (Fig.2)

The core of the town wall was located in underpinning work at the rear of Dunn and Co. at a distance of about 32 metres from the

... The rear elevations of Littlewood's and what was until recently Lilley and Skinner's both project beyond the line of the town wall, onto an artificial terrace of made-ground constructed in front of the town wall in the post-medieval period (see below).

SITE 3. (Pride Hill Chambers/MacDonald's) (Fig. 3)

The town wall here survives at the base of the rear elevation of a stone building constructed over it in c.1400. Examination on this site was, again, possible in some detail, and it was found to consist of a Keele Beds rubble raft c.1.9m wide, resting on a step cut into the natural slope, backfilled behind the foundations (see fig.6).

SITE 4. (The Bennett's Hall Site/The Pride Hill Centre)

Construction of the town wall in this area was essentially the same as at Site 3: a step was cut into the natural slope to accommodate a foundation raft and core of Keele Beds sandstone rubble, bonded with green, gritty mortar, behind an ashlar face of the same stone type.

4. Later Medieval Adaption (c.1400-1650).

Archaeological evidence points to intensive investment in property in this area by wealthy individuals during this period. All military functions for the town wall must have ended, as domestic structures are now known to have been built on top of the reduced wall at Site 1 (Rigg's Hall), probably at Rodney House and Sydney House to the north of Woolworth's, and at Site 3 (MacDonald's). At the latter, a large undercroft or cellar was dug into the slope inside the town wall, whose footings were retained for the new back wall. A similar structure was built next-door to the north, just inside the town wall, at Site 5: 14-16 Pride Hill (to the rear of the County Bookshop, Ratner's and Salisbury's). Here again, a large undercroft was terraced into the slope, in this case behind a sunken courtyard lying behind shops on the frontage. Building in this period established the pattern which has been followed in the area ever since, with maximum exploitation of the slope through terracing, and the construction of larger buildings over basements on different levels to accommodate the gradient.

Economic changes taking place after the end of the medieval period resulted in the sub-division of properties, and increasingly built-up back yard areas. The need to provide access to new housing behind the frontage resulted in the creation of alleyways, like Seventy Steps. These alleyways may also have served as drainage routes from the high ground- how this need was accommodated among the increasingly dense buildings in the earlier, medieval, period is not known.

3. Post-medieval.

The first edition of the Ordnance Survey shows that, by the 1880's, housing had spread over the line of the town wall on many properties in the area, with buildings creeping backwards from the Pride Hill and Castle Street frontages, and with new buildings constructed on the plot tails at the bottom of the slope.

THE STABILITY OF STRUCTURES.

Terrace Construction.

In the 18th and 19th centuries, the slope itself was subject to major changes on several individual properties. On Sites 2, 3, and 4, archaeological investigation has shown that new 'positive terraces' were built outside the line of the town wall. New retaining walls were built at the base of the slope on Site 2 (to the rear of Menzies, Lilley and Skinner's, and Dunn & Co., 23-26 Pride Hill) and Site 4 (the rear of 3-4 Pride Hill), and at intervals up the slope at Site 3 (MacDonald's) (3). The spaces behind these new retaining walls were then backfilled with various materials, generally topsoil, ash and rubbish. It could be argued that these activities represent attempts at increasing the available living area, though in most cases there is no evidence that the new terraces were ever used for anything more than gardens. The level of investment represented by these structures seems more appropriate to the solution of major engineering problems than to horticulture.

There are indications that the terraces described above were built as a response to the gradual failure of the town wall and the instability of the slope. At Site 3 (MacDonald's), recording of the medieval stone building showed severe cracking in various planes resulting from movement in the building and its foundations (Fig. 5). Excavation behind the town wall foundation raft also appears to have found shearing of soil-layers in the backfilled construction cut (Fig. 6). None of these failures is, by itself, dateable. However, the excavation was also able to demonstrate that a series of massive stone buttresses were built against the outer face of the rear elevation during the 16th century, presumably to stop or prevent movement (Fig. 3).

Archaeological recording on Site 4, (rear of Nos. 3 and 4 : the Pride Hill Centre Site) revealed the town wall core material, and made-ground immediately behind it, both showing signs of extensive shearing, with cracks in soil layers and interstices in the rubble of the wall-core itself filled with pressurised cement grout (Fig. 6).

CONCLUSIONS.

