

Geophysical and Building Survey at Launde Abbey

Paul Beavitt

Introduction

The School of Archaeological Studies at Leicester University has been carrying out a programme of geophysical survey at Launde Abbey in East Leicestershire since 1989 and began a building survey in 1994. The author, with assistance from Peter Liddle of the Leicestershire Museums Service, organised and directed short programmes of geophysical work in the 1989-1992 seasons with the work primarily directed to teaching undergraduates and postgraduates on the M.A. in Landscape Studies course some of the skills in geophysical survey. Launde Abbey was chosen for this work because of the support and encouragement of Canon Henry Evans and because the work would contribute to the research on Launde previously carried out by the Leicestershire Museums Service. In 1994, with the support of the present warden, the Rev. Graham Johnson, an elevation drawing was made of part of the north wall of the house. It is hoped that this short summary paper which presents these findings will contribute to a fuller discussion and attempted interpretation in a subsequent volume.

Geophysical Survey

Launde Abbey, according to Philip Hunt (1976), is thought to date from the early years of the twelfth century when Richard Bassett (a Justiciar of England under King Henry I and Steven) founded (c.1119) an Augustinian priory of Black Canons in the parish of Loddington. The name 'Launde' – a glade in a woodland – is a further indication of the Norman origins of the settlement. The possessions and influence of the priory appear to have increased throughout the twelfth and thirteenth centuries but then declined somewhat until the Dissolution. When Thomas Cromwell was sent by Henry VIII to Launde he is reputed to have indicated his own wish to create there a country residence for himself. The last prior of Launde, John Lancaster, surrendered the monastery to the King in 1539. Thomas Cromwell began the construction of the present house, Launde Abbey, and work was continued by his son Gregory, following the execution of Thomas in 1541. The present chapel houses a monument to Gregory which is dated 1551; on his death the house passed to his eldest son Henry, who died at Launde in 1592. The house was then occupied by a number of different families and very extensively rebuilt in the 1840s in which period a number of earlier features such as the chapel windows and probably the dining rooms wooden panels were moved and rearranged. It is hoped that the geophysical work and the first stage of the building survey will make a contribution to our understanding of the long and complex process of conversion of the priory to the present structure.

Resistivity survey, using Geoscan instruments (RM4 and RM15) was the major technique employed in the survey, although some work with a Philpot gradiometer was carried out in 1990. The gradiometer is an instrument for measuring local variations in the earth's magnetic field. At Launde anomalies could be expected if buried walls were present and were constructed of a material with a higher magnetism than that of the surrounding soil. There was some evidence for this in the north western corner of the survey area, where a positive resistance anomaly coincided with a high magnetic anomaly. However, because of difficulties with setting the instrument to zero before taking readings it was not used more extensively.

The resistivity survey was from the outset much more successful. Resistivity instruments give an indication of the relative wetness or dryness of soils and hence indicate buried walls or building destruction debris as positive anomalies (higher resistance than the surrounding soil) or buried ditches as negative anomalies (lower resistance than that of the surround soil). In the case of Launde, given the destruction of the priory, one would expect buried foundations creating a positive anomaly and possibly also robber trenches (negative anomaly).

