

**TAYINAT ARCHAEOLOGICAL PROJECT  
2005 SEASONAL REPORT**

[Not for Publication]

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## INTRODUCTION

The Tayinat Archaeological Project (TAP) represents part of an ongoing regional research effort investigating the historical development of urban institutions and the rise of early state societies in the ancient Near East. More specifically, TAP was conceived within the framework of the Amuq Valley Regional Project (AVRP), which has been systematically documenting the archaeology of the Amik Plain, in southeastern Turkey, since 1995. This explicitly regional project, still a relative rarity in the field of Near Eastern Archaeology, seeks to facilitate a multi-scalar approach to the investigation of the complex social, economic and political institutions developed by the first urban communities to emerge in this part of the ancient world. As first revealed by the investigations of the University of Chicago in the 1930s, Tell Ta'yinat preserves the extensive remains of the Neo-Hittite/Luwian capital Kunulua. Within the broader framework of the regional perspective articulated by the AVRP, therefore, the TAP investigations were initiated for the specific purpose of documenting the archaeological record preserved at this important settlement, located on the southern edge of the Amik Ovası.

Due to the considerable size and importance of Tell Ta'yinat, TAP was conceived and initiated as a long-term project, committed to fully and systematically documenting the archaeological record preserved at the site. Given the extensive architectural remains preserved on the site, conservation will also play a central role in this project. Furthermore, these remains will be linked to the original Chicago excavations, with the aim of producing a final report that integrates the results of both projects in a comprehensive monograph series.

The specific goals of the current phase of TAP are (1) to create a computerized base map (using GIS software technology) clearly defining the settlement parameters and topography of the site, (2) to document all visible architectural remains on the site, (3) to document the settlement history of the site through the assemblage of extensive, quantifiable collections of surface artifactual remains, (4) to document sub-surface remains utilizing remote sensing technology (both satellite imagery and ground-penetrating techniques), (5) to initiate an extensive coring program in the lower mound, (6) to begin targeted excavations, (7) to assemble extensive, quantifiable collections of paleobotanical, faunal, ceramic and other artifactual remains from each of the principal phases of occupation at the site, and (8) to integrate the architectural and artifact records in a relational database that will permit the detailed regional comparative analyses necessary to address the broader research objectives of the project referred to above.

The first three project goals were the focus of field seasons conducted as part of the AVRP Survey. The surface artifact (#3) and architectural (#2) surveys were completed in 1999, and the topographic survey (#1) was completed in 2001. The 2002 and 2003 field seasons were devoted primarily to the remote sensing survey (project goal #4). The 2004 season was devoted to launching the coring program on the lower mound (project goal #5), and initiating excavations on the upper mound (project goal #6) (for more thorough descriptions of these field seasons, see the published reports in *Araştırma Sonuçları Toplantısı*). In addition, during this period, work was initiated on the construction of a comprehensive relational database (project goal #8) for the site, linking the topographic and architectural record with artifact inventories from both past and

present field work at Tell Ta'yinat, including artifact collections preserved in the Antakya Museum.

The 2005 season was devoted to expanding the excavations initiated in 2004 (project goal #6), as well as continuing the coring program and remote sensing investigations in the lower mound (project goal #5). The field season was conducted between June 18 and August 2. The expedition senior staff consisted of Dr. Timothy Harrison (Project Director), Dr. Laurence Pavlish (Geoarchaeologist), Dr. David Lipovitch (Zooarchaeologist), Dr. Hatice Pamir (Mustafa Kemal University), Dr. Stephen Batiuk (Senior Field Archaeologist), Dr. Heather Snow (Senior Laboratory Supervisor), Fiona Haughey (Artifact Illustrator), Julie Unruh (Conservator), Andrea Onodi (Paleobotanist), Kent Bramlett (Square Supervisor), Ryan Defonzo (Square Supervisor), Brian Janeway (Square Supervisor), James Osborne (Square Supervisor), and Lynn Welton (Square Supervisor). In addition, the project was assisted by nine archaeology students from Mustafa Kemal University. Mr. Musa Ülker, of the Izmir Archaeological Museum, served as government representative for the Directorate of Cultural Heritage and Museums.

### PREVIOUS INVESTIGATIONS AT TELL TA'YINAT

Tell Ta'yinat forms a large, low-lying mound 1.5 km east of Demirköprü on the northern bend of the Asi River, at the point where it turns west and winds around the southern edge of the Amik Ovası. The site consists of an upper and lower mound, with the lower mound now hidden by a thick alluvial accumulation characteristic of the Orontes floodplain within the Amuq. The site sits just north of the modern Antakya-Reyhanlı road, and measures approximately 500 m (E-W) by 700 m (N-S) (**Resim 1-3**).

As noted earlier, Tell Ta'yinat was the scene of large-scale excavations in the 1930s, conducted as part of the University of Chicago's Syro-Hittite Expedition (for a more thorough description of these investigations, see previous reports in *Araştırma Sonuçları Toplantısı*). The excavations of the Chicago Expedition demonstrated that the West Central Area of the upper mound preserves a lengthy settlement history that spans the Early Bronze (ca. 3000-2000 B.C.) and Iron Age (ca. 1200-550 B.C.) periods. In addition, epigraphic finds (both Luwian/Neo-Hittite and Aramaic) made by the Chicago Expedition have identified the site as ancient Kunulua, capital of the Neo-Hittite/Aramaean Kingdom of Patina/Unqi. Since the results of these excavations remain largely unpublished, however, the Tayinat Archaeological Project was initiated in part to document more thoroughly the extensive archaeological record preserved at this important site, and to produce a final report that incorporates the results of the renewed investigations with the work of the Chicago Expedition.

Given the considerable size of Tell Ta'yinat, its complex settlement history, and the extensive excavations conducted previously at the site, a remote sensing survey was considered the most prudent and effective way to assess the archaeological potential of the various components of the site. When combined with the results of the topographic and surface surveys, these layered data (integrated with the GIS-formatted relational database) are designed to facilitate focused investigations of those specific areas of the site, such as the West Central Area, which have indicated the greatest archaeological potential.