Archaeological evidence from a series of excavations and investigations has been able to show how the natural slope in the Pride Hill /Castle Street area was exploited and adapted from the medieval period to the present day.

Where the 13th century town wall has been investigated, evidence has been found of structural failures; where a building that was constructed on top of it has been investigated, this too was found to show evidence of structural problems, with remedial action in the form of buttressing taken in the 16th century. Finally, a series of terraces built in front of the town wall in the 18th and 19th centuries are themselves interpreted as further remedial action to support the wall and the underlying slope.

Nigel Baker

1-2-89

on behalf of Birmingham University Field Archaeology Unit

REFERENCES.

1. Carver, M.O.H. 'Early Shrewsbury: An Archaeological Definition in 1975'. Transactions of the Shropshire Archaeological Society, 69, 1973-4, 240.
- 2.3. Carver, M.O.H. 'Two Town Houses in Medieval Shrewsbury'. Transactions of the Shropshire Archaeological Society, 61, 1983.

ARCHAEOLOGICAL INVESTIGATIONS

SITES

- 1 Riggs Hall
- 2 20-22 Pride Hill
- 3 Pride Hill Chambers
- 4 The Bennet's Hall Site
- 5 14-16 Pride Hill
- 6 The Post Office

}) Course of 13th-C Town Wall

↔ Section lines

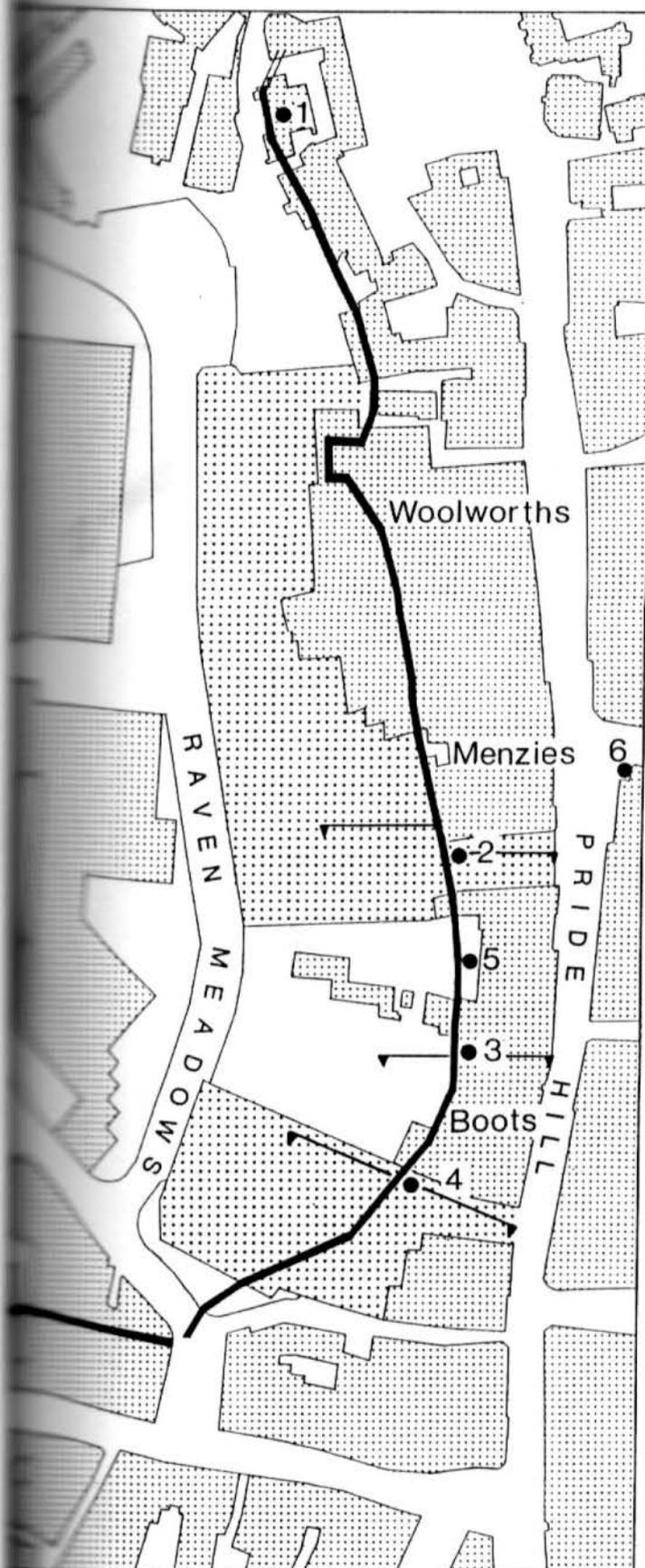
▨ pre-1986

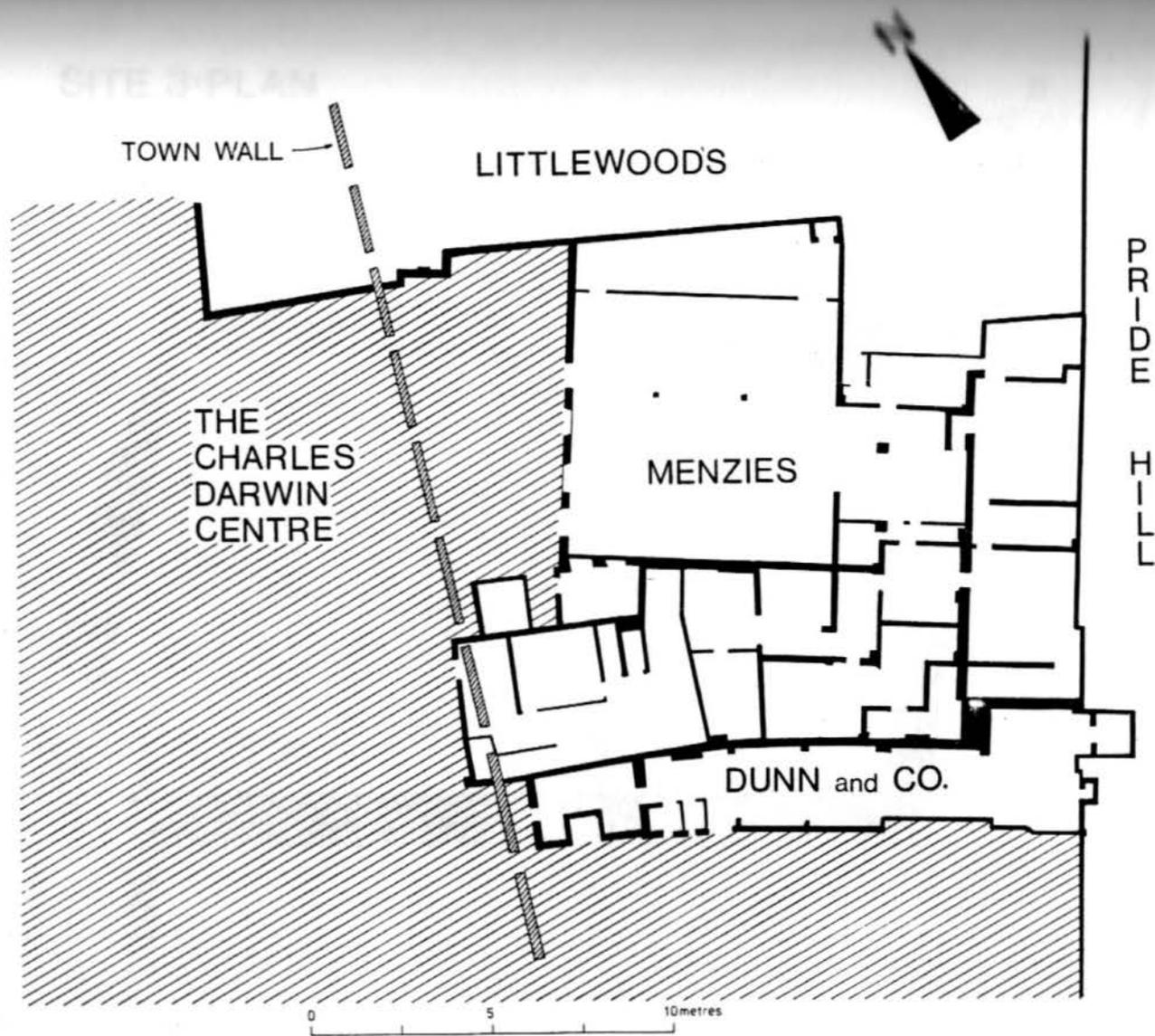
▩ post 1986



0 50 100 metres

fig.1





SITE 2: Probable course of Town Wall (approximate)

