

## SARDIS: ARCHAEOLOGICAL RESEARCH AND CONSERVATION PROJECTS IN 2004

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The field season at Sardis (Fig. 1) in 2004 was conducted for two months, in June and July, by the project called Archaeological Exploration of Sardis, or Sardis Expedition; which is co-sponsored by the Harvard University Art Museums and Cornell University. The season program included excavation, conservation and site maintenance, restoration, touristic enhancement, and study projects. For support, assistance, and trust, as well as for fundamental permissions, the Sardis Expedition is deeply grateful to the General Directorate of Cultural Resources and Museums, particularly to Director General Nadir Avcı, Deputy Director General İlhan Kaymaz, Excavations Division Directors Ömer Çakır and Melik Ayaz, and to Excavations Division Officer Çiğdem Morçöl; and to the Manisa Museum, Director Müyesser Tosunbaş and Assistants Sadrettin Atukeren, Şevgi Soyaker, and Emin Torunlar. The Ministry of Culture Representative was Funda Ünal (Bursa Museum). A professional in the best sense, whose perceptive and rational ideas, and supportive attitude towards research and scholarship greatly improved all aspects of the 2004 season programs.

Excavation was conducted at four locations in the city site, all within the city core, as defined by circuit defense walls of Lydian and Late Roman eras; at western and eastern limits and in the center (Fig. 1: near no.64a; nos. 79, 67, 64d). Excavation exposed archaeological material ranging in date from the Lydian era of the 7<sup>th</sup> and 6<sup>th</sup> centuries B.C. to Late Roman in the 5<sup>th</sup> and 6<sup>th</sup> centuries A.D.

On the west side of central Sardis, in the location called sector MMS/S (Fig. 1, south of no. 64), and specifically just inside the early Archaic Lydian city wall, where a rectilinear recess (of unknown purpose) opens to the east (Fig. 2; recess located near the bottom of the plan), excavation in previous seasons had exposed an Archaic stratum consisting of "Brick Fall" destruction debris, which may be dated to the mid 6<sup>th</sup> century B.C. and associated with capture Sardis by the Persians, and an occupation surface directly under the debris. Excavation of the north and south ends of the exposure in previous seasons (1992-1995) had yielded many objects of iron (including a chopping sword, sickle, filter, and parts of a wheeled vehicle), which rested on the occupation surface. Excavation of the middle portion in 2004 (Fig. 3) again exposed considerable traces of burning in the destruction debris and many objects resting on the occupation surface: iron objects, including about 92 nails, five "brackets," four spits, two sickles (one shown in Fig. 4; agricultural sickles or war sickles - *drepana* ?), one bar or strap, and one "axel hub" (Fig. 5); and ceramic objects, including fragments of a small table amphora, column crater with late Orientalizing decoration (Fig. 6), skyphos, pyxis, and lamp.

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Debris that had eroded from later occupation strata in the trench scarps included a sculptured marble fragment (perhaps from a table leg) with the face of Pan, and a ceramic ampulla decorated in relief with the bust of a saint (?) on either side (Fig. 7).

In the central part of the city site, excavation continued on an artificial terrace (sector F 55; located west of the theater-stadium complex and south of Building A; Fig. 1, no. 79), and at the site of a nearby Roman temple (Wadi B Temple; Fig. 1, no. 67), located immediately south of the terrace. Excavation was conducted in several trenches, located on the north side and in the central part of the terrace. Two trenches, which continued ones of 2002 (at north side and center), indicated that much of the terrace consists of artificial fill, deposited in Roman and Late Roman times. A massive wall of fieldstone and mortar, which evidently contours the terrace near its three exposed sides (north, east, west), is 1.75-1.80-m. thick and stands 5.76 m. high, all of it below modern and ancient ground level (Figs. 8, 9, right). Context pottery suggests a construction date in the first century A.D.; perhaps after the famous earthquake of A.D. 17. Whether it was a terrace wall or a building wall with an unusually deep foundation – perhaps meant to be earthquake resistant - or both is unclear. Oriented parallel to it located further towards the terrace north edge, another large wall, of which less was exposed, may have been the “real” or a later terrace wall. (Fig. 9, right). The deepest levels reached in excavation—nearly 6 and 7 m. (6.82 m.) below modern ground surface, contain Archaic fill of the 6<sup>th</sup> or 7<sup>th</sup> centuries B.C. (in one trench clearly a deposit of Archaic times, and containing an simple internal retaining wall, Fig. 8), in the other possibly redeposited (and containing an Archaic tile fragment, with “star and scroll” design; Fig. 9).

