

**PRELIMINARY REPORT OF THE 1994 SEASON OF THE
MADABA PLAINS PROJECT: REGIONAL SURVEY,
TALL¹ AL-'UMAYRI, AND TALL JALUL EXCAVATIONS**
(June 15 to July 30, 1994)

RANDALL W. YOUNKER
Andrews University
Berrien Springs, MI 49104

LAWRENCE T. GERATY
La Sierra University
Riverside, CA 92515

ØYSTEIN LABIANCA
Andrews University
Berrien Springs, MI 49104

LARRY G. HERR
Canadian Union College
College Heights, AB T0C 0Z0

DOUGLAS CLARK
Walla Walla College
College Place, WA 99324

A fifth season of archaeological research was undertaken by Andrews University in the Madaba Plains region of Jordan during the summer of 1994. This season La Sierra University, the Levant Foundation Poland, and Cincinnati Bible College and Seminary joined Andrews University, Canadian Union College, and Walla Walla College in sponsoring the Madaba Plains Project.² Our international team consisted

¹New transliteration rules issued by the Department of Antiquities of Jordan have changed the spelling of Arabic "tell" to "tall." We have adopted this new rule in this article for proper site names since this is how these place names will now appear in scholarly literature. However, since "tell" is so widely used in English as a noun referring to mounds of archaeological debris, we shall continue to use this common spelling when the generic sense is intended.

²Special thanks are extended to the major sponsoring institutions. Thanks are also extended to the former Director-General of Antiquities, Dr. Safwan Tell, for the support he provided this season, and Department of Antiquities representatives Rula Qussous and Adeb Abu Shmais. Dr. Kamal Fakmawi, principal of the UNRWA-sponsored Amman Training College, and his staff again graciously opened their facilities to us for our base camp. In addition, we wish to extend our sincere gratitude for the continued support received from the land owners: businessman/scholar Dr. Raouf Abujaber of Tall el 'Umayri and General Acash es-Zeben of Jalul.

The American Center of Oriental Research (ACOR), through the good offices of their staff and facilities, provided their usual excellent support while we were in the field; special thanks to Dr. Patricia Bakai and Dr. Pierre Bikai.

of over 100 archaeologists, students, and volunteers and over 40 Jordanian specialists and workers.³ This season the Madaba Plains Project continued the three major field research components that were undertaken during the 1992 season. These components included regional survey (including some hinterland excavations), excavations at Tall Jalul, and excavations at Tall al-'Umayri. Once again, we refer the reader to the preliminary reports published in *AUSS* for a description of the projects, research objectives, and previous results.⁴

1. Regional Survey

As in previous seasons, the hinterland within a 5-km radius of Tall al-'Umayri continued to be studied by means of small-scale excavations and intensive surface surveys⁵. Excavated were an EB IB megalithic

The directors for the project this season continued to be Lawrence T. Geraty, Senior Project Director; Larry G. Herr, Director of the Tall el 'Umayri Excavations; Øystein S. LaBianca, Director of the Regional Survey; and Randall W. Younker, Director of the Tell Jalul Excavations. Douglas R. Clark was Director of the Consortium. Mark Ziese represented the Cincinnati Bible College and Bogdan Dabrowski was director of the Levant Foundation Poland.

³To all the staff and volunteers, our gratitude for making these results possible. Ralph Hendrix, Trudy Stokes, and Randall Younker served as dig administrators at the Institute of Archaeology during the early planning stages of this season's expedition. Philip Samaan served as camp administrator in Jordan. Lloyd Willis served as camp chaplain and Paul Buchheit as camp handyman. Leila Mashni served as head cook. Sherilyn Samaan was the camp nurse. Pottery registrars were Stephanie Merling and Gillian Geraty. Processing of small finds was supervised by the Objects Registrar, Elizabeth Platt. Photography was directed by Ron Graybill. Objects were drawn by Stephanie Elkins, Rhonda Root, and Brian Manley. Mark Ziese and Valentin Gligirov served as draftsmen/architects for Tall al-'Umayri and Jalul. The surveyor was Abbas Khammash.