fig. 2

SITE 3: PLAN

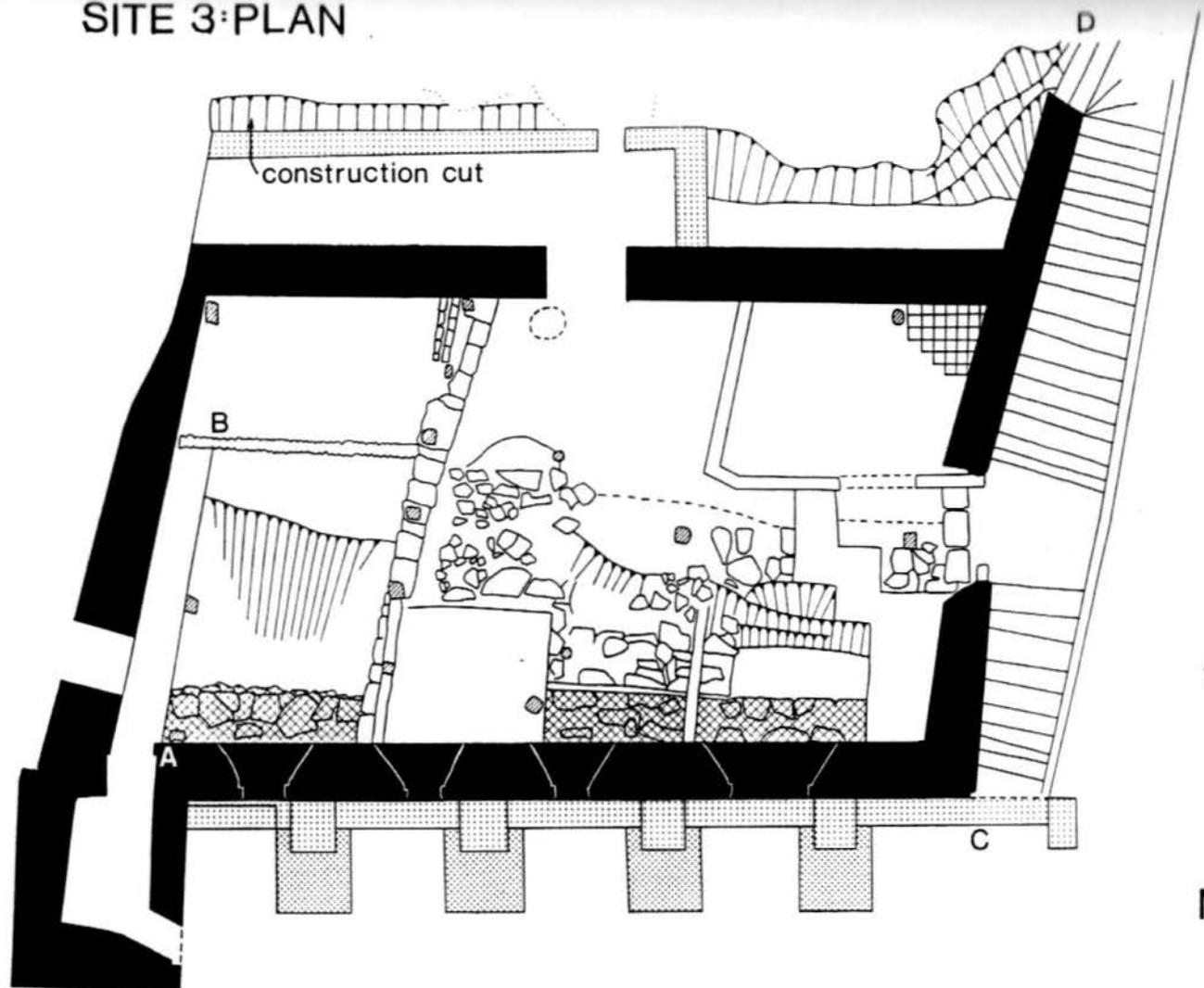


fig 3

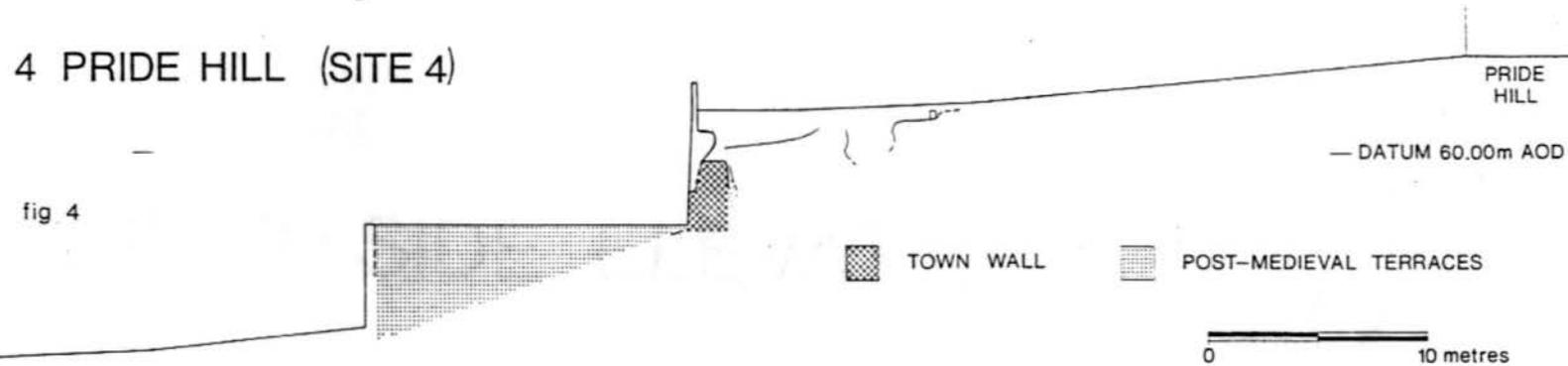
