TAYINAT ARCHAEOLOGICAL PROJECT 2012 SEASONAL REPORT

[Not for Publication]

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Introduction

The Tayinat Archaeological Project (TAP) completed its ninth season of excavations at Tell Tayinat in 2012, conducted between June 4 and August 3. The field excavations were followed by three months of laboratory analysis and research, conducted between September 10 and December 7, 2012, in preparation of reports and conference presentations on the results of the 2012 season.

The 2012 TAP senior staff consisted of Dr. Timothy Harrison (Project Director), Dr. Elif Denel (Assistant Director), Dr. Stephen Batiuk (Senior Field Archaeologist), Dr. Lynn Welton (Field 1 Operations), Dr. James Osborne (Field 2 Operations), Dr. Jack P. Dessel (Field 5 Operations), Dr. Fiona Haughey (Artifact Illustrator and Shell Specialist), Dr. David Lipovitch (Zooarchaeologist), Dr. Serena Love (Geoarchaeologist), Julie Unruh and Alexis Smith (Artifact Conservators), Molly Lambert (Architectural Conservator), and Jennifer Jackson (Photographer). Dr. Elif Ünlü, of Boğazici University, also participated in the field season. The project was assisted by 12 archaeology students from Boğazici University, Harvard University, Koç University, Cambridge University, the University of California at Los Angeles, the University of Buffalo, and the University of Toronto. Ms. Yıldız Şahin served as government representative on behalf of the Directorate of Cultural Heritage and Museums.

The primary objectives of the 2012 TAP field season were as follows: (1) excavate and expand the exposure of the Early Bronze Age (specifically Amuq Phase J, or EB IVB) levels in Field 1; (2) extend the step trench down the east slope in Field 5; (3) continue the exploratory soundings in Field 7; (4) initiate a mud brick conservation program on the monumental architecture in Fields 1 and 2, as part of the planned archaeological park; and (5) complete the stabilization and conservation of the extensive artifact assemblages accumulated from recent

field seasons, most notably the artifacts and cache of cuneiform tablets recovered from Building XVI in Field 2.

FIELD 1 EXCAVATIONS (L. WELTON)

The Field 1 excavations, located in the center of the upper mound on the southern edge of the Syrian-Hittite Expedition's West Central Area (**fig. 1**), focused primarily on the Early Bronze Age, but also continued to encounter remains from the Early Iron Age. To date, the Field 1 excavations have succeeded in delineating nine superimposed architectural phases, or Field Phases (FP), with the primary sequence (FPs 3-6) dating to the 12th-11th centuries BCE, or the Early Iron I (or Iron IA) period. As noted above, the primary objective of the 2012 season was to continue the effort to expand the exposure of the Early Bronze Age (EBA) levels in Field 1, specifically the late third millennium BCE, or Amuq Phase J (EB IVB) cultural horizon. Consequently, excavations were conducted in Squares G4.56, G4.65, and G4.66 (**figs. 2-3**).

Square G4.56 (T. Spurrier)

Excavation continued during the 2012 season in G4.56, clarifying the EBA architecture that was mostly articulated during the 2011 season, and removing room fill within the various rooms identified in the square.

A large pit was identified in the southeast corner of the square toward the end of the 2011 season (figs. 3-4), and thus was the first issue addressed in 2012. It became clear as the excavations progressed that this pit, which was lined in mudbrick (whitish in color), had penetrated into a structure comprised of intact mudbricks, almost certainly representing architecture dating to the Early Bronze Age. The identification of the pit also clarified the stratigraphy of the southeast corner of the square. The extent of the pit that could be exposed was limited due to its proximity to the southeast corner, and was very deep. Moreover, its contents represent what is probably the earliest deposit of Iron I material encountered thus far in the Field

1 sequence. Notably, the associated pottery consisted entirely of a range of Plain Wares, including a Hittite baking plate, and a single piece of Mycenaean IIIb, possibly part of a kylix.

Following the excavation of this and a number of other pits, the remainder of the season was devoted to the removal of fills within the previously identified rooms of a large EBA building, located primarily in the northern and western portions of the square. The specific rooms excavated were Rooms A, B, and C (**fig. 3**).

At the end of the season, the north balk of Squares G4.55 and G4.56, the west balk of G4.55 and the east balk of G4.56 were covered with geotextile (**see below; fig. 18**), as well as the Early Bronze Age architecture in G4.55 and G4.56, to protect these remains from water runoff, and to prevent balk collapse or spalling during the off-season.