⁴See Lawrence T. Geraty, "A Preliminary Report on the First Season at Tell el-'Umeiri (June 18 to August 8, 1984)," *AUSS* 23 (1985): 85-110; Lawrence T. Geraty, Larry G. Herr, and Øystein S. LaBianca, "The Joint Madaba Plains Project: A Preliminary Report on the Second Season at Tell El-'Umeiri and Vicinity (June 18 to August 6, 1987)," *AUSS* 26 (1988): 217-252; Randall W. Younker, Lawrence T. Geraty, Larry G. Herr, and Øystein S. LaBianca, "The Joint Madaba Plains Project: A Preliminary Report of the 1989 Season, Including the Regional Survey and Excavations at El-Dreijat, Tell Jawa, and Tell el-'Umeiri (June 19 to August 8, 1989)," *AUSS* 28 (1990): 5-52; Randall W. Younker, Lawrence T. Geraty, Larry G. Herr, and Øystein S. LaBianca, "The Joint Madaba Plains Project: A Preliminary Report of the 1992 Season, Including the Regional Survey and Excavations at Tell Jalul, and Tell el-'Umeiri (June 16 to July 31, 1992)," *AUSS* 31 (1993): 205-238.

⁵Øystein S. LaBianca (Andrews University) continued to direct the hinterland survey, aided by five teams:

burial, an EB IV "cemetery," an MB IIC cave-tomb, a 6th-Century B.C.E. rural complex, and an Early Islamic inscription cave (Khirbet Rufeis). Surveys were also conducted of 'Umayri East and 'Umayri North, and a random square survey was begun in the territory around Jalul.

EB IB Megalithic Tomb (Dolmen)

This season's most sensational discovery in the Tall al-'Umayri hinterland was the EB IB megalithic burial (see **Plate 1**). Located on the southern slope of Tall al-'Umayri, it consisted of a rectangular structure made of very large hewn stones. Within this structure were found 16 disarticulated and partially articulated skeletons and 19 complete vessels dated to about five thousand years ago. Around it was a large quantity of EB IB pottery and lithics, which points to a use of the place for purposes other than burying the dead—perhaps as a seasonal camp for nomadic tribes. Although it had no covering slab, the structure is believed to be a dolmen. While numerous dolmens have been reported elsewhere in Jordan, this one is unique because of the corpus of complete EB IB vessels inside it.

EB IV "Cemetery"

Excavation begun in 1992 by Mohammad Waheeb of the Department of Antiquities continued this season in the Bronze Age cemetery. Located across the highway from Tall al-'Umayri West, the site straddles the slopes of a fertile agricultural valley. Five EB IV shaft tombs and two storage silos were excavated. In addition to a few fragments of human and animal bones, the tombs produced six four-spouted lamps, one intact strap-handled jug, and a dagger (see **Plates 2a**

The first, the Greater 'Umayri Investigations, was headed by Bogdan Dabrowski (Levant Foundation Poland). They excavated the EBIB tomb, the EBIV Cemetery and the MBIIC Hewn Cave tomb. They also carried out the Umeiri East survey and the metal detector survey of Umeiri North. Team members included Tomasz Bochenski, Dorota Dabrowski, Muriel Geroli, Maryla Kapica, Howard Krug, Frank Reschke, Sarah Spangler, and Eva Swiniarska.

The second, the Farmstead team, was headed by David Hopkins (Wesley Theological Seminary). Their main accomplishment was to excavate the sixth century B.C. rural complex. Team members included Garrick Herr, Marvin Puymon, and Rhonda Root.

The third team, the Jalul Random Square Survey, was supervised by Gary Christopherson (University of Arizona). He was assisted by Samir Masheh, Tisha K. Entz, Julie Piller, and Mailen Kootsey.

The fourth, the Inscription Cave team, was headed by Paul Ray and included team members Sharon Cregier, Kurt Fattic, Reinhold Gothard, and Sameh Khamis.