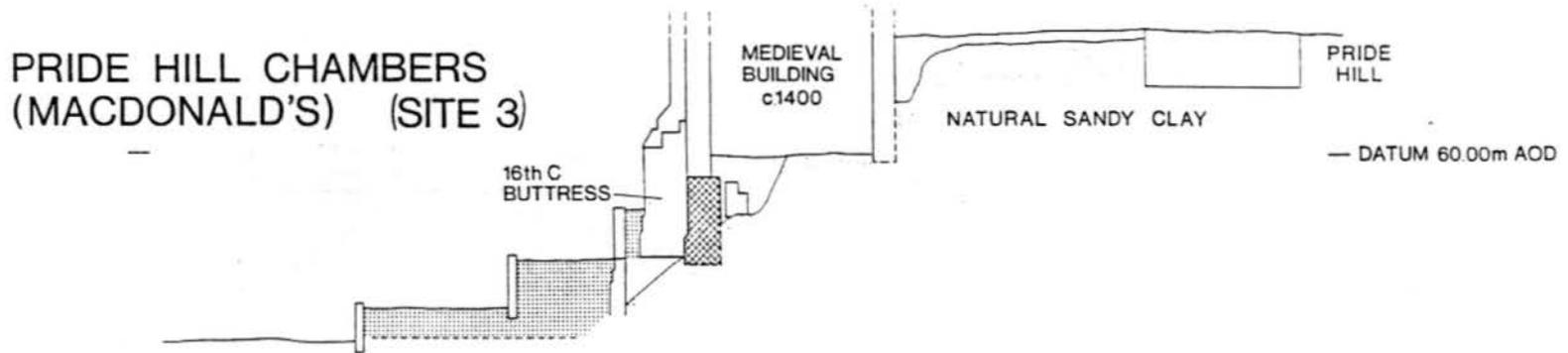
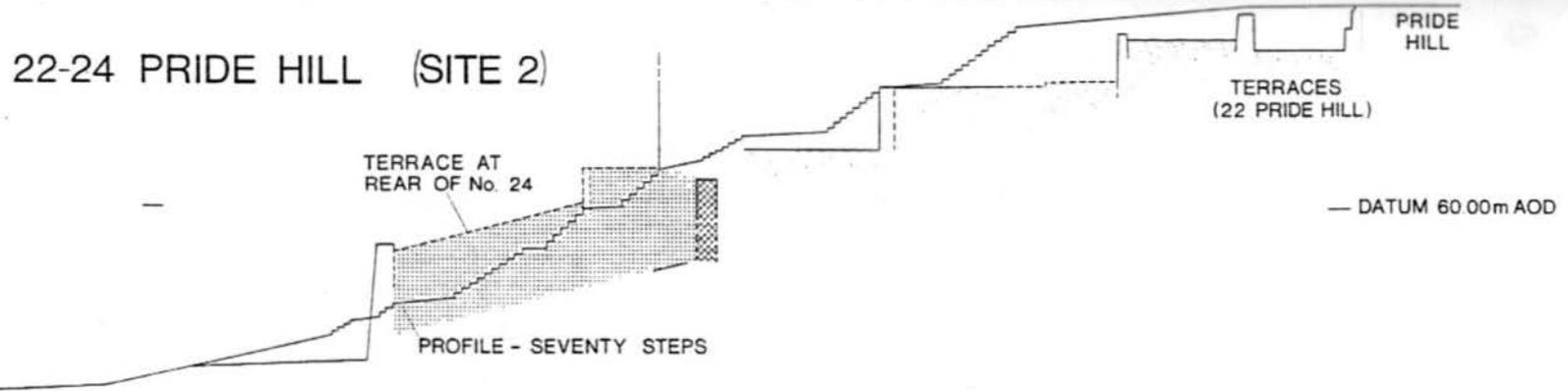