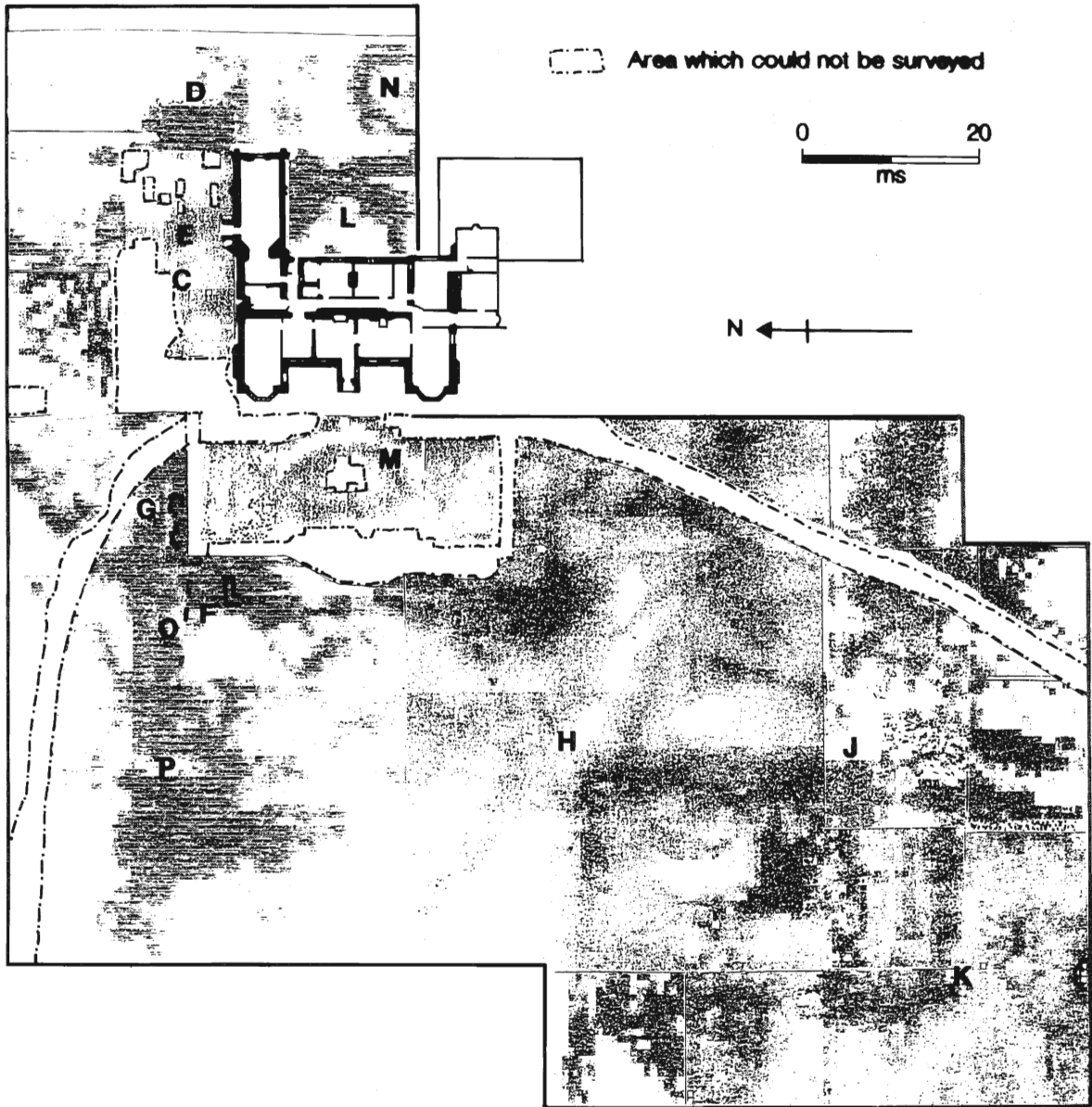
A grid at 20 metre intervals was established over the whole site using a theodolite; a number of pegs were left in place from season to season to ensure continuity. Instrument readings were taken at one metre intervals for both types of survey. In 1989 efforts had concentrated on the area close to the present chapel, with a view to seeking evidence for the crossing between nave and assumed transepts. In subsequent years areas to the north, east and west of the house were surveyed, until 1992 when it was felt that the 'edge' of the speculated priory complex had been reached. Some areas, particularly that closest to the house, were subsequently re-surveyed in order to check results. These checks indicated that our earlier survey was satisfactory and demonstrated how the anomalies were 'real' in that they could be detected more than once.

