

## GIZA PLATEAU MAPPING PROJECT

Mark Lehner

### 2003 STUDY SEASON

During the 2003 season of the Giza Plateau Mapping Project (January 8–May 31), the team focused on preparing the tremendous amount of material from our previous seasons (especially the intensive clearing, mapping, and excavations from 1999 through 2002) for analysis and publication. Excavation was limited to clearing two trenches west of the soccer field of the Abu Hol Sports Club to determine if our Fourth Dynasty site continued that far south. We also mapped the newly excavated areas of the Aswan obelisk quarry where the Supreme Council of Antiquities has been working.

### Site Work

In our last excavation season (2002), we found that the Fourth Dynasty settlement we have been working on since 1988 continued south beyond our excavations under the modern Abu Hol Sports Club. We cleared 25 meters of what proved to be the back end of a huge royal administrative building in the southeast corner of the site. The rest of the royal building obviously lay under the soccer field that runs south of our excavations.

This season, Chief Inspector Mansour Bureik asked us to peel back the sandy overburden in two places immediately west of the soccer field south of our site to ascertain if the ancient settlement continues this far south and west. We had good reason to anticipate finding settlement here. Our first excavations on the site in 1988/89 were in Area AA, about 75 meters west of the northwest corner of the soccer field. We found a substantial building, probably for storage, with what looked like part of a large house. Between this area and the soccer field, an ancient mudbrick wall has protruded, since about 1983, from the area where the sand diggers from the riding stables had removed the overburden. This wall and pottery scatters in the area were among the first clues that the overburden hid substantial settlement remains from the Pyramid Age.

### Trench SFW-1

Our first trench, SFW (Soccer Field West)-1, about 10 × 15 meters, cut through overburden several meters thick, mostly deposited along the west side of the soccer field since the early 1990s. Just as soon as the workers, supervised by Mohsen Kamal, lifted the sandy overburden, marl lines and brick patterns of ancient plastered walls appeared. The walls enclose rectangular rooms and courtyards, 2.5 to 3.0 meters wide, and a small bin such as we have seen in houses within the Gallery Complex. Dark ash-filled spaces could have been cooking areas. The organization appears to be more regular than in the Eastern Town, the village-like settlement that we found last year on the eastern side of the site. The settlement on the west could be a more formally laid out extramural town (outside the Enclosure Wall around the Gallery Complex). The buildings that we excavated in 1988/89 probably belong to this part of the town (see figs. 1–3).

### Trench SFW-2

The second exploratory trench (SFW-2), also 10 × 15 meters, was at the far southern end of the soccer field right up against its west wall. The workers, supervised again by Mohsen Kamal, dug through thick layers of gray and black ash from recent burning of stable dumping, then a layer of clean sand, to expose the surface of the ancient ruins (see fig. 4).