The function of the terrace was intimately associated with the temple located immediately to the south (Fig. 10, right). One corner of that building had been excavated in 1981 and 1982, enough to show that it had been large – comparable in size to the Temple of Zeus at Aizanoi – probably pseudodipteral, and had had Ionic or Corinthian columns with handsomely designed and finished fluted shafts and Attic Ionic bases. At the time of excavation, the temple was assumed to have had an east-west orientation; excavation in 2004 of what appears to be a northwest corner, however, indicates that the Temple orientation was north-south, and that its north-south axis corresponded exactly to that of the terrace to the north, and to that of a monumental staircase or ramp on the north side of the terrace. The last feature is attested by 11-12-m. broad foundations that were partly exposed in other excavation trenches of 2004, and by a “hump” in unexcavated land to the north, which extends 40 m. or more beyond the north edge of the terrace (Fig. 10, right). Axially-coordinated temple, terrace, and monumental approach thus belong to a precinct of characteristic Roman design, occupying a space of approximately two hectares in the heart of Sardis (Fig. 1, nos. 79, 67).

In Late Roman times, space on one side of the staircase or ramp became a residence, perhaps quite modest; one of its components, a niche under the staircase/ramp, yielded remains of glass cups, pottery dishes, and food residue including mussel and egg shells, and fish and animal bones. Flotsam and jetsam on the other side of the staircase ramp support included a bronze bust of Pan, probably the *fulcrum* of a *kline* (Fig. 11).

At the east limits of the city core, where Lydian and Late Roman fortifications coincide on a ridge of the Acropolis (sector CD 6; Fig. 1, no. 64d), excavation attempted to clarify the form of a narrow space, presumably a corridor, inside the mudbrick core of the Lydian defense wall. In previous seasons, the corridor had been approximately traced from surface remains for a distance of 13-14 m. In a 6 m.-long stretch that seemed most promising for excavation in 2004, intense burning and dislocation of bricks frustrated identification of surviving corridor surfaces; and two surfaces no longer existed (the corridor ceiling, which had collapsed, and one sidewall, which had been removed by Roman construction). The use of timber, which is attested by surface

impressions and holes within bricks, in corridor design and construction also obscures corridor form. A segment of the surviving side wall, which now has an uneven and irregular vertical plane, was traced for a distance of about 4.5 m (Fig. 12). The only chronologically-diagnostic item recovered from corridor debris was part of a skyphos, of characteristic Archaic Lydian shape, common in the 6<sup>th</sup> century BC (but with surface too worn to permit identification of glaze decoration).

Results of excavation in 2004 support identification of the corridor as an original or secondary feature of the Archaic fortification wall (i.e., not a tunnel created by attackers, from outside). Whether its destruction occurred in the mid 6<sup>th</sup> century B.C., and in the context of Persian capture of Sardis in the 540s B.C., is unclear; but there is nothing to suggest a later time of destruction. (From mixed debris was recovered a small Roman terracotta figurine of a gladiator; which may be associated with a large quantity of Hellenistic or Roman terracotta figurines that had been recovered from Roman deposits near the Archaic corridor in 2001.)

*Conservation, reconstruction, site maintenance.* Some 238 artifacts (recovered in 2004 and previous seasons) were cleaned, consolidated, mended, and restored as appropriate. Backing of mosaics from a Late Roman portico (sector MMS/N) continued with paving segments that had been lifted in 1990 and 1992 and damaged in an accidental fire in 1997. In 2004, eleven lifted segments (in eighteen subdivided segments; having a total surface area of 19.7 square meters), were backed with the relatively light-weight construction of Glass Fiber Reinforced Cement (GRFC) in the process originally developed by conservator K. J. Severson, and, in recent seasons, further developed by conservator D. Fullick.

