

Topographical Survey along the Shoreline of the Birecik Reservoir in 2001

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Between February and May 2001, archaeologists embarked on a limited survey of the shoreline of the Birecik reservoir at Zeugma.¹ The newly formed shoreline corresponded to the area of excavation in 2000, which had been selected for its location at the reservoir's maximum projected waterline (ca. 380 m) so that archaeologists and conservators would have a reasonable amount of time to complete meaningful work on parts of the ancient city destined to be flooded.² Survey in 2001 was limited to the shoreline between areas of previous excavation (Plate 149). In October 2000, at the conclusion of the rescue excavations, the CCA conservation team under the direction of Roberto Nardi supervised the backfilling of all trenches and the consolidation of the anticipated shoreline.³ By spring 2001 the consolidation efforts had proven successful in most areas, but some places had suffered erosion from particularly destructive wave action against the shoreline, stirred up by winds across the surface of the new artificial lake. In these areas the survey team made a few important discoveries. The following discussion aims to illuminate the value of these findings for this publication's presentation of the rescue excavations of 2000. Artifacts, if they were recorded or collected at all, were not managed for the survey in the same way as artifacts from the rescue excavations. Accordingly, the following comments are limited to archaeological features of the built environment.⁴ Discussion proceeds from Trench 13 in the northwest to Trench 10 in the southeast.

After the conclusion of the rescue excavations of 2000, erosion of the shoreline at the House of the Tunnel in Trench 13 revealed further evidence for rock-cut terracing and rooms paved with geometric mosaic pavements. These discoveries are presented in this volume in chapters by Tobin and Dunbabin (Plates 124–6). Between Trenches 13 and 18 the shoreline surveyors observed further evidence for residential buildings (Plates 150–1).⁵ These included numerous foundation walls of solid ashlar or rubble construction, substantial deposits of mud-brick, and intensive bedrock terracing illuminating challenges that the precipitous slopes below Kara Tepe posed to ancient builders. Like parts of the House of the Tunnel, entire walls for subterranean rooms had been carved from bedrock, sometimes preserving traces of sockets to hold beams for upper stories.⁶ Some of the smaller rock-cut pits and channels in this area could represent Hellenistic activity near Kara Tepe, where excavations by Catherine Abadie-Reynal have revealed evidence for some of the earliest known houses at Seleucia/Zeugma in the second century B.C.⁷ Whereas the House of

the Tunnel was entirely Roman in date, nearby excavations in Trench 18 revealed a Roman house with some indication of construction over Hellenistic remains.⁸ The surveyors also observed broken architectural parts and basalt grinding stones built into rubble walls between Trenches 13 and 18 in a pattern of reuse that is characteristic of Roman-period construction at Zeugma.⁹ Other discoveries include the eastern continuation of a Roman terracotta drainpipe found in the alley on the north side of the House of the Plastered Floor in Trench 18 (Plate 151D).¹⁰

Erosion of the shoreline was particularly dramatic on the north and west sides of a newly formed promontory at Trench 15. On the west side of this promontory and along the neighboring bay reaching into the areas around Trenches 7, 12, and 18, the surveyors identified a number of bedrock cuttings and building debris in limestone and mud-brick scattered about the shoreline, but without strong connections to features documented in the rescue excavations of 2000 (Plates 152–3, 155A–B).¹¹ Of greatest significance were bedrock cuttings and piers composed of ashlar blocks of limestone that mark the western limits of interior and exterior foundation walls of the monumental building in Trench 15 (Plates 154, 155C–D, 156).¹² These finds show that the building's interior structure, perhaps a cella, was 26.10 m long, and that the exterior wall, which may have defined the outer limit of the building's platform, was 36.30 m long. Each foundation wall appears to have been built of solid ashlar construction on bedrock trimmed down to allow for level building on the sloped topography.¹³ The building's foundations were thus composed of many more courses on the northern side. Most parts of these walls appear to have been robbed all the way down to bedrock, but shallow rock-cut channels for the lowest foundation courses indicate their original orientation. In some places ashlar blocks are preserved in situ inside these cuttings, which are between 1.10 and 1.20 m wide.¹⁴