Accordingly, in 2002, an extensive remote sensing survey, using a proton magnetometer, was initiated in the lower mound, and expanded to the upper mound in 2003 (for details, see reports in *Arkeometri Sonuçları Toplantısı*). The magnetometry survey results exceeded expectations, and permitted a number of preliminary observations. Most importantly, the magnetometry succeeded in recording numerous magnetic anomalies that appeared to delineate rectilinear features or structures in the lower mound, and in the area of the Chicago excavations on the upper mound which, when geo-referenced, produced promising convergences between the two sources of data.

Consequently, in 2004, exploratory excavations were initiated along the southern edge of the West Central Area to test (or “ground truth”) the data produced by the remote sensing and topographic surveys. These excavations, though limited in area to a 3 X 20 m trench, spanning two 10 X 10 m squares (G4.55 and G4.56), produced exciting confirmation of the remote sensing data, revealing part of an Iron Age temple originally discovered during the Chicago excavations, which in turn sealed a remarkably well-preserved sequence of Early Bronze and Early Iron Age remains, including a wealth of material culture with strong Aegean connections (**Resim 4-6**).

### THE 2005 EXCAVATIONS

The primary objectives of the 2005 field season were to (1) expand laterally the 2004 test probe in the Early Iron Age levels (Field I), (2) open a new probe to the north, where Early Iron II remains were anticipated (Field II), (3) open a new probe to the southwest of Field I, where Early Bronze Age remains were anticipated (Field III), and (4) continue the coring program and remote sensing investigations in the lower mound. In summary, the 2005 excavations achieved these objectives, with results that exceeded expectations, particularly in Fields I and II.

#### Field I Investigations

The 2005 excavations in Field I extended laterally the trial probe opened in 2004, expanding the area of excavation southward by opening four 10x10 m squares (G4.55, G4.56, G4.56 and G4.66), for a total area of 400 sq m (**Resim 7-9**). In all, the 2004 and 2005 excavations in Field I have identified seven distinct stratigraphic Field Phases (FP), with the primary sequence of phases (FPs 3-6) dating to the Early Iron Age (**Resim 10**).

The earliest phase, FP 7, was reached only in a limited area in the western part of Square G4.55. A portion of a mudbrick wall (G4.55:31), preserved in height to five courses, extended from the west balk of the square. A lime plaster surface (G4.55:30) sealed against this wall. The pottery in the associated soil deposits included both Simple and Painted Simple Wares, and dated to the Early Bronze (EB) IVB (or Amuq Phase J).

Superimposed above this Early Bronze Age cultural layer was a sequence of four field phases dating to the Early Iron Age (or Amuq Phase N). The earliest of these, FP 6, has been encountered in all four squares, but thus far has been only partially excavated. The top of a mudbrick wall (G4.55:29=G4.56:33; shown in light blue in **Resim 9**), constructed of a single row of flat-lying bricks, and preserved to only two courses in height, was uncovered along the northern edge of the excavation trench. It extended in a northeast direction, from the mid-point of Square G4.55, before exiting the excavation area through the north balk of Square G4.56. By

the end of the season, excavations in Squares G4.56 and G4.66 had reached the top of FP 6, and were producing evidence of severe burning and destruction, as well as very good preservation, including large quantities of Mycenaean IIIC:1-style pottery (**Resim 11**).

FP 5 was encountered primarily in the northern two squares, G4.55 and G4.56. In particular, a well-preserved rectilinear structure (G4.56:23, 66-68; shown in orange in **Resim 9**) was excavated in the western part of the square, directly sealing the partially excavated Wall G4.56:33 of FP 6. The walls formed a small room, 1 X 2 m in size. The walls of the structure were constructed in a header and stretcher technique, preserved to a height of seven courses, and the bricks appeared to have been laid in a bed of mortar. Four wall segments (G4.55:62-65) in Square G4.55 almost certainly belong to this field phase, as well as a fragmentary wall preserved only along the northern edge of the square (G4.55:27), although this remains to be demonstrated stratigraphically. The associated soil layers produced a large quantity of painted pottery, including possible Aegean imports, but predominantly a locally produced variation of the Mycenaean IIIC:1 monochrome tradition, as well as highland Anatolian painted wares.

FP 5, in turn, was sealed by a substantial cultural layer that included the fragmentary remains of several large walls (in particular Wall G4.55:15; shown in light green in **Resim 9**), all assigned to FP 4. Although well-preserved, the remains of FP 4 appeared to have been heavily damaged by the leveling that occurred during construction of the foundations and sub-structures of the later Iron Age temple (or Building II; see further description below) associated with FP 2, and by extensive pitting activity during an intermediate occupational phase (FP 3; see below). The walls associated with FP 4 were dry-laid, and preserved to between five and seven courses in height. A number of installations appear also to belong to this field phase, although their stratigraphic links were not clear, including a clay and lime-plastered pit (G4.55:23), possibly a storage silo, and a stone pavement or platform (G4.56:20), which flanked a second, larger clay-lined pit (G4.56:34/37). The surfaces and soil layers associated with FP 4, but in particular the ashy deposits removed from the silo-like storage pits, produced a wealth of faunal and paleobotanical evidence. The pottery and material cultural assemblages continued the traditions introduced in FPs 6 and 5.

FP 3 formed a somewhat enigmatic phase, inserted between FPs 2 and 4. It was represented primarily by substantial pitting activity, best exemplified by two large ashy pits in the western part of Square G4.55 (G4.55:19 and 37; shown as dotted outlines in **Resim 9**), the former of which was sealed in turn by a slightly concave-shaped plastered installation (G4.55:16). No walls or other free-standing structures were assigned to this phase. Although somewhat mixed, the pottery appeared to be primarily Late Iron I (i.e. Iron IC) in date.

Sealing the Early Iron Age phases were the remains of a large mud brick structure, which proved to be the sub-structural support for the north (G4.55:9=G4.56:2) and south (G4.55:61=G4.56:47 and 69) walls of Building II (shown in brown in **Resim 9**), first uncovered during the University of Chicago excavations in the 1930s, when it was identified as a megaron-style temple, and dated to the late ninth century BCE, or the Iron IIB (Amuq Phase Oc). Most of this impressive structure, which once was graced by a flanking pair of columns supported by large basalt lion figures, was no longer preserved, having been destroyed by agricultural cultivation conducted since the completion of the Chicago excavations. Nevertheless, our excavations succeeded in uncovering portions of the cobbled surface that paved the central room

of the sanctuary (G4.55:2/3/4), the north and south piers that separated this room from the front porch of the building (G4.55:5/13=G4.55:57=G4.56:63), two flat stone pavers (G4.56:3), which had once formed part of the stepped approach to the building, and the mudbrick foundation that had supported the east façade of the building (G4.56:44 and 74). Though from heavily disturbed contexts, the associated pottery dated predominantly to the Iron II, and included large quantities of the Red Slip Burnished Wares assigned by the Chicago Expedition primarily to Amuq Phases Ob and Oc.