Results and interpretation

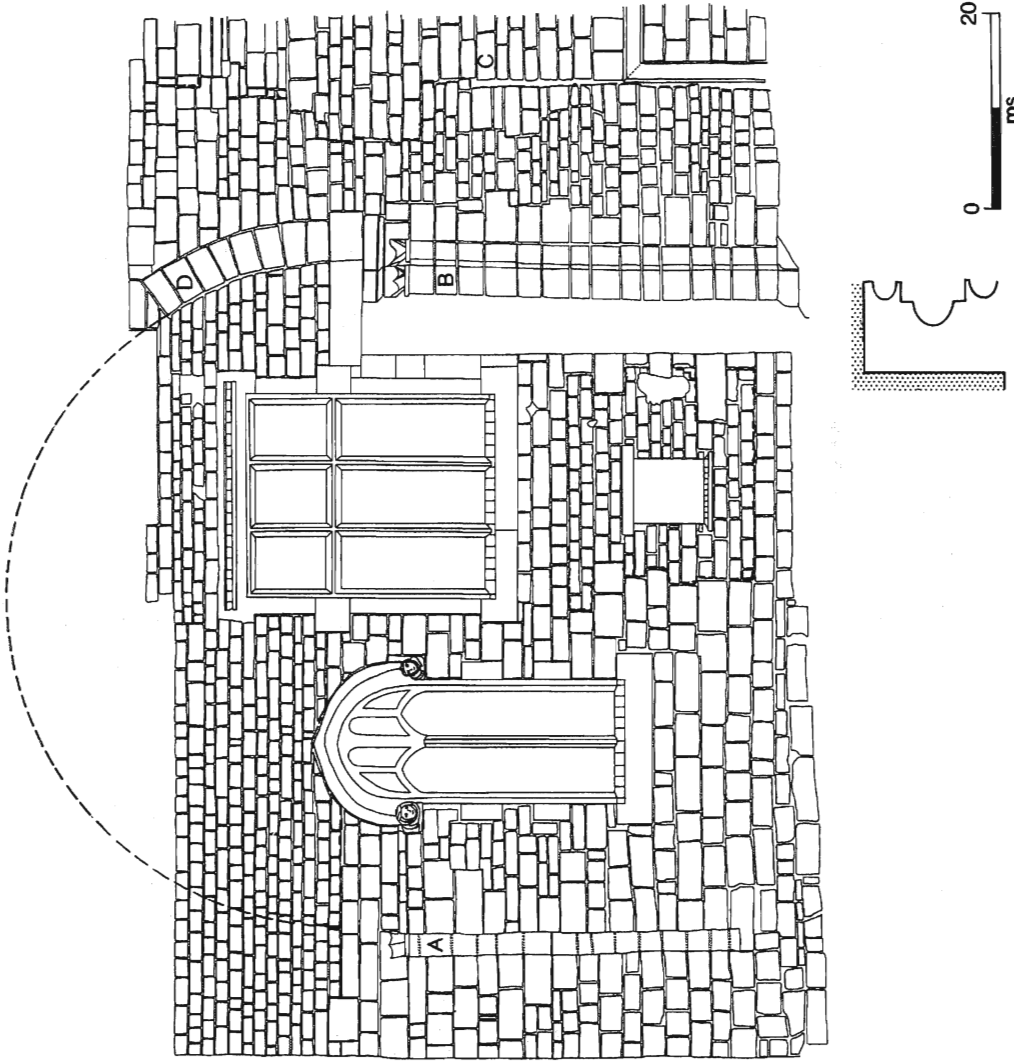
The main results of the survey are presented here, with some general comments as to possible causes. Detailed interpretation will follow in a later section. The aim of the work in the first year was to look for evidence of the northern part of the crossing, under the assumption that the visible pillars in the present house (illus. 1, and illus. 2, A and B) formed the southern side of this crossing. The area was difficult to survey because of the presence of a large holly tree just to the north of C (illus. 1), with branches down to ground level preventing easy placing of the probes into the soil. Furthermore, the interpretation of the results is hindered by the presence of a crypt (illus. 1, E). However the dot density plot does suggest some evidence for possible foundations (illus. 1, C) where readings some 10 ohms above the average for the grid were made.