Square G4.65 (A. Lanham)

The 2012 excavations in Square G4.65 continued the investigations of the EBA structures that were uncovered in 2011 (**fig. 3**). The 2011 season revealed a series of interconnected mud brick walls that had been built using construction techniques similar to those used to produce the EBA walls in G4.56. The G4.65 walls formed a series of mostly long, rectangular rooms, and also appeared to represent later additions to the large FP 8 building preserved to the north in G4.55. In all, a complex of six rooms has been uncovered thus far. Several of these rooms contained hearths or cooking installations, suggesting a primarily domestic function for this area. The 2012 excavations also identified a number of ephemeral construction phases in the EBA complex in G4.65, essentially sub-phases of FP 8, complicating the EB IVB (Amuq J) sequence in Field 1, which until now had been delineated primarily by the more substantial architectural remains in G4.55 to the north.

Square G4.66 (E. Coate and D. Johnson)

The 2012 season saw a resumption of excavations in Square G4.66, which had not been excavated since the 2007 season. Excavations in the northern third of the square had reached Iron I levels by the end of the 2007 season; an Iron II pebbled surface had been left in the center of the square, and the southern third remained largely unexcavated, due to heavy disturbance from erosion. The primary goal of the 2012 season was to bring the northern two thirds of the square down to the level of the EBA remains identified in Squares G4.55, G4.56, and G4.65.

Accordingly, the excavations initially focused on the northern third of the square, which had already produced Iron I loci in 2007 (**fig. 3**). During cleaning of the northwest corner of the square, a surface was uncovered almost immediately, helping to provide an important stratigraphic link between the four squares of Field 1. In the fill beneath the surface, excavations revealed a mudbrick-lined pit containing a concentration of mendable LH IIIC pottery and an assortment of objects, including more than 30 cylindrical clay loom weights.

The remainder of the season was spent examining a series of walls and surfaces concentrated primarily in the northern and central parts of the square (**fig. 3**). These remains were assigned primarily to FP 6, and would appear to be associated with the FP6c architecture excavated in G4.56. Although these newly excavated architectural remains do not form a coherent plan that can be assigned to any particular phase or sub-phase, they nevertheless provide an important stratigraphic link to the phasing sequence in G4.56, a connection which thus far has been mostly tentative and only loosely defined. Further excavations will be needed to clarify these important stratigraphic relationships. Finally, a small number of architectural remains were assigned to FP4.

FIELD 5 EXCAVATIONS (J. P. DESSEL)

Excavations in Field 5 were resumed in 2012 following a two-year hiatus in 2010 and 2011 (**fig. 1**). The excavations in Field 5 were initiated in 2008, and continued in 2009. The Field 5 excavations have been guided by a two-part strategy: (1) the horizontal exposure of the terminal Iron Age settlement at Tayinat along the eastern crest of the upper mound, and (2) the excavation of a step trench down the eastern slope of the upper mound, with the aim of connecting the stratigraphy of the upper mound with the lower settlement at Tayinat. The primary goal of the 2012 season was to continue the eastward extension of this step trench. The northern portions of two 10 X 10 m squares (F6.92 and F6.93) were excavated, extending the trench eastward by 20 m, to the edge of the eastern slope of the upper mound (**figs. 5-6**). It is anticipated that one further 10 m unit will complete the connection to the lower settlement.

Square F6.92 (M. Cook)

The 2009 excavations established that a wall ran along the eastern crest of the upper mound on a north-south axis, extending into F6.92 from F6.91 and F5.100 to the west (**fig. 6**). Consequently, one of the primary objects of the 2012 season was to delineate the eastern face of this wall. To accomplish this, a 10 X 4 m trench was excavated along the northern balk of the square. Much of the season was devoted to the removal of erosional wash and a substantial layer of mud brick detritus that sealed the intact portions of this wall, which was made of mud bricks that contained high concentrations of white nari limestone chips. The finds from these deposits included a heavily mixed assemblage that dated predominantly to the Iron II/III, but also included isolated Roman, Byzantine, and modern pottery. Towards the end of the season, the top of a second, stratigraphically earlier north-south wall was uncovered below the late Iron II/III wall. This earlier wall was made predominantly of black and yellowish mud bricks.

A large cache of worked bone (and some ivory) discs was uncovered from the deposits that sealed against the later of the two walls. Six discs were found in a row aligned along a north-south axis; approximately forty additional discs were found around and above these discs. The discs have an average diameter of 2.3 cm and a thickness of 0.42 cm. Although many if not most are made of bone, some appear to be made of ivory. The discs may have served either as tokens or furniture inlays.

Square F6.93 (Y. Bouzinab)

In addition to extending the Field 5 step trench, an additional goal of the excavations in Square F6.93 (**fig. 6**) was to try to delineate remains of the Early Bronze Age settlement, and to determine whether a north-south fortification wall was preserved along the eastern edge of the upper mound. Excavations reached a depth of approximately 3 m, uncovering a succession of deposits rich in phytoliths, almost certainly the product of slope erosion and wash, but they did not reach EBA levels. More positively, the excavations in Square F6.93 may have determined the eastern extent of the Iron Age settlement on the upper mound at Tayinat.