Field Phase One was assigned to the post-Iron Age abandonment debris accumulation (G4.55:1/6/7=G4.56:1), primarily in the form of a plow zone, which formed the topsoil covering the excavation area.

## Field II Investigations

The 2005 excavations saw the opening of a new field, Field II, to the north of Field I, in the approximate location of the main Iron II *bit hilani* palace (Bldg I) uncovered during the Chicago excavations (**Resim 7**). The primary objectives were to determine what remained of Building I, to excavate below it into Building XIV, an earlier palace that had been only partially excavated by the Chicago team, and to establish the relative stratigraphic relationships of these structures.

The results exceeded our expectations. Massive mudbrick walls were encountered about 15-20 cm below the surface of the mound, immediately below the modern plow zone. These mudbrick remains constituted several large walls which collectively occupied approximately 60% of the entire area of the square (see **Resim 12-13**). Wall G4.35:2, which ran east-west across the north of the square was uncovered for a width of 3 m and a length of 10 m. Its north face was obscured by the north balk, limiting our knowledge of its full width. A parallel wall, Wall G4.35:4, ran across the south of the square with a minimum width of 2 m projecting directly into the square. The area between these east-west walls was bisected by a north-south intersecting wall, Wall G4.35:8, which had a maximum width of 2.7 m, dividing the square into two rooms. The west room was called Room 1 and the east room, Room 2. Two more walls were identified, although both were mostly in the east and west balks. Wall G4.35:9 provided the west wall of Room 1. It was mostly obscured by the west balk, although 1.10 m of its east face was exposed where it cornered with Wall G4.35:4. Wall G4.35:19 formed the east wall of Room 2, and was delineated along the entire 3.65 m length of the room, although its west face had been damaged by a trench cut by the Chicago team, so that the wall could only be seen in section.

The bottom of Room 1 was reached only in its southwest corner (where Walls G4.35:4 and 9 meet), at a depth of more than 3m, indicating that these walls were part of a truly monumental structure (**Resim 14**). Although preliminary, our excavations indicated that this structure very probably is Building XIV, as an overlay of the Chicago plan also suggests (see **Resim 15**). The pottery and associated material culture pointed toward a Late Iron I/Early Iron II date (ca. 10-early 9<sup>th</sup> Cent. BCE) for the complex. The remarkable size and preservation of this building clearly mark it as an important structure, and very possibly the palace of the Early Iron Age Neo-Hittite Kingdom of Padasatini/Wadasatini, as recently proposed by Prof. David

Hawkins. Consequently, large-scale horizontal excavations are planned for 2006 and subsequent seasons.

### Field III Investigations

The 2005 excavations saw the opening of a second new field, Field III, to the southwest of Field I (**Resim 7**). The primary objective of these excavations was to confirm the presence of Early Bronze Age (EBA) remains in this area of the upper mound, and to clarify the depth and accessibility of these remains. Previous excavations in trench T4 by Braidwood during the 1930s were located to the west of Square G4.92, and produced intact EBA levels approximately 1.7 m below the surface. Square G4.92 was thus chosen as a starting point for the Early Bronze excavations in the 2005 season due to its proximity to Braidwood's trench T4.

After excavating through modern wash and erosion, comprised of large concentrations of phytolithic material, to a depth of more than 2 m, a decision was made to open a second probe, Square G4.72, further upslope to the north. Again, excavations encountered the phytolith-rich organic layer for approximately 2 m, but then came down on deposits rich in EBA pottery. Although the main exposure in G4.72 was limited to a 2 x 10 m sondage along the east balk, structural remains were encountered in the southern portion of the square, including a series of walls, a plaster installation and an intact pithos (Resim 16). The associated pottery dates these structures to the EB IVB, or Amuq Phase J, the terminal phase of the Early Bronze Age in the region. Further excavations in Field III are planned for the 2006 field season.

### THE CORING PROGRAM

The coring program initiated during the 2004 season was expanded considerably in 2005. The primary goal of these investigations is to determine the full extent of the lower mound, which has been buried by alluviation from the annual floods of the nearby Orontes River, and to develop a sedimentary profile of this submerged part of the site. The coring program will also help to determine the impact of the changing course of the river in ancient and modern times. To date, a total of 35 cores, ranging in depth from 2 to 8 m, have been drilled across the lower mound and around the base of the upper mound, producing a valuable sedimentary profile of the submerged lower mound (**Resim 17**).

Of particular note, the cores in the eastern sector encountered extensive cultural deposits, some reaching a depth of almost 8 m below the current surface of the plain, and produced material culture from both the Early Bronze and Iron Ages. In contrast, the cores taken at the western base of the upper mound produced only sand and shell deposits, suggesting the existence of a relic water channel or lake bed to the west of the site (**Resim 18-19**). The results of the coring program have exceeded expectations, and it is anticipated that these investigations will continue in future field seasons.

### CONCLUDING OBSERVATIONS

In summary, the 2005 excavations not only confirmed the preliminary results of the trial sounding conducted in 2004, they have also confirmed the accessibility of the Bronze and Iron Age levels in the West Central Area of the upper mound, and the remarkable preservation of these remains, in particular those of the Early Iron Age. As a result, the Tayinat Archaeological

Project will continue to prioritize its efforts and resources on the excavation and investigation of the Early Bronze and Iron Age levels in Fields I, II and III at the site.

While the well-preserved monumental architectural remains at Tell Ta'yinat have elevated the archaeological importance of the site, warranting a continuation of excavations in future field seasons, they have also established the critical need for immediate implementation of an architectural conservation program at the site. Consequently, during the 2005 field season we introduced a program designed to treat the sun-dried mudbrick that forms the primary building material utilized at the site. In addition, to provide protection from the natural elements during the off-season, a temporary shelter was erected over the exposed mudbrick walls in Field I (see **Resim 20-21**). These temporary measures are intended to provide immediate protection, in advance of the implementation of a more comprehensive conservation and restoration program that will prepare the site for presentation to the public as part of a planned archaeological park. To further ensure the safety and protection of these important remains, and in keeping with the regulations of the Directorate, a bekçi was employed by the Tayinat Archaeological Project to guard and protect the site throughout the year.