There is good evidence for a presbytery (D) in the readings above 45 ohms to the north east of the present chapel. The crossing could be postulated at some seven metres wide. This would fit well with the measured distance between the centres of the extant piers (illus. 2, A and B). The remaining buried debris which we are assuming to be the explanation for the proposed presbytery would seem to spread over some fifteen metres and this could be consistent with a section of the building some seven to eight metres wide. The outline of the possible presbytery as well as a north transept is indicated by a heavy line in illus. 4.

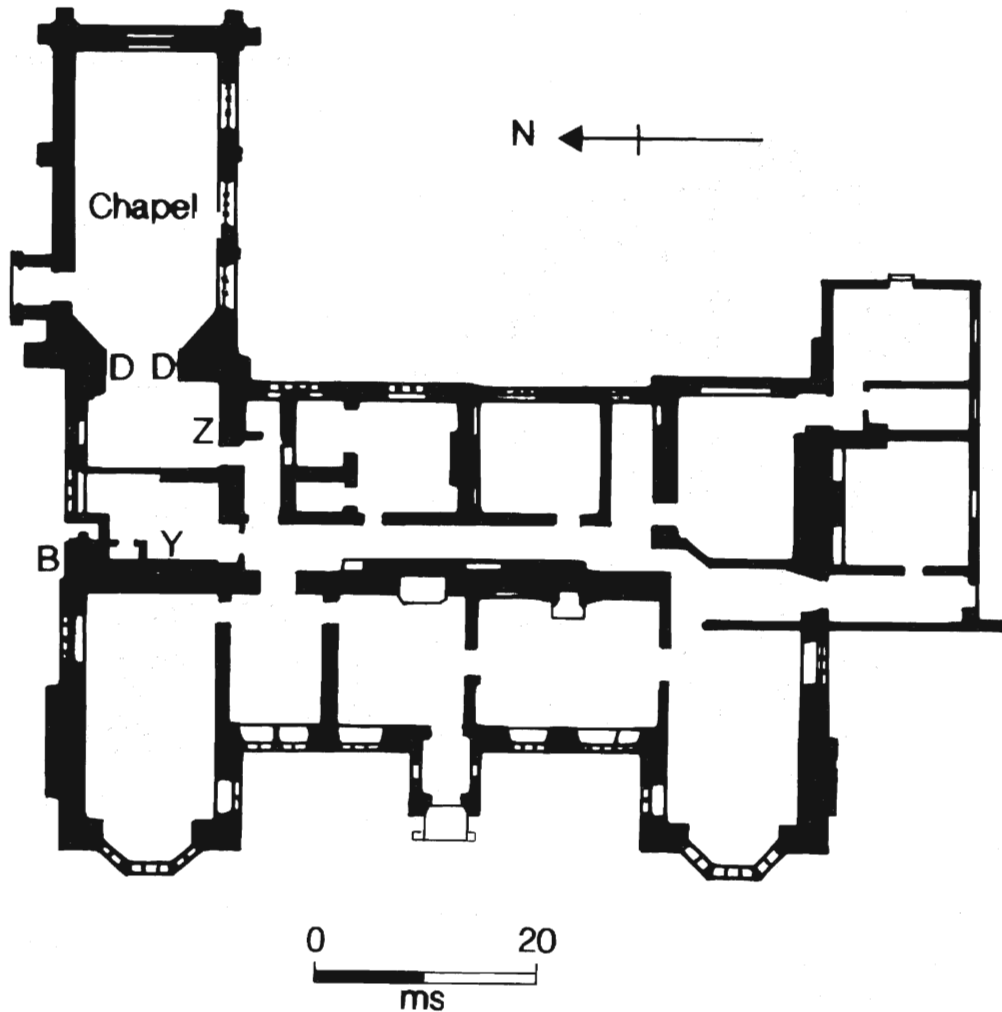
Evidence for the nave is much more elusive. Illustrations 1 and 4 include a superimposition of the plans drawn by Arthur Grimbley after his 1961 excavation. His