Several objects that had been recovered in 2003 from a chamber tomb of the late 5<sup>th</sup> or early 4<sup>th</sup> century B.C. (in the city necropolis of Sardis; Tomb 03.1) were cleaned and consolidated; including a stone alabastron (with very thin walls in its upper body; left) and beads made of copper alloy, stone, shell, resin (one), and glass (of which you see a selection at right; Fig. 13). Most of the glass beads, 75 or more in number, are jet black.

Site maintenance efforts included the following: cleaning and consolidation in the Temple of Artemis (spalling marble on the south wall; column capital F and the plinth for column no. 15); in the Marble Court and Synagogue of the Bath-Gymnasium Complex, continued cleaning with a pressure washer, and repainting of the Marble Court dedicatory inscription; experimental attempts to preserve exposed revetment mortar in one Bath Building room (BE-C) and the Synagogue, with a reversible covering of geotextile and concrete; building a stile over the north wall of the Synagogue, to accommodate irresponsible site visitors who persist in climbing the wall and using wall revetment and revetment mortar as stepping aids, in order to take short-cut routes between Synagogue and "Marble Court"; protective covering of some steps in the frigidarium pool of the Bath Building; in a residential unit south of the Bath Gymnasium complex, consolidation of tile floor paving and baseboards and continued wall capping.

*Site enhancement.* Modest site enhancement efforts included the following: in a Late Roman residential unit south of the Roman Bath-Gymnasium Complex, completion of replica tile flooring in one room (VI) and restoration of a (two-person) toilet seat in another (XXII); and renewal of signs. One sign, which explains a fragmentary inscription, reused in Late Roman paving south of the Synagogue, has been corrected to identify the inscribed name as that of Emperor Caligula, as deduced by the late Peter Herrmann (not Prince Germanicus, as previously identified).

*Study projects.* Two short studies, on symbolic funerary doors and on alabaster, by Christopher Roosevelt, have been submitted for publication. During the 2002 season, three Archaic coins of gold and silver were recovered during excavation of the

Archaic city fortifications, on the west side of the site; specifically excavation in a large recess located on the fortification exterior side. The three coins were a gold croeseid, recovered in accumulated earthy fill just below the cobbled floor surface of the recess; a silver croeseid recovered in what was probably the same stratum but where modern erosion (since excavation of previous seasons) had destroyed the floor surface, thus leaving the stratum open to contamination; and a silver coin of Miletus, reportedly recovered during the sieving of earth that had been excavated from the recess floor and stratum below. At that time, the provenience of the Miletus coin reported by the workman who delivered it to the supervising excavator was accepted by the supervising excavator and by the writer. Last year, when the Sardis report was being delivered at the Symposium in Konya, Dr. Koray Konuk politely but firmly expressed disbelief that the Milesian coin and the two croeseids had the same context; Dr. Konuk's disbelief now may be supported by other evidence. The Miletus coin is genuine, and it almost certainly did not fall into the recess from surrounding trench scarps; but it may be intrusive and come from elsewhere; the circumstances are being studied. The provenience of the two croeseids, particularly of the gold croeseid, however, remains identifiable with the stratum below the cobbled floor of the recess; and since that floor was covered by destruction debris datable to the mid 6<sup>th</sup> century B.C. and identifiable with the Persian capture of Sardis in the 540s B.C., the stratum below the cobbled floor is a context that antedates the Persian capture of Sardis and establishes the production of gold and silver croeseids before the coming of the Persians.