### **ACKNOWLEDGMENTS**

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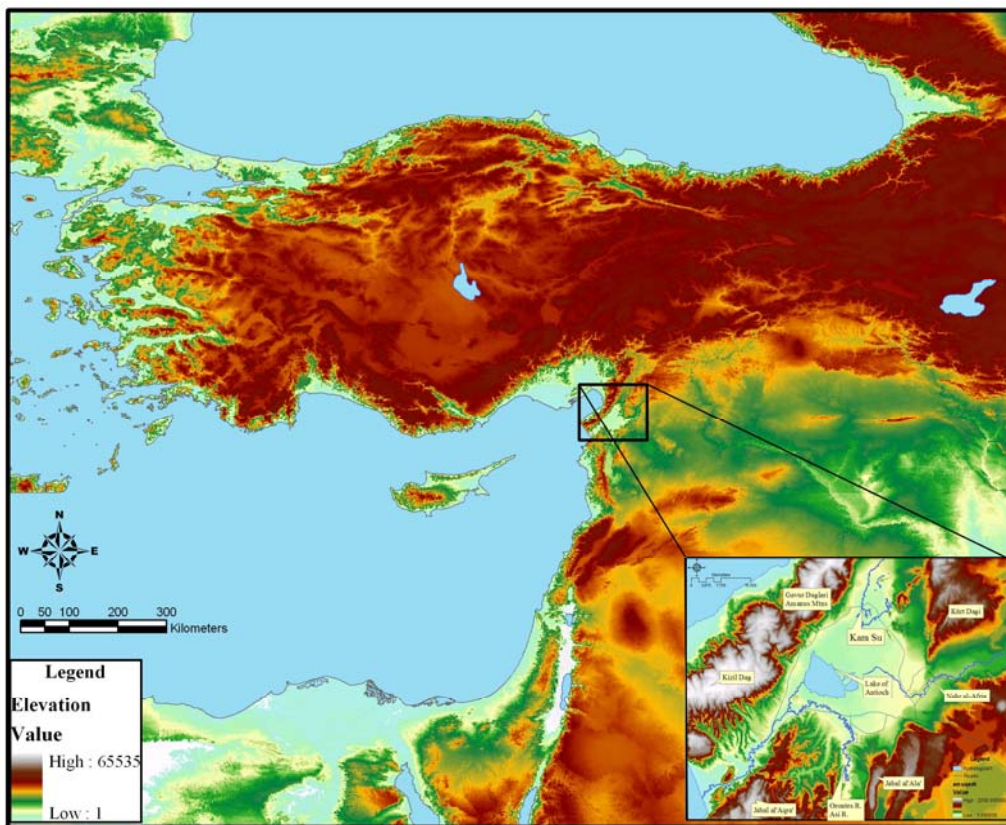