1. Launde Abbey building plan, geophysical survey 1989-92 with superimposition of walls excavated in 1961.



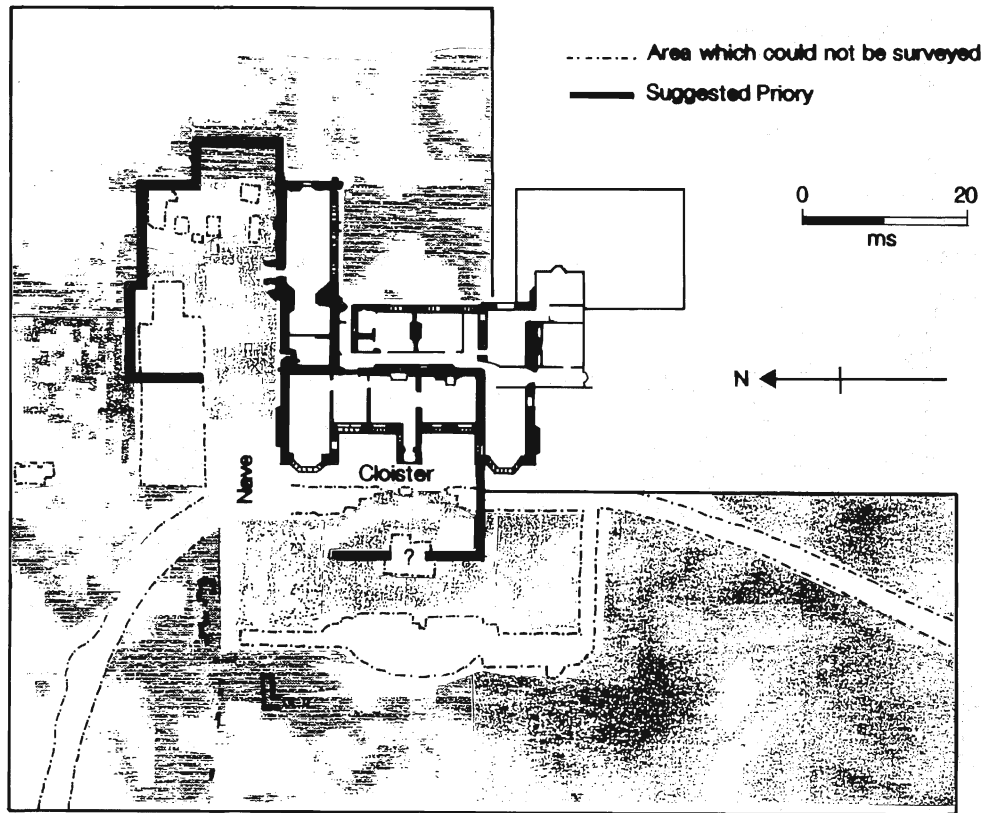
2. Elevation drawing of a part of the north wall of Launde Abbey. The lower drawing indicates a section through the pillar B.



3. Plan of the present building at Launde.

'turret' and spiral staircase at G must presumably suggest the west wall of the church. If so, his wall, at O, on a slightly different alignment, but also consistent with the geophysical evidence and continuing at P, is indicative of some feature such as a gatehouse. F indicates a possible corner of a building, where we have the additional evidence of Grimbley's excavation to support this view. However, if F and G do indicate the appropriate line of the west range the implication is that the priory elements, choir, transepts and presbytery were constructed on a much larger scale than the nave. Liddle (pers. comm.) is in favour of this view arguing that there would be a limited local rural population, possibly outnumbered by the monastic community. There were after all other churches nearby at Glooston and Loddington to cater for the laity of the area.

Indications of buildings in the outer court are very clear. H, J and K would appear to be corners of a building, perhaps an infirmary, with indications of internal divisions.



