

ditch. The likely explanation for these peculiar events is that a raised level of the mere had now made its edge the natural perimeter for the castle. The base of the outer curtain stands at 265 ft. O.D., 3.5 ft. above the raised level of the mere. These changes probably took place in King John's or early in Henry III's reign,²⁸ the normally-accepted date for the outer curtain.

Evidently therefore an accurate knowledge of the changes in level of the mere is likely to lead to a greatly-increased understanding of the early history of the castle.

M. W. THOMPSON

RUFFORD ABBEY, NOTTINGHAMSHIRE (FIG. 32)

A brief note on the excavations undertaken in 1956-7 by the Ministry of Public Building and Works to determine the extent and condition of the remains of Rufford Abbey outside the later house of that name has already been published (*Med. Archaeol.*, II (1958), 191). The work was directed initially by Mr. T. L. Jones and later by Dr. M. W. Thompson, and the plan (FIG. 32) provides a reconstruction based on the foundations and robber-trenches then revealed and the surviving remains within the house. The only major points that remain undetermined are the positions of the S. walls of the kitchen and the monk's frater, this part of the site having been thoroughly disturbed by modern concrete foundations.

Although the plan shows that Rufford conformed to the normal layout of an English Cistercian house of the second half of the 12th century, it presents several points of interest. The church was intended to be of typical Bernardine plan, but by the time work had reached the W. side of the crossing a decision seems to have been taken to increase its scale, for the inner transept chapels are not in alignment with the nave aisles and the distance between the pier arcades of the nave is greater than the width of the original presbytery estimated from the robber-trench marking its N. wall. The S. aisle of the nave was probably laid out first, to give a base for the construction of the claustral buildings, and the foundations for its two E. bays were clearly intended to carry compound piers. When the N. arcade was built a change was made in favour of foundations for cylindrical piers with slightly different spacing, suggesting that the temporary church required by Cistercian regulations (*Lib. Antiq. Definitionum*, dist. iii, cap. i.) may have stood here and, until its demolition, prevented the builders from sighting through the arcades. The length of the nave can be estimated at seven bays from the position of its W. wall, which is indicated by toothing on the N. wall of the W. range. The varying width of the robber-trenches shows that the N. aisle was buttressed. Later in the middle ages the S. wall of the presbytery was rebuilt and provided with a foundation for a large buttress at the SE. angle. Although it was not increased in length, the presbytery now became substantially wider at the expense of a marked lack of symmetry and the sacrifice of the inner chapel of the S. transept.

The survival of the footings of buttresses of good projection under the floors of the later house shows that the E. alley of the cloister was rebuilt in six bays, probably when the upper parts of the W. range (now being investigated) were remodelled in the 14th century. The S. alley contained a lavatory at its W. end in the same position and of the same type as that partly remaining at Thetford Priory. The buttressing of the chapter-house shows that it was a normal rectangle of three by three bays; south of it, the cross walls for the inner parlour and the infirmary passage can be identified. A similar cross wall confirms the site of the monks' day stairs in the usual Cistercian position at the E. end of the S. range and shows that a small chamber was won out of the space beneath them as at Fountains and Salley and as recently investigated in detail at Newminster (*Archaeol. Aeliana*, XLII (1964), 141-6). The position of the warming-house was confirmed by the discovery of fragments of its fireplace.

²⁸ The dating really depends on the reference (*Cal. Lib. Rolls*, 1240-5, p. 71) in 1241 to the wall, that threatened to collapse into the pool, needing repair.

