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**BRICK ROTUNDA ON THE CASTLE HILL IN SIERADZ:
ARCHAEOLOGICAL AND ARCHITECTONIC RESEARCHES
1969-1971**

Sieradz is situated in the south-western part of the Central Poland Lowland zone, in the southern stretch of Warta valley which constitutes the boundary sphere between Łódź and Wielkopolska region. Vast high plain areas cut by the river valleys of Pilica and Warta are predominant in this district.

The areas of river valleys were usually making an excellent place for the development of settlements.

Site no 1 in Sieradz, the so-called Castle Hill, is located on the eastern outskirts of the town, on the flood terrace of Warta at the foot of scarp where the town buildings are spread. At present the Castle Hill elevates about 5 m above the Warta terrace and covers the area of about 1 hectare (Figs 1, 2).

Archaeological excavations confirm the existence of the settlement traces on the Castle Hill from the second half of the 11th century till the 14th century:

- | | |
|------------------------------------|--|
| I — settlement layer | — dated to the second half of the 11th century |
| II — time interval | — flood layers |
| III — settlement layer | — dated to the 12th century |
| IV — stronghold with borough | — the 12th century and the first half of the 13th century |
| V — Stronghold and foundation town | — the second half of the 13th century and the 14th century |

(Fig. 3, Table 1) (U. Perlikowska-Puszkarska 1979, p. 147).

The phenomenon of the mediaeval fortified settlement development on the west terrains is confirmed by Sieradz. Crossing of the Warta river was the place where various communication routes were meeting. Sieradz was

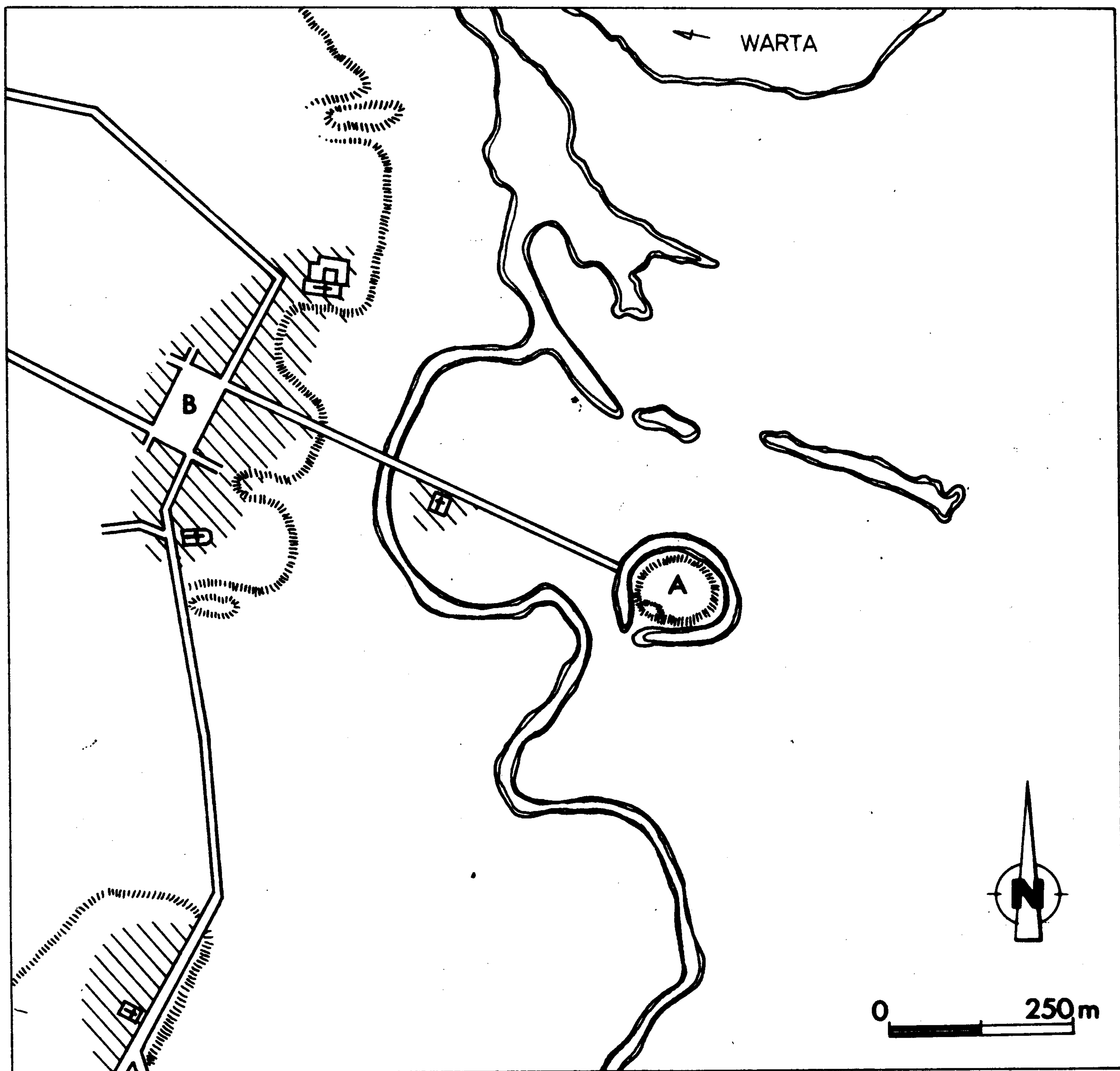


Fig. 1 Sieradz — Castle Hill, site 1. Stronghold and foundation town, 13–14c. A: stronghold, B: market square (Drawn by Marek Puzkarski)