Figure 1

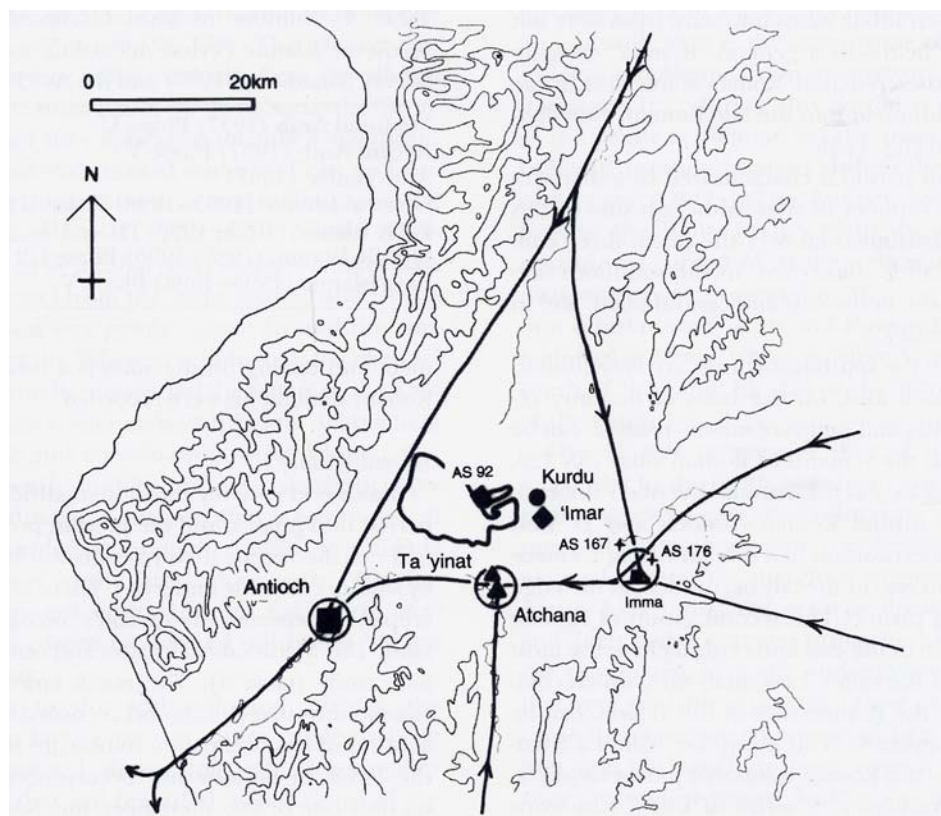


Figure 2



Figure 3

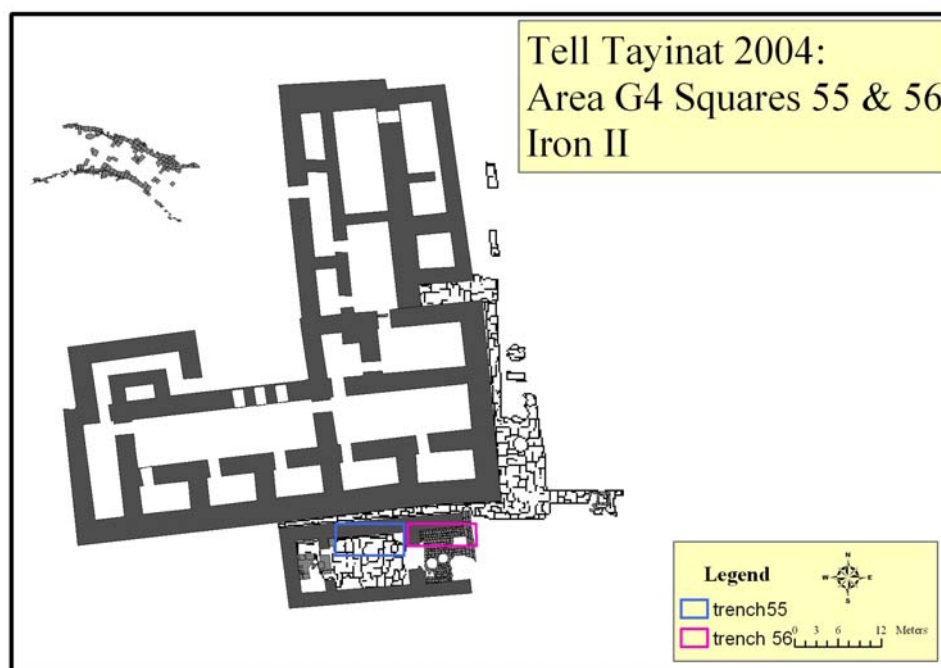


Figure 4

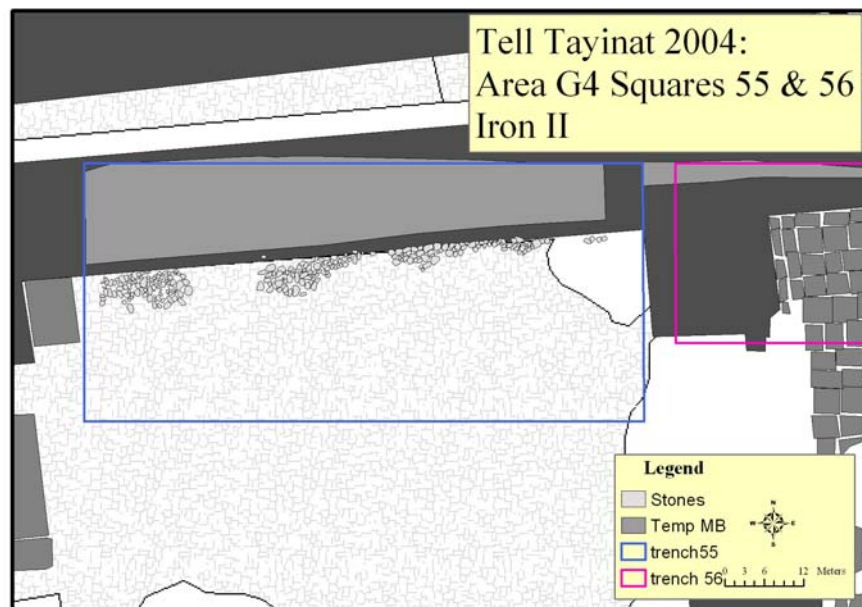


Figure 5

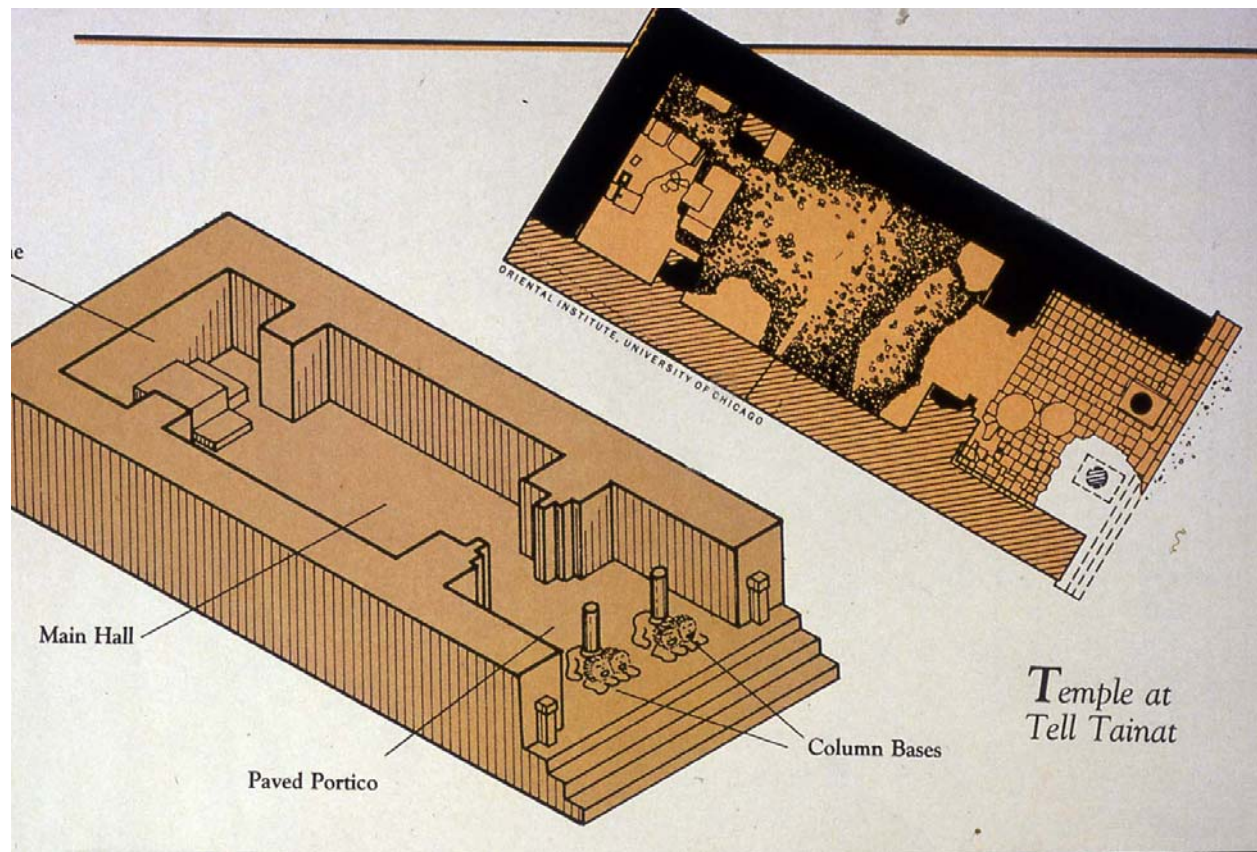


Figure 6