Another silver croeseid, recovered in 1988 but only identified in 2004, also has a context that establishes its existence before the Persian conquest. It comes from the same destruction debris that filled the recess in the Archaic fortifications, and it was recovered with a human skeleton, belonging to a casualty of the destruction. The skeleton was studied by physical anthropologist Melodie Domurad (in 1989); and was identified by her as belonging to a young man in his early twenties; bone development and wear of arm and neck bones suggested to her that he had been a soldier, bone damage that he had sustained wounds before death, and suffered wounds at the time of death. The unceremonious disposal of his corpse, which had been dumped from above into destruction debris, and buried under more debris, suggests that he was one of the defeated, on the Lydian side. The coin was found under the skull. Cleaning - considered impossible or inadvisable at the time of excavation, in 1988, - in 2004 revealed the croeseid obverse motif of confronted lion and bull protomes (Fig. 14); it is one twenty-fourth of a Lydian stater; which numismatist John Kroll suggests might represent a day's wage. Was it being carried in a pouch, around the man's neck; or in his mouth, as Greek civilians carried their pay and market money, according to plays of Aristophanes? (The coin is scheduled to be published by N. D. Cahill and J. H. Kroll in a forthcoming issue of *American Journal of Archaeology*.)

Remains of colossal acrolithic statues from the Artemis Temple were considered, by F. K. Yegül, (visitor) R. R. R. Smith, C. Alexander, N. D. Cahill, and P. T. Stinson. Smith, who has identified or accepted previous identifications of some of the heads as images of Roman emperors and empresses, thought others, because of idealized physiognomy and hairstyle, more likely to represent divinities or heroes. Alexander estimates that the standing statue postulated by Smith for the head that he identifies as Commodus would have stood 8.5 m. high (Fig. 15). Yegül suggested that the statues might have been placed between interior columns of the cella(e); Cahill, however, estimated that the spaces between those columns would have been too narrow to accommodate statues of such size in the relaxed stance that Alexander and Smith have plausibly reconstructed for the statue of Commodus. Stinson suggested that the interior columns of at least one cella might have been removed (as T.N. Howe also had suggested; which would have involved major structural changes for roof support) and that the statues were mounted on interior column foundations.

