

KHIRBAT 'ATARUZ 2011 - 2012: A PRELIMINARY REPORT ON THE PERIMETER OF THE TEMPLE COMPLEX

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Introduction

Khirbat 'Ataruz is located 24 km south of the town of Madaba, 10 km west of the village of Libb, and 3 km east of the ancient site of Machaerus between Wādī Zarqa to the north and Wādī Sayl Haydan to the south (31° 34'31"N / 35° 40' 03"E) (**Fig. 1**). During the Iron Age it was a fortified town situated on an important crossroad overlooking the Dead Sea. The ancient roads that led from the Dead Sea, Wādī Sayl Haydan and the town of Madaba met at this important cultic site. Excavations were carried out during the summer of 2011 and 2012, under the direction of Chang-Ho Ji of La Sierra University, with the help of a small group of students, volunteers and 18 Jordanian workers from the Beni Hamida region of Jordan (**Fig. 2**).

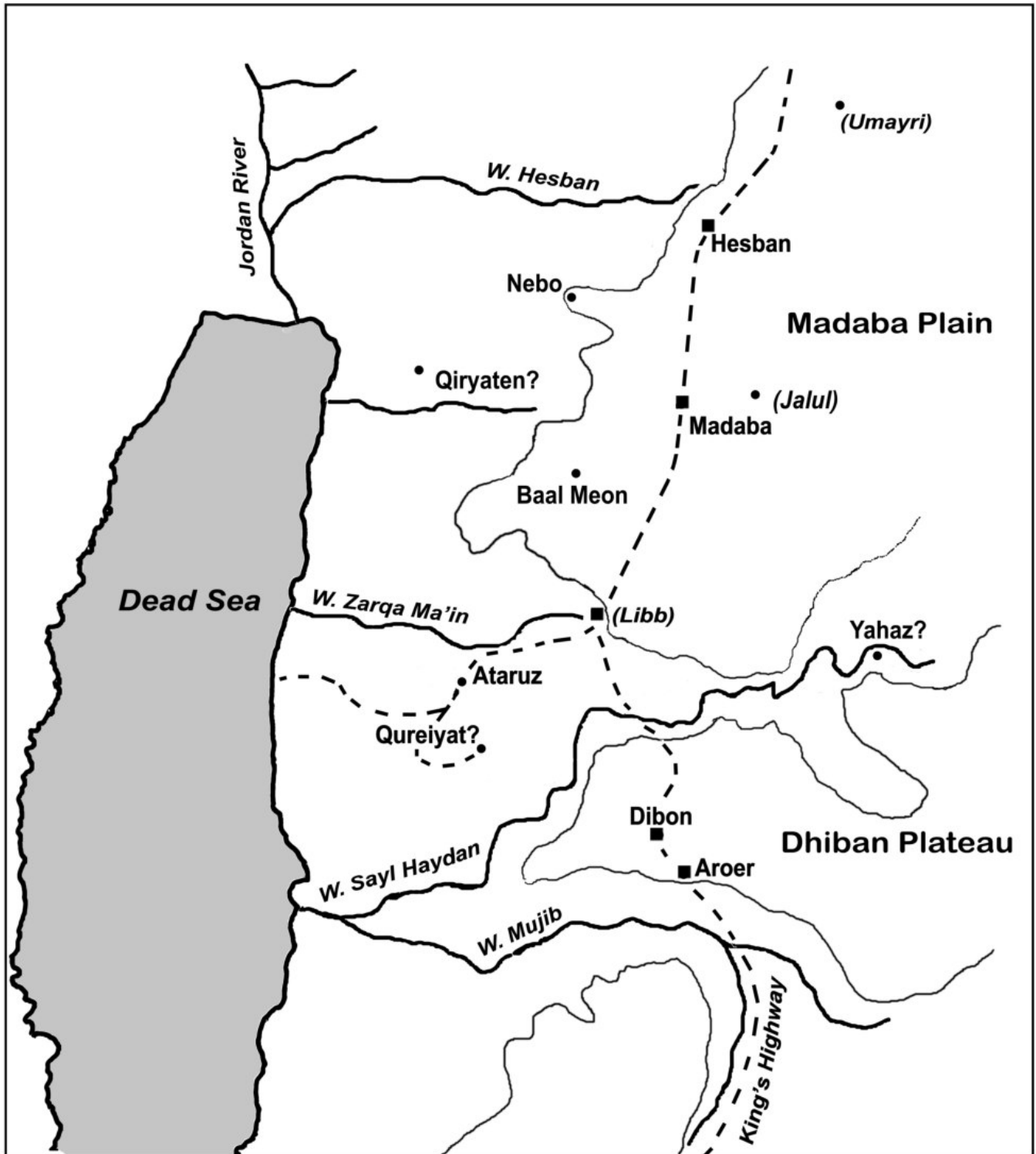
History of Exploration and Excavations

Nelson Glueck was the first western explorer to document the region surrounding Khirbat 'Ataruz when he visited Jordan in 1937. He concluded from the numerous Iron Age I-II sherds that the site was initially occupied during the Iron Age but later abandoned until its reoccupation during the Late Hellenistic period. In addition, small quantities of Late Hellenistic to Middle Islamic sherds suggested limited occupations during these periods. A later survey conducted by Schottruff found a number of other Iron Age settlements sites in the Jabal Hamidah region (Glueck 1939: 135). In 1983, H. Nieman visited Khirbat 'Ataruz and found an abundance of Iron Age pottery and a figurine fragment that he believed was made sometime during the 11th - 9th centuries BC (Niemann 1985).

In the summer of 1998, Chang-Ho Ji and

Lawrence T. Geraty surveyed Khirbat 'Ataruz as part of the Dhiban Plateau Survey Project. They also found Iron Age sherds but the western and south-western portions of the site were now underneath a modern cemetery for use by the village of Jabal Hamida (**Fig. 3**) and was therefore unsuitable for excavation. However, the eastern side of the *tell* had several visible wall lines and other ruins standing proud of ground level. A dry moat was observed on the north and south sides and several limestone caves were also discovered.

The first six seasons of excavation at Khirbat 'Ataruz (2000 / 2001, 2004, 2006, 2008 and 2010) exposed many architectural and material remains (Ji 2011, 2012) (**Fig. 4**). In 2000 / 2001 excavations were carried out in the area of the *acropolis* near to the eastern edge of the modern cemetery. Two squares were opened and an Iron Age temple with many cultic vessels was found. Among the discoveries were fragments of two possible model shrines, sea shells, a pedestal bowl, a lamp and a bronze object with Egyptianising *uraeas* and cobras. Subsequent excavations revealed a temple, 4.1 m x 11 m, oriented east toward the rising sun, with doorways that opened into adjacent rooms and a main doorway that opened into the central courtyard (**Fig. 4**). The southern room contained a hearth and a platform / altar, and the northern room, with three entrances, may have served as a storage area. Additional buildings on the northern side contained two raised, bed-like platforms and stairs to another possible altar. The eastern doorway of the main temple building opens directly on to a large courtyard where there are several altars and another building.



1. Map of the region surrounding Khirbat 'Ataruz showing towns mentioned in the Mesha Inscription.

Four altars face an enclosure wall on the east and a large altar on the north side has a step. Abutting the eastern wall of the temple, next to the doorway, is a four-tiered stepped structure, the purpose of which remains unknown.

Occupation and Abandonment

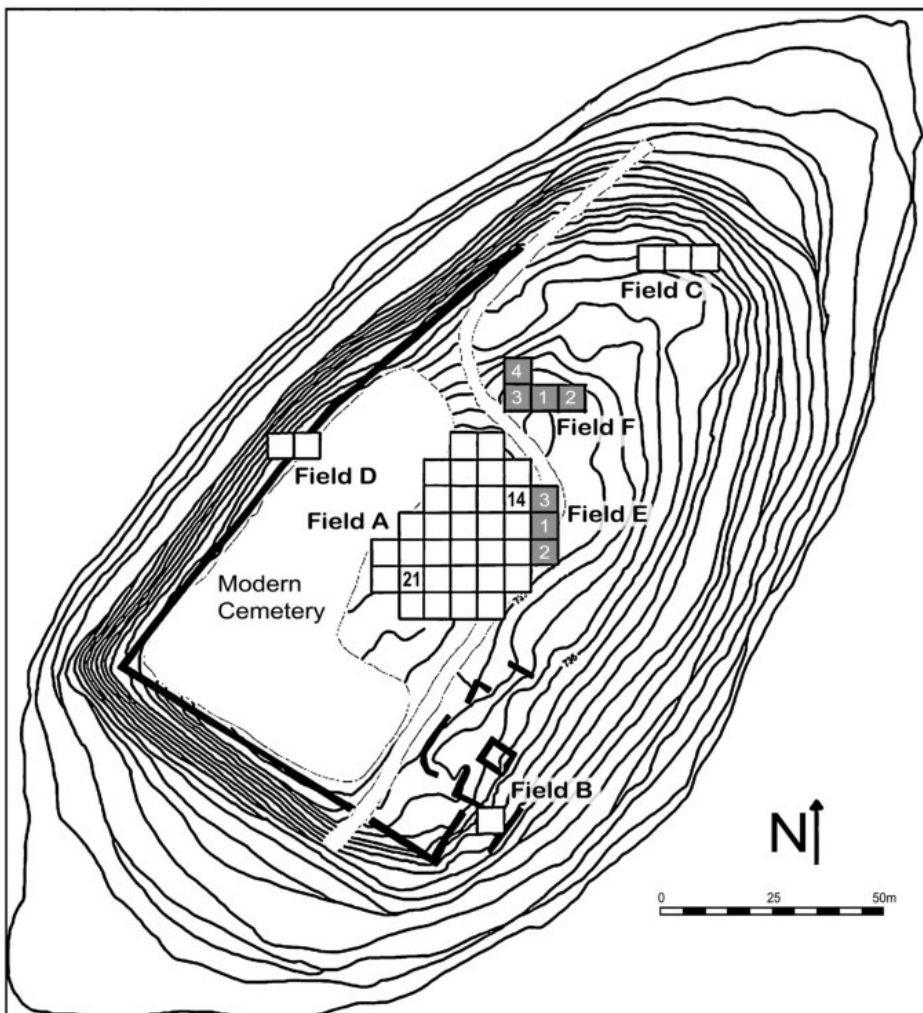
There appear to be at least three phases of cultic activity dating from the early Iron IIA to the early Iron IIB periods, that is, the late 10th to the early 8th centuries BC (see Fig. 5a and 5d for



2. Co-authors Chang-Ho Ji, La Sierra University and Robert Bates, Institute of Archaeology, Andrews University, discussing excavations.

examples of pottery).¹ At that time, the site was a major cultic centre, probably built and maintained by a national, or at least regional, political entity. The temple complex was well laid out, centrally located and built on the highest point of the site. In the main sanctuary next to the offering table, a standing stone represented the principle deity. Further excavations suggest that a bull motif was also used to symbolize this god. The cultic objects found near the alter and in other parts of the temple complex reflect the same types of cultic material found at Tell Megiddo and Tell Dan, west of the Jordan River (Ji 2012).