GIZA PLATEAU MAPPING PROJECT

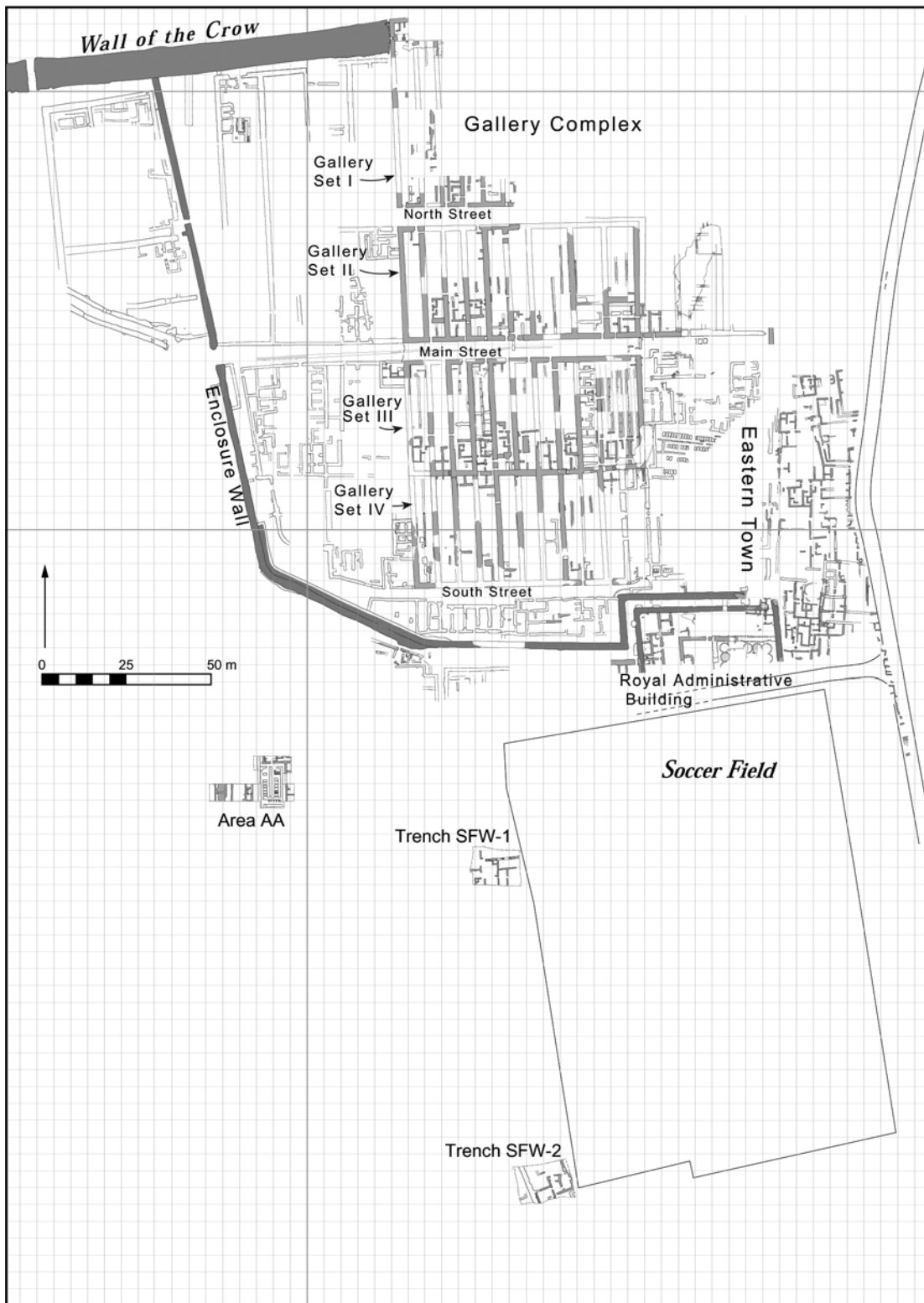


Figure 1. Site map June 2003 (modified version of the site plan prepared by Peggy Sanders, Archaeological Graphics Services)

## GIZA PLATEAU MAPPING PROJECT

These Old Kingdom ruins include a fieldstone wall, 1.50 meters thick, that stands high above the surrounding mud mass along the western end of SFW-2. The wall runs at a pronounced angle west of north, similar to the angle of the Enclosure Wall west of the Gallery Complex. On the west side of the fieldstone wall, in the few meters between it and the boundary of the trench, there are traces of thinner fieldstone walls that may be remnants of a bakery, as suggested by a thick ash deposit in the far southern corner of the trench.

Thin mudbrick walls, with marl plastered faces, are attached to the east side of the large fieldstone wall. They form a square court, 5.20 meters (10 ancient royal cubits) wide east to west. Traces of other walls show in a wide, shallow depression north of the court. More mudbrick walls to the east of the court could belong to a house, about 5 × 6 meters.

On the far east side of the trench, thicker mudbrick walls run along and just south of the soccer field. These, like the fieldstone wall on the west, stand high above the more sunken ruins in between, so that initially we thought the two walls might form a wide avenue running north to south. But the sunken corridor appears to be filled with courts and houses.

The second trench (SFW-2) extends the ancient city ruins more than 150 meters south of the southern limit of our excavations up to the end of our last season, 2002 (with the exception of isolated Area AA). We now know that the ancient settlement extends for a length, north to south, of more than 350 meters, and with a width of 260 meters, covers more than 9 hectares.