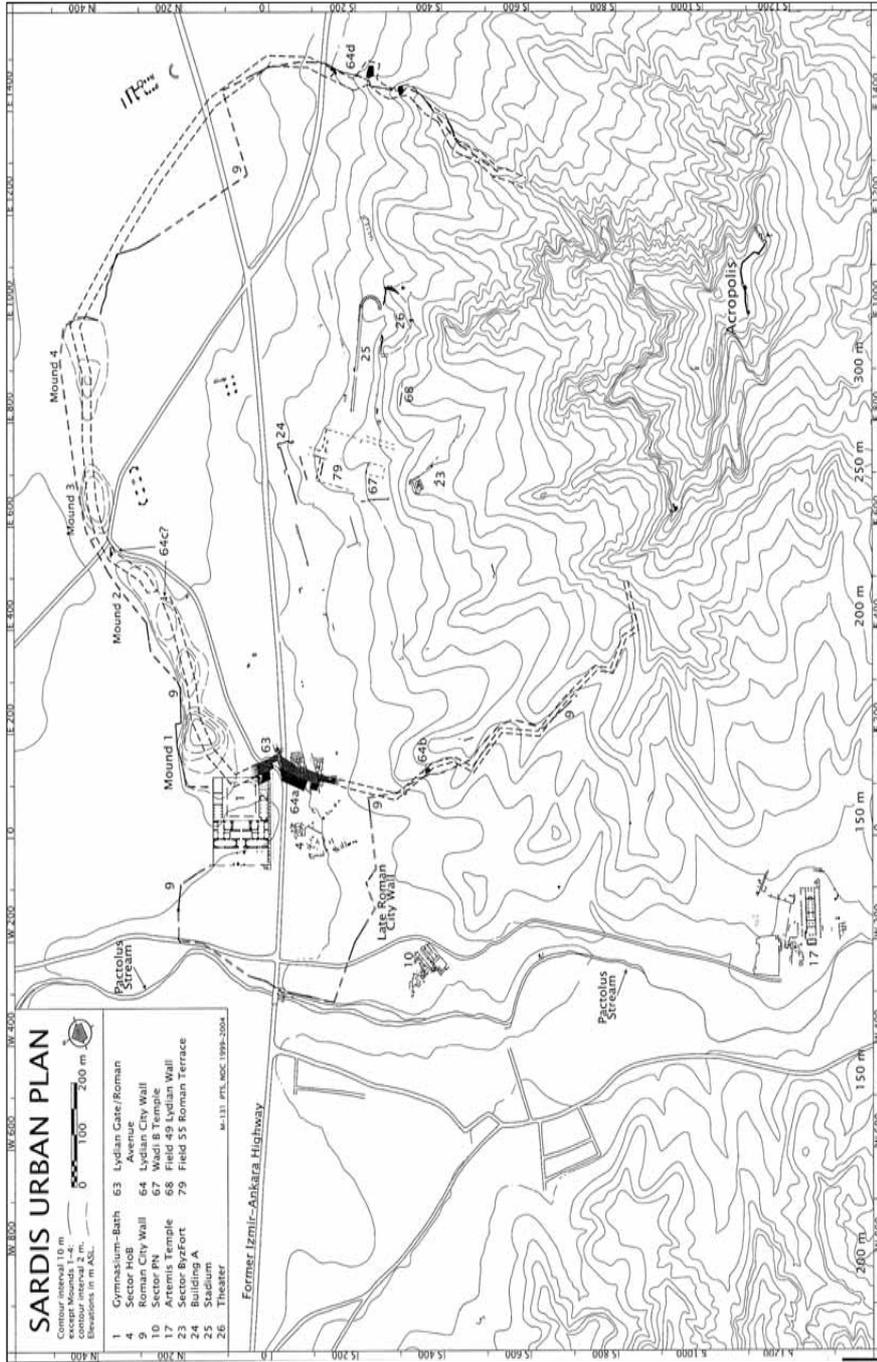
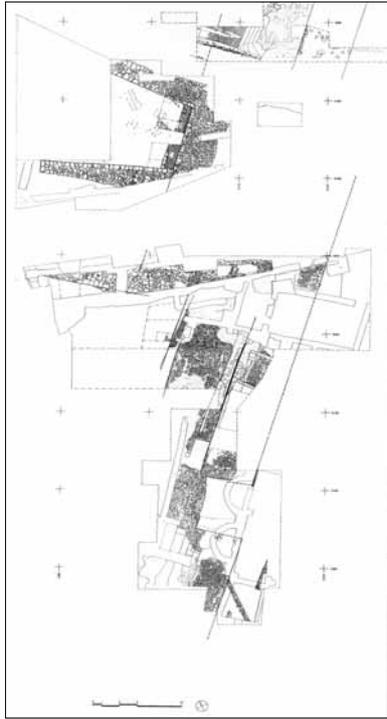


Fig. 1: Sardis, general site plan. The Lydian city wall appears in heavy black where excavated, in a pair of dashed lines where conjectural; the Late Roman city wall is no. 9. Excavation locations of 2004 are just south of nos. 64 (sec for MMS/S), 79 (sector F 55), 67 (Wadi B Temple), and 64d (sector CW 6)



**Fig. 2: Sectors MMS (southwest part) and MMS/S, Archaic features (with some Late Roman**



**Fig. 3: Sector MMS/S, just inside the early Archaic Lydian city wall (polygonal masonry of inner face in background at left - with unexcavated fill at front of rectilinear recess behind excavator, A. Flaata; see Fig. 2, lower part of plan), showing excavation into destruction debris.. View looking west/northwest**



**Fig. 4: Iron sickle (for agriculture or war ?) from Archaic occupation surface of the mid 6th century B.C., sector MMS/S**