The fifth, the Project Rainkeep team, was headed by Dorothy Irvin. She was assisted by Rula Qussous of the Department of Antiquities and Basam Aziz of ADRA-Jordan.

and 2b). The existence of several storage silos among the tombs—all of which produced mostly EB IV pottery—lends support to the idea that this “cemetery”—like the dolmen—served not only as a place to bury the dead, but as a seasonal camp or homing site for nomadic tribes. There is at the present time no evidence of permanently settled villages in the Madaba Plains during this period.

MB IIC Hewn Cave-Tomb

Also located on the southeastern slope of Tall al-‘Umayri was an MB IIC hewn cave-tomb which is entered by several steps carved in the passageway. There were 15 articulated skeletons in the tomb; of these 4 were of children. The cave also produced 13 complete vessels, including jars, jugs, juglets, bowls, and a lamp (**Plates 3a and 3b**). The tomb was contemporaneous with the fortified MB IIC town on Tall al-‘Umayri and is presumed to contain the remains of the sedentary villagers of the site.

Sixth-Century BCE Rural Complex

Another significant outcome of the hinterland work was the excavation of a Late Iron II rural complex. Associated with the 8 x 9 m building were a perimeter wall, agricultural terraces, a reservoir, several cisterns, and several winepresses (**Plates 4a and 4b**). The excavation produced a large number of reconstructible pottery vessels of diverse types, grinding stones, pounders, mortars, and pestles. The presence of numerous jewelry and figurine fragments, a scaraboid seal, and two stamp seals suggests that this was no ordinary Ammonite rural household, but a managerial complex of some sort. It thus points to the existence of a certain degree of social stratification and bureaucracy in the Ammonite vineyards of the Late Iron Age.

Early Islamic Inscription Cave

The work begun last season in the Khirbet Rufeis “inscription” cistern/cave was continued this season. Excavations revealed that the cistern was last cleaned and replastered sometime during the Late Byzantine or Early Umayyad period. It appears to have gone out of use as a cistern because of damage by an earthquake—perhaps around A.D. 850. Subsequently it seems to have been used as a habitation. It was likely used as some sort of cave-khan in its postearthquake phase. This interpretation takes into account its location near the haj route; the presence of a baking oven (*tanur*) constructed during the Umayyad period, which measures 1.5 m in diameter; and the presence of two large cisterns only a few meters from the cave entrance. The use of the cave wall as an inscription panel came about after the destruction of the

cistern. The emerging scholarly consensus with regard to the inscription is that most of the more than one thousand engraved markings on the panel represent tribal marks or *wasm* etched on it by mostly illiterate tribesmen throughout the Early Islamic centuries. The cave provides a window on the process of nomadization which occurred during the late Abbasid period in this part of Jordan.

Survey of 'Umayri East

Because of the threat of imminent development and destruction of ruins at 'Umayri East and North, an intensive survey was carried out to document as many as possible of the archaeological features that were clearly visible on the surface. A total of 43 features was recorded on 'Umayri East. There is a 94-m N-S wall which straddles the hill. A 62 m E-W wall abuts it. Both walls appear to be of recent origin. Other features include 11 cisterns, 22 caves, and 10 quarries. Portions of a mosaic floor are sealed against one of the cistern openings. A stone with a Byzantine cross engraved on it was found as well. Using a metal detector, thirteen coins were recovered: 2 Early Umayyad, 7 Late Umayyad, and 1 Late Ottoman. A large quantity of Byzantine and Early Islamic pottery was also collected.

Metal Detector Survey of 'Umayri North

'Umayri North was first surveyed by our team in 1989. In order to compare the two tells (east and north) in terms of coin finds, a metal detection survey was completed on 'Umayri North. This survey yielded a total of 10 coins, including coins from the Roman, Umayyad, Ayyubid, Mamluk and Ottoman periods.