situated on the great east-west transit route. The roads from the south, from Cracow to the north, to Gniezno and Poznań were passing there. The connection with Mazowsze also existed. The roads to the south-east through Żarnów and Sandomierz in the direction of Ruthenia led through Sieradz.

The choice of this place was conducive to the development of the market type settlements and as a result created good base for the establishment of the stronghold, borough, and of open settlements at the end of the 11th century (J. Kamińska 1962, p. 41–71).

The wet and paludal terrain as well as two rivers, Warta and Żeglina, were decisive for the natural defensive qualities of this place (J. Kamińska 1962, p. 41–71).

From the point of this location Sieradz is included to the strongholds of Central Poland and a meritorious investigator in this area, J. Kamińska,



Fig. 2 Sieradz — Castle Hill, site 1. Contour lines plan with a square-grid. (Drawn by Marek Puskarski).

assumes that historical district of Łęczyca and Sieradz together with three castellanies of Żarnów, Skrzyńsko, and Małogoszcz constitute the region of Central Poland (J. Kamińska 1971, p. 69).

Written sources mention Sieradz for the first time in 1136 (R. Rosin 1962, p. 27). It is the papal edict of Innocent II issued for the archbishop of Gniezno. In the papal edict we can find the passage referring to duties of the strongholds districts in the Łęczyca province: "...from the strongholds of Sieradz, Spicymierz, Małogoszcz, Rozprza, Łęczyca, Wolbórz, Żarnów, and Skrzyńa full tithes from corn, honey, iron, from fox and marten