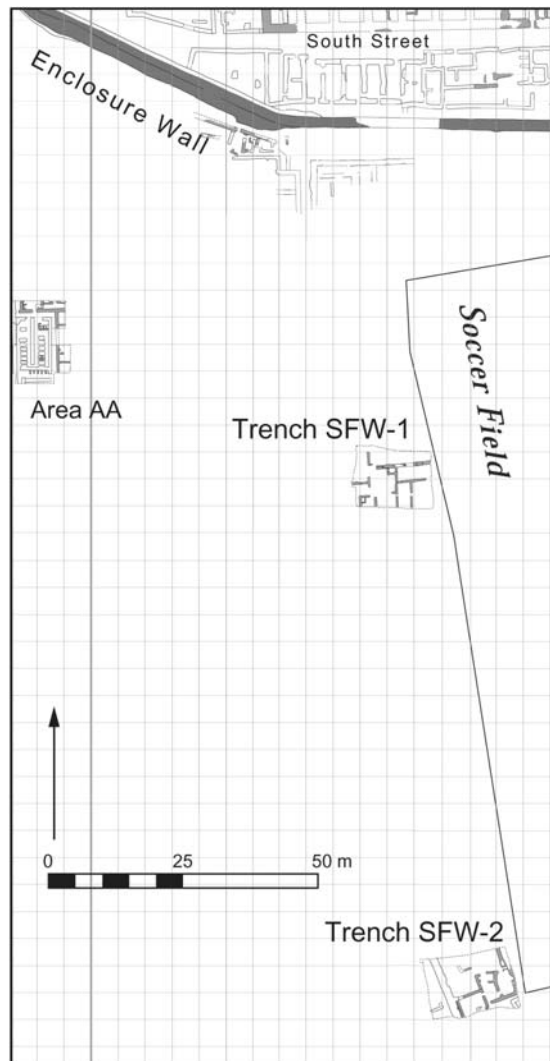


Figure 2. Map detail, plan of trenches SFW-1 and SFW-2

### Surveying and Mapping the Unfinished Obelisk Quarry

Last year, the Supreme Council of Antiquities (SCA) excavated nearly 100,000 cubic meters of debris at the site of the Unfinished Obelisk in Aswan revealing massive trenches where New Kingdom workmen literally pounded out possibly as many as five of the largest obelisks ever, probably for the Eighteenth Dynasty king, Thutmose III. In October 2002, Dr. Zahi Hawass asked the Giza Plateau Mapping Project to help prepare a large-scale map to document all the cultural features, as well as natural joints, fissures, and major outcrops in the quarry trenches. Both the cultural and natural features offer important information about the quarry work (see fig. 5).

All over the quarry there are red painted marks and lines remaining from the notation of ancient granite workers and surveyors. Every stage of Bronze Age granite working is represented

## GIZA PLATEAU MAPPING PROJECT

in the quarry. In the Bronze Age, quarrymen removed shapes such as obelisks from the bedrock using deep trenches that they pounded out of the rock with dolerite hammer stones. The various stages of Iron Age quarrying are also seen in parts of the quarry. During that era, quarrymen had the aid of small wedges to split large pieces. Iron Age quarrymen left long lines of wedge sockets where they removed pieces in various parts of the quarry.

Natural features, such as fissures, are also informative. The ancient quarrymen recognized and skillfully exploited such geological realities in order to extract obelisks as long as 32 meters, weighing more than 400 tons, without cracking and breaking, after scores of laborers had spent months pounding them out of the solid bedrock.

### Survey

To help document these important natural and cultural features, we scheduled three weeks to capture all the details of a boulder-strewn series of quarried areas comprising  $250 \times 150$  meters, the size of our whole cleared area at Giza where we have spent three years mapping part of an ancient settlement.

Ana Tavares designed the survey and Tobias Tonner was our computer technician and database manager. With Stephanie Durning and Mark Lehner as sketchers and point takers, we went to Aswan with two total stations. Mohsen Kamel and Mary Anne Murray joined us for a short period.



*Figure 3. Trench SFW-1, looking east toward the Abu Hol Sports Club soccer field*

Our approach was to sketch large tracts of the quarry by eye, somewhat to scale (about 1:200 or thereabouts) but measured only by pacing. With the total stations, and using a survey control network of points already established by SCA surveyor Mohammed Ali, we then “shot” hundreds of points on the sketches — outlines of boulders, major corners, trenches, ancient pounding patches, “spines” left where large blocks and obelisks had been snapped off. Back in our “office” at the Cleopatra Hotel, right in the heart of Aswan’s busy Market Street district, Tobias Tonner printed out the points against the local Aswan grid established by the Swiss-German archaeological mission. We then used the point plots to correct our sketches, bringing them true to scale. Sometimes we took the corrected drawings back for more points, and further corrections. Altogether we surveyed more than 10,000 points.

Meanwhile the inspectors from the SCA continued to map the detailed masonry features at 1:50, as they had been doing during the several months before we arrived. Their excellent maps greatly advanced the work.

## GIZA PLATEAU MAPPING PROJECT

We could reduce them by half to 1:100 and lock them into our overall map, which saved us from having to map such minute detail.

In this way we are compiling a map of the entire mass of granite comprising the north and south quarry trenches. We designated major topographical areas, such as West Ridge; the main quarry trenches north and south; major removal areas; features of major quarry works including pounding patches, or cavities left by large block removals; and specific contexts such as exploratory “proofing holes” or spines where a block was snapped free.