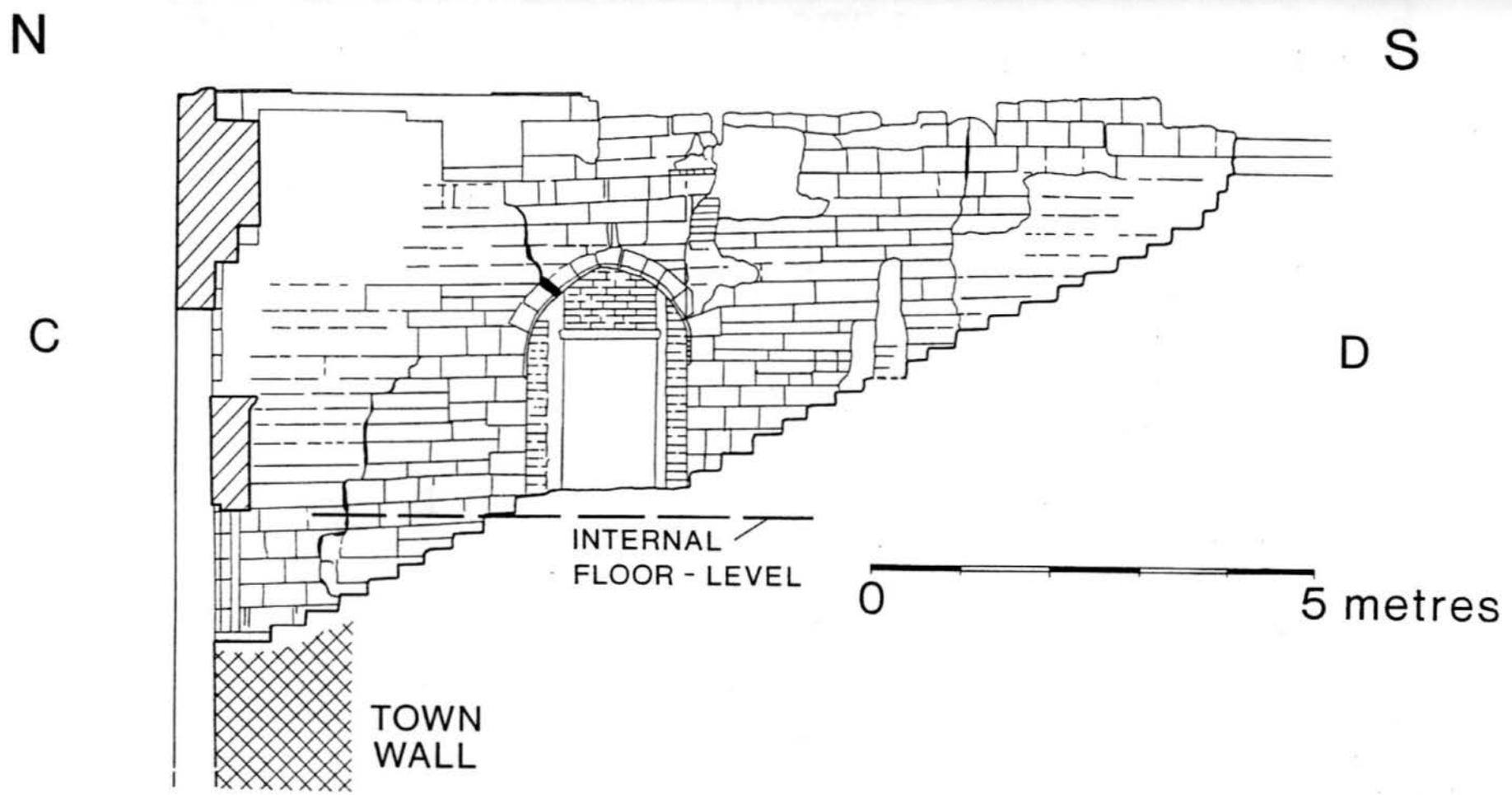
- | | | | |
|---|-----------|---|--------|
|  | TOWN WALL |  | 16th C |
|  | c.1400 |  | 18th C |