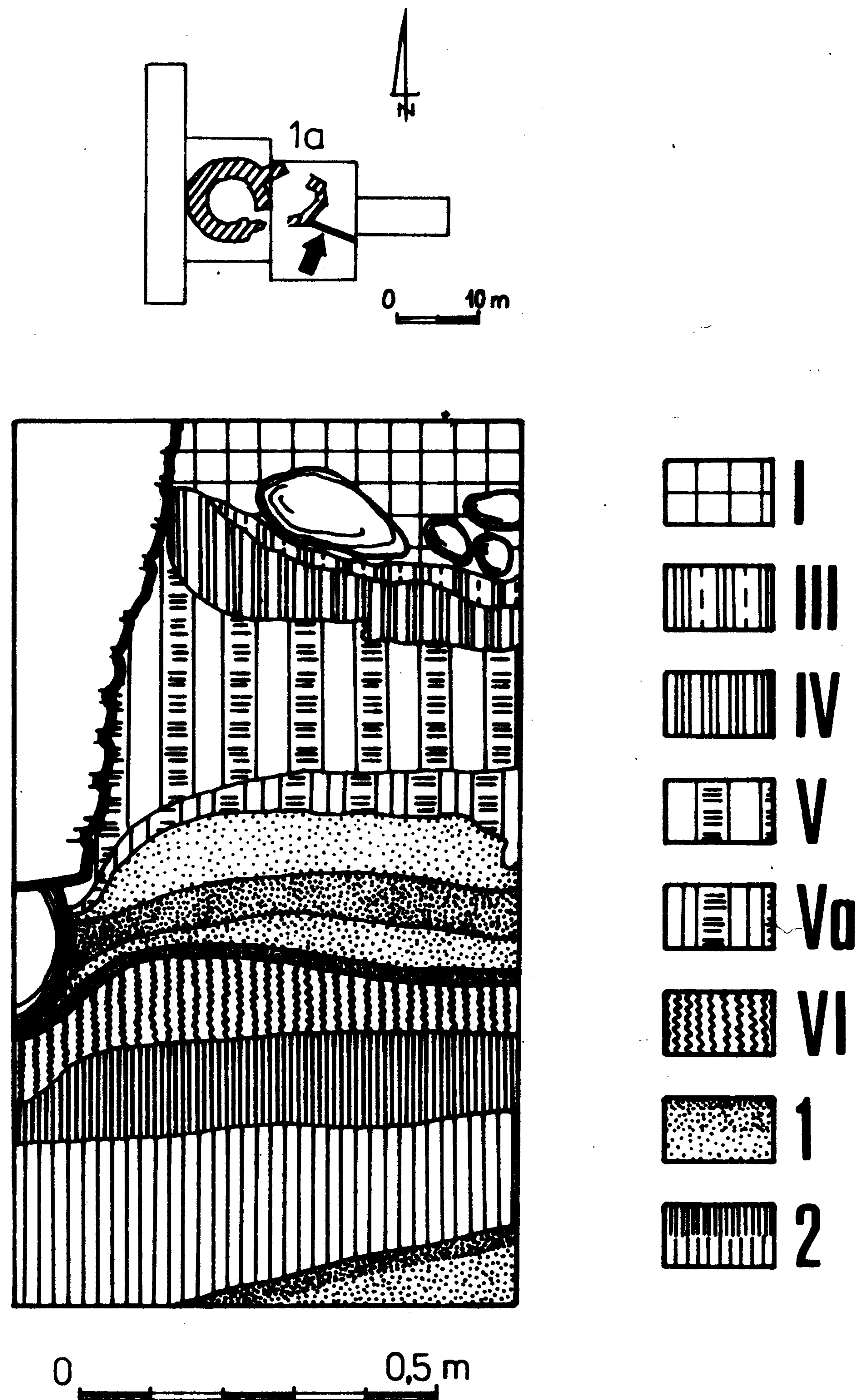


Fig. 3 Sieradz — Castle Hill, site 1, Section no. IV. Stratification.

I: dark brown sand and clay with pieces of bricks and mortar, III: dark grey sand layer with pieces of bricks, mortar, and charcoal, IV: grey sand, V: dark brown layer (mouldy wood), Va: mouldy wood and charcoal, VI: dark brown sand layer with pieces of wood and charcoal, 1: yellow sand, 2: river mud (Drawn by Marek Puzkarski)

skins, from charges in inns and market places, from custom duties charged in the strongholds themselves, and in other adjacent places on all crossings..."

Sieradz as a state outgrowth equal in significance to other strongholds of Piast's Poland is also mentioned in so called *Roger's Book* by the Arab geographer, al Idrisi, from the 12th century and is placed in the same category as Gniezno, Wrocław, and Cracow. "All of them are famous capitals and strong centres where the wealth of various countries is gathered. A part from this, they also enjoy the esteem because educated scholars in the field

Table 1. Sieradz-Castle Hill, site 1, section No. IV

<i>Archaeological Research</i>		
<i>Layers</i>	<i>Interpretation</i>	<i>Chronology</i>
III + IV	later embankment	12/14 c.
V	earlier embankment	12/13 c.
Va	second settlement layer	12 c.
1	flood layers	
VI	first settlement layer	dated to the second half of the 11th century
1—2	natural soil	

of science and religion stay there. Their craftsmen are skilful and familiarized with their professions.”

In the 12th and in the first half of the 13th century, Sieradz is mentioned in documents as a place of assemblies. Sieradz was to transform into the foundation town, from the legal point of view, in 1247–1255 under the rule of Casimir, the Prince of Kujawy.

In 1255, Sieradz is described in documents as a place possessing educated townspeople class and, besides Łęczyca, the most important centre in this area.

In 1263–1264 the establishment of the Sieradz principality took place. Two sons of Casimir, Leszek Czarny and Ziemomysł, took actions against their father. They seized the Sieradz castle and Leszek Czarny overtook the rule over this province. In 1263–1264 an agreement was made between them and the north-eastern part of the Łęczyca region returned to Casimir while the south-western part formed the Sieradz principality. This division proved to be very long lasting and continued to exist till the end of the 18th century.

The defensive qualities of the stronghold were also stressed by J. Długosz who said”... Czech Wacław II in 1292 conquered by force only town but not the castle situated among the swamps surrounded by water and possessing the strong crew.” (A. Grzybowski 1971). The fall of the stronghold probably took place in the course of the political events such as raids of the Teutonic Knights in 1331 and in the following years.

The interest of historians and archaeologists in the Castle Hill dates back to 1958 (Fig. 4). In 1968, the disclosure of brick building fragments dated to the 13th century in the south-eastern part of the site became the turning point in the investigations at the Castle Hill.

Excavations carried out from 1969 till 1971 revealed the western part of the building while the eastern part was exposed in 1972–1976. This part became at the same time a clue to the determination of the primary building concept (Fig. 5).