During the Iron IIB to Iron IIC periods, Khirbat 'Ataruz was rebuilt and reused. Remains of



3. Topographical map of Khirbat 'Ataruz showing the excavated squares and Fields E and F.

1. There has been much debate as to the chronology of the Iron II period in the southern Levant, which is beyond the immediate scope of the present paper. In this report, we tentatively date

Iron IIA to the late 10th to late 9th centuries (ca 950 - 830 BC), Iron IIB to the late 9th to 8th centuries BC (ca 830 - 700 BC), and the Iron IIC to the 7th century BC (ca 700 - 600 BC).

kitchens, storage facilities, and water channels suggest that the area was primarily adapted for domestic purposes. However, the eastern side of the earlier Iron IIA courtyard, and its nearby buildings, continued to be used for cultic purposes. By the end of the Iron IIC period, the site was abandoned. No further evidence for domestic or cultic activity is recorded at the site until the early Hellenistic period when the site was rebuilt.

The Hellenistic occupants of the *tell* reused the earlier Iron II structures and added two long walls inside the ‘hearth’ and ‘double platform rooms’ (**Fig. 4**). Also, several walls and rooms in the south-western part of Field A were built during the Late Hellenistic and Early Roman periods (ca 200 BC - AD 100). In addition, excavations in Field C along the north side of Khirbat ‘Ataruz revealed Late Hellenistic / Early Roman structures, including a bath installation with plastered steps and walls. The abundance of sherds from storage jars suggests that the Hellenistic and Early Roman settlements took advantage of a rich agricultural hinterland. At the time, Khirbat ‘Ataruz was most likely engaged in the cultivation of cereals, and oil or wine production. By the end of the 1st century AD a decline in agricultural prosperity, together with increased political turmoil in the region, contributed to the site’s abandonment.

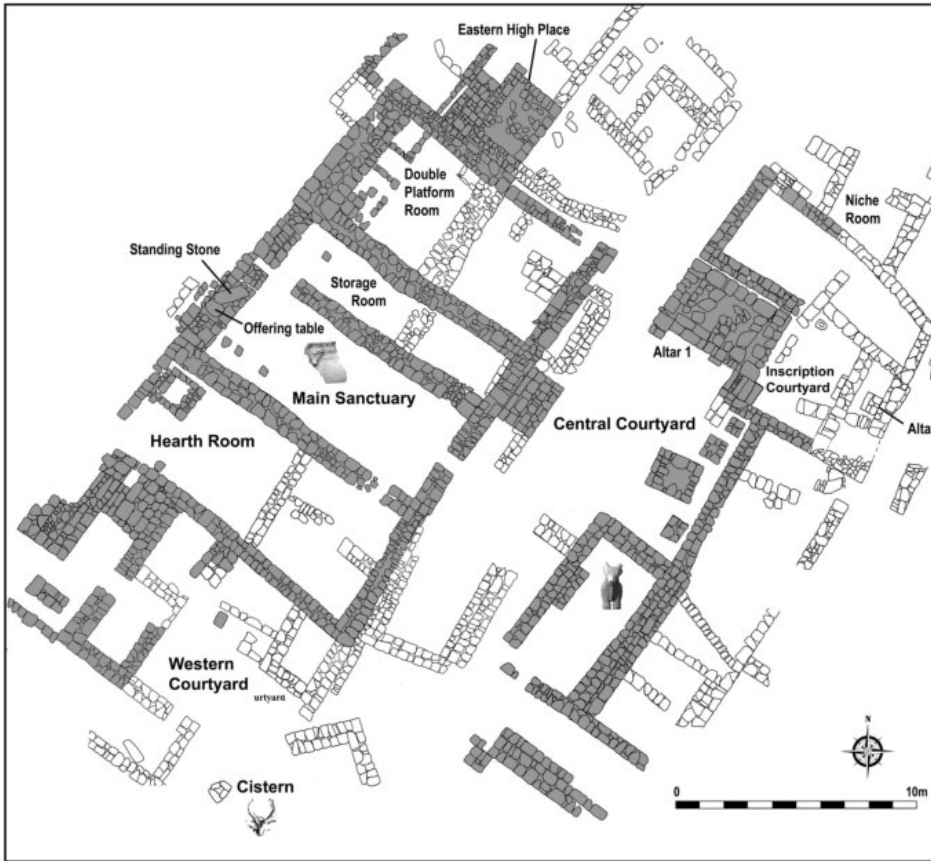
Khirbat ‘Ataruz remained unoccupied for nearly 800 years before it was resettled in the Middle Islamic period (ca 1000 - 1400 AD). Residents re-established ‘Ataruz as a medium-sized village but the exact size and plan of the settlement is difficult to determine. Although there are a number of walls associated with this period, many of the domestic rooms and buildings reused earlier walls rather than erecting new ones. Indeed, much of the building stone used in the construction of the early to mid-Iron IIA temple complex was dismantled during the Middle Islamic period. This practice was particularly extensive in the area to the north of the acropolis. Nevertheless ‘Ataruz was a populous and thriving village during the Middle Islamic period.

Excavation Aims

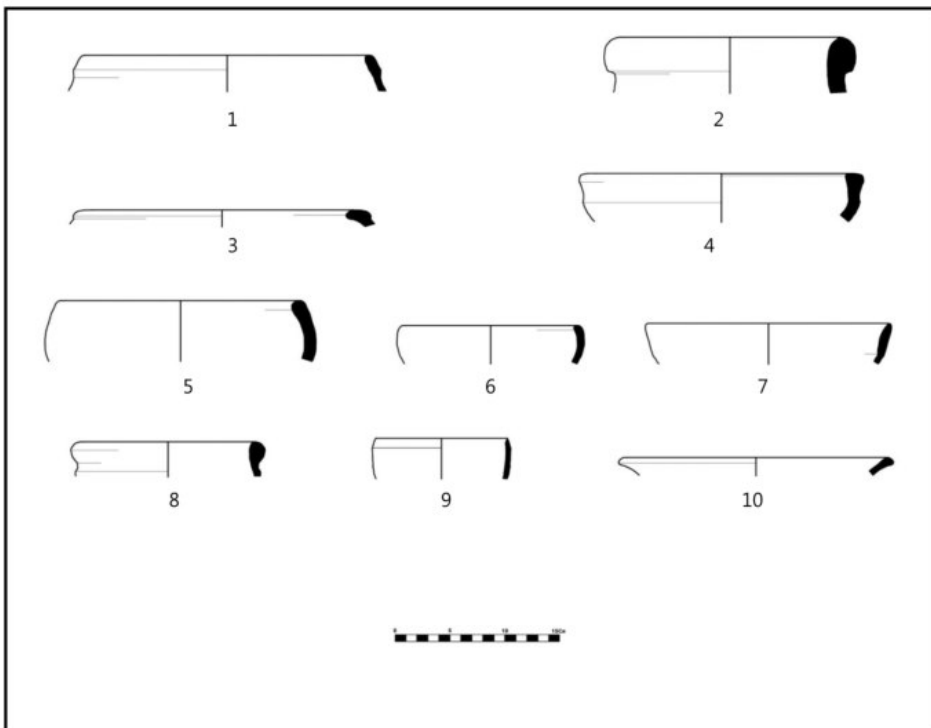
There were four main aims of the 2011 and 2012 seasons. First, since the acropolis had revealed numerous cultic buildings it was necessary to continue exploring the western (Field A) and eastern (Field E) boundaries of the temple complex. (**Fig. 3**) On the eastern side, excavations focused on a small room where a large grinding stone had been found in association with Iron II pottery. Thus an aim of the 2011 and 2012 seasons was to continue excavation in the small room in order to find the edge of the temple complex and determine the size and function of the small room. Another room uncovered in 2010, on the eastern side of the temple complex, revealed an altar platform with an offering step. At the base of the step (IE03) were several cultic objects including a pillar with an inscription.

A second aim of the 2011 season was to determine the exact context of these cultic objects, as well as the size and function of the step altar or platform (IE01-2; **Fig. 4**). This made it necessary to explore the northern extent of the temple complex where some Middle Islamic buildings incorporated earlier structures of the Iron Age temple complex. Questions remained as to whether this marked the end of the temple complex or whether these buildings were reused and modified in later periods. Several additional wall outlines were visible on the surface near the northern edge of the tell before it begins to slope down in a series of terraces. To address these issues, a new field (Field F) was opened under the direction of Robert Bates (**see Figs. 2 and 3**).

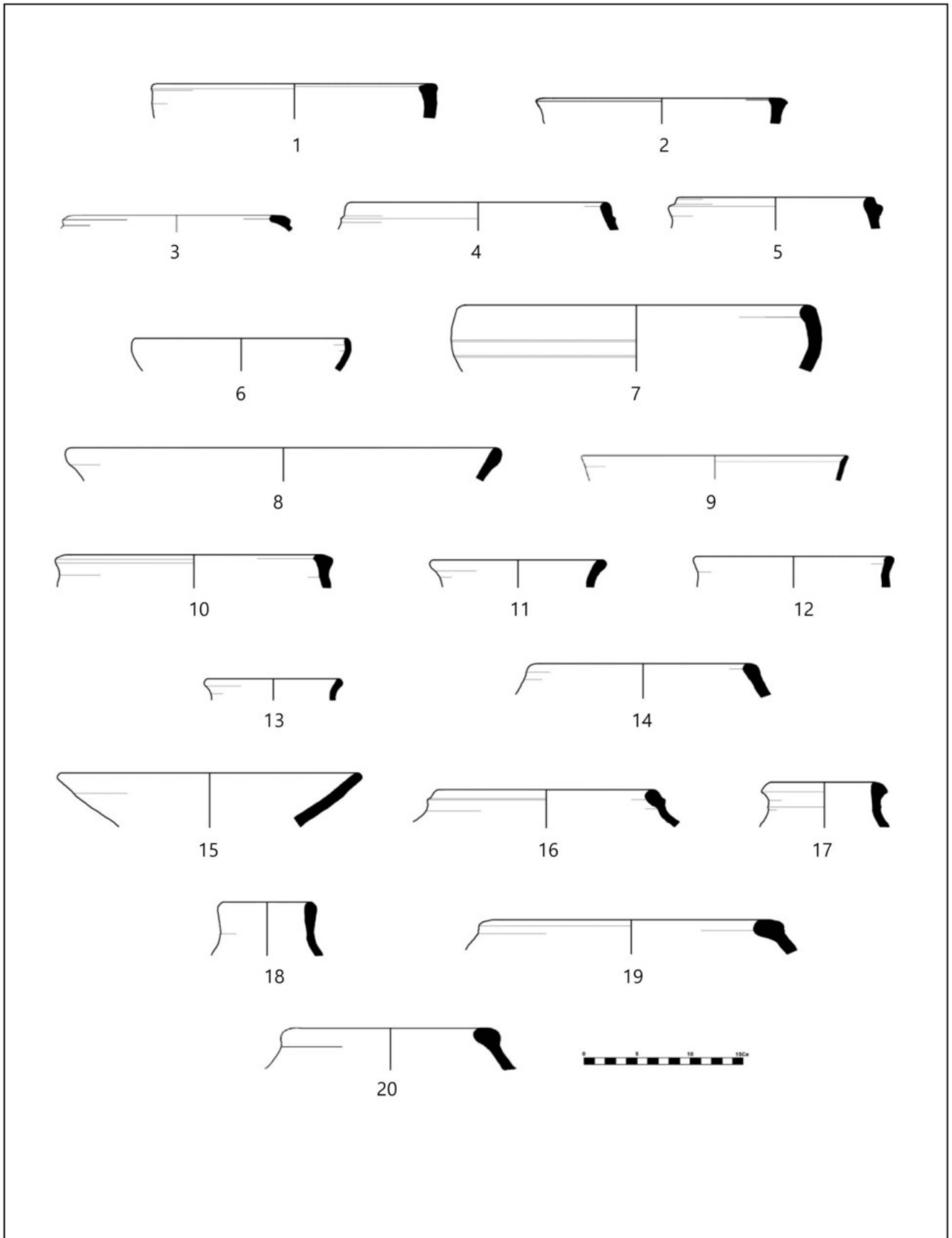
A third aim of the 2011 and 2012 seasons was to explore the cistern that was found on the south-west side of the temple complex in the western courtyard of Field A (**Fig. 4**). Although the cistern had been identified previously it had not been fully explored by the research team. Debris from the surface had been pushed into the opening and had collected on the floor. Some of the stones were part of the original building material used in the temple complex. Very little water was visible from the opening. The



