

CONSERVATION WORK AT KOM EL-DIKKA IN ALEXANDRIA IN THE 1991-1992 SEASON

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Over a period from October 15, 1991, until May 5, 1992, the Polish-Egyptian Joint Mission at Kom el-Dikka¹ continued the conservation of the monuments located in the area.

Baths. In the Southern Portico a further 54 m³ of foundations were prepared, following guidelines presented already in previous reports.² The reconstruction of the missing parts of the foundations, which have been dismantled in medieval times will permit the first stage of the Zona Monumentale project, accepted for realization by the Egyptian Antiquities Organization, to be completed. Stage I of the project assumes that the Baths and Cistern will be made accessible to tourists in part by 1994.

It will now be possible to complete the anastylosis of the original columns of the Southern Portico, and in the future of the columns of the eastern and western porticos of the South Gymnasium. Furthermore, the reconstructed foundation of this portico will also close off the cellar complex of the Baths from the south.

¹ The mission included Dr. eng. Wojciech Kołataj, director; Dr. eng. Jan Borkowski, Mr. Grzegorz Majcherek, Mrs. Teresa Kołataj, Mr. Jacek Martusewicz and Eng. Krzysztof Złotkowski. The Egyptian side was represented by inspectors Mr. Ala'a ad-Din Mahrous and Mrs. Mona Shaban Hafez.

² W. Kołataj, Conservation work on Kom el-Dikka in Alexandria in the 1989 season, *PAM II*, 1989-90 (1991), pp. 15-18; id., Report on the conservation activities at Kom el-Dikka in Alexandria in the spring season of 1991, *PAM III*, 1991 (1992), pp. 15-18

After the foundations for three new columns were completed, the second column was raised together with its Corinthian capital. The bottom part of a third column was also set up. This last column was broken in two with a diagonal break (60 degrees from the horizontal); three stainless steel rods will be introduced to join the two parts. The column will be mounted in the next season; the present one was devoted to preparing the sockets for rods according to a procedure described in previous reports. Both columns were set up on completely new bases made of artificial stone and worked with a tooth chisel to give them a texture and color recalling the original marble bases. The following formula is used for the artificial stone: 30% white Portland cement, 65% marble grit with a fraction 0.1-0.2 mm, 5% quartz sand floated and sifted. In order to prevent cracking caused by high fluctuations in daily temperatures a space about 0.30 m in diameter was left empty in the bases, which are 0.85 m in diameter.

Three great blocks of nummulithic limestone were recovered from the service-area room adjacent to the cellars of the portico (fuel store for the second furnace of the hypocaust). The blocks obviously belonged to the corner of the porticoes of the South Gymnasium. Future seasons will be devoted to a partial reconstruction of this corner. This season the negative of the northern part of a gate dismantled in medieval times was excavated; the gate separated the Southern Portico from the passage, which joined it to the Theater Portico in the west. The structure is currently under study.

In the Southern Latrine of the Baths the fragments of one of the columns of the peristyle were put together; these frag-

ments constitute 40% of the upper part of the column. The disintegrated conglomerate marble was saturated with Ciba-Geigy epoxy resins EP-CA 521887 and 521888 diluted in toluene. Larger fragments were put together and glued; missing parts were filled with a putty made of this resin and marble dust. The whole column will be reconstructed and set up on the original base in the corner of the latrine peristyle.

At the same time conservation started on a grey granite column which belonged to the northern edge of the Theater Portico and which was discovered many years ago. The strongly eroded sections and deep lengthwise cracking in the middle of the diameter present a very difficult problem for conservation. The empty spaces under the relatively well preserved surface have been filled with organic material and granite detritus. These spaces are inaccessible and it is impossible to remove the detritus through the capillaries or to introduce and consolidating substances. In order to attach the surface and to strengthen the eroded structure, small holes were drilled in the outer surface, through which it was possible to clear canals leading inside the column and fill them with Paraloid diluted in toluene. About 50% of the disintegrated surface was consolidated in this way. The holes were then closed using a putty made of resins and granite dust corresponding in fraction to the structure of the granite in this case. The conservation process will be continued in successive seasons.³

³ A detailed and systematic description of all the conservation work carried out on the monuments of ancient architecture at Kom el-Dikka, complete with documentation and photographs, will be published as a successive volume in the Alexandria series.

Cisterns. The eastern facade of the structure, between the first and second buttresses, was completed according to the procedure described in reports for previous seasons.⁴ The destroyed facing of the eastern facade between the third and fourth buttress was cleared down to the foundations. On top of the wall proper, runoffs for rainwater were introduced. The southern end of the facade was excavated from the south, uncovering the corner of this original structure. Archaeological and architectural investigations will be continued in this sector.

Theatre. The anastylosis of a deformed part of the brick arch in segment X of the theatre corridor (ambulacrum) was completed. The arch had been deformed in 1964 when a concrete pillar intended for a modern skyscraper had been driven into the ancient substance even before the theatre was discovered. The disintegrated part of the arch was removed and reconstructed with as much of the ancient substance as could be retrieved. The mortar used was a lime mortar mixed with powdered brick and about 5% of white cement.

Thanks to this operation it was possible to complete the excavations of the ambulacrum and the recording of its walls. In the future, the whole length of the corridor will be opened to tourists.

Sector WIN. In the test trench WIN the wall of Room 3 in House H was consolidated and protected against collapsing, creating conditions for further conservation work to be carried out in this area.

⁴ Cf. above, note 2.