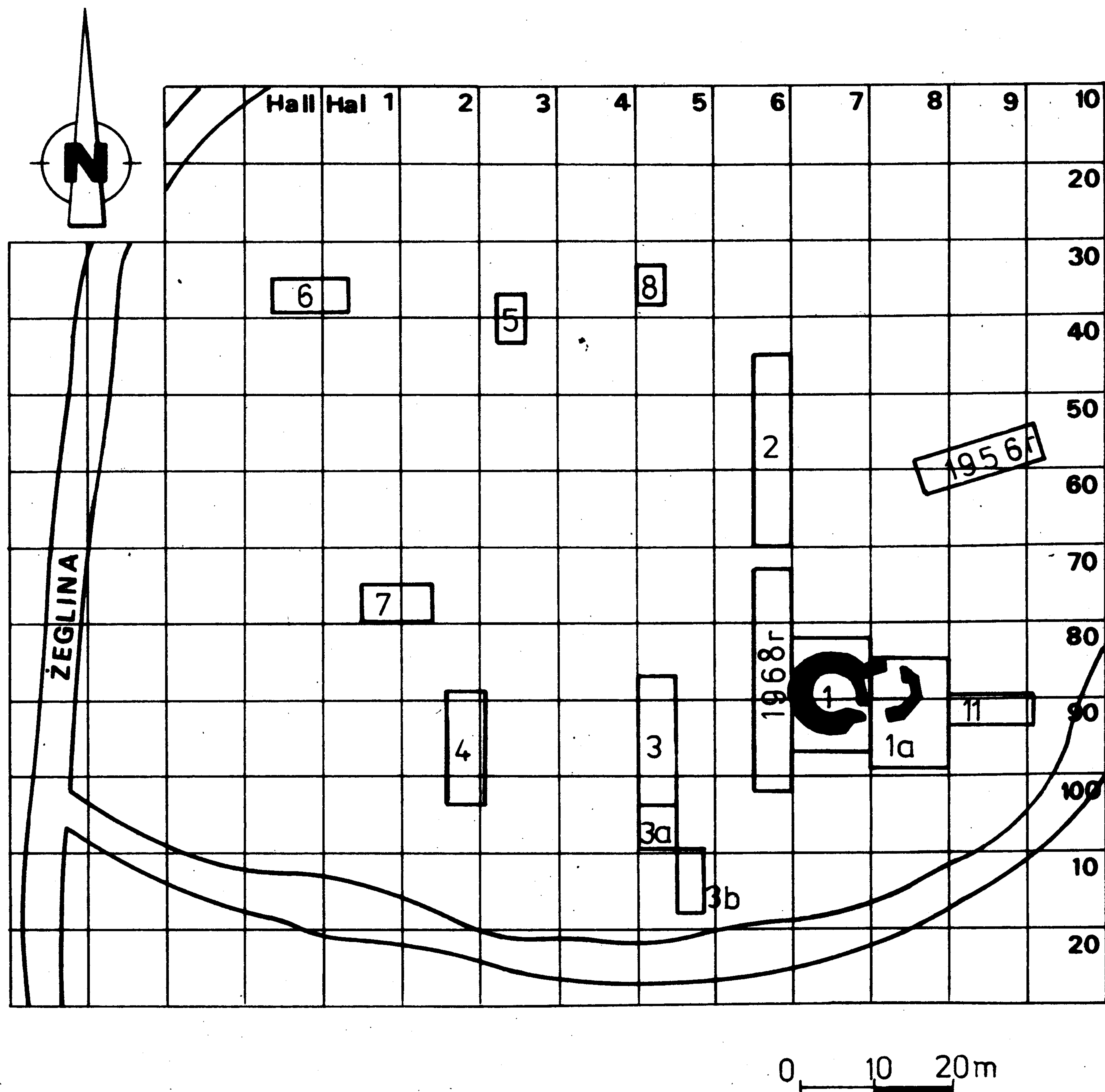


Fig. 4 Sieradz — Castle Hill, site 1. Situation plan a square-grid, location of trenches and rotunda. (Drawn by Marek Pużkarski)

This building was recognized by the archaeologist as a rotunda.¹ This is a central, two-part object. Its western part is founded on the circle plan and its eastern part is closed from the east by three sides of octagon without corner counterforts.

The building is orientated along the east-west axis and the axis of the eastern part is deviated towards the north by 6° . That resulted in the bottom view deformation of this part and of its contact with the central part.

The rotunda walls were made of so called “fingred bricks” (*palcówka*) with the Weneds succession and were included to the type *opus emplecton*. The lime mortar was used and the construction rests on the foundation of the field stones also connected by the lime mortar.