FIELD 7 EXCAVATIONS (E. DENEL)

The Field 7 excavations were initiated in 2011 with the goal of examining the area immediately to the east of Field 1 and south of the Field 2 temple (Building XVI), which is believed to have functioned as a courtyard, part of a 'sacred precinct' encompassing Building XVI and the 1930s excavated temple (Building II) (**figs. 1 and 7**). Since much of the stone pavement that had formed this courtyard is no longer preserved, it was hoped that excavations could clarify the level of erosion (or modern disturbance) in this area, as well as determine what earlier cultural levels might be accessible. The 2011 excavations were confined to Square G4.58, and proceeded to uncover the remains of a monumental gate, adorned with monumental stone sculptures, most notably a large lion figure with stylistic features that closely resemble the

double lion column base that fronted the entrance to Building II. The 2012 season was devoted to expanding the exposure in Square G4.58, and to opening probes to the south and east, with the aim of determining the extent and preservation of this citadel gate complex (**fig. 8**).

Square G4.58 (D. Joblonkay)

The primary objective for the 2012 excavation season in G4.58 was to expose the Iron Age remains in the eastern half of the square (an approximately 4 X 9.5 m area) with the hopes of exposing more of the gate complex. Establishing the broader stratigraphic context of the statuary, while defining the field phasing for the area, represented an important second objective. Achieving a greater horizontal exposure, it was hoped, would help to elucidate the context of the finds from the 2011 season and provide greater insight into the structural layout of the Neo-Hittite royal citadel at Tayinat during the Iron Age.

The 2012 excavations in Square G4.58 proceeded to uncover two additional monumental stone sculptures: a colossal human figure and a carved column base, both made of basalt, which appear to have been ritually buried in the paved stone surface of the central passageway through the gate complex (**figs. 8-10**). The head and torso of the human figure is intact to just above its waist, and stands approximately 1.5 m in height, suggesting a total body length of 3.5 to 4.0 m (**fig. 11**). The figure's face is bearded, with beautifully preserved inlaid eyes made of white and black stone, and its hair has been coiffed in an elaborate series of curls aligned in linear rows. Both arms are extended forward from the elbow, each with two arm bracelets decorated with lion heads. The figure's right hand holds a spear, and in its left is a shaft of wheat. A crescent-shaped pectoral adorns its chest. A lengthy Hieroglyphic Luwian inscription, carved in raised relief across its back, records the campaigns and accomplishments of Suppiluliuma, likely the same Patinean king who faced the Neo-Assyrian onslaught of Shalmaneser III as part of a Syro-Hittite coalition in 858 BC (**figs. 12-13**).

The second sculpture, a large semi-circular column base, approximately 1 m in height and 90 cm in diameter, was found completely intact lying on its side next to the human colossus (**fig. 14**). The figure of a winged bull is carved on the front of the column, and it is flanked by a sphinx on its left. The right side of the column is flat and undecorated, indication that it originally stood flush against a wall.

The 2012 excavations identified at least four field phases (FP) in G4.58. The earliest FP includes the west pier of the gate complex, which, given its north-east orientation, is thought to have led to an earlier structure below Building XVI to the north, but with a different orientation from this later building. The second phase is associated with the abandonment of this gateway structure, best evidenced by the looting of the stones of the gateway's central pavement, and a concentration of collapsed plaster that lined the western side of pier. During this abandonment phase it would appear that the lion statue, excavated in 2011, was toppled, abandoned, and encased in a layer of mud bricks, possibly part of a foundation to support the stone pavement of the temple precinct courtyard. The statue base fragment carved with the Master of Animals motif uncovered in 2011 was most likely also destroyed and abandoned at this time. However, as noted above, the Suppiluliuma statue and the winged-bull column base appear to have been deposited (or ritually buried?) in the limestone pavement to the east of the gate pier, thus representing a distinct, third field phase. This third phase therefore saw the destruction of the statuary, the disturbance and pitting of the associated stone payement, and the deposition of the statuary into a large pit that was cut into the pavement. The final phase of occupation corresponded with the leveling of the area by the deposit of mud bricks, which appears to have formed the foundation for the stone pavement of the temple courtyard. Further excavations will be necessary in Square G4.58 to establish the depositional sequence more precisely, as well as the broader historical context of the remarkable discoveries that have been made in this square.