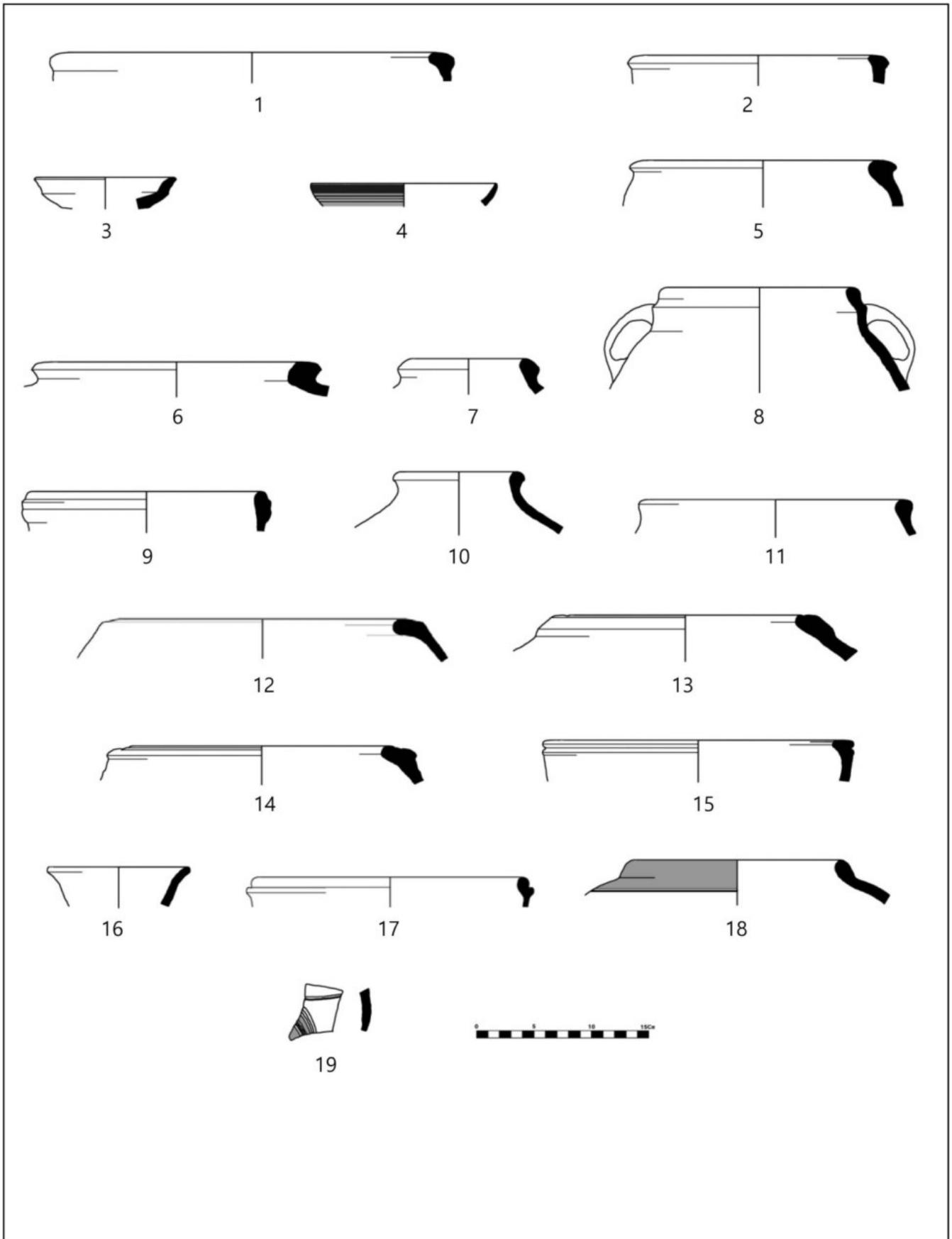
4. Temple complex map with artefacts showing a bull motif and their relative locations.



5a. Selected Iron II pottery from the 'Ataruz temple (Temple Phase I).



5b. Selected Iron II pottery from the Ataruz temple (Temple Phase II).



5c. Selected Iron II pottery from the Ataruz temple (Temple Phase III and Post-Temple Period).

Vessel/Type*	Origin**	Surface Color	Slip & Painted Decoration***	
5A.1	Cooking pot	A1.33	gray (10R 6/6)	no slip
5A.2	Storage Jar	A1.33	light reddish brown (5YR 6/4)	no slip
5A.3	Storage jar	A1.33	reddish yellow (5YR 6/6)	pink (EI; 5YR 7/4)
5A.4	Bowl	A1.27	pink (7.5YR 7/4)	very pale brown (EI; 10YR 7/3)
5A.5	Bowl	A1.23	reddish brown (2.5YR 5/4)	yellowish brown (E; 2.5Y 6/3)
5A.6	Bowl	A1.27	light red (2.5YR 7/8)	very pale brown (EI; 10YR 8/2)
5A.7	Bowl	A4.12	light red (2.5YR 7/8)	pink (EI; 5YR 7/4)
5A.8	Storage jar	A1.27	reddish brown (2.5YR 5/4)	pink (EI; 7.5YR 8/3)
5A.9	Bowl	A1.27	light red (10R 6/6)	pale red (EI; 10R 7/4)
5A.10	Bowl/plate	A1.23	light gray (10YR 7/2)	reddish brown (I; 2.5YR 5/4)
5B.1	Bowl	A1.24	reddish yellow (7.5YR 6/6)	no slip
5B.2	Bowl	A1.23	pink (7.5YR 7/4)	very pale brown (EI; 10YR 7/3)
5B.3	Krater	A1.23	reddish yellow (7.5YR 6/6)	no slip
5B.4	Cooking pot	A1.31	weak red (10R 5/4)	no slip
5B.5	Cooking pot	A1.23	strong brown (7.5YR 4/6)	no slip
5B.6	Bowl	A1.23	light gray (5Y 7/2)	no slip
5B.7	Bowl	A1.23	very pale brown (10YR 7/3)	no slip
5B.8	Bowl	A1.23	light gray (10YR 7/2)	no slip
5B.9	Bowl	A1.23	light red (2.5YR 7/8)	no slip
5B.10	Krater	A1.23	reddish yellow (5YR 7/6)	very pale brown (E; 10YR 7/3)
5B.11	Bowl	A4.9	light gray (10YR 7/2)	no slip
5B.12	Bowl	A4.9	light gray (10YR 7/2)	no slip
5B.13	Jug	A8.15	light gray (10YR 7/2)	no slip
5B.14	Krater	A8.12	reddish yellow (7.5YR 6/6)	pink (EI; 7.5YR 7/4)
5B.15	Bowl	A12.15	very pale brown (10YR 7/4)	no slip
5B.16	Cooking pot	A12.24	reddish brown (2.5YR 5/4)	no slip
5B.17	Storage jar	A12.24	pink (5YR 7/4)	pale yellow (E; 5Y 8/2)
5B.18	Storage Jar	A15.22	very pale brown (10YR 7/4)	no slip
5B.19	Storage Jar	A15.27	pale yellow (2.5Y 8/2)	no slip
5B.20	Krater	A15.22	gray (10YR 6/1)	very pale brown (E; 10YR 7/4)
5C.1	Krater	A7.11	pink (7.5YR 7/4)	pale yellow (E; 2.5Y 8/2)
5C.2	Krater	A7.11	very pale brown (10R 7/4)	no slip
5C.3	Bowl	A7.11	reddish yellow (5YR 6/6)	very pale brown (E; 10YR 8/2)
5C.4	Bowl	A7.11	red (10R 5/8)	reddish painted decoration (E)
5C.5	Krater	A7.11	very pale brown (10YR 8/3)	no slip
5C.6	Storage Jar	A7.11	very pale brown (10YR 8/2)	pale yellow (E; 2.5Y 8/2)
5C.7	Storage Jar	A14.12	very pale brown (10YR 8/3)	pale yellow (E; 2.5Y 8/2)
5C.8	Cooking Pot	A14.11	yellowish red (7.5YR 4/2)	no slip
5C.9	Cooking Pot	A14.11	yellowish red (5YR 5/6)	no slip
5C.10	Storage Jar	A14.18	very dark red (2.5YR 2.5/2)	light reddish brown (E; 5YR 6/4)
5C.11	Krater	A14.12	red (2.5YR 5/6)	no slip
5C.12	Storage Jar	A14.11	strong brown (7.5YR 5/6)	pink (E; 7.5YR 7/3)
5C.13	Storage Jar	A14.12	very pale brown (10YR 8/3)	pale yellow (E; 2.5Y 8/2)
5C.14	Storage Jar	A14.12	pink (7.5YR 8/4)	pale yellow (2.5Y 8/2)
5C.15	Bowl	A14.12	light red (2.5YR 6/6)	no slip
5C.16	Bowl	A14.12	light red (2.5YR 6/6)	pink (E; 7.5 YR 8/4)
5C.17	Cooking Pot	A14.12	pink (7.5YR 7/4)	no slip
5C.18	Storage Jar	A14.11	pink (7.5YR 8/3)	light reddish paint (E)
5C.19	Bowl	A14.12	reddish yellow (5YR 6/6)	reddish and gray paint (E)

Note. *Figure Number; **Field, Square, and Locus; ***E: external; I: internal.

purpose of this excavation was to determine the size and approximate age of the construction of the cistern and evaluate whether debris from the surface that had fallen into the cistern had any archaeological significance.

The fourth aim was to create an accurate map of the temple complex and determine the spatial relationship of the many outlying walls on the acropolis. Khirbat 'Ataruz is a large site where most of the excavation has focused on the acropolis, thus, the extent and nature of the outer limits of the site have not been fully investigated. Creating an accurate map using the Promark 3 GPS unit would provide a framework for exploring the relationship of the emerging buildings to the temple complex and allow for the creation of additional fields.

