# ALEXANDRIA

# KOM EL-DIKKA PRESERVATION WORK 1996/97 Wojciech Kołątaj

The Polish-Egyptian conservation work was carried out from 1 November 1996 until 30 May 1997.<sup>1</sup>

## CISTERN

Investigations of the cistern's southern water-drawing well and the area next to the western wall of the corridor-ramp proved that the entire lower part of the wall had been dismantled in the Middle Ages and that the lower end of the well is destroyed, presumably because of the crumbling of the vaults of the underground aqueduct above which it had been located. Considerable hazard and the impossibility of carrying out immediate reconstruction necessitated breaking off all work in the area following only provisional protection.

Work was completed on the final landscaping of the southern end of the eastern wall of the corridor. A large part of the face of the upper wall was completed and the top of the wall was insulated. Test trenches dug along the southern end of the wall (western face) that separated the cistern from street R4 revealed that the structure was preserved to a depth of c. 5 m above sea level. A partial reconstruction of the western face of this wall was begun in accordance with the original work program, resulting in a total of 9 m<sup>2</sup> being reconstructed over the season (fig. 1).

<sup>&</sup>lt;sup>1</sup> The staff included: Dr. Eng. Wojciech Kołątaj, Director; Eng. Wiesław Kuczewski, conservator; Eng. arch. Beata Kołątaj, architect; Dr. Grzegorz Majcherek, archaeologist. The Egyptian side was represented by Mr. Ahmed Mousa, chief inspector, and Messrs Al'a Ed-Din Mahrous and Ashraf Abd El-Raouf Ragab.

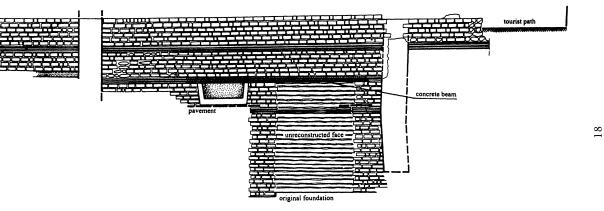


Fig. 1. South end of the wall (western face) separating the cisterns from street R4. Drawing W. Kołątaj.



Fig. 2. Northern facade of the cistern. Photo W. Jerke.



*Fig. 3. New stairs and revetment wall at the southern edge of the cistern. Photo W. Jerke.* 

Clearing of the northern facade of the cistern in 1995/96 had revealed a dangerous overhanging of the upper parts of this elevation. Almost the entire length of this facade (c.  $50 \text{ m}^2$ ) was cleared this year, providing visible proof of the fact that practically the entire cistern complex stands on top of

a number of extensive voids created by the caving in of the structures that had lain underneath. The work was extremely dangerous, requiring the most endangered fragments to be cleared and protected on a step-by-step basis. Since protection in this case does not concern a historic building (cistern) and in any case it is only a structural reinforcement of fragments threatening to collapse, the supporting walls and pillars, of which a total of 17 m<sup>2</sup> was constructed, were made using a semi-cement mortar (fig. 2).

Investigations of the northern cistern facade proved that it had been robbed out in the Middle Ages in a section 20 m long and 2.50 m or more high. The reconstruction of this wall facing will be completed next year.

# BATHS

An existing supply of Helwan limestone on the site permitted fragments of two vaults to be reconstructed, one in the subterranean service area of the bath under the south passage, next to the vestibule of the fourth hypocaust furnace (where it was necessary to protect from collapse fragments of a canal draining water from the pools in the southern *destrictarium* and *sudatorium*) and the other in the southern part of the service area, which will permit entry in the future to this part of the service cellars. A total of 12 m<sup>2</sup> of vaulting, a task anticipated in the program presented to the SCA last year, was completed during the season.

It turned out impossible to reconstruct the two parts of the outer wall of the baths on the south. The part of the western buttress was cleared and the overhanging wall protected with steel ropes, and the second foundation course of the buttress was completed.

#### **ROMAN HOUSE**

Clearing the ruins of this buttress gave access to the brickdomed units of the Roman house abutting the buttress. The building of the buttresses in the late 4th century AD cut through the northern dome. The remaining part of this dome, partially supported on disintegrating walls, currently threatens to collapse. Work began on reinforcing the walls and the dome itself by filling in losses of lime mortar and introducing a limecement and lime-casein putty into the cracks in the domes in order to protect the structure against the penetration of rainfall. Similar methods and materials were employed simultaneously to protect other fragments of walls in the villa.

## LANDSCAPING

With respect to the Zona Monumentale landscaping project, it should be noted that 2,000 m<sup>3</sup> of excavated soil were removed from the area of the bath's *frigidarium*, as well as modern deposits from the surface layers in the area between the theater and the bath complex. Besides, a total of 25 m of pavement and steps was laid along the southern perimeter of the site, using basalt slabs and basalt and granite cobblestones recovered from the debris accumulated in the modern layers (fig. 3).