N

S

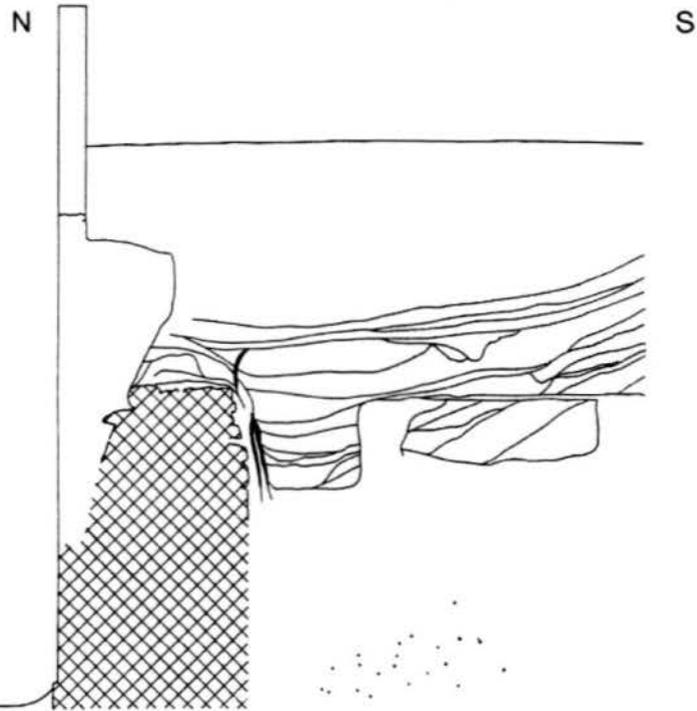




SITE 3 : SIDE ELEVATION

fig. 5

SITE 4
THE BENNETT'S HALL SITE



SITE 3
PRIDE HILL CHAMBERS
(MACDONALD'S)

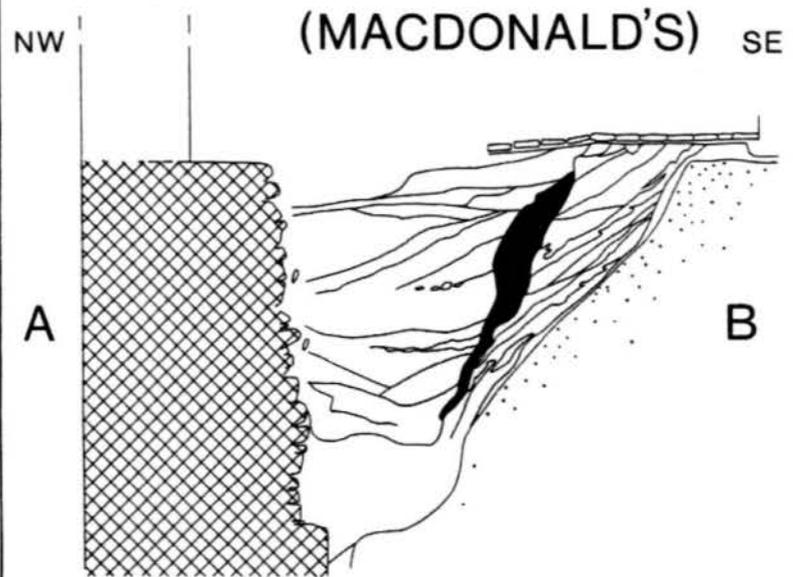


fig. 6

-  TOWN WALL
-  VOIDS / FISSURES