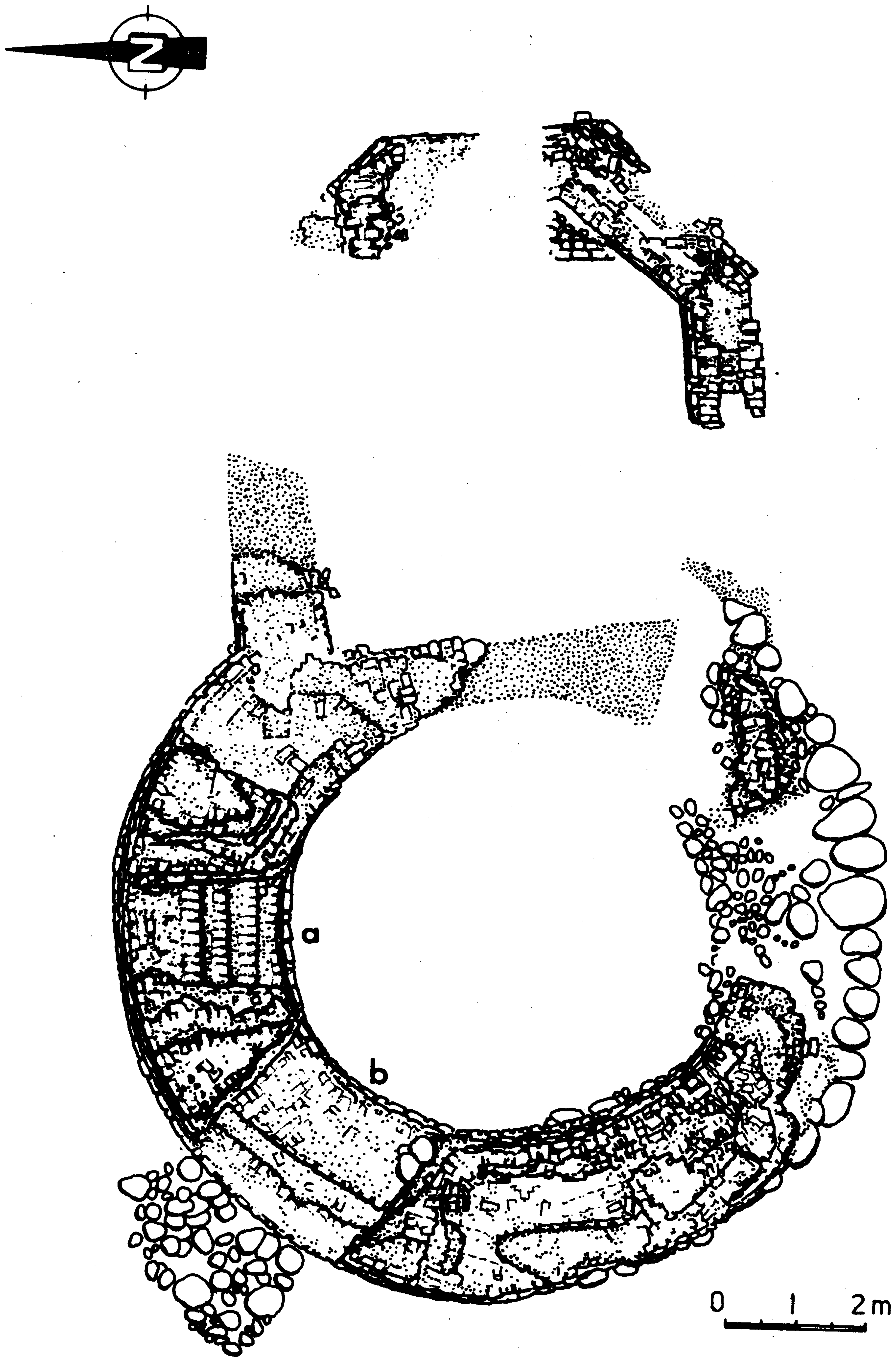


Fig. 5 Sieradz — Castle Hill, site 1. Architectural inventory of the rotunda. a: original entrance opening, b: opening broken in the wall (Drawn by Marek Puzkarski)

Exactly on the north-south axis, in the northern circumferential wall of the western part, the remains of the original entrance opening 1.10 m wide are preserved.

The second opening, 2.50 m wide, broken in the wall, is situated in the western part of the circumferential structure.

In the composition of the rotunda bottom view there is full interdependence of its both part (the eastern and western one) resulting from the adoption of uniform proportion system. The object is symmetrical in relation to the main longitudinal axis and from the point of view of the geometrical construction in relation to the main transverse axis. The construction of the bottom view indicates the application of the *ad quadratum* system by the builder of the rotunda.