Random Square Survey of Jalul Hinterland

An intensive surface survey of the hinterland of Tall Jalul covered the area within a 5-km radius of the site. The survey used the same methodology as was used in previous seasons in the random survey of Tall al-'Umayri. A total of fifty randomly chosen 200 x 200 m squares was surveyed. Although a significant amount of pottery was collected by the survey team, no signs of ancient farmsteads, villages, or towns were found within the survey area. The survey findings contrast strikingly with the findings of the 'Umayri survey, which produced about fifty archaeological sites within a comparably sized region.

Project Rainkeep

An outgrowth of the hinterland research of the Madaba Plains Project, Project Rainkeep has sought to heighten public awareness in Jordan of the continued viability of cisterns as a means of dealing with

the worsening water crisis. To this end, the Madaba Plains Project—in cooperation with Adventist Development and Relief Agency (ADRA) and the Ministry of Social Development—has assisted project-area residents with cleaning and restoring several ancient cisterns (**Plate 5**).⁶

Tall Jalul

Iron Age I

Excavators at Tall Jalul, located 5 km east of Madaba, uncovered at least four major architectural phases from the Iron Age I to the Persian periods in three different areas of excavation.⁷ Although little has been uncovered from the Iron Age I (1200-1000 B.C.E.), a stretch of wall in Field C (located in the center of the tell just east of the acropolis, see **Plate 6**) appears beneath a wall of the Iron II period and could date to Iron I (**Plate 7**). However, since the bottom of this lowest wall was not reached, its date must remain uncertain for now. Next to the wall was collapsed mudbrick that contained typical Late Bronze and Iron I Age pottery, providing evidence for occupation during those periods. The Late Bronze Age pottery included two oil lamps, a carinated krater, and the base of a chalice. Iron Age I pottery included typical collared-rim jars and carinated bowls. A necklace containing a variety of glass, fruit, and semiprecious stones was also found in this collapse.

Ashy lenses measuring up to a meter in thickness, containing typical Iron I forms, including collared-rim jars and carinated bowls, were found under all the Iron II structures in both Fields A and B, suggesting that Jalul experienced a major conflagration near the Iron I/II transition. The presence of some possible Iron II wheel-burnished sherds in these lenses suggests that this destruction occurred either at the very end of the Iron Age I or at the beginning of Iron Age II.

⁶As this article was going to press, we were gratified to receive word that the Canadian government has provided a grant to ADRA and Jordan to expand this project.

⁷Randall W. Younker was director of excavations at Tell Jalul. David Merling (Andrews University) was the associate director. Field Supervisors included Zeljko Gregor (Andrews University), Jim Fisher (Andrews University), Penny Clifford (University of Arizona), and Richard Dorsett. Square Supervisors included Adeeb Abu Shmeis, Kent Birmingham, Canute Birch, Karen Borstedt, Mary B. Hugo Christiansen, Stephanie Elkins, John Erlich, Ruzica Gregor, Jennifer Groves, Ken Hutchenson, Chang-ho Ji, Dragomir Matak, Suzanne Onstein, and Sabal Zaben. Volunteers included Laura Bradel, Samuel Gregor, Julie Lepore, Gregory Lepore, Brian Manley, Sandra Perkevic, and Boris Vale. Mark Ziese and Valentin Gligirov were the architects. The Department of Antiquities representative was Adeeb Abu Shmais.

Early Iron Age II

The early Iron II period (10th-9th centuries B.C.E.) was represented by a wall fragment of a building in Field A on the north side of the tell. The building, located in the westernmost part of Field A, appears to be a domestic dwelling. Three of its walls, constructed of roughly hewn stones, were partially preserved. A portion of a plastered floor was sealed up against its western wall (**Plate 8**). The room was founded immediately on top of the ashy layers full of Iron I and possible early Iron II pottery, noted above. What appears to be a door was preserved in the northwest corner of this room. This dwelling appears to be contemporary with the wall line found about 5 m to the east during the 1992 season. The function of this wall (which now appears to have been rebuilt in the 8th, 7th and 6th centuries) is still uncertain. The wall is on the northern edge of the tell where one might expect a city wall to be located, but this wall does not appear sturdy enough to have served as such.