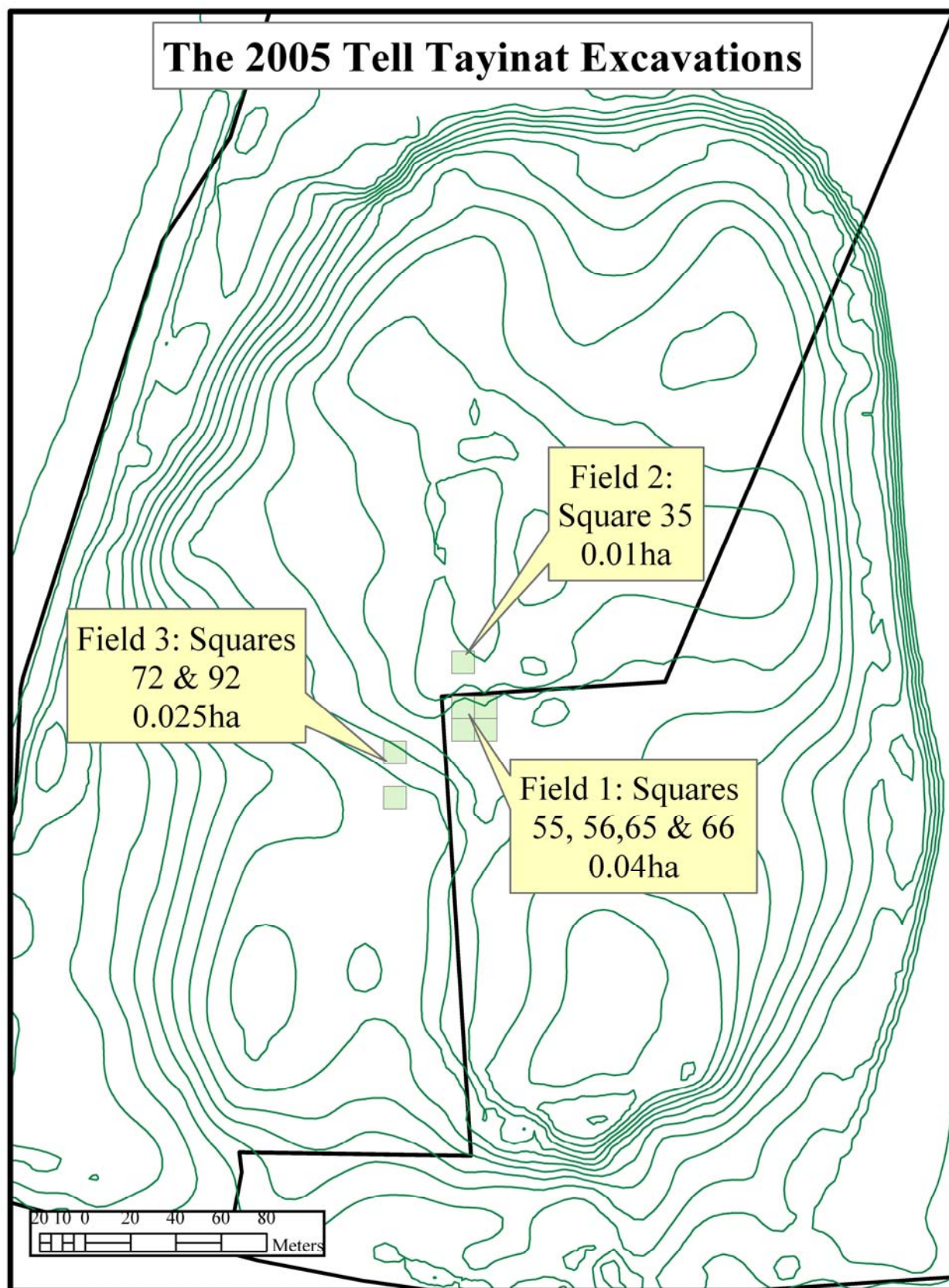


Figure 7



Figure 8

# **Tell Tay'inat 2005: Area G4 Square 55, 56, 65 & 66** **Iron I/ Iron II**

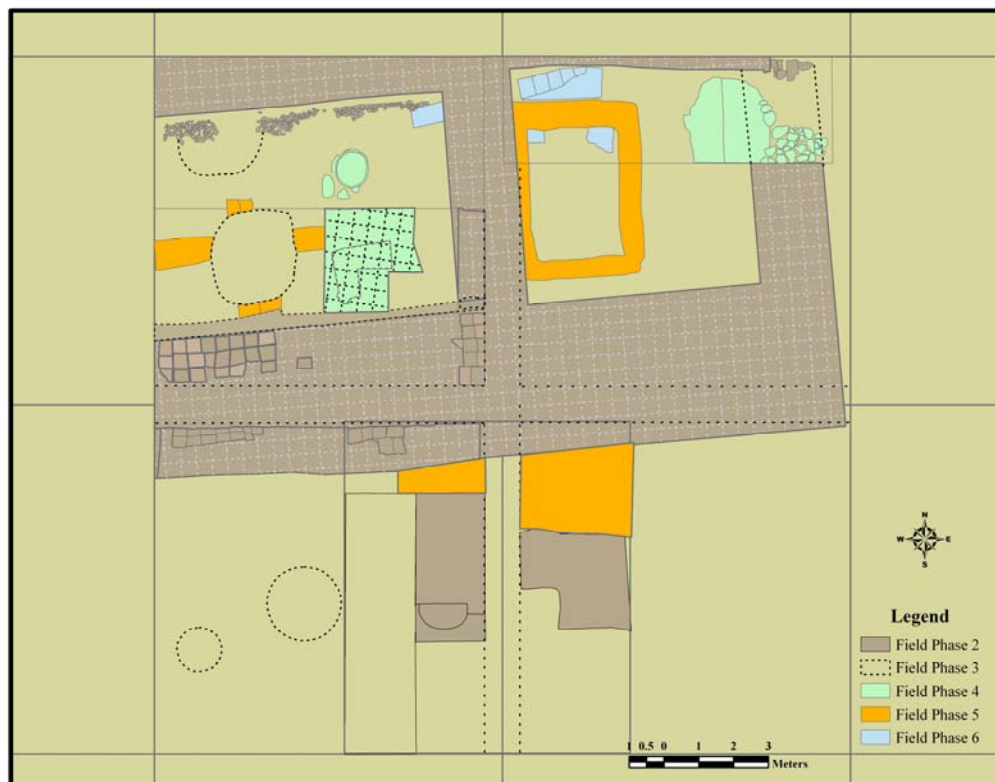


Figure 9

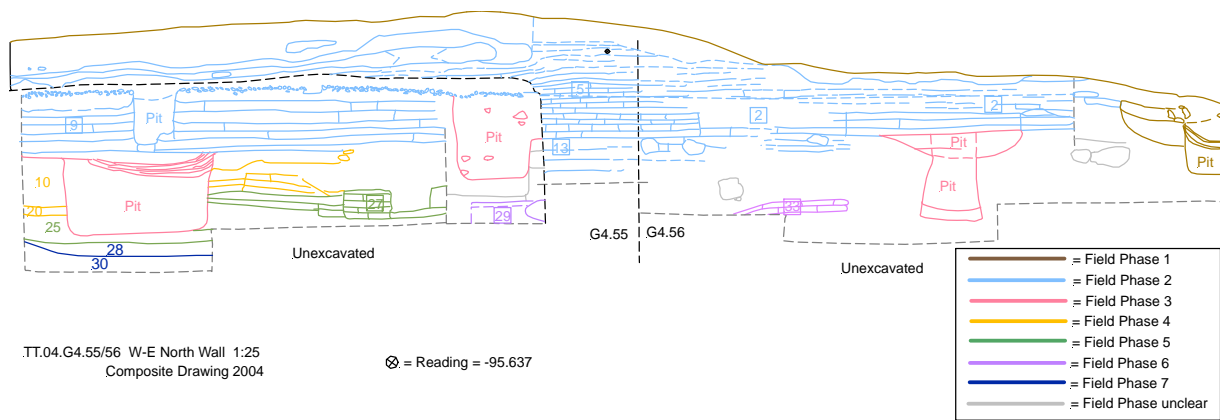


Figure 10