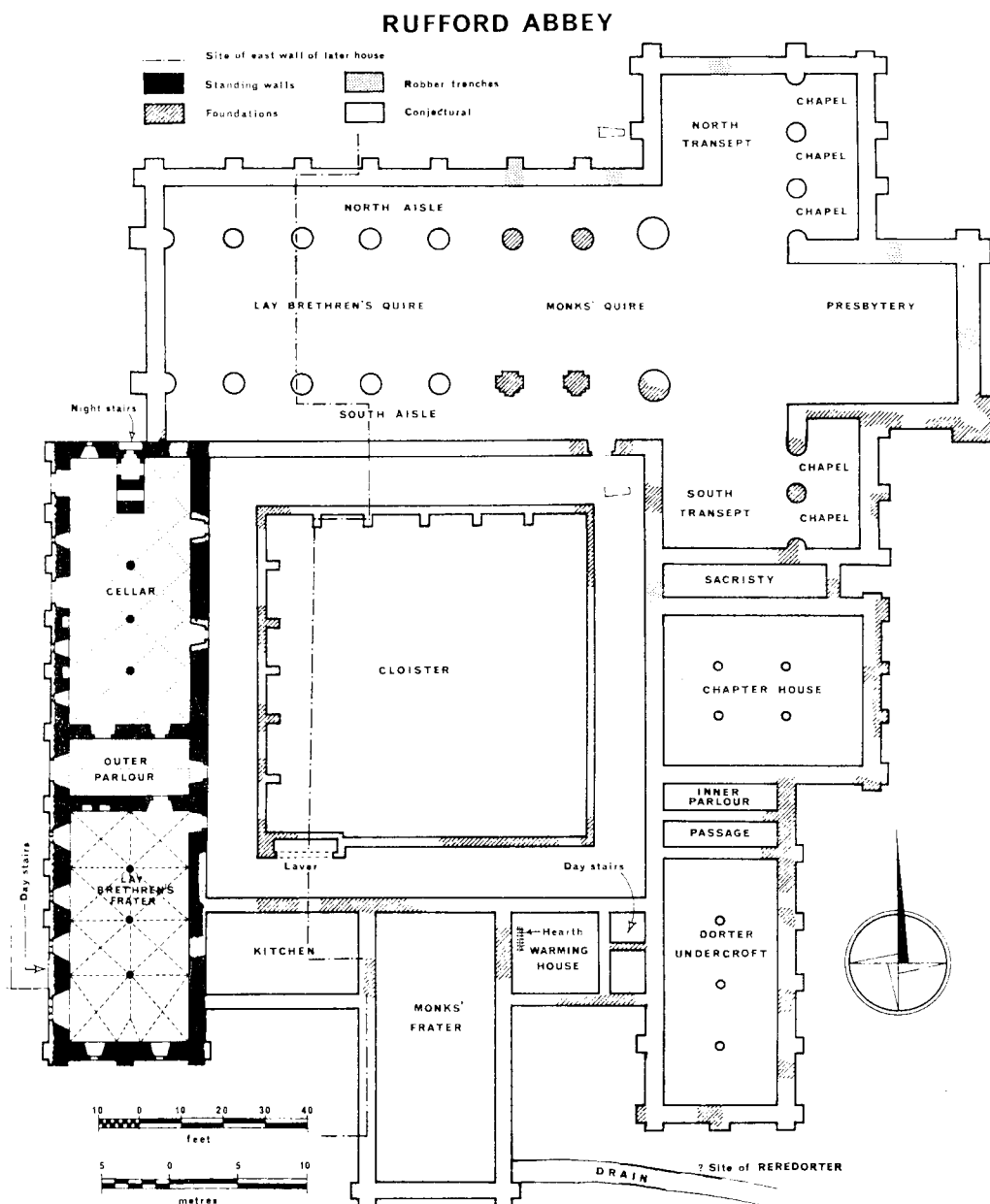


FIG. 32
RUFFORD ABBEY, NOTTS. (pp. 161, 163)
Plan based on recent excavations

The lay brethren's frater preserved in the later house is one of the finest examples in Britain. Its spoon and linen cupboards remain in the N. wall, and the split cell of the vault against the S. wall indicates the position of the reredos or crucifix over the high table. The outer parlour also did duty as a service passage to this frater, to which it has direct access. The westernmost of the two doorways that connect it to the cellar is grooved for a half-door or service hatch, and it seems likely that the S. bays of the cellar served as buttery and pantry to the two fraters, as was deduced from more slender evidence at Fountains (*Yorks. Archaeol. J.*, xv (1900), 109). The block in the cellar carrying the lay brethren's night stairs is pierced by a barrel-vaulted passage, and the position of their day stairs has been verified by the discovery of the treads in the core of the wall of the house. The manner in which both flights of stairs are constructed is again closely paralleled at Fountains.

The discovery of shaped floor-tiles, none *in situ*, shows that parts of the abbey had mosaic tile-pavements of the type characteristic of some northern Cistercian houses.

R. GILYARD-BEER

BRONZE PLAQUES FROM NORWICH (PL. XX ; FIG. 33)

During building operations in 1964 on the W. side of Castle Street, Norwich (TG/23050855), four bronze roundels (Norwich Castle Museum, 570.964) were dis-



FIG. 33

CASTLE STREET, NORWICH

Reconstruction of bronze plaque, drawn by W. F. Milligan. Sc. $\frac{3}{4}$

covered by workmen. These roundels are incomplete, but appear to be approximately the same size, 7.8–8 cm. diam., and very thin. Each had several small nail holes. The roundels are decorated in relief with the Arms of England, 1198–1340, around which are decorative scrolls, but the detail is blurred by corrosion.

The E. side of Castle Street marked the boundary of Norwich Castle Fee until 1345 when Edward III granted much of the Fee to the citizens of Norwich. Before this the tenants of the Fee of this royal castle formed a separate community, free from the jurisdiction of the bailiffs of Norwich. From abutments of properties erected in the old Fee after 1345, given in conveyances, it seems that the boundaries of the Fee ran some distance from the outer lips of the castle ditches. Until now the method of defining the boundary of the Fee was unknown. It is suggested, however, that these plaques were