Excavations in Field B (on the east side of the tell) continued to trace the early Iron Age II approach ramp to the city gate. The ramp or approach road was paved with typical flat flagstones, similar to those seen at Tel Dan and Tel Beersheba, west of the Jordan River. Although it appears that most of the corresponding gate was robbed out, three piers of an outer gatehouse were preserved (**Plate 9**). A robber's trench clearly appeared in the east balk where the northeast pier was removed. Four large stones appear in a line just south of this outer gatehouse, about where an inner threshold might be expected. However, this threshold is slightly out of line with the gate and may represent an architectural phase between the early Iron II and middle Iron II gates (see below). Small finds in the gate area included an Iron II stamp seal with a stylized depiction of an ibex.

Iron Age II

The middle Iron II period (8th century B.C.E.) was represented in Field A by the northern wall of a building built in the westernmost part of Field A along the same line as the northern wall of the early Iron II building (above). Nearly .5 m of debris separated the 9th- and 8th-century floors. The walls of this later structure were constructed of nicely hewn limestone. Again, to the east of this building, was that stretch of wall, found last season, with a distinctive architectural phase that dated to this same period.

In Field B the contemporary approach ramp, paved with flagstones, continued to be traced along approximately the same line as the earlier road of the early Iron II Age (above). This later road also

apparently led to a city gate, although it appears that this later gate was robbed out shortly after the 8th-century B.C.E. city was abandoned or destroyed.

From the late Iron II period (7th-6th centuries) the remains of at least two buildings were recovered from Field A. The easternmost building is pillared (**Plate 10**), similar to those commonly found in the West Bank and now in increasing numbers in Jordan. Three parallel rooms were partially uncovered. The central room appears to be an open court with a floor of hard, beaten earth. Its floor had been disturbed by the digging of 19th-century graves. The side rooms, which parallel the central court, were paved with flagstones. Pottery under the flagstones included well-known 7th-century B.C.E. Assyrian bowls. Several of the pillars had fallen over towards the north in a manner that suggested possible earthquake activity. Since only portions of the northern and western walls were uncovered, the exact extent of the pillared building is uncertain, although the western wall is at least 12 m long. To the west of the pillared building were patches of pavement and the remnant of a small room (built directly over the domestic room of early Iron II described above). The northern (and probably back wall) of the room was built inside and immediately against the base of the north wall of the western early Iron II building described above. Underneath the beaten-earth floor of this room was typical late Iron II pottery (**Plate 11**) including a fragment of an Assyrian bowl. Small finds from this period were mostly from the surface, but probably come from the Iron II Age. They included the head of a crowned male figurine (**Plate 12**) similar to the crowned busts found in the Ammon region, the upper portion of a typical female figurine with hands held below exposed breasts (**Plate 13**), a lion figurine (**Plate 14**), and fragments of horse and rider figurines, well known from the Ammon region. The horse's head of one was particularly well preserved.

Late Iron Age II/Persian Period

The late Iron II/Persian Period (late 6th-5th centuries B.C.E.) was represented in Field A by several pits, some sections of walls, and a stretch of pavement, all located to the west of the Iron II pillared building. One of the pits cut through the floor of the western late Iron II room of Field A, down to the surface of the early Iron II domestic room described above. No coherent architectural plan of this period was discerned, however, in Field A.

In Field C, the eastern and southern walls of a late Iron II/Persian period building were excavated down to floor level (**Plate 15**). The southern wall of this building was built up against the mudbrick fall and

walls of early periods. Persian pottery included some typical Attic ware. An incense stand from the Persian period was found inside the Late Iron II/Persian building of Field C (**Plate 16**).

In the western portion of Field A was uncovered a poorly built, semicircular wall of uncertain purpose. To the north of this structure, running in an east-west direction, was a well-built wall of an apparently separate building. Both of these structures dated to the Persian Period (5th-4th centuries B.C.E.).