Field E: The Eastern Edge of the Temple Complex

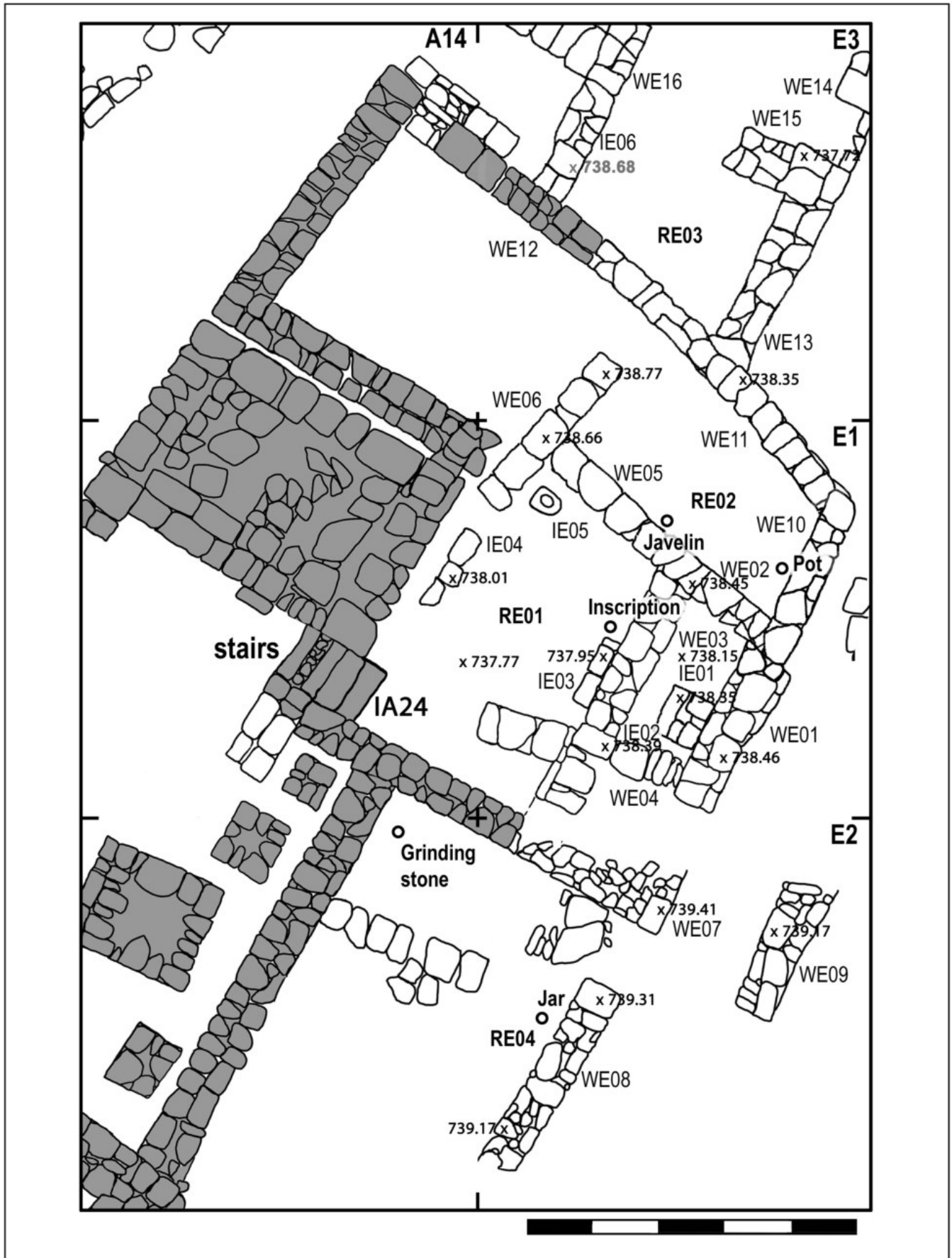
On the eastern side of the temple complex is a low platform with a small altar on top, which was discovered in 2010 and measures 0.70 m x 0.70 m (IE01-2). At the base of the platform, a stone step (IE03) was found with two small stone columns on either side. The first column had an inscription on one side that dated to the late 9th to early 8th centuries BC. The second stone column had a square shaped *abacus* incorporated into it with a shallow depression that might have been used to burn incense or hold torch-fire inside. The purpose of the 2011 / 2012 excavations was to determine the relationship between the platform and step and the nearby walls.

In 2011, three 6 m x 6 m trenches were opened to explore the eastern extent of the temple complex (Field E) and parts of the temple compound (**Fig. 6**). Excavations revealed an Iron IIA - Iron IIB courtyard (RE01) and a raised rectangular platform (WE01-04) that was built for cultic activities. On the south side a three-step staircase (IA24) was discovered that connected the subsidiary courtyard with the main central courtyard near the main sanctuary (**Fig. 4**). The staircase was the entrance for the courtyard when the platform altar was first built. Priests from the Iron IIA

period probably approached the platform from the central courtyard facing the rising sun. Later in the Iron IIB period, this entrance was blocked off in order to put a square fireplace or furnace in the corner. In addition, most of the staircase was covered with soil and incorporated into the earth-beaten floor. On the floor of the courtyard three large irregularly shaped flat stones (IE04) were found near the western wall directly in front of the platform and were probably used as offering tables. The floor, fireplace, and offering stones were all contemporary with the stone columns found in 2010. By the late 9th century BC the area was transformed into a partially enclosed courtyard (the so-called inscription column courtyard, RE01, ca 4 m x 5 m) surrounded on four sides by the platform and three walls and was probably entered through a narrow alley from the south-east (**Figs. 4, 6 and 7**). This courtyard was reused later in the late Hellenistic period.

The 2012 season concentrated on the architectural details located on the north and south side of the platform. Questions still remained regarding the broader architectural context of the inscription column courtyard (RE01) and its overall plan. While excavating Square E3, four walls of a rectangular room (niche room RE03, 3 m x 6 m; WE11-13, 15-16) were discovered on the north side of the inscription column courtyard (**see Figs. 4 and 8**). At the centre of the room was an arched niche (IE06) built into the western wall approximately 0.45 m x 0.60 m with a depth of 0.20 m.

A second, adjacent room (RE02, 2 m x 4 m) was found in Square A14 and in the north-eastern corner of Square E1. This room was divided in two by an east / west wall (WE06, **Fig. 9**), which was connected by a door (1 m wide). Excavation showed that this room, like the niche room (RE03), was originally built in the Iron IIA period and then later reused in the Late Hellenistic period, as a small lamp of Hellenistic date was found (**Fig. 10**). In this area, four earth-beaten floors dating to the Iron IIA - Iron IIB periods were also found. The earliest floor was made during the mid-Iron IIA period when the main sanctuary and its central courtyard were at peak usage. The wall (WE02,



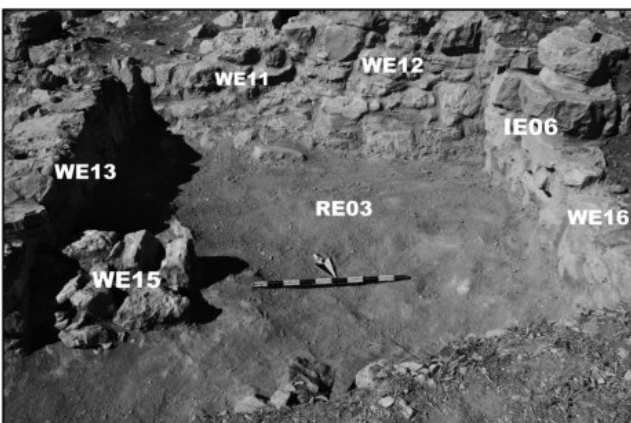
6. Field E diagram on the eastern side of the temple complex.

Fig. 6; WA43 [Ji 2011: **Fig. 4**]) associated with this Iron IIA floor was built in two courses with chink stones. Its stones were medium sized, relatively well dressed, and laid with much care. A later floor was added in the early Iron IIB period, where an iron javelin (**Fig. 11**) and complete cooking pot (**Fig. 12a-b**) were found in situ next to walls WE05 and WE02 respectively (**Fig. 6**). During this later phase, a different construction technique seems to have been adopted. The walls consisted of one row of large-sized boulders (e.g., WE05-06 and WE11). These two early walls were reused in the mid to late Iron IIB periods when residents also laid two earth-beaten floors above the earlier ones. During the 2007 season the project identified a Late Hellenistic floor in the area, which was similar to the Late Hellenistic earth-beaten floor found in the rooms in Square A21 (Ji 2011).

On the south side of the inscription column



7. Bongjae Kim investigates and excavates the alley to the south of the cultic platform in Square E1.



8. Facing south the niche room (RE03) in E3.

courtyard (RE01) Square E2 was also opened in 2011 (**Fig. 13**). The purpose of excavating this square was to determine the eastern extent of the temple complex and the southern extent of the inscription column courtyard. In addition, a small room (ca 1.5 m x 2.5 m) with a large grinding stone adjacent to Square E2 was excavated in 2007. Three walls made of chink and boulder construction were discovered. In the north-west corner, the southern edge (WE07) of the inscription column courtyard turned toward the north to form the back side of the altar platform. A second wall (WE08) and doorway running in a north / south direction were connected with the southern edge of the courtyard and altar platform. Several broken vessels of the Iron II period were found, including a cup / jar (**Fig. 14a**) and a juglet (**Fig. 14b**) near the doorway in room RE04. Two large stones lay on the floor next to the doorway but were not excavated. A third wall (WE09) on the north-east corner of the square may connect to a wall in Square E3.

Field F: The Northern Edge of the Temple Complex, 2012 Excavations

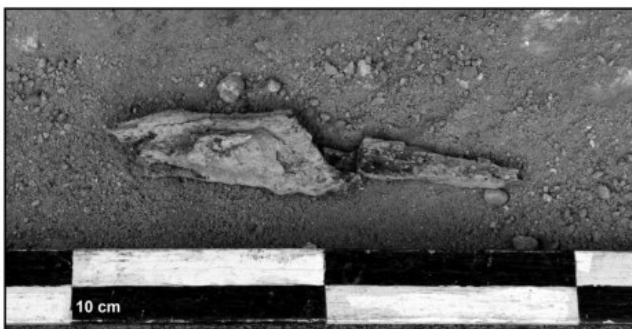
The 2012 season at Khirbat 'Ataruz included the opening of a new field (Field F) on the north side of the temple complex where the acropolis ends and the hill begins to slope downward in a series of possible terraces (**Fig. 3**). In this area, the tops of several walls were visible above the surface and their close proximity to the north side of the temple area suggested that these structures might mark the northern extent of the temple complex. Like many of the other buildings on the acropolis, it was thought that these buildings might be associated with some type of cultic practice. Alternatively, these buildings could be related to domestic dwellings, industries or defensive structures. Therefore, the main purpose of opening Field F was to examine the edge of the temple acropolis and determine its northern extent, as well as to look for a possible entrance that may have led into the complex. In addition, since there are several walls in the area that could represent fortifications, or possibly



9. Wall WE06. Facing east. Wall WE06, compartment wall that dividing room RE02. Note the wall has at least two phases.



10. Hellenistic lamp with scrolled design found in E3.



11. In situ bronze spear point found in E1.

other outlying domestic buildings, a secondary purpose for opening this field was to examine these buildings and their relationship to the temple acropolis.

Four squares (F1 - F4) were opened in Field F; three at the edge of the terrace (F1 - F3) and one (F4) straddling the edge and the northern downslope (**Fig. 3**). The initial probes in F1 - F2 did not reveal any architecture and consisted of topsoil and stone rubble. These squares were closed and will be reopened at a later time. However, F3 - F4 revealed visible wall lines running in a north / south direction and were intersected by an east / west wall line.