Squares G4.68 and G4.69 (Ö. Demirci)

Towards this end, two new squares (G4.68 and G4.69) were opened to the south of G4.58 during the 2012 season (**fig. 8**). Given the scale and depth of the deposition in this area, the excavations were confined to a 2.5 m wide trench along the northern balk of G4.68, and a 2 m section along the western balk of G4.69. The excavations in G4.68 reached a stone pavement in the eastern portion of the sounding at a depth of more than 2 m from the modern surface of the mound. The pavement covered almost the entire eastern third of the trench, extending into the east and south balks. Meanwhile, excavations in G4.69 uncovered a similar stone pavement to the southeast, which could possibly be a continuation of the G4.68 pavement, although it was not possible to establish a clear connection between the two before the end of the season. The G4.69 pavement also appeared to be of better construction than the pavement in G4.68.

Although further investigations are necessary, it is possible that the pavements in Squares G4.68 and G4.69 formed part of an ascending street or passageway that led in a curving path northwest to the temple area. If this reconstruction is correct, the stone pavement uncovered in G4.58 might also preserve part of this street.

ARTIFACT CONSERVATION (J. UNRUH)

116 small finds were treated during the TAP 2012 season, including objects made of bone, ivory, ceramic, unbaked clay, copper alloy, iron, faience, glass, shell, stone, and one plastic object. Of particular interest from a conservation standpoint were a group of five unbaked clay jar stoppers, which preserved impressions of plant material, cordage, and textile used in sealing; a group of 39 bone and ivory round inlay pieces, some with drilled indentations, still awaiting interpretation; an inlaid iron blade hilt; a glass bead with two smaller beads inside the interior hole, presumably indicating the arrangement as strung; a beautiful but fragile blue faience bowl; and two large stone sculptures: a fragmentary statue of King Şuppiluliuma (TT 2500), and a

column base carved with a winged bull and a sphinx (TT 2501) (see further description above in report on Field 7). In addition to performing the conservation treatment of these sculptures, the conservation staff was involved in coordinating their removal, photography, and winter-over storage at the Antakya Museum (**figs. 15-16**).

Objects from Building XVI

In 2012 a concerted effort was made to organize, identify, and begin the treatment of the so-called "mystery object" material excavated in Building XVI in 2008 and 2009. To better understand this material, a spreadsheet was created listing pertinent features of each lot of material, including such features as sheet thickness, the existence of drilled holes, associated nails, associated wood or textile, and other elements. The sortable spreadsheet allows grouping of similar features, loci, etc. Nails were described on a separate spreadsheet that allows all nails to be sorted by head type/diameter and shank diameter, and iron artifacts were also listed in their own spreadsheet. In total, 64 nails, 89 groups of copper alloy (and wood) pieces, and 12 iron (and wood) objects were described in detail on the spreadsheet.

A component of this study was to try to identify the find locations of all of the material. Because most of the "mystery object" pieces had been registered as samples, not objects, their exact find spots were not recorded. The locus information was not always helpful: Square G4.28, in particular, was excavated almost entirely as single locus. Buckets tended to cover large areas and to overlap. The original top plans and field notes were revisited, and the excavators of these squares were consulted. A Photoshop map was produced overlying the Square G4.28 pail units on top of each other in order to graphically observe the overlap, and the find spot measurements recorded in the field notes and on object tags were recovered. A numbered plot of the Building XVI finds was then produced using this conservation information.

In brief, it now seems most likely that the copper alloy material from Square G4.38

represents furniture fittings, rather than door cladding. In Square G4.28, some of the copper alloy materials are vessel fragments, although not all of the fragments; a good amount of material consists of nails, most likely for furniture fittings.

The iron material from Square G4.28 held a surprise: most of the iron bars are associated with wooden boss heads. Again, furniture seems a good guess for an object that incorporates iron bars and wooden boss heads; however, parallels for iron and wood furniture were not found. The iron was discovered in the same general area as the tablets, raising the possibility that the iron formed part of hanging brackets for the tablets.

Wood appears to have been prevalent, whether as part of the architecture or furniture, in Building XVI. Analysis of the soil block-lifted with the shield (see below), for example, identified 109 pieces of worked wood.

Iron Shield (TT 1926)

An iron shield (TT 1926) was found lying in front of the podium in the inner room of Building XVI during its excavation in 2009. Although analysis and conservation of this object continues, a number of preliminary observations were made during the 2012 season. Interpretation of the shield is complicated by the fact that there seem to be features belonging to another object(s) preserved on both obverse and reverse surfaces. There is evidence for wood strips of similar dimensions on both surfaces, possibly indicating one object on both obverse and reverse, or a pair of similar objects. A preliminary literature review has not produced any immediate parallels, although some elements on the shield, such as its perimeter bosses and central omphalos, occur on Neo-Assyrian exemplars.

MUD BRICK CONSERVATION PROJECT

Thanks to generous funding provided by the Kaplan Fund, a two-stage strategy was implemented during the 2012 season to consolidate and conserve the monumental architectural

remains preserved at Tayinat, most notably the Neo-Hittite palace and temples in Fields 1 and 2. The conservation of these architectural remains forms the primary focus in Stage One, to occur over a two-year period starting in 2012, with Stage Two to see installation of tensile shelters and completion of park landscaping.