An ephemeral wall that also dated to the latter part of the Persian period was found in Field C along the same line as the eastern wall of the Iron II/Persian building (above). The precise purpose of this wall line is not yet known.

Unfortunately, no data have yet been uncovered at Jalul to provide any hint regarding the identity of either the site or its inhabitants. Not surprisingly, the material culture, including the ceramic corpus, appears to have much in common with that at sister sites like 'Umayri, Jawa, and Hesban; one can reasonably assume that Jalul's social, political, and cultural history was intimately connected with these other sites. Nevertheless, the first two seasons of excavation support the preliminary findings of the survey that Jalul was not only occupied, but was an important regional site on the Madaba Plain during the Iron Age and Persian period. The anticipated 1996 season of excavation will undoubtedly enrich our understanding of this site.

3. *Tall al-Umayri*

End of the Middle Bronze Age (ca. 1600 B.C.E.)

In Field B at Tall al-Umayri (**Plate 17**) excavation was completed through the MB IIC rampart uncovered in previous seasons.⁸ The rampart is best seen on the western slope where the lack of topographical change in the original bedrock ridge provided easy access to raiding or invading armies. The MB inhabitants bisected the ridge by digging an artificial trench or moat across it into the bedrock 5 m deep (**Plate 19:15**). The moat was not simply to create a barrier, but to lower the point at which the second construction, the rampart, began its rise. The rampart rose approximately 10 m in height over a distance of about 22 m (**Plate 19:10**). Although much smaller, our moat and rampart were similar to the huge rampart on the western side of the lower city at

⁸Larry G. Herr (Canadian Union College) was the director of excavations at Tall al-Umayri. Supervisors included Doug Clark (Walla Walla College), John Lawlor (Baptist Theological Seminary), and Lloyd Willis (Southwestern Adventist College).

Hazor. At a later time an earthquake caused damage to the rampart, so that much of it eroded into the moat.

Late Bronze/Iron Age Transition (13th-12th centuries B.C.E.)⁹

Solid evidence for an earthquake dated to about 1200 B.C.E. was uncovered this season (**Plate 19:9**). Note the crack in bedrock to the right of No. 11 in **Plate 19**.

When the town was rebuilt soon after the earthquake, it was reconstructed in an impressive manner. The moat at the bottom was cleaned out, leaving about one meter of eroded MB IIC rampart debris in the bottom (**Plate 19:14**). A retaining wall (**Plate 19:12**) supported a new rampart (**Plate 19:9**), which filled in the earthquake crack and raised the top of the MB rampart by 1.5-2.0 m. At the top of the rampart was a casemate or double wall (**Plate 19:8**).

The casemate wall, perhaps the earliest such wall, and inner casemate wall segments are preserved over 2 m high. The crosswalls are also house walls, so the houses were incorporated into the defensive system. Ground Penetrating Radar studies of the southern lip of the site show the distinct presence of two parallel lines with similar dimensions to those of our suggested casemate wall.

We have been able to expose portions of at least three domestic dwellings. In the eastern room of Building A (**Plate 18:A1**), excavated in 1989-1992, domestic artifacts and a hearth were found on a beaten-earth floor. But west of a row of post bases and upon a flagstone floor (**Plate 18:A2**) was an oval rock in front of a standing stone. A door to the south of the standing stone led into one of the casemate rooms (**Plate 18:A3**) where approximately 15 collared pithoi stood in the northern half of the room and a platform reached by small steps appeared in the southern half.

Building B, excavated primarily this season, was made up of four rooms: three long rooms separated by narrowly-spaced post bases (**Plate 18:B3**) and a second casemate room acting as the broad room in the rear (**Plate 18:B4**). This four-room house plan is well known from early Iron I sites. The paved portion of the room was separated from the beaten-earth portion by two post bases along the side walls, suggesting a curtained division at one stage in the history of the room. Approximately 20 collared pithoi lined the walls, while another