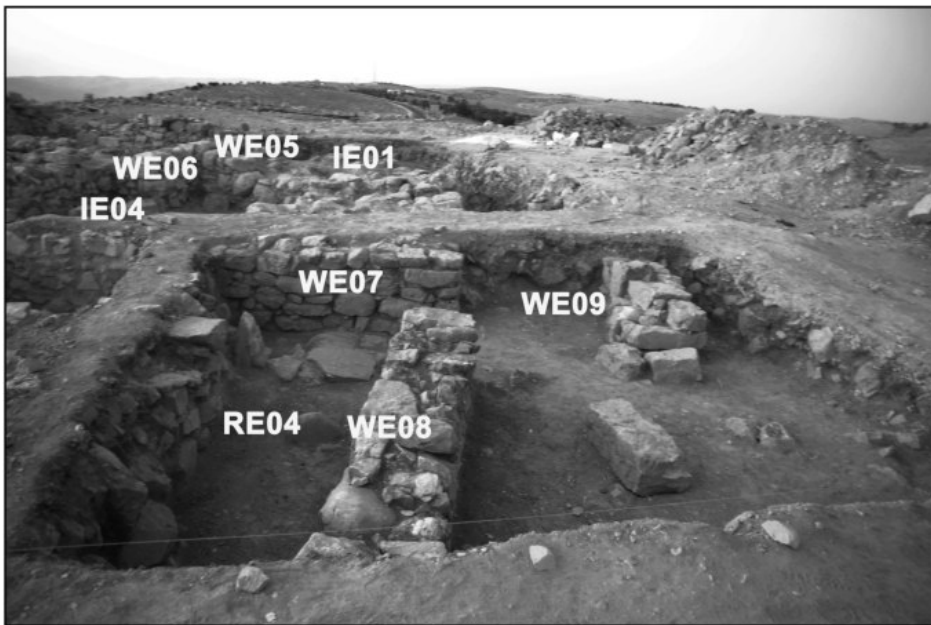
Excavation in Square F3 revealed two north / south walls and three east / west walls (**Fig. 15**). A central wall (WF05) continues north / south into Square F4, dividing the square into two rooms (RF01-02). On the east side, RF01 is approximately 2 m x 4 m and consists of four walls WF01-04. Wall WF02 does not extend the full length of the room and may have been truncated by a doorway on the eastern side. Iron IIB pottery was found near the walls and on the floor associated with the walls.

A careful examination of the walls in room RF01 revealed several possible phases (**Fig. 16a-d**). The earliest phase (WF01b-04b) consisted of large rounded unworked boulders 0.5 m - 0.6 m x 0.4 m - 0.5 m (**see Fig. 16e-h**) with small chink stones. Although the stones in wall WF04 were laid out evenly to form a low wall, the stones in walls WF01 - WF03 do not appear to have been laid flat. Some of the stones from walls WF02 - WF03 were found inclined at odd angles between 25-27 degrees while stones in WF01 were uneven. A slight gap was found between the larger stones with the debris that filled the gaps. This would suggest that originally the stones were stacked on top of each other in a wall or possibly a pillar structure that may have fallen over in antiquity.

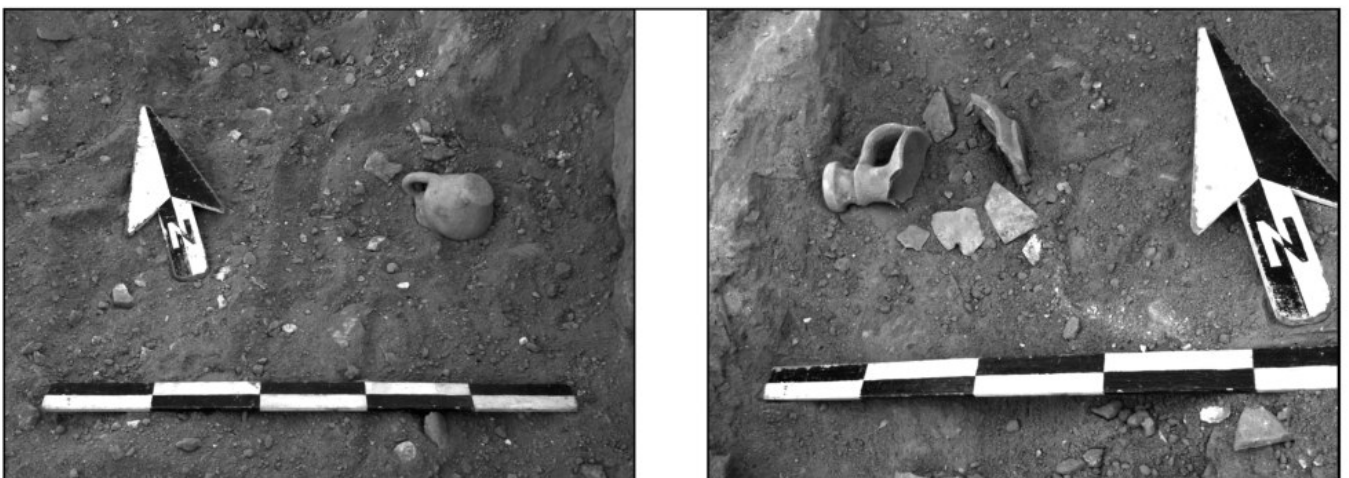
After a period of abandonment, new stones were used to fill in the gaps, uneven surfaces were levelled and the wall reshaped. At this time, the half wall mentioned above (WF02, **Fig. 16b**



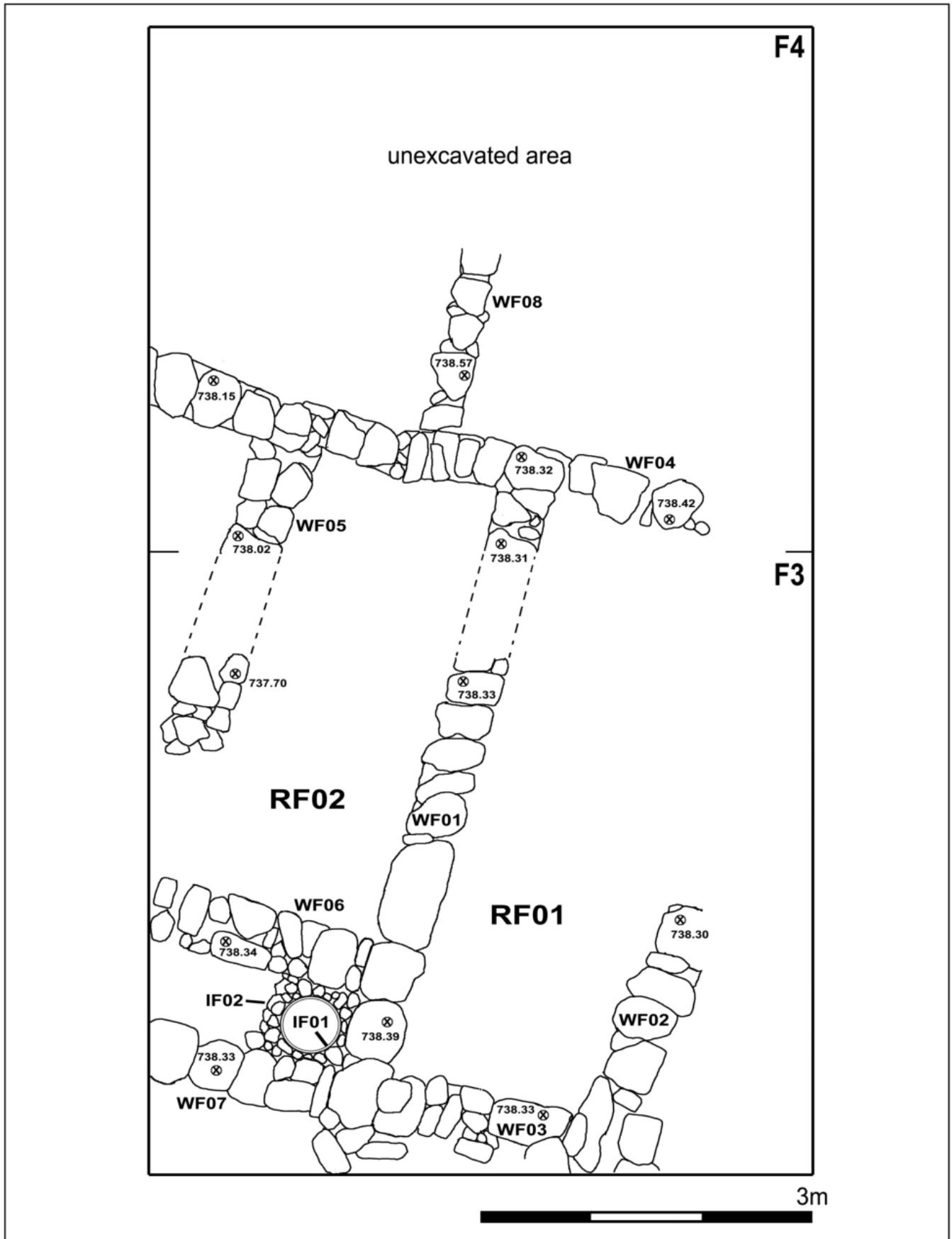
12a. E1 cooking pot diagram, b. In situ cooking pot found in E1.



13. Facing east. Walls WE07-09 and room RE04 in E2.



14a. Cup found in situ near doorway in E2, b. Broken juglet found in E2 near doorway.



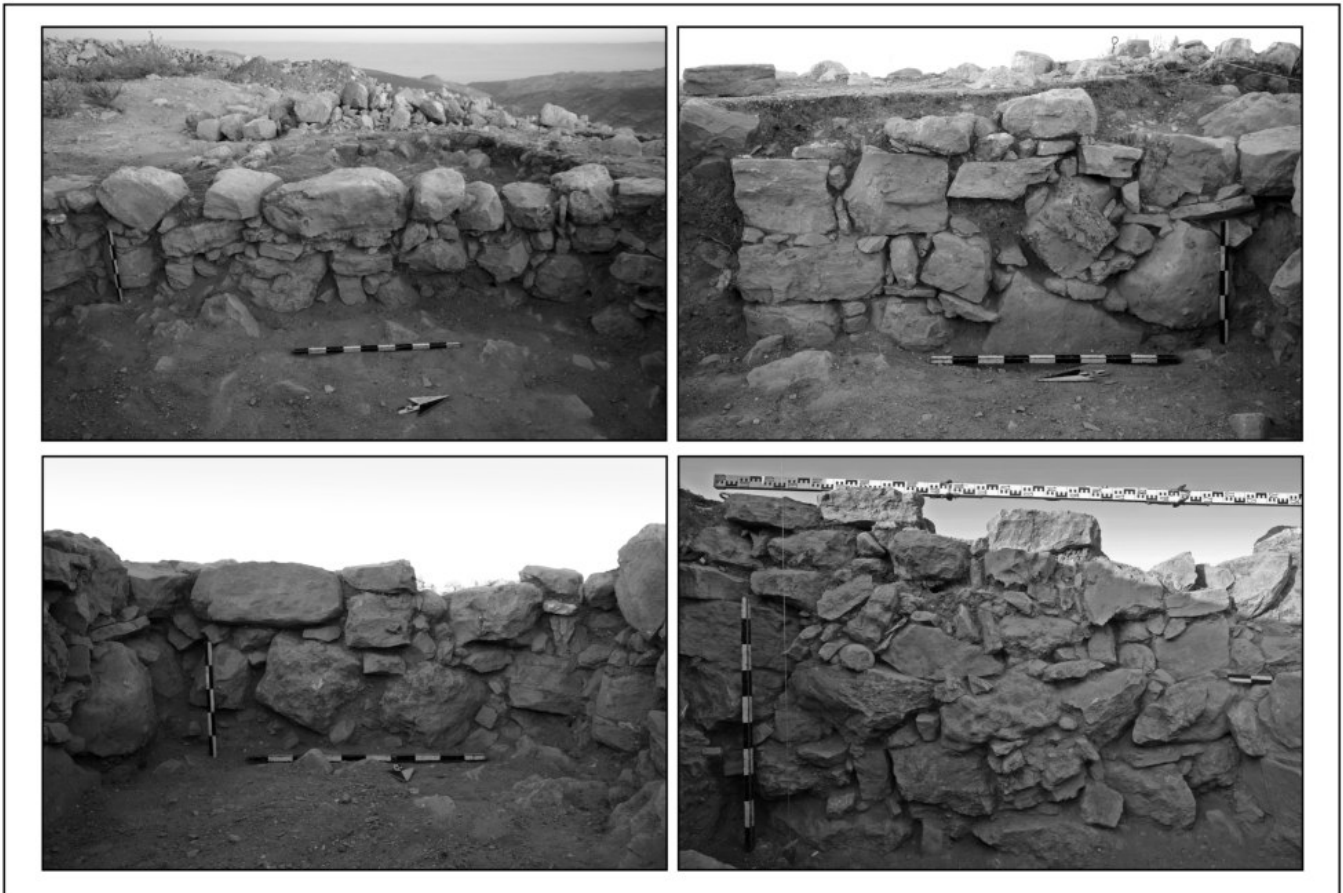
15. Field F diagram on the north side of the temple complex.