Much of the effort in 2012 was focused on assessing the condition of the monumental architecture at both sites, and securing the requisite permissions to implement an architectural conservation program. This analysis was conducted by Molly Lambert, a leading authority on traditional mudbrick architectural conservation, and resulted in an identification of the best treatment strategies, and the development of a comprehensive conservation program. A team was deployed to clean and prepare the Tayinat Temples (Buildings II and XVI), as well as the monumental Early Iron Age Palace (Building XIV), in preparation for consolidation and conservation treatment in 2013. The 2012 season also saw these structures, specifically the north wall of Building II, and the east and west walls of Building XIV, receive some preliminary consolidation treatments to help stabilize them in preparation for the conservation program planned for 2013 (figs. 17-18).

The 2012 season also saw the preparation of a plan for landscaping the site, most notably in the royal citadel area, with pathways and signage, as part of the archaeological park plan. Signage, in keeping with the specifications required by the Ministry of Culture and Tourism, were also prepared as part of this effort.

The overarching aim of this conservation effort is to establish an open air archaeological park that encompasses the two sites of Tell Tayinat and neighboring Tell Atchana, and highlights their shared role as an historic crossroads in the region. Thanks to the funding provided by the Kaplan Fund, the results of this conservation program will present a visually commanding view

that conveys the quintessential monumentality that was an integral feature of Hittite art and architectural expression.

CONCLUDING OBSERVATIONS

The Tayinat Archaeological Project investigations have continued to uncover the remarkably well-preserved remains of the long succession of Early Bronze and Iron Age settlements that occupied the site. The ongoing excavations in Field 1 have now uncovered a substantial (almost 300 sq m in area)—and expanding—section of the terminal EB IVB (or Amuq Phase J; ca. 2250-2000 BC) settlement (FPs 9-7) beneath the previously excavated Iron I strata (FPs 6-3), with ceramic evidence indicating that earlier EBA phases still lie below.

The new excavations in Field 7, meanwhile, have uncovered a previously unknown citadel gate complex dating to the Iron II period, when Tayinat flourished as Kunulua, royal city of the Neo-Hittite Kingdom of Patina (ca. 9th-8th centuries BC), decorated with an expanding array of spectacular monumental stone sculptures. This gate complex is reminiscent of the great staircase excavated on the contemporary Neo-Hittite citadel at Carchemish, with its famous sculptures and ornately carved procession of orthostats.

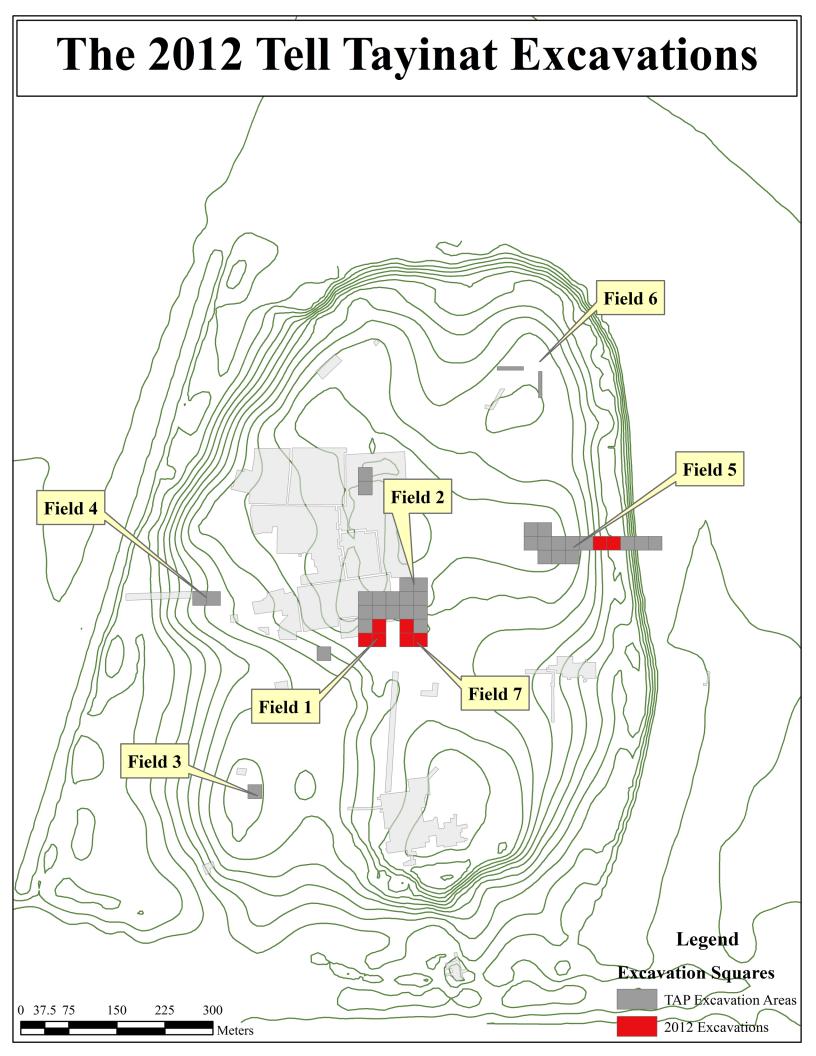
The newly discovered Tayinat sculptures were the product of a vibrant local Neo-Hittite sculptural tradition, and provide a vivid glimpse into the innovative character and cultural sophistication of the Iron Age cultures that emerged in the eastern Mediterranean following the collapse of the great imperial powers of the Bronze Age at the end of the second millennium BC. The presence of colossal human statues, often astride lions or sphinxes, in the citadel gateways of the Neo-Hittite royal cities of Iron Age Syro-Anatolia continued a Bronze Age Hittite tradition that accentuated their symbolic role as boundary zones, and the role of the king as the divinely appointed guardian, or 'gate keeper', of the community. The Tayinat gate complex appears to have been destroyed following the Assyrian conquest of the site in 738 BC, when the area was