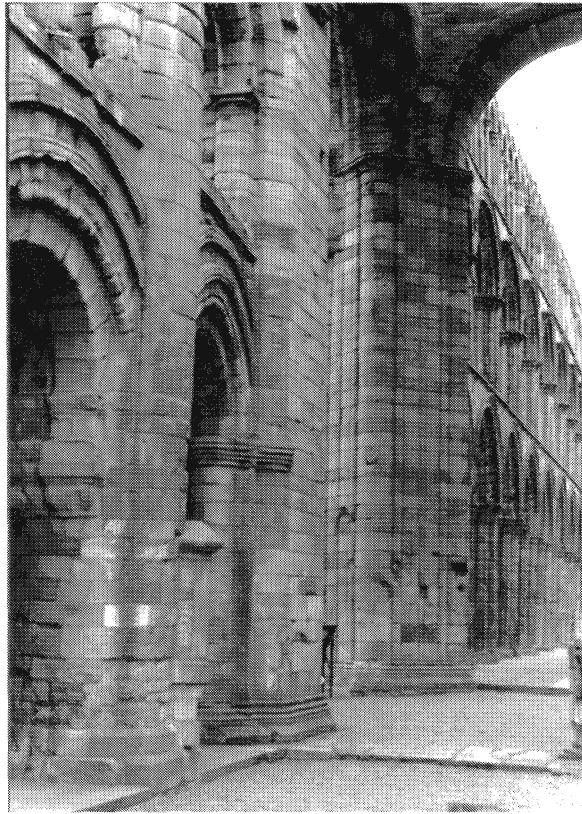
4. Interpretation of the relationship between Priory and Present building (based on illus. 1).

Finally a number of circular features are evident at L, M and N. M and N are probably remains of flower beds, although it is tempting to suggest L as a possible chapter house, the western part of which is beneath the 1840 kitchens. However, drains run through this area and may have affected the results.

Interpretation of the standing building recording

Understanding the evidence in the building fabric for the conversion of the priory at Launde into the present house is fraught with difficulties. On the one hand some close parallels between features at Launde with other abbey churches and claustral buildings can be drawn, but on the other hand difficulties arise in almost every case when an overall interpretation is attempted.

This section will list some of these analogies and then discuss them in the light of their possible place within the whole. The building plan, illus. 3, and the elevation drawing, illus. 2, will be referred to throughout the discussion. A number of parallels can be drawn between Launde and some of the southern Scottish abbeys, particularly Dryburgh and Jedburgh, where preservation of thirteenth, fourteenth, fifteenth and sixteenth century building work is excellent. At Jedburgh the church is almost intact, whilst at Dryburgh, although much of the church is no longer standing, the monastic



5. Jedburgh: view through the crossing towards the nave.

buildings survive well. It is not unrealistic to look for parallels so far afield. There is good evidence, for example, to suggest that the designer of Jedburgh may have come from Tewkesbury in Gloucestershire and furthermore there are very close parallels between the giant piers of the canons' choir which embrace two stories in both Jedburgh (illus. 5) and Romsey Abbey in Hampshire (Fawcett, 1994). Indeed the founders of monastic buildings did not restrict their sponsorship to a single order. Hence Robert Fitz Roy, the first Earl of Gloucester (*c.* 1090-1147) was a major benefactor of the Benedictine monastery at Tewkesbury but also founded the Cistercian abbey at Margam in South Wales.

The major visible evidence of the early priory at Launde consists of the remains of the two piers on the north elevation of the house and the features within the wall between the present pantry and dining room. The two piers visible in the north wall (A and B on illus. 2 and 3) could well date from the late eleventh or early twelfth century. The capitals and surviving portion of arch at Launde (illus. 6), are very similar to those in the Norman tower of the 1080s at Tewkesbury (illus. 7). The piers themselves may, however, argue for a later twelfth century date in that they are more elaborate than the simple rounded form of Tewkesbury and represent a partial development towards the Cistercian innovation, 'bundles of eight shafts', found at sites like Kirkstall Abbey in West Yorkshire, St. Andrew's, Jedburgh, and further afield (e.g. Burgundy in Eastern France). However, unlike the piers on the above churches, those at Launde have four



6. Drawing work in progress at Launde (compare pier and arch with illus. 7).

shafts and intervening square sections and do not have evidence of having been keeled. Liddle, argues as noted above, that these two piers derive from the southern part of the crossing, the other two lying in the area which is now the graveyard (pers. comm.). The chapel is then an eastern chapel extended from the south transept. The resistivity survey lends considerable support to this interpretation. A possible north transept is indicated, along with a presbytery as discussed above (illus. 4).