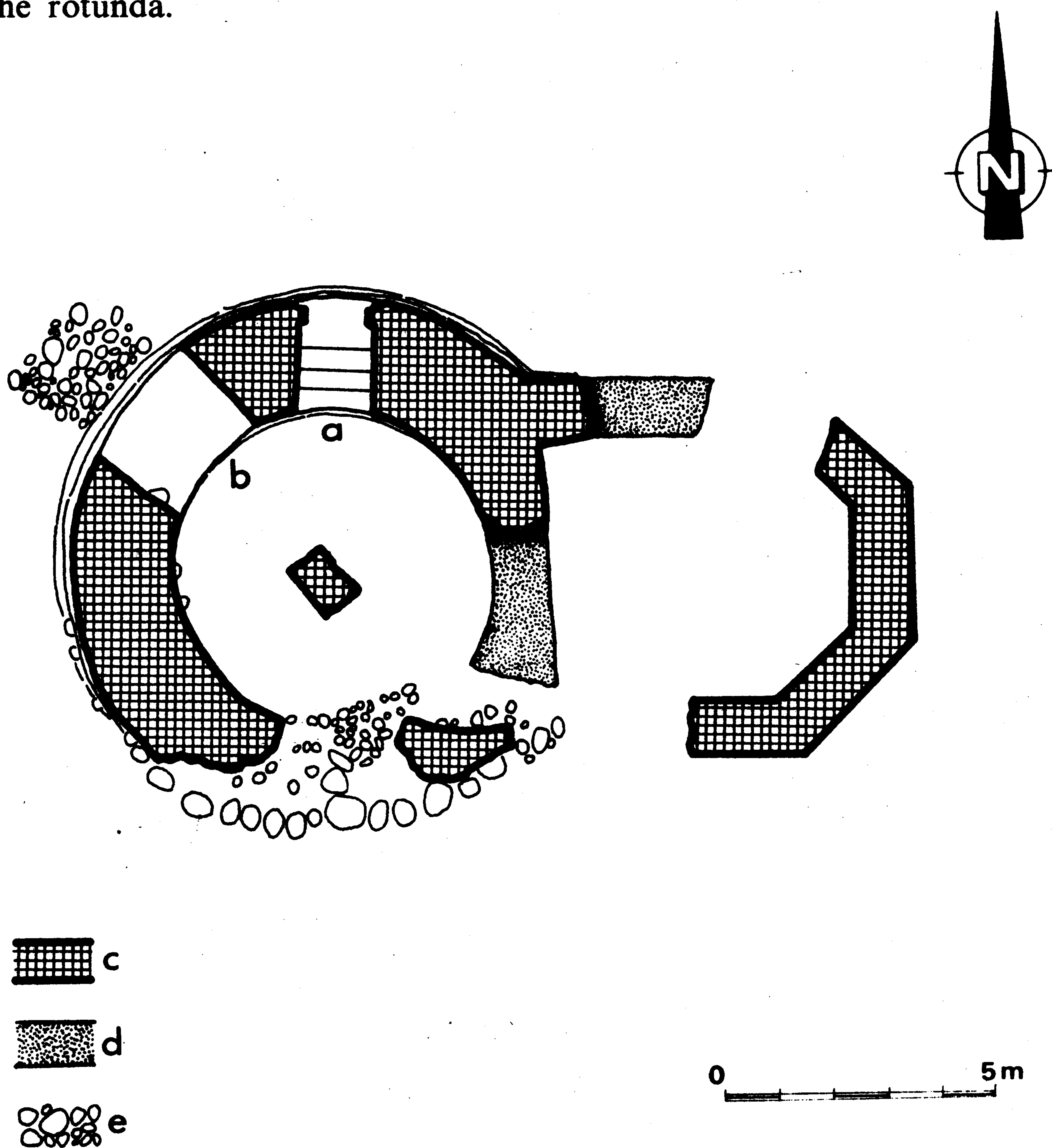


Fig. 6 Sieradz — Castle Hill, site 1. Plan of the rotunda. a: original entrance opening, b: opening broken in the wall, c: wall, d: wall robbed, e: stones (Drawn by Marek Puzkarski)

Basing on the configuration of the bottom view this object can be included to two-element establishments with a simple layout (K. Koczorowski 1977).

The relics of Sieradz rotunda discovered in the course of archaeological excavations allow us to reconstruct fully the bottom view of its ground storey and give the base for the determination with a big approximation of the height of the western part of this storey. The height of the eastern part and the problem of access are still to be solved through theoretical considerations. The problem of the higher storey reconstruction is also being considered. The rotunda consists of the circular western part with an inside diameter amounting to 6.20m and outer one measuring 10.20m. It is closed by 3/8 of the eastern part octagon which is 5m wide and 5.90m long. While the circumferential walls were 0.95—1m thick, the thickness in the western part amount 5 to 2m. The complete length of the building was approx. 15.95m. In the middle of the western compartment there was a pillar supporting the vault. The pillar was square in the projection and the side length amounted to 1.50m. The total height of the western compartment was 2.17m; the height of portal, 1.65m (Fig. 6).

Basing on the architectonic research² we can say that the lower ground storey could not have served liturgical purposes. We should look for the actual chapel on the higher non-existing storey which, because of its size and apatial solution, could have fulfilled these conditions.

The rotunda was probably functioning in the later phase of the Sieradz stronghold dated to the second half of the 13th and the 14th century. While stressing the sacral function of the object, it is necessary to take into account its defensive function. The location of the rotunda in the set of the stronghold retrenchments and its massive construction allow us to suppose that it could have been used as a refuge. Basing on the archaeological materials obtained till now as well as on the dendrochronological materials, the construction of the later embankment could be preliminary dated to the turn of the 'sixties and 'seventies of the 13th century (M. J. Dąbrowski, M. Kardasz 1973).

Accepting that the Sieradz object was the stronghold chapel we have to find out what the period of its formation was, conditioned by the appropriate historical circumstances. Sieradz was functioning as a principality capital in three periods:

1. 1233—1234 — during the short rule of Bolesław Konradowic,
2. 1264—1279 — in the period of Leszek Czarny rule in Sieradz; it gave beginning to the existence of the Sieradz principality
3. 1327—1339 — in the period of joint control in this province by Przemysław of Sieradz.