Figure 11



Figure 12

**Tell Tay'inat 2005: Area G4 Square 35  
Late Iron I/ Early Iron II  
(Building XIV)**



Figure 13



Figure 14



Figure 15



Figure 16

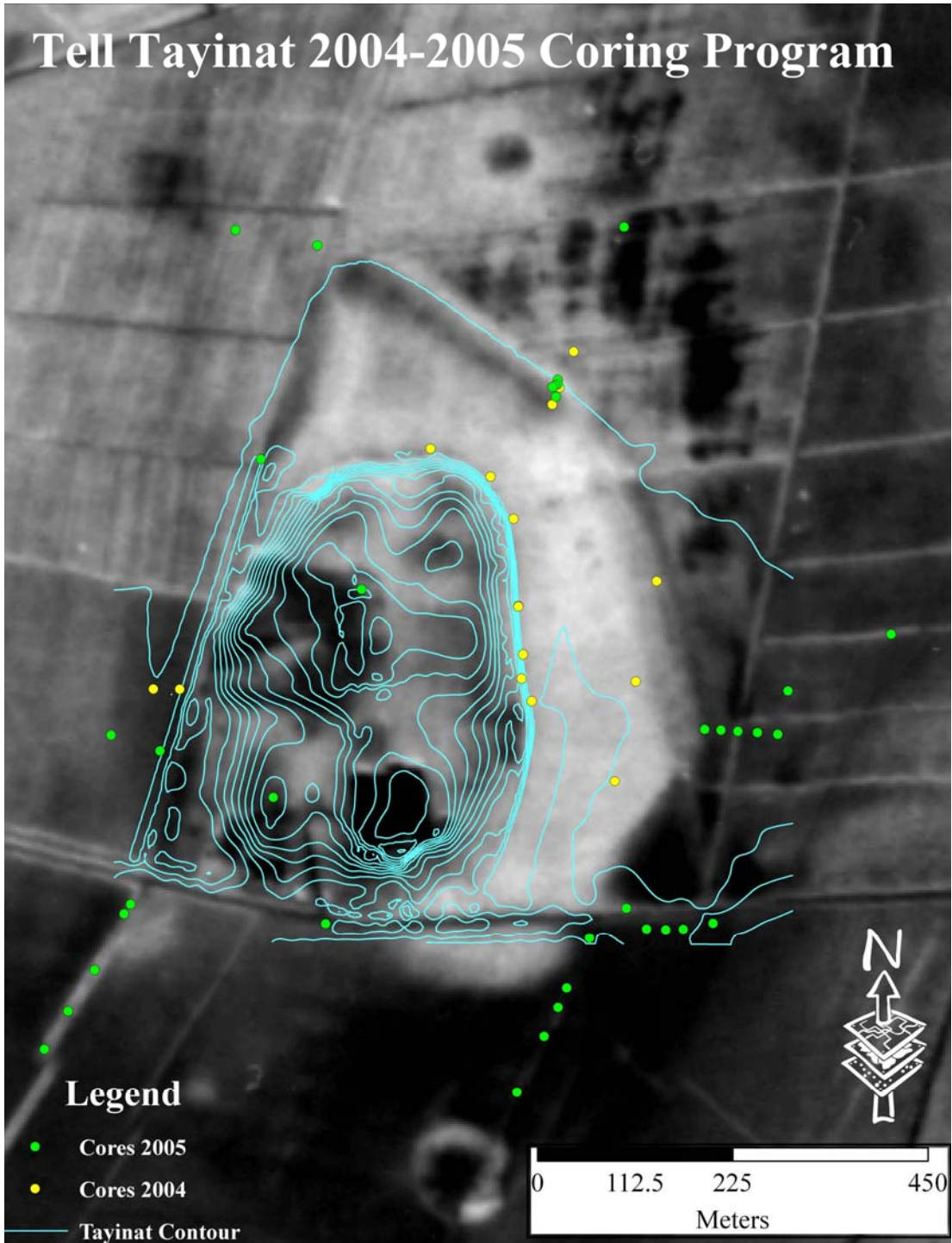


Figure 17



Cross-Section A-A'