The surveyors also documented parts of drains built of tile and mortared rubble outside the southwest corner of the outer foundation wall (Plate 154). A drain made of ceramic tile and waterproof mortar was parallel to the south foundation wall.¹⁵ A larger drainage channel veered down to the north, away from the building. This was built of mortared rubble with a coating of waterproof mortar on the interior.¹⁶ The latter drain corresponds in placement, function and construction technique to a mortared-rubble drainage channel found in the rescue campaign of 2000 outside the southeast corner of the building's outer foun-

dition wall (Plates 132–3).¹⁷ These nearly identical drains at the southern corners of the building probably connected to downspouts for diverting rainwater down and away from the building. Near the southwest corner of the building, the surveyors observed a rock-cut cistern fed by a drain-pipe in a rock-cut channel oriented north-south. It is likely that runoff from the building was also diverted to this cistern.

Within the inner foundation wall, the surveyors observed additional evidence for the concentric zones of mortared-rubble packing set apart by walls of ashlar piers mixed with mortared rubble. The concentric sections of masonry had been installed across the entire interior of the monumental building's inner foundation wall, presumably in a later refurbishment or transformation of the building.¹⁸

Also reexposed along the new shoreline was Kennedy's Site D, where parts of a Roman house had been found in 1993.¹⁹ The survey recorded a number of features on the periphery of these previous excavations, including collapsed building debris to the south and east of Site D, with evidence for walls composed of ashlar blocks with rubble infilling and mud-brick (Plates 157–9).²⁰ Immediately south of Site D the reservoir had exposed the southwest corner of a rock-cut room with two phases of painted-plaster decoration, each with a horizontal band at the socle. To the south, traces of a masonry staircase suggest that parts of the house in Site D had an upper story.²¹ To the east the surveyors found a large mortared-rubble terrace wall that retained additional walls and a small latrine, probably a four-seater like the latrine in Trench 10.²² A few small sections of collapsed mortared rubble give the impression that this area may have belonged to a vaulted structure, but the evidence for this is sketchy.²³ Further east, a number of terracotta pipes laid in rectangular channels of mortared rubble with a pink waterproof mortar inside may mark the location of a street oriented northeast to southwest.²⁴

The reservoir had exposed several new features on the long stretch of shoreline between Trenches 2 and 6, including the areas around Trenches 4 and 9.²⁵ To the immediate west of the House of the Tesserae on the lower terrace of Trench 9, water washed out a rock-cut room (Room 9C) that communicated with Room 9B (Plates 160, 162A–B). On the west side of this room the surveyors documented parts of at least two arches that gave passage to areas further west. The arches had collapsed, and only parts of the haunches were visible among architectural debris. They were both about 2 m wide; one was built from mud-brick, and another of fired brick and mortar (Plate 162A–B).²⁶ Mud-brick is well represented in collapsed upper walls of houses at Zeugma, but it was far less common for arches. To the east of Trench 9 the surveyors also found a series of limestone terrace walls and rock-cut terraces.²⁷ These share the same alignment as the north wall of the House of the Hoards in Trench 9 (Plates 160–161), and they may belong to the continuation of that house to the east, or else

to the north wall of a neighboring property built on the same alignment.

Beyond the northwestern limit of excavation in Trench 6 the surveyors documented part of a black-and-white mosaic pavement that may have belonged to an ancillary part of the house found in Trench 6 in 2000 (Plates 161, 163A).²⁸ The pavement preserved a field of white tesserae with rows of staggered quincunxes in black tesserae framed by a band of four rows of black tesserae and a surround of white tesserae.²⁹ The aperture for a pear-shaped rock-cut cistern was found on a rock-cut terrace 5 m to the south.³⁰ The appearance and spatial relationship of the mosaic and cistern are consistent with the arrangement of mosaic M17 and cistern 2331 in the House of the Bull in Trench 2 (Plate 10).³¹ About 20 m further west parts of two rooms were found carved from bedrock. The rooms were separated by a rock-cut partition wall pierced by a rock-cut stairway covered by two rock-cut arched doorways (Plates 163B–C).³²