Analysing historical sources we can come to the conclusion that the period of the erection of the stronghold chapel should be connected with the problem of the beginning and functioning of the chancellery in Sieradz. The Sieradz

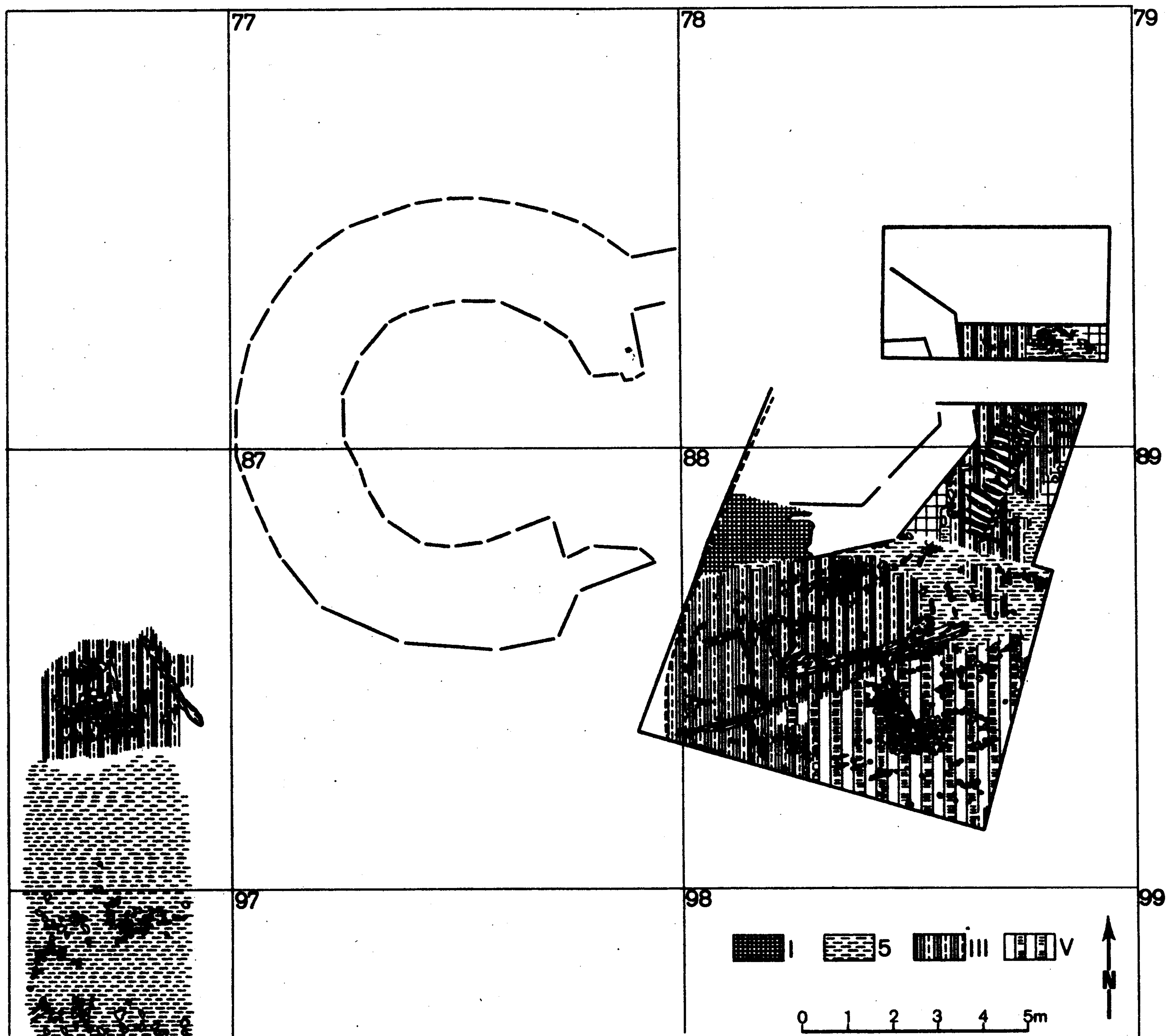


Fig. 7. Sieradz — Castle Hill, site 1. Rotunda and defensive constructions 13–14c. (later embankment). I: pieces of bricks and mortar, 5: clay, III: dark grey sand layer with pieces of bricks mortar and charcoal, V: dark brown layer (mouldy wood) (Drawn by Marek Puzzkarski)

chancellor appears in the sources as late as 1264 and the biggest amounts of documents were issued under the rule of Leszek Czarny in Sieradz. Fifteen years long rule of Leszek Czarny and the necessity of possessing the proper residence created the optimum conditions for the realization of such an investment.

Two-storey rotunda in Sieradz, under the invocation not preserved in the written sources, was probably built between 1264 and 1288 from the prince Leszek Czarny foundation and because of the late period of its construction and its spatial layout, it can be considered one of the final links in the many hundred years long history of rotundas development.