and 16f) was rebuilt using smaller square and rectangular shaped stones approximately 0.15 m - 0.25 m x 0.20 m - 0.30 m on top of the rubble of the earlier phase (WF01b - WF04b). These stones were probably worked or chosen for their square shape. A second similar half wall (WF01) was also built on top of the fallen debris of WF01b. In this phase, both walls WF01 and WF02 were approximately 2.5 m - 3.0 m long and ran parallel to each other with squared-off edges that formed an opening or niche not unlike a gate structure. In a later sub-phase the gap between the end of wall WF01 and WF04 was filled in with additional stones sealing off room RF01 from room RF02. This sub-phase (RF01a.1) was probably contemporary with the jar installation discussed below (IF01).

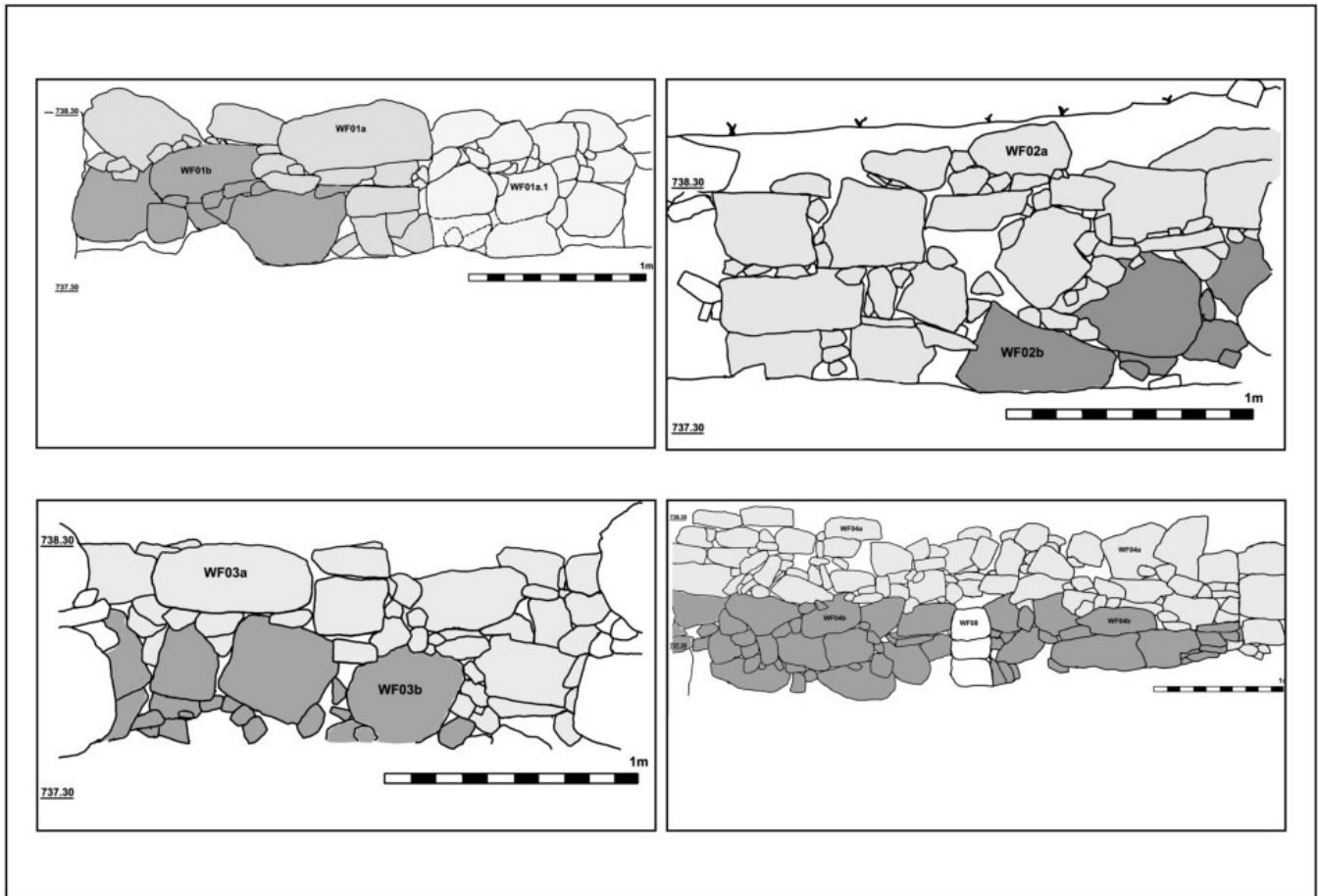
The dimensions of room RF02 are uncertain as the western portion of the room may lie in another square. Room RF02 probably measures 2 m x 4 m and consists of three complete walls

(WF01, WF04 and WF06) and one partial wall (WF05). It also appears that wall WF05, on the western side, does not extend southward for the full length of the room but it seems to be the same length as wall WF02 in room RF01 (Figs. 15, 16a and 16e). This may indicate an entrance to the room. Although the south wall of room RF01 bonds to the central wall (WF01), the south wall of WF05 does not. Instead, it abuts the central wall and may belong to a later building phase. Finally, the length of room RF02 is shorter than room RF01 because an additional wall (RF06) was added to form the northern wall of an enclosure (see Figs. 15 and 17).

The most interesting discovery was found in room RF02 (Fig. 16). Wall WF07 was found abutting wall WF01, parallel to wall WF06. This construction formed a very small room, approximately 1 m wide, which extended into the western balk. Pottery found sealed against this enclosure included a small lamp and suggests



16a. Facing west. Wall WF01 in room RF01, b. Facing east, face of wall WF02 in room RF01, c. South face of wall WF03 in room RF01, d. North face of wall WF04 in room RF01 and.



16e. Diagram of the west face of wall WF01 in room RF01 showing phases WF01a and b and subphase WF01a.1., f. Diagram of the east face of wall WF02 in room RF01 showing phases WF02a and b., g. Diagram of the south face of wall WF03 in room RF01 showing phases WF03a and b., h. Diagram of the north face of wall WF04 in room RF01 and RF02 showing phases WF04a and b and wall WF08.

that it was made sometime during the mid-8th century BC (**Fig. 19**). An area next to wall WF01 was outlined with small stones to form a stone lined pit (IF02) in which a large Iron II collared-rim storage jar (IF01, **see Figs. 15 and 20**) was placed. The bottom of the jar was buried into the ground and soil was backfilled to keep the jar upright. Additional stones were added around the jar to a height of approximately 0.5 m. Soil and stones were backfilled to a level just below the jar handles. When the jar was initially discovered, the portion of the jar above the handles was missing.

The bottom of the jar was filled with approximately 10 cm of compacted soil. On top of this soil the upper shoulders of the jar and one third of the rim were found surrounding a stone (**Fig. 21**). Soil filled the space and a flat stone was placed horizontally,

directly above the sherds, creating a separate space below. Additional stones were stacked vertically on top of the edges of the horizontal stone, creating a lining for the jar, with two courses of stones on the western side and one large stone on the southern side (**Fig. 22**). The remaining two thirds of the rim and other body sherds were found in the soil fill. The sherds were not resting directly on the stones. Another stone was placed horizontally above this area, creating another separate space below it. This top stone was covered with soil up to the edges of the broken jar. Everything was sealed and undisturbed when the jar was discovered and there were no seeds, objects or unrelated additional material found within it.

Finally, in Square F4 another wall (WF08) running north / south was found abutting wall WF04 (**see Fig. 15**). Three courses were



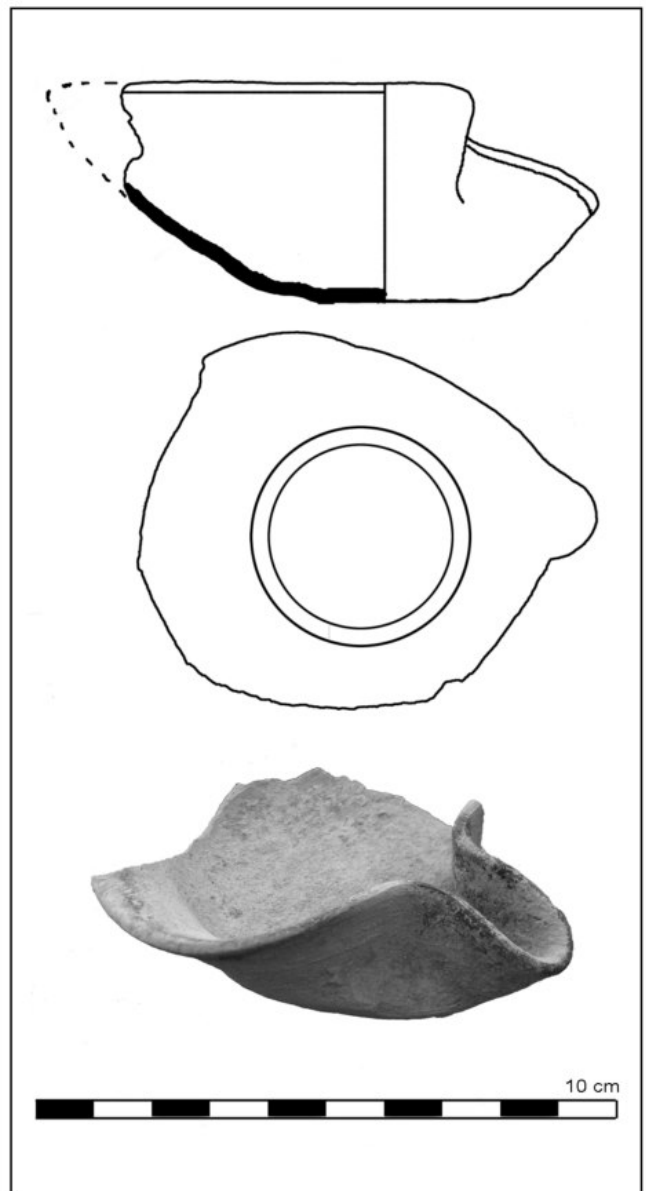
17. Facing north. Final photo of Square F3 showing rooms RE01 and RE02.