Floodwaters also exposed a number of rock-cut graves around Trench 6 (Plates 164, 167A).³³ In the rescue work of 2000, excavation of the Roman house in Trench 6 by the University of Nantes campaign had documented the existence of a Hellenistic necropolis, which presumably marked the eastern limit of the Hellenistic settlement but was put out of use by expansion of the city in Roman times.³⁴ In some cases these are small chamber tombs carved into steep sections of the sloping topography, but most graves are shallow rectangular shafts on a variety of orientations and just large enough for single inhumation burials. Erosion by waves had exposed two shallow rock-cut graves on the rock-cut terrace southeast of Trench 6, directly over rock-cut chamber tomb 258.³⁵ Four of these shallow rock-cut graves were found on newly exposed bedrock up to 100 m to the southeast of Trench 6, thus adding new perspective to the expanse of the Hellenistic necropolis (Plates 164b, 167B–C).³⁶

Between Trenches 6 and 10 the surveyors observed a number of rock-cut drains, in some cases lined with waterproof mortar, as well as terrace walls of ashlar blocks mixed with rubble construction aligned atop rock-cut ledges (Plates 165, 168A).³⁷ These were oriented parallel to the river, and they were probably designed to retain coluvial fills and support artificial platforms for building. The surveyors found a large ceramic storage vessel in situ behind one of these terrace walls, presumably installed below floor level of a structure washed away by the reservoir.³⁸ Parallel to the north side of another terrace wall the surveyors found traces of a paved street with a stone-lined drain.³⁹ The northwest-southeast orientation of the street and drain is consistent with the orientation of alleys and drains found in Trenches 2 and 11, and this suggests that the remains here were conceived on the same plan as the residential suburb identified to the west in the rescue campaign of 2000.

A few features were newly exposed around previous excavations in Trench 23 by the Zeugma Initiative Group (ZIG). A large structure uncovered here in 2000 almost

certainly belongs to a small Roman hypocaust bath (Plates 166, 168–9). The surveyors identified collapsed walls of mud-brick and a large tile-lined drain that appears to have carried effluent beyond the north wall of the building at foundation level. Another large stone-lined drain had been exposed outside the west wall of the building. The small latrine found in Trench 10 in the rescue campaign of 2000 lies almost 100 m to the southeast, and this makes a functional connection between the latrine and the bath unlikely.