paved over and converted into the central courtyard of an Assyrian sacred precinct that incorporated renovations of the two temples, Buildings II and XVI. The smashed and deposited monumental sculptures provide a hint of the earlier Neo-Hittite complex that might have once faced the gateway approach.

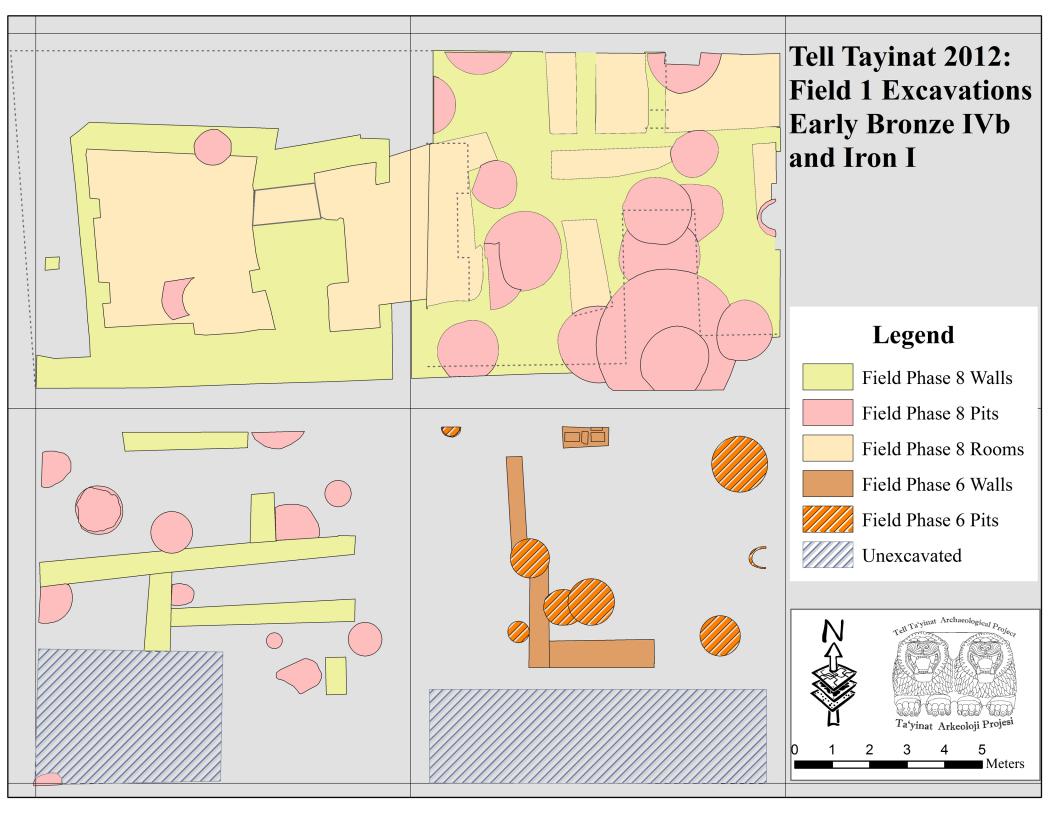
Finally, considerable time and effort during the 2012 season was devoted to the ongoing analysis and conservation of the extensive artifact assemblages that have been uncovered in the course of recent excavation seasons, and in particular the wealth of small finds recovered from the inner sanctum of the Field 2 temple (Building XVI). Concurrent with this effort, the 2012 season saw the initiation of an extensive program to consolidate and restore the mud brick architecture of the royal palaces and temples that formed Tayinat's citadel, as part of a program to establish an archaeological park encompassing Tayinat and Atchana, its neighboring sister settlement.