Arguing against this interpretation of the two visible piers as being original and as the base of a tower crossing is the arch labelled 'C' in illus. 2. Given that one pier base is extant the projected height from floor to the top of the arch is only seven metres and therefore much less than might be expected in a tower base (see illus. 15, Jedburgh). This might be more in keeping with an interpretation of A, B and C as part of an arcade arch opening into the aisle. However, there may not have been much of a tower at Launde and almost certainly not a belltower as a detached bell turret is mentioned in Gregory Cromwell's inventory at Launde (Hunt 1976). Further support for these piers as comprising the southern part of the crossing, rather than the northern part as suggested by Hunt, following Pevsner, is that the present chapel is most unlikely to be a part of the Chancel as they suggest. The arch DD on illus. 3 is much smaller than AB, probably of the thirteenth century rather than early twelfth, and hence much more likely represents a side chapel.



7. Capital and arch at Tewkesbury Abbey.

Parsons (pers. comm.) makes an interesting comment which could account for the relatively small scale of the arch A, B, C (illus. 2). He suggests consideration of an interpretation with transepts but without a crossing, which would be close to a Cistercian plan (e.g. Valle Crucis). Walls of the proposed south transept may survive in the present building (Y, Z, illus. 3). This suggestion is of considerable interest in the light of the continuation of Y, illus. 3, as a possible east wall of the cloister. Grimbley's wall, (at F, illus. 1) could then be a part of the nave. Fig. 4 sketches this interpretation.

An initial interpretation of a small area of post-priory house fabric is evidenced on illus. 2. A number of phases of stonework are indicated particularly by areas of smaller blockwork as shown by dotted lines on illus. 2. These may well be a part of the 1840 refurbishment which included changes to the chapel. C indicates a possible corner, now covered by a drain pipe; the smaller blockwork to the left of C may indicate that more of the pier B was originally exposed.

Conclusion

It is fully recognised that the work reported here does not yet represent a clear answer to the questions we asked concerning the evidence for the early priory at Launde. However, the geophysical survey does throw some light on the extent of the earlier

buildings, now demolished, and the building survey has begun the process of detailed recording of the fabric of the building. It is anticipated that both forms of study will continue in the future. Improved techniques for the processing and interpretation of geophysical data may help to clarify some of the outstanding problems in the understanding of the relationship between the church and the buildings of the outer court, although only systematic excavation will properly reveal the plan and sequence of the Priory. It is hoped that Scheduled Monument Consent will be given to enable re-examination of the 1961 excavations.

Acknowledgements

My thanks to David Parsons and Peter Liddle for discussions on the architecture of Launde. Thanks are also extended to Neil Christie for commenting on the text and to Sarah Beauchamp for typing the report. The building survey was carried out by Alex Mosely, Martin Rose, Sandra Mumford, Julia McGoff and Ann Lapidge. Thanks are also due to the staff at Launde for their constant support.

Bibliography

- Fawcett, R., 1994 *Scottish Abbeys and Priors*. London: Batsford
- Hunt, P.E., 1986 *Launde Abbey: a short history of Launde*. Launde Abbey Press.
- Pevsner, N., 1960 *The Buildings of England - Leicestershire & Rutland*. London: Penguin.
- Hoskins, W.G., 1954 [*Victoria*] *History of the County of Leicester*. Oxford University Press.
- Liddle, P., 1982 *Leicestershire Archaeology: the present state of knowledge, 2: Anglo-Saxon & Medieval Periods*. Leicester: Leicestershire Museums, Arts and Records Service.
- Nichols, J., 1815 *The History of Antiquities of the County of Leicester* 3, pt. I, pp.301-328.

Personal details:

Paul Beavitt, Head of Archaeology Division, School of Archaeological Studies, University of Leicester, Leicester LE1 7RH.