NOTES

1. The survey was conducted at the request of, and with the full permission of, the Ministry of Tourism and Culture of the Republic of Turkey.
2. For photographs of the topographical situation of Zeugma and Apamea before the completion of the Birecik Dam and reservoir, see Butcher 2003, fig. 3; Comfort and Ergeç 2001, fig. 22; Comfort et al. 2000, figs. 3, 5, 6, 7; Ergeç et al. 2000, abb. 152; Başgelen and Ergeç 2000, 10–3, 18–9; Başgelen 1999, 168, 171, 173; Algaze 1994, figs. 10, 13; Kennedy 1998, figs. 1.2, 1.5, 2.2, 2.3, 2.4, 2.7, 2.10, 3.1, 3.8, 3.10; Chaumont 1984, 73, figs. 1, 2; Wagner 1976, taf. 2, 3, 4, 8, 9.
3. See the chapter by Nardi and Schneider in this volume, and Nardi and Schneider 2004, 157–67.
4. These were the focus of an unpublished report on the survey prepared by Oxford Archaeology (OA) for PHI — essentially an annotated photographic survey with additional topographical features added to existing plans of the site, submitted in January 2002, henceforth “OA report.” In 2002 and 2003 I made first-hand observations along the shoreline with the OA report in hand. Many observations in the report concern the reexposure of features already documented by the excavators of 2000. There is no discussion of artifacts, which, if collected at all, were apparently turned over to the Gaziantep Museum. Accordingly, context numbers in this chapter refer to features of the built environment, not to archaeological deposits, and they are not included in this book’s chapter on Context Descriptions. In any case, before the start of the survey in 2001, destructive waves on the shoreline had already contaminated the zone of investigation by carving into unexcavated deposits and spreading the contents across gravel beaches installed in the consolidation program at the close of 2000 to protect the backfilled trenches below. As a result, some observations about phasing are offered in the text, but phasing is not indicated on the archaeological plans presented here.
5. Area 29 in the OA report.
6. Rock-cut wall with traces of four pockets: context 29053. Parts of rock-cut Room 13D, described in the chapter by Tobin, were also observed during the survey of 2001.
7. Abadie-Reynal 2003, 367.
8. See descriptions of these houses in the chapter by Tobin in this volume.
9. Spolia: contexts 29025, 29026.
10. Drain 29039, the possible continuation of drain 18086.
11. The bay and the north and west sides of the promontory are designated Area 26 in the OA report. The reservoir claimed up to 3 m of unexcavated colluvial overburden on this part of the shoreline. Independent excavations (Trench 21) were opened to the west of Trench 15 by the Zeugma Initiative Group in the rescue campaign of 2000, directed by Ümit Serdaroglu, but the results of this work have not been published.
12. See my chapter on Trench 15 in this volume.

13. Remains of inner wall: 26013, 26014. Remains of outer wall: 15020, 26005, 26006.
14. Some blocks measured 1.20 m long, .54 m wide, and .62 m tall.
15. Drain 26010. Width: .80 m; preserved length: 1.35 m.
16. Drain 26011. Interior width: .22 m. Depth of channel: .38 m. Preserved length: 4.0 m.
17. Drain 15116.
18. The surveyors suggested an original depth of at least 4 m for this foundation. Two blocks on the west side of this construction formed the lowest course of a pier 1.80 m long, 1.10 m wide, and .53 m tall.
19. The same area had been reinvestigated by the University of Nantes campaign in 1997: Abadie-Reynal et al. 1998, 394–5, figs. 16–8.
20. Area 27 in the OA report. For site D, see Kennedy and Freeman 1998, 61–72.
21. Staircase 27010; cf. Abadie-Reynal et al. 1998, fig. 18.
22. Terrace wall 27060. Latrine 27053.
23. Collapsed mortared rubble 27016 and 27017.
24. Drain channels 27002, 27011, 27012, 27013.
25. Area 25 in the OA report: immediately adjacent to the northwest side of Trench 6. Area 25a in the OA report: immediately southeast of Trench 2, extending up to and around Trenches 4 and 9.
26. Mud-brick arch 25011. Fired-brick arch 25012. Photos from the survey show otherwise undocumented evidence for the extrados of another arch made of fired brick emerging from colluvium somewhere near Trench 9.
27. Walls 25004, 25007, 25058.
28. Mosaic 25001.
29. Maximum preserved dimensions: 3.86 x 1.85 m. It is possible that this mosaic had been discovered in the rescue campaign of 2000, near the far western corner of Trench 6.
30. Cistern 25065.
31. See the chapter by Tobin in this volume.
32. Arches 25033 and 25036. Steps 25035. The arches were spaced 1.88 m apart. One arched doorway was .90 m wide and 1.85 m tall.
33. In the OA report, graves to the northwest of Trench 6 area in Area 25, whereas graves to the southeast are in Area 30. Most of this section of the report repeats discoveries made in 2000.
34. For the excavations in Trench 6, see Abadie-Reynal et al. 2003, 79–99; 2001, 258–72.
35. Graves 30002 and 30003; cf. Abadie-Reynal et al. 2003, fig. 4.
36. Graves 30010, 30011, 30012, 30013, 30015.
37. Walls 30005, 30021, 30022, 30035.
38. Storage vessel 30036.
39. Drain 30030. Street 30032.

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