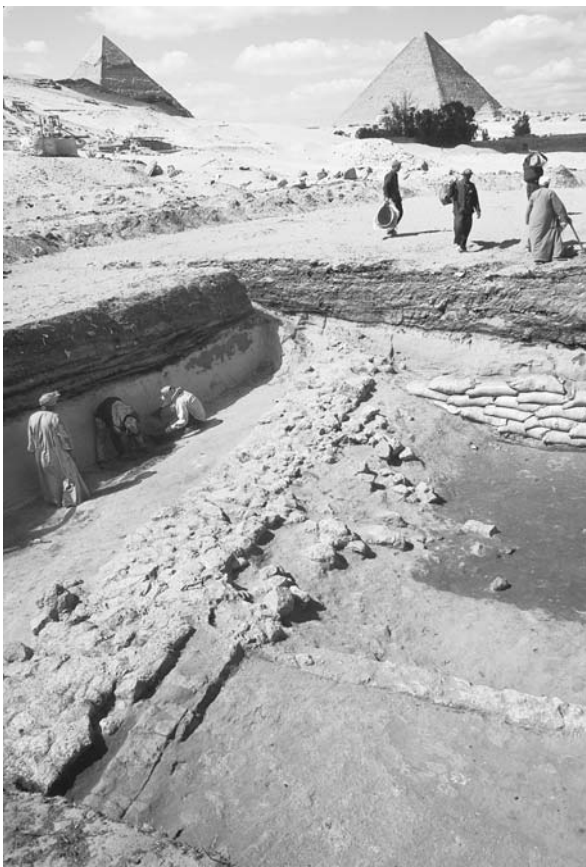
We are still working on drawing up the overall map, at scales of 1:100 and 1:200, which we will deliver to the SCA for their development of the site for tourist visits, as well as further archaeological documentation.

### Acknowledgments

For a very successful season, we are grateful to Dr. Zahi Hawass, Undersecretary of State and Secretary General of the Supreme Council of Antiquities. We thank Mr. Adel Hussein, Director of Giza, and Mr. Mansour Bureik, Chief Inspector of Giza. We thank Mr. Naser Ramadan and Mr. Gaber Abd al-Dayim who represented the Supreme Council of Antiquities at the excavation site, and their assistants, Mr. Tamer Shawqi and Mr. Shazli Ahmed, as well as Mr. Ahmed Eiz who served as our inspector in the storeroom. Reis Sobhi supervised the workmen who cleared our backfill from last season and refilled the excavations at the end of this season.

We could not have carried out this work without the major support of Ann Lurie, David Koch, Jon Jerde, and Peter Norton. We also appreciate the loyal support of Robert Lowdermilk, Glen Dash, Matthew McCauley, Bruce Ludwig, Ann Thompson, Fred and Suzanne Rheinstein, Sandford and Betty Sigoloff, Victor and Nancy Moss, David Goodman, Marjorie Fisher, Alice Hyman, Don Kunz, Richard Redding, Lora Lehner, Bonnie Sampsell, Art and Bonnie McClure, and Charles Rigano.

Our crew this season was an international team that included the following individuals: Mark Lehner, Harvard Semitic Museum and the University of Chicago, Director; Mary Anne Murray, Institute of Archaeology, University College, London, Assistant Director and Archaeobotanist; Mohsen Kamal, University of California, Los Angeles, Assistant Director and Archaeologist; Ana Tavares, Centre de recherches archéologiques, (CNRS) Valbonne, Object Registrar, Surveyor, and Archaeologist; Tobias Tonner, University of Tübingen, Database Manager and Archaeologist; Richard Redding, Michigan Museum of Natural History, Faunal Analyst; Cordula



*Figure 4. Trench SFW-2, looking northwest toward the pyramids. A large stone wall is visible on the left side of the photograph*

**GIZA PLATEAU MAPPING PROJECT**



*Figure 5. Members of the Giza Plateau Mapping Project surveying in the Aswan obelisk quarry with the Supreme Council of Antiquities. In the foreground Ana Tavares works with the total station*

Werschkun, University of Tübingen, Lithics Analyst; John Nolan, University of Chicago, Epigrapher; Anna Wodzinska, University of Warsaw, Ceramicist; Jessica Holst Kaiser and Johnny Karlsson, Osteo-Archaeologists; Caroline Hebron, University College, London, David Swan, Firat Archaeological Services, Johnny Karlsson, Artists; Stephanie Durning, Firat Archaeological Services, Archivist; Fiona Baker and Paul Sharman, Firat Archaeological Services, Lauren Bruning, Ashraf Abd al-Aziz, Supreme Council of Antiquities, Conny Meister, Angela Milward Jones, Archaeologists.

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