**Fig. 5: Iron bar or strap and "axle hub," from Archaic occupation surface of the mid 6th century B.C., sector MMS/S**



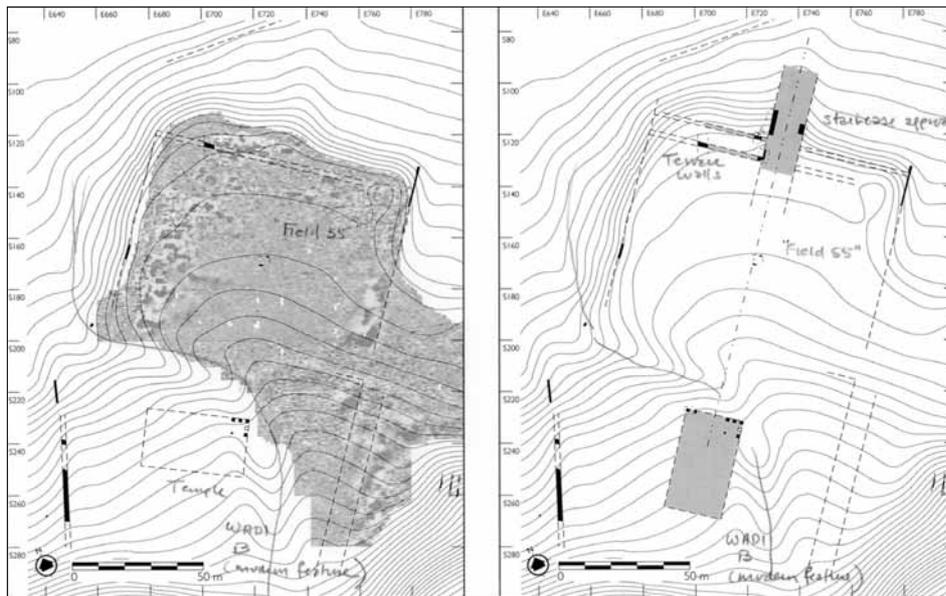
**Fig. 6: Fragments of column crater with late Orientalizing decoration, from Archaic occupation surface of the mid 6th century B.C., sector MMS/S**



**Fig. 7: Late Roman ampulla, from eroded occupation strata, sector MMS/S**



**Fig. 8: Sector F 55, Roman building or retaining wall (behind) at the north edge of the terrace, and Archaic Lydian deposits, with simple internal retaining wall (bottom; being excavated by P. Özgüner)**



**Fig. 9: Sector F 55 and Wadi B Temple, plans. The plan at left shows preliminary results of geophysical survey by M. Drahor and associates from Ninth of September University (2001) and presumed location of Wadi B Temple; the plan at right shows results of excavation in 2004, with reconstruction of terrace and other walls, Wadi B Temple, and staircase/ramp**



**Fig. 10: Fragment from an Archaic tile (with “star and scroll” design), from Lydian deposit or redeposited fill, sector F 55**