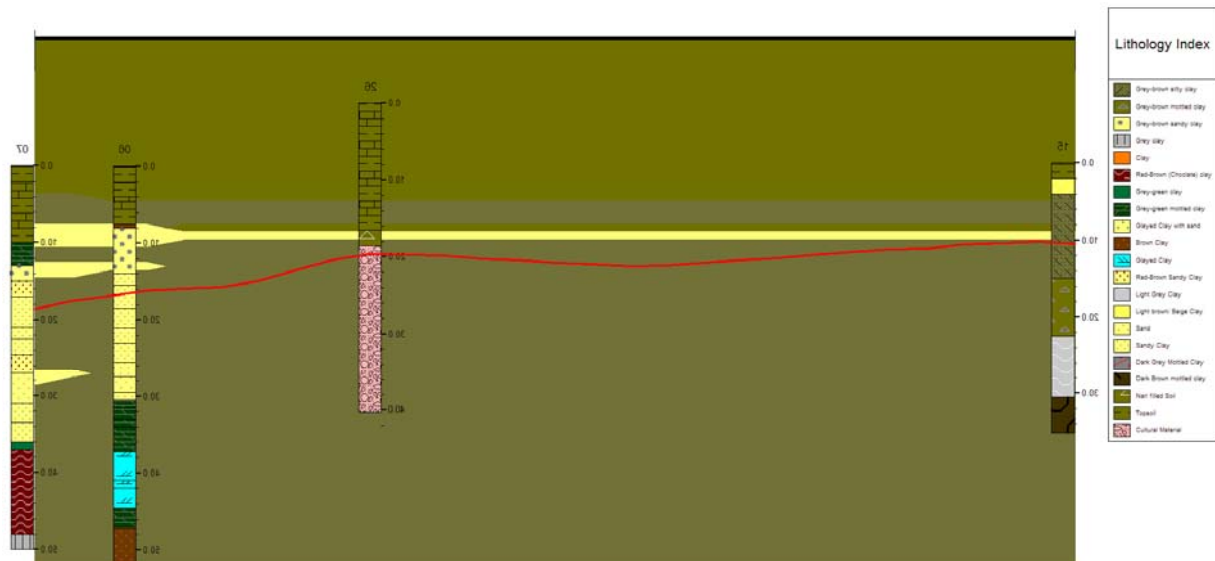


Figure 18

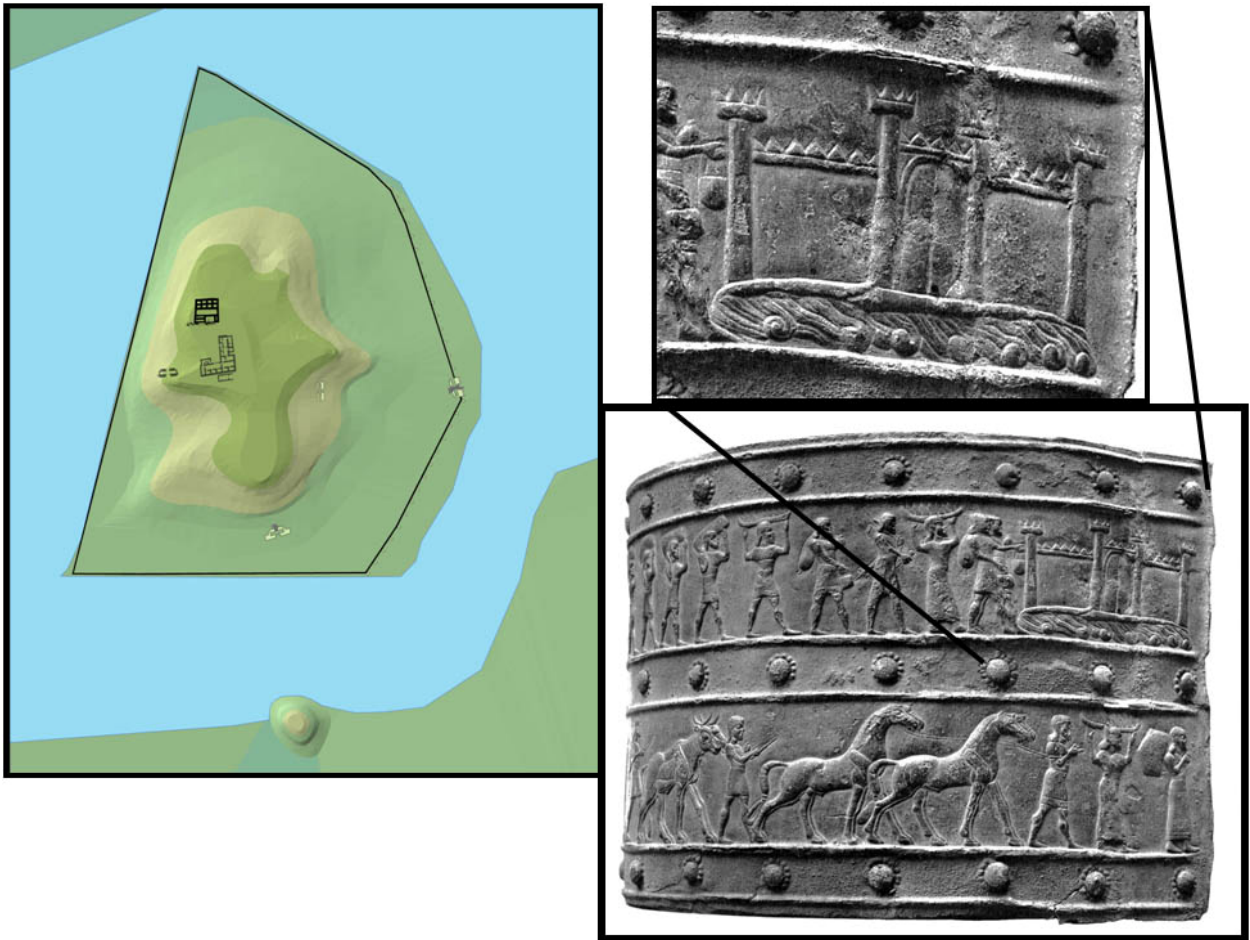


Figure 19



Figure 20



Figure 21