ACKNOWLEDGMENTS

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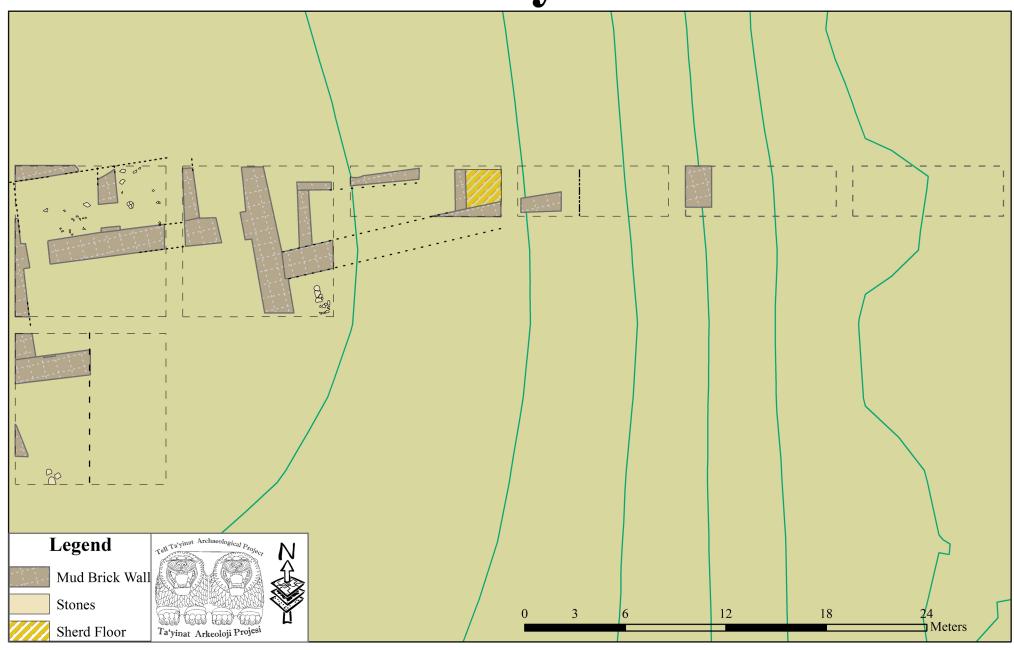