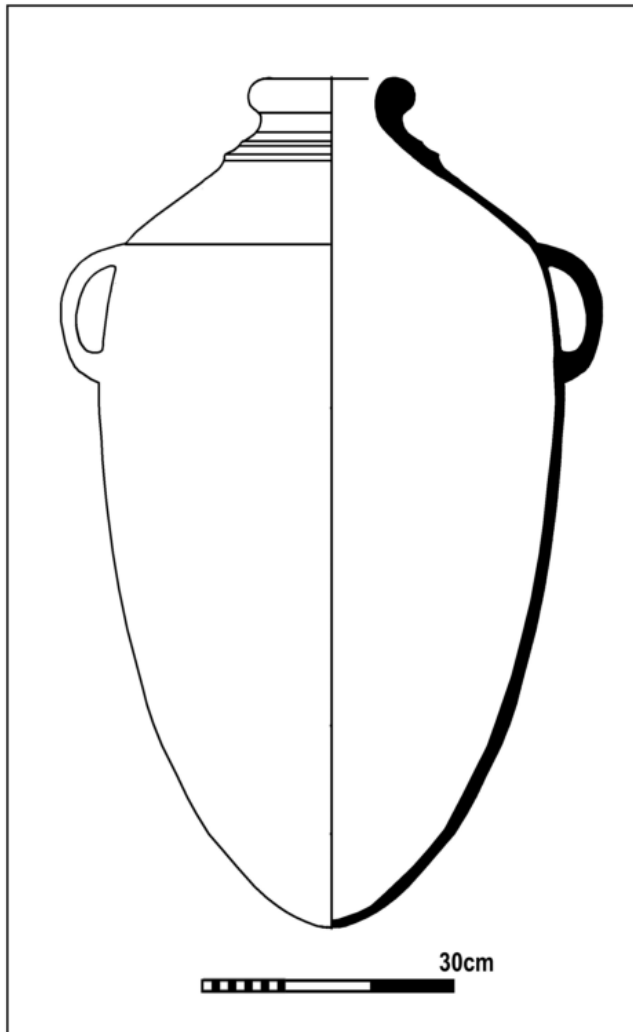
18. Christine Chitwood discovers a nearly complete Iron IIB storage jar in Square F3.

excavated and a possible compacted earthen floor was found sealed against this wall (Figs. 23, 24 and 25). It is uncertain whether this wall belongs to the same phase as rooms RF01 and RF02. It may represent an earlier building phase or possibly a lower terrace of buildings sharing a common wall. Further excavation in adjacent squares should reveal the nature of this wall.

Although it is too early to determine the phasing and the function of the rooms that have been recently discovered in Field F, it appears that the jar installation (IF01 - IF02) was created some time during the Iron Age IIB period. The low collar on the jar and the lamp that were found the laying against it suggest that the room was occupied between the mid to late 8th century BC (see Figs. 19 and 20). These rooms were probably used for domestic purposes, either for storage or possibly for food preparation. However, since rooms RF01 and RF02 do not share a common doorway and could not be accessed on the main floor in the later phase, they must represent separate buildings (see Figs. 15 and 17). The entrances to each room must be found in adjacent squares and these two rooms may have had entirely different functions. Further excavation to the east and west should help clarify the purpose of these two buildings. In future seasons, we plan to continue excavating to floor level in Square F3, expand Square F4 to its north balk, re-open Square F2 and possibly open squares west of



19. Iron IIB lamp found in the fill next to the Iron IIB storage jar in Square F3.



20. Diagram of Iron IIB storage jar found in Square F3. The jar was restored at ACOR and now resides in the Madaba Museum holdings.

Square F3 - F4 and north of Square F2.

Field A: Cistern

On the south side of the temple complex near the western courtyard a cistern was dug in antiquity (see Fig. 4). According to the residents of the area the cistern has been used for generations. The local tribe watered its flocks from the cistern and used the water for cooking. Until recent years, the Jordanian workers at the site would drop a pail down into the cistern to fetch water for tea until they found a snake in the bucket. One of the workers described how his father had plastered the walls sometime in the

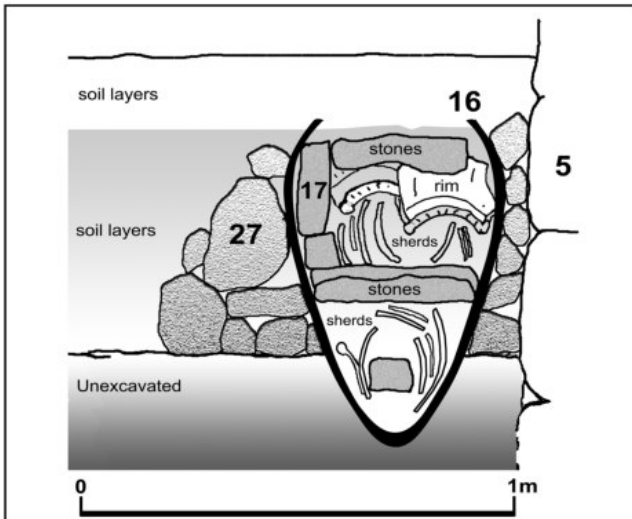
late 1950s so that it could hold more water. They also said that in recent years there had been less water in the cistern and subsequently the cistern has been sealed in order to allow further study and prevent any accidents.

Exploration of the cistern during the 2011 - 2012 seasons revealed that the opening of the cistern is roughly square in shape, approximately 1 m wide with a shaft that descends approximately 3.5 m into an oval-shaped cistern chamber (Figs. 26 and 27). The chamber measures approximately 5 m x 6 m with a ceiling height of approximately 3.5 m.² The walls of the chamber are covered with a recent layer of cement plaster over ancient plaster confirming the local story. The floor of the chamber is covered with debris that forms a mound just below the entrance. Among the debris was a large stone approximately 0.4 m x 0.4 m x 1.2 m that was hollowed out on one side to a depth of 1.5 cm - 2.0 cm in a convex shape. The stone resembles a feeding trough, but it was too dangerous to examine it closely or to remove it from the cistern for further study. The cistern chamber was filled with approximately 0.2 m - 0.3 m of water, of which the origin is currently unknown. Evidence from the walls would suggest that the cistern has held as much as 1.5 m - 2.5 m of water during the winter months.

The most remarkable discovery was made in the entrance shaft of the cistern at the end of the 2011 season. Approximately 3 m down from the opening and just above the point where the cistern chamber opens up, a bull figure was found on the wall of the shaft (Fig. 28). The bull figure measures approximately 0.5 m x 0.6 m with a brownish patina covering the wall (Fig. 29). A circular-shaped depression ca 10 cm - 15 cm in diameter rests between the horns on the top of the head and another similar depression is below the right ear. A third example may be below the left ear as well. Each depression seems to be part of the natural stone but further study is needed to evaluate whether tools were used to

2. Since a detailed documentation of this cistern and its installations are planned for a separate future article,

only a brief presentation of the cistern is provided here.



21. Diagram of the contents found in the Iron IIB storage jar and the installation stones supporting the jar. The rim and body sherds were found inside the jar.



22. Stone lining of the Iron IIB storage jar from Square F3.



23. Facing west. Final photo of Square F4 showing the north wall of rooms RE01-02 that was found in Square F3 and wall WF08 on the north side.

carve their shapes. The circular shape above the horns resembles a solar disk found in Egyptian drawings of the Apis bull or even the goddess Hathor. The shape of the face is nearly identical to those on the bull storage jar from the main sanctuary room (Ji 2012: Tf 44b-45). It is also reminiscent of the bull figurine that was found in the Central Courtyard in the 2010 season (see Fig. 4; Ji 2012: Tf 46).

In addition, while we were staring up at the bull we noticed that sunlight from the opening at the top of the cistern shone directly on to the face of the bull at 12:00 pm on June 23, 2011 coinciding with the summer solstice. Within minutes the light was gone. Although the cistern may have been used for centuries, based on the patina and the similarities between the cistern bull and other bull figurines found at the site, it appears that the early inhabitants of Khirbat 'Ataruz used the natural rock and possibly plaster to form an image of a bull on the side of the cistern wall for cultic purposes. Further study is needed to evaluate its iconography and patina.

During the 2012 season workmen began to clear away some of the larger stones on the cistern floor (Fig. 30). The aim was to remove the debris and excavate the inside of the cistern in the hope of finding the bottom and possibly its water source. Some progress was made but it will likely take several seasons to clear out the remaining debris. In addition, precise measurements were taken and an artist, Stefanie Elkins, was brought in to create a finished drawing of the bull figure, which will appear in a future publication (Figs. 31 and 32).

GPS Mapping

Most of the excavation squares at Khirbat 'Ataruz were created from a central point using 'dead reckoning' and a compass. Many excavations have found that using this method can cause 'grid drift.' As squares are added, the farther the new squares are away from the original point of origin the greater the chance that the new squares will begin to drift away from the central line of reckoning where the squares started. Even small errors as little as 5 cm -

10 cm can over a distance of 100 m misalign future squares by as much as 10 degrees. In addition, sometimes these errors are drawn into the grid or topographical map and in subsequent seasons the errors are repeated until they become published. These mistakes make it difficult to create 3D renderings, architectural models and topographical maps that include known architecture. In order to prevent this problem, squares for the 2008 season at Khirbat 'Ataruz were laid out using a Promark 3 GPS base station and rover along the Palestinian grid with the help of Matthew Vincent. That season additional squares were added on the south side of the temple complex.

In 2012, the Promark 3 GPS base station and rover was employed to accurately map out the walls of the temple complex and other walls on the site. The base station was set up on the edge of the modern cemetery and elevation points were taken along the tops of the walls. The Promark 3 recorded each individual point and a topographical map was generated of the main excavation area including the elevation of each point (Fig. 33). This GPS map was used as an overlay to create a new architectural drawing of the temple complex with pre-existing drawings of the site (see Fig. 4). As predicted some grid drift had taken place on the eastern edge of the complex, however, this slight deviation was corrected and the new drawings reflect the most accurate representation of the temple complex of the Iron Age. In addition, a walking survey was done along the tops of walls outside of the excavation area. GPS points were measured and photos were taken of prominent walls along the perimeter of the site (Figs. 33 and 34). Finally, a basic 3D model was created using the GPS points and the new architectural drawings. Using Google Sketchup, the walls of the site were added to a Google Earth map of the area to give an aerial view of the temple complex within its geographic context.

Female Figurine

While taking measurements and shooting photographs of the walls along the perimeter, a small broken fragment of a female torso was found (Object



24. Facing south. Final photo of Square F4 showing walls WF04 and WF08 in the foreground and additional walls in Square F3.