The constructional system used in the arrangement of blocks shows

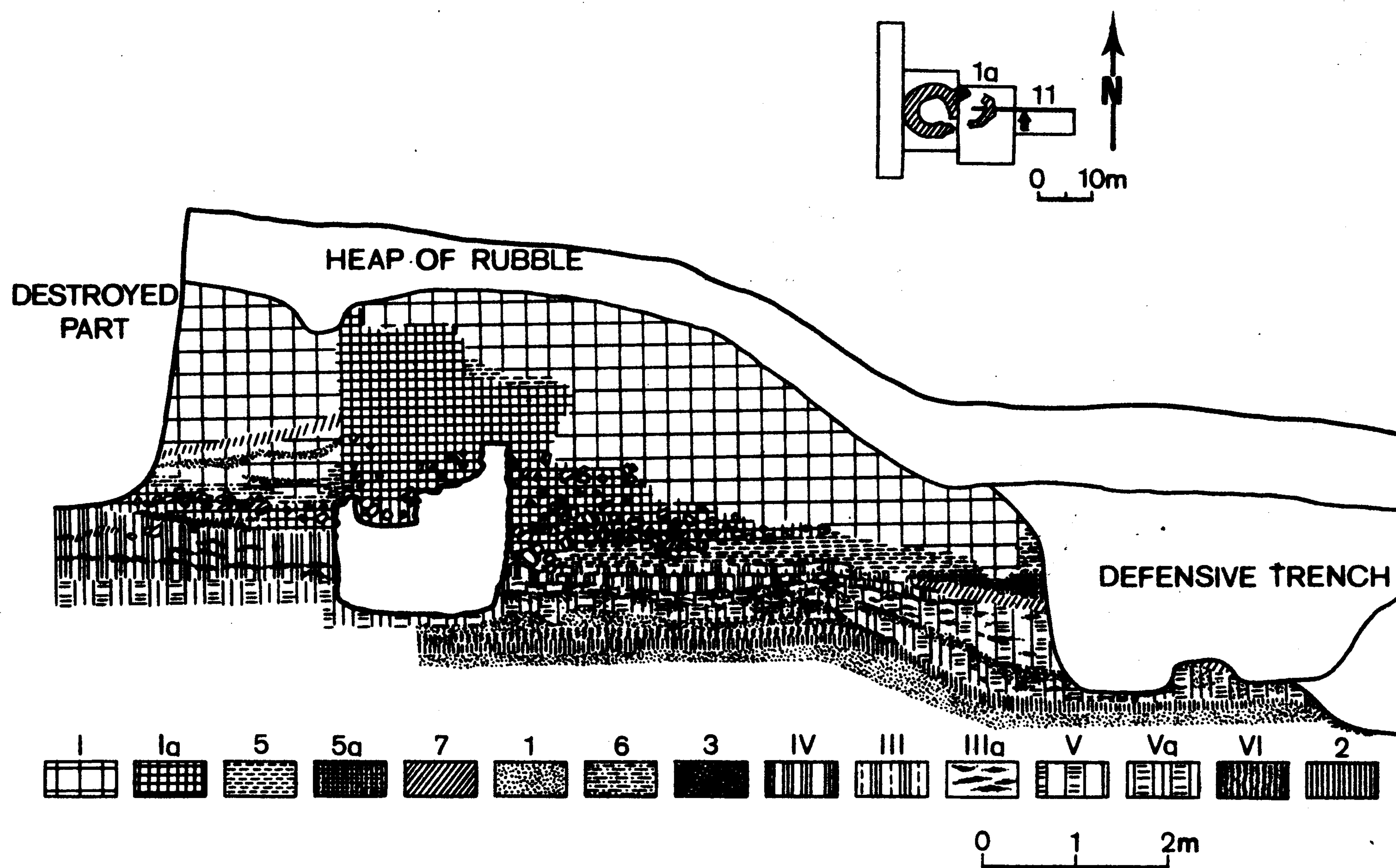


Fig. 8 Sieradz — Castle Hill, site 1. Section along rotunda axis. Stratification. I: dark brown sand and clay with pieces of brick and mortar, Ia: pieces of bricks and mortar, 5: clay, 5a: burnt clay, 7: charcoal, 1: yellow sand, 6: mouldy wood layer, 3: very small pieces of bricks and mortar, IV: grey sand, III: dark grey sand layer with pieces of bricks and mortar, IIIa: pieces of mouldy wood, V: dark brown layer (mouldy wood), Va: mouldy wood and charcoal, VI: dark brown layer with pieces of wood and charcoal, 2: river mud (Drawn by Marek Puzkarski)

progress in relation to the older establishments. It did not consist in the simple arrangement of nave and presbytery blocks but in the conscious composition based on common uniform geometrical system. Nothing indicates the utilization of foreign models in the Sieradz rotunda concept. We can acknowledge it as a local product. "It is a material proof of activity and creative possibilities of the Polish artistic milieu in this period. It is a typical architectural product of the second half of the 13th century."

Up till now, apart from the Legnica chapel, it has been the second known example of unique stronghold chapels from the final period of the timber-terrestrial strongholds existence. The Sieradz building was fitted into the already existing system of stronghold constructions (Fig. 7, 8). It was an attribute of the power of an independent prince.

The discovery of rotunda enriched the resources of architectural relics in this region with an unique object of great significance not only at the regional level (K. Koczorowski 1979).

NOTES

¹ Geodetical measurements of the rotunda were carried out by J. Fellmann. Compare next article in the publication.

² The complete analysis and architectonic documentation, made during the excavations will be printed in future (K. Koczorowski 1979—manuscript in the library of Warsaw Technical University, Department of Architecture).

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