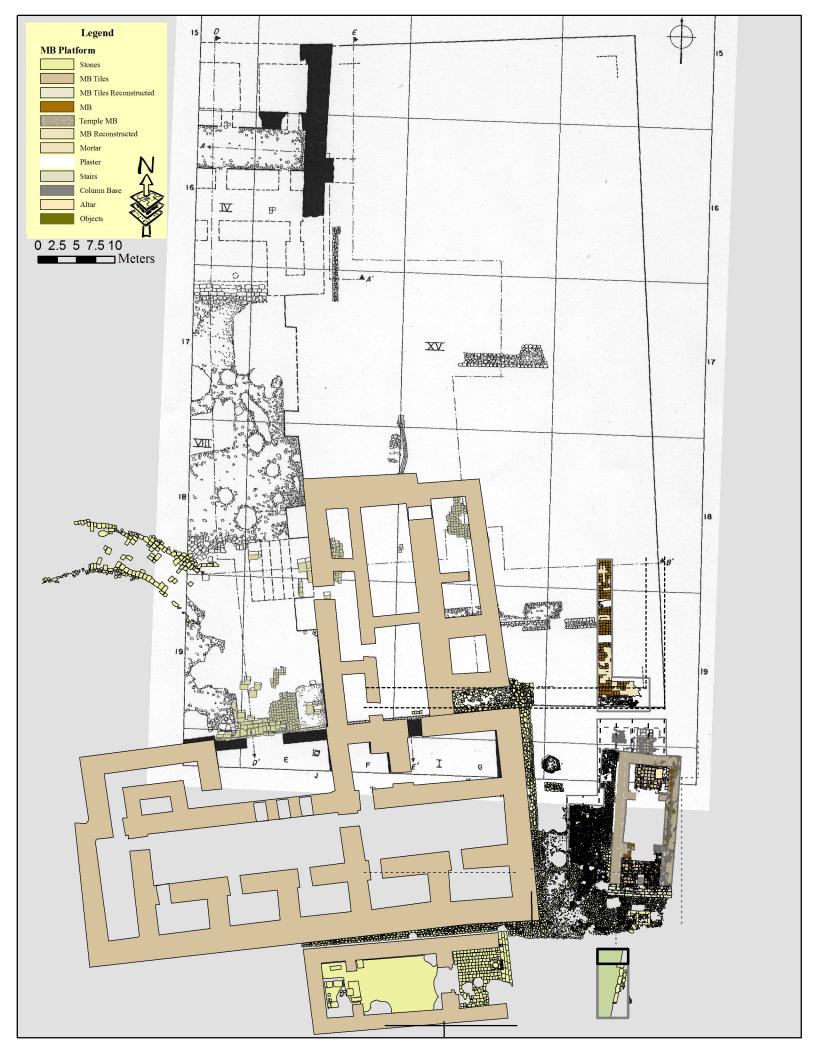


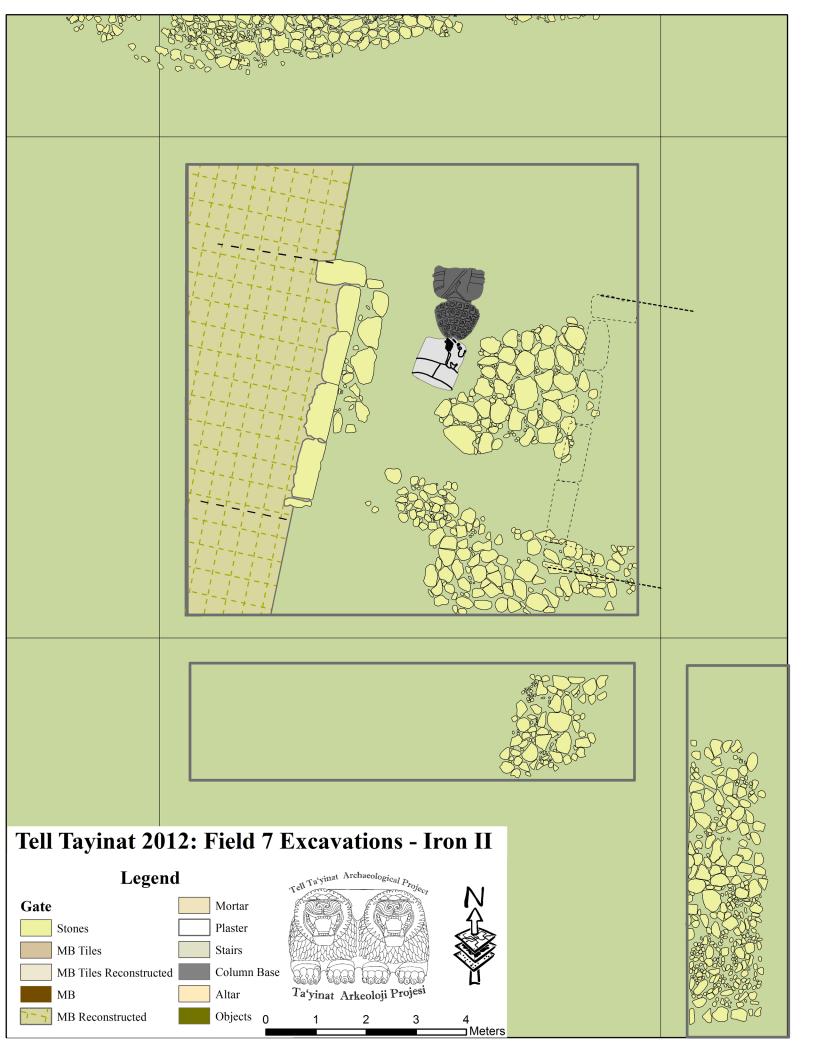




Tell Tayinat 2012: Field V Iron II 'Courtyard House'





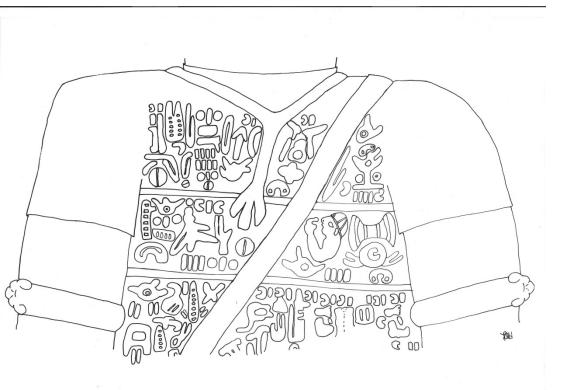












- 1. §1... but he became my opponent 1. §2 and from him I took away 8? lands
- 2. §3 and I put the border for him at the x-TAMI? 2. §4 and I, Suppiluliuma
- 3. [to] m[y]? father a stele er[ected?] 3. §5 ...[to the?] father [with?] "virtue"?, fullness?, in front of ... 3. (§6?) 100 cities, the city of x x,