25. Facing east. Wall WF08 abuts wall WF04.



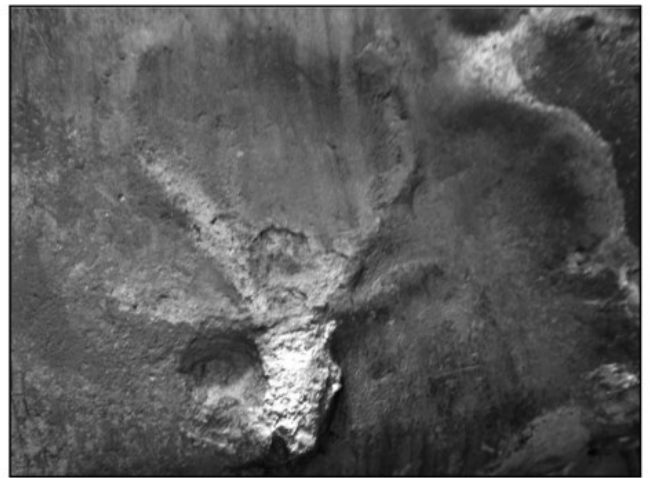
26. Abelardo Rivas entering the Iron Age cistern in 2012.



27. Looking up toward the opening of the cistern. Note the large stones that form the entrance.



28. Chang-Ho Ji discovering the bull carved on the wall of the cistern in 2011.



29. The bull carved and possibly plastered onto the wall of the cistern. Note the horns curve inward and the circular depressions between the horns and below the right ear.

no. ATZ 12-014). The figurine measures 4 cm x 5.5 cm (**Fig. 35**). The head is missing and the lower half is broken off just below the abdomen but the arms, hands, belly and a partial breast are clearly visible. There is no evidence of any clothing (*i.e. naked goddess figurine*) and the abdomen appears to be distended showing a prominent girth that may represent a sign of fertility and / or pregnancy (Lewis 2005). The arms are bent and the hands appear to be clutching a flat disk to her chest, which may be a loaf of bread or possibly a musical instrument³. At least three fingers are visible and there may be striations along the arms, possibly outlining some type of jewelry. The back is slightly convex with no distinguishing features like many mold-made figurines. The manufacture is

typical of Iron Age IIB figurines with a buff or slightly reddish-coloured exterior and a grey core. The top shows signs of weathering and the greenish colour on the edges suggest that the object was exposed long enough for some type of vegetation to cause a slight discoloration. The bottom was also broken off, but it does not show the same signs of weathering found on the top. Since the figurine was found near the modern cemetery it may have been exposed during a recent burial.

Similar figurines are found throughout Transjordan including one from Tall Hisban⁴. In particular, the 'Ataruz figurine bears a striking resemblance to one that was found at Tall Jalul⁵. Both female figurines have bent arms clutching the chest and a distended

3. For a discussion on female terracotta plaque figurines clutching flat bread or a musical instrument see Keel and Uehlinger 1998:164-167; Sugimoto 2008: 67-87.

4. Object 2826 in Ray 2001: 108, Pl. 5.9.

5. Object J0784 in Gane, Younker and Ray 2010: 189 and Pl. 6.



30. Jerry Chase assisting the workers clearing the inside of the cistern of debris.

the Jalul figurine and others like it are generally found in a domestic context. The discovery of the 'Ataruz female figurine suggests that a domestic cult involving female figures was present at Khribet 'Ataruz in addition to the cultic activities taking place in the main temple complex. Indeed, this discovery may point to where some Iron Age domestic buildings might be found. In addition, the present female terracotta molded figurine is significant because it is the only female figurine that has been found to date in the Khirbat 'Ataruz excavations. All other figures found in and around the temple complex have been male including the model shrine figures as well as other small figurines. Even the animals appear to be male including the various bull figures and the lion figure (Ji 2012: 211-212 and Taf. 460).

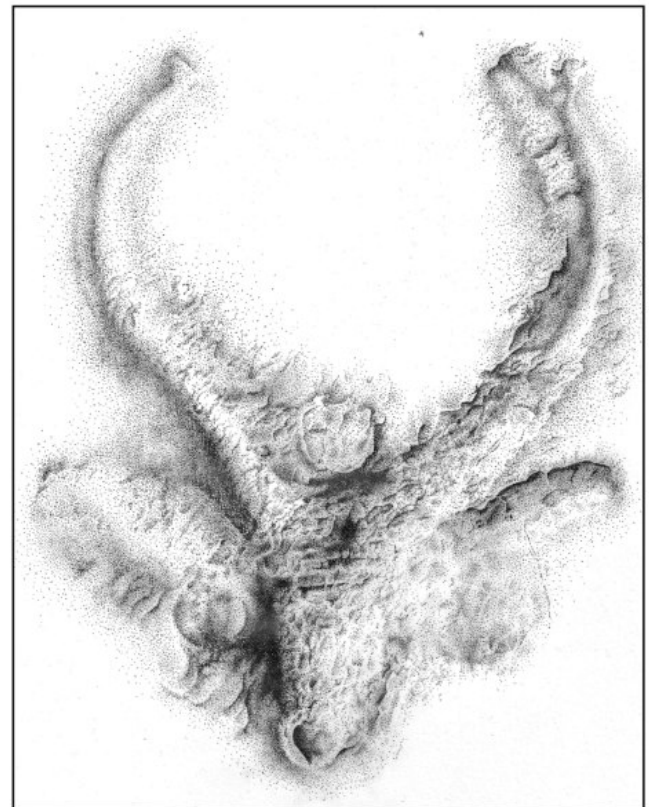
Conclusions and Future Excavation Goals

The excavations at Khirbet 'Ataruz continue to uncover Iron Age II remains. The 2011 - 2012 excavations in Fields E and F along the northern and eastern outskirts of the 'Ataruz

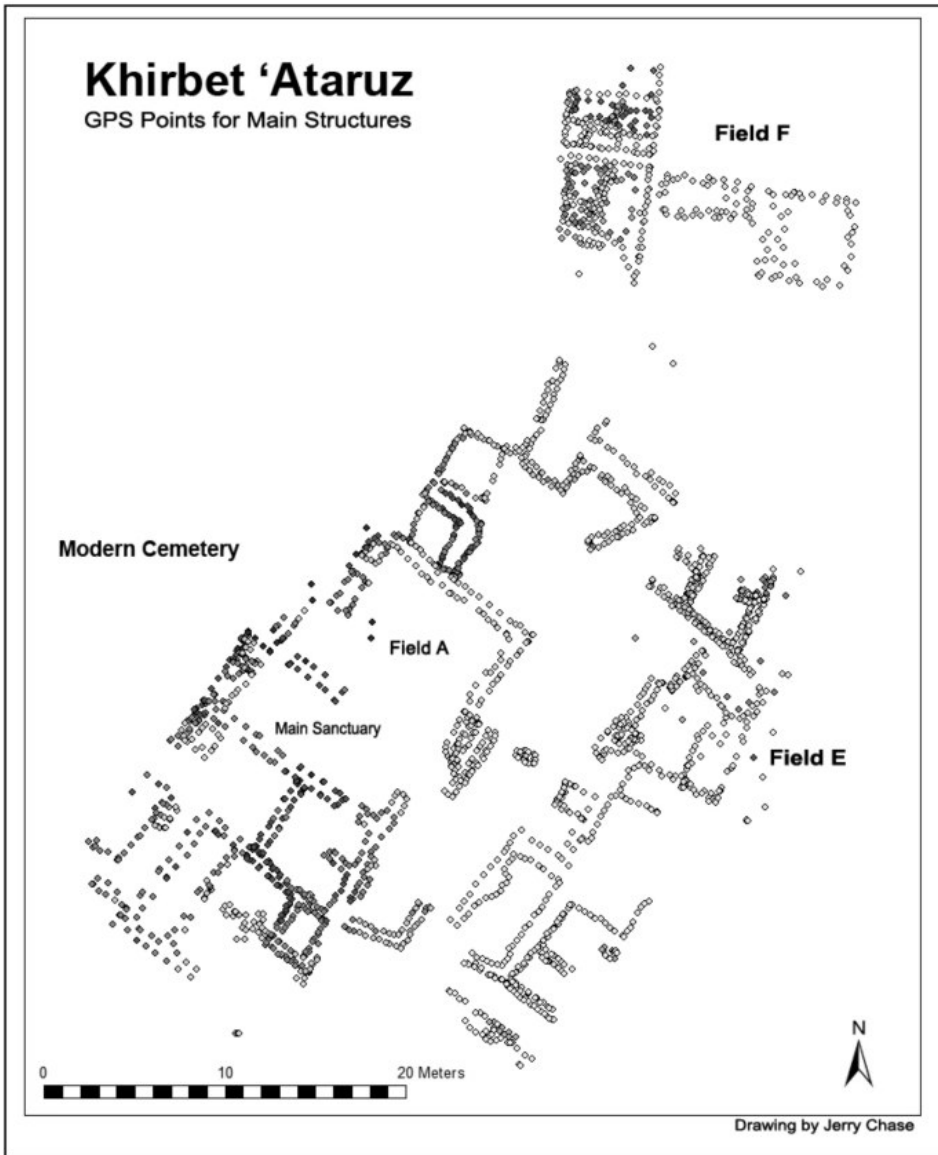


31. Stefanie Elkins preparing the drawing of the bull in the cistern, and other artifacts.

abdomen. Although there are some differences, these similarities suggest that the lower half of the 'Ataruz female figurine may have had shaft-style legs and no prominent feet. Moreover, this figurine appears to be holding a round flat disk. Finally,



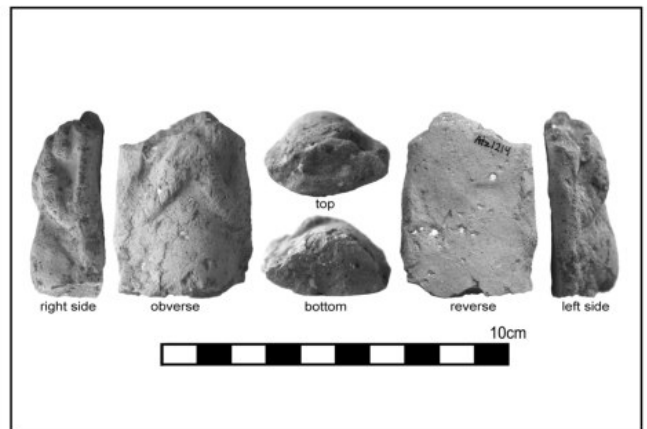
32. Drawing of the bull in the cistern by Stefanie Elkins.



33. Map created from the GPS points taken in Jerry Chase's survey. The points show where the major walls stand and were used to adjust the architectural drawings. Note Fields A, E and F are indicated.



34. Facing south. Perimeter wall on the western slope of the tell.



35. Small female votive figurine with distended abdomen and two hands clutching a flat disk.

temple compound have uncovered important buildings and cultic installations. In particular, the discoveries from Fields A and E established a date for the inscription column, its relationship to the altar, and the nature and chronology of the inscription column courtyard. Ceramics from this courtyard and its associated platform point to the Iron IIA period for their construction and continuous use into the Iron IIB period. The rooms on the north side of the inscription column courtyard also appear to have originated in the Iron IIA-IIB periods but they were later used during the Hellenistic period. In addition, the buildings in Field F confirm that the temple complex continued to be expanded during the Iron IIB period, even though the purposes of these buildings require further excavation.

Future excavations will include continued exploration of the temple complex in Fields A, E, and F, a thorough examination of the cistern, and an evaluation of the southern fortifications.

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