**Fig. 11: Bronze bust (fulcrum) of Pan, from fill on east side of staircase/ramp support, sector F 55**

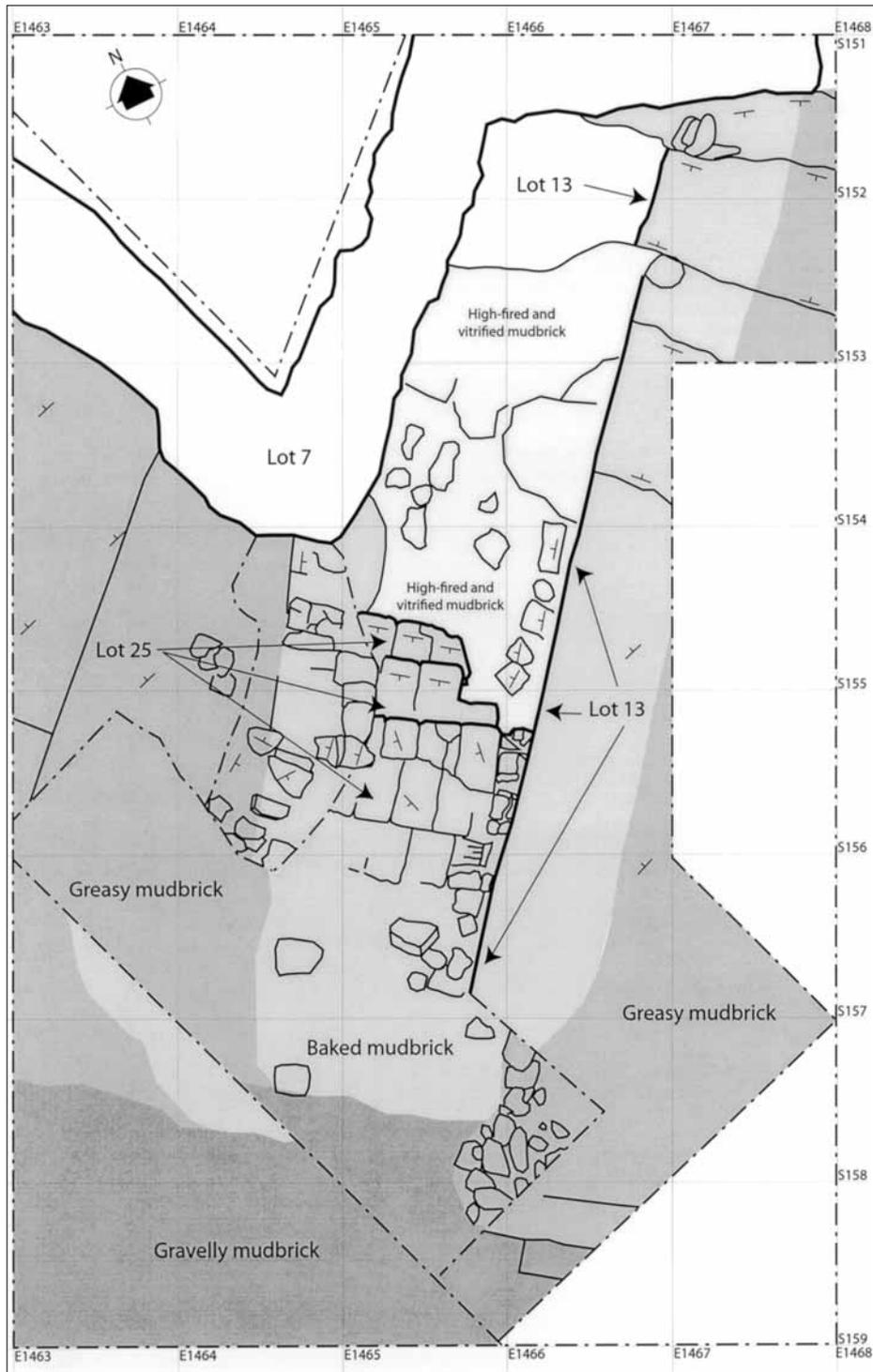
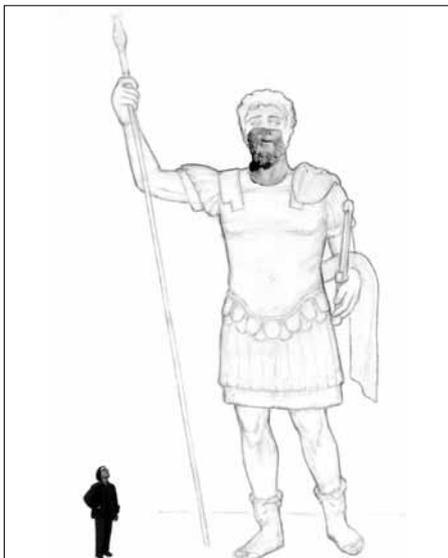


Fig. 12: Sector CW 6, remains of corridor inside Lydian city wall, plan



**Fig. 13: Beads of shell (cowrie), bone, natural resin (amber?), stone, copper alloy (selection), and glass (selection), from Tomb of the late 5th or early 4th century BC (Tomb 03.1). The glass beads are jet black**

**Fig. 14: Silver croeseid (one twenty-fourth of a Lydian stater), obverse: recovered in 1988 with skeleton encased in destruction debris datable to the mid 6th century BC and identifiable with the Persian capture of Sardis; cleaned in 2004. (The coin rests on the little finger of excavator N. D. Cahill.)**



**Fig. 15: Colossal statue of Commodus, reconstructed (on the evidence of the fragmentary head recovered from the Temple of Artemis, in 1996), by C. S. Alexander in consultation with R. R. R. Smith. (The scale figure is C. S.)**