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CONSERVATION WORK AT MAREA IN 2007

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The shortened excavation season of 2007 did not allow for the planned conservation program to be executed in full.[1] Protection was undertaken of the most endangered masonry structures located within the presbytery area of the basilica, namely, the baptismal font and the earlier structure of the pottery kiln [*Fig. 1*].

Fig. 1. Basilica presbytery area, general view, condition after the season in 2007. Note pottery kiln wall and baptistery font (Photo J.M. Kucy)

1 Conservation work for the PCMA mission at Marea was directed by Barbara Wrońska-Kucy, architect, representing Bone/Levine Architects, New York, the sponsor of the conservation work. Technical and photographic services were provided by Jack M. Kucy, JMK-Gallery.com, New York. Joanna Babraj (Kraków Academy of Fine Arts, Faculty of Conservation) participated in the conservation of the plasterwork of the baptistery font. The Egyptian side was represented by Hala El-Fawal, delegated by the Supreme Council of Antiquities.

CONSERVATION AND PROTECTION OF THE BAPTISMAL FONT

Less than half of the baptismal font has survived over the ages, including fragments of the steps and south half of the basin [*Fig. 2*, top] erected of limestone blocks and red baked brick. The undermined structure, missing floor and footing, was in danger of collapse. The east and west steps of the font were lined with waterproof plaster (*opus signinum*), and the basin was lined with a white limestone mortar bed featuring imprints of the finishing tiles (the latter not preserved). All the coatings were severely deteriorated, cracked and displaced and in danger of detachment. The entire assembly was in immediate need of structural stabilization and conservation of the finishes.

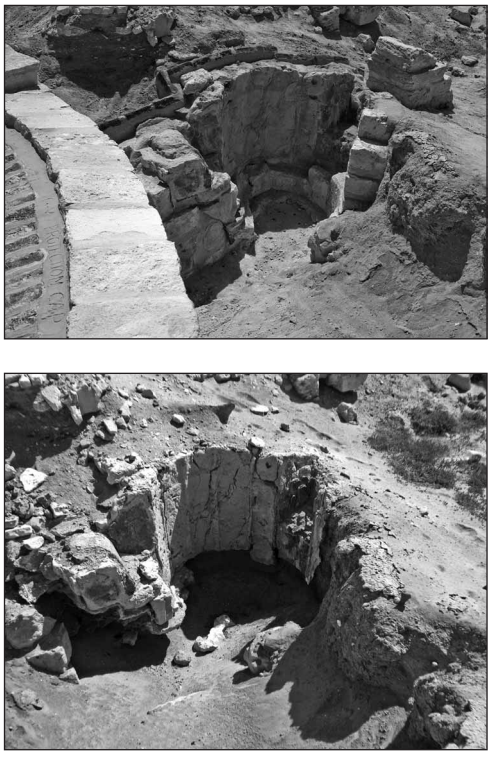

Fig. 2. Baptismal font, condition before (top) and after stabilization and conservation (Photo Jack M. Kucy)

First of all, the steps and the basin of the font had to be supported [*Fig. 2,* bottom]. The new footing was constructed of limestone blocks set on a surface hardened with crushed brick, stone and light mortar soil, approximately 30 cm below the floor of the font. A small fragment of the basin, adjacent to the east steps, was supported and protected with a low retaining wall constructed of the limestone blocks set in lime mortar. All major voids between new support stones and the font were filled in with limestone mortar. The old structure was consistently separated from the new work with strips of bituminous membrane. After stabilization of the structure, conservation work on the preserved surfaces of the font was executed and included cleaning of the surfaces and cavities with water, filling the cracks and voids beneath the plaster with grout (a, for specification of materials used, see below), re-adhering edges of the plaster (b), and filling in the plaster cracks with grout (a) and mortar (c). Finally, all surfaces were dusted, desalinated and impregnated (d). The basin was backfilled with loose soil to the top of the new footing. Drainage was ensured in the ground and low provisional curbs were built around the font to limit water accumulation in this area.

The retaining wall built this season adjacent to the font to protect the pottery kiln wall (see below) abuts the new support of the east steps of the font.

The materials used were as follows:
(a) one part hydrated lime, two parts sand,

sieved to pass through a 0.5 mm sieve, mixed with 10% water solution of PRIMAL AC30 by Remmers;
(b) all voids behind loose plaster cleaned of dust and primed with 5% water solution of PRIMAL AC30, and re-adhered with grout of one part hydrated lime, two parts sand, sieved to pass through a 0.5 mm sieve, mixed with 10% water solution of PRIMAL AC30 by Remmers. The edges were finished with mortar of type (c);
(c) one part hydrated lime, three parts sand, sieved to pass through a 0.5 mm sieve, mixed with 10% water solution of PRIMAL AC30 by Remmers;
(d) FUNCOSIL KSE 300 by Remmers.

POTTERY KILN PROTECTION

The outer wall of the pottery kiln, constructed of dried mud brick, was the object of conservation and protection during the previous season of 2006. Due to mechanical damage incurred over the past year to the temporary coping installed over the kiln's wall, and erosion of a soil infill found back of the wall, the method of protection needed to be revised. Provisional mud-brick copings installed during the last season and compatible with the original fabric, as well as a mud-mortar infill were noted to perform very well in protecting the original wall from mechanical damage. Mud mortar took impact well and had not been vandalized; the copings remained in excellent condition. All things considered, it became clear that stronger protection was required for this open and vulnerable site.

The exterior face of the mud wall, now exposed, required a new backing at the very least. The new retaining wall [***Fig. 3***] was constructed of limestone blocks collected on site, set approx. 20 cm from the kiln's mud wall. The cavity was filled loosely with earth collected on the site. The mud-brick copings installed last season were reused to level the wall crown, set in a mud mortar [***Fig. 3,*** right]. A new cantilevered limestone coping set on a new retaining wall, and a brick cap over the kiln wall (set on angle to discourage walking) were installed, separated from the original wall with bituminous membrane to prevent water penetration. As

Fig. 3. Outer wall of the kiln, inboard face (left) with new mud-brick infill and brick and stone coping, and outboard face (right) with new retaining wall and coping (Photo Jack M. Kucy)

a result, the original wall of the kiln is protected with a slightly higher outer stone wall and coping, capable to withstand accidental impact. The new wall has a distinctively different bond from any original structures on site, but it blends in visually with the surroundings. If needed, it can be easily dismantled in the future, when conditions are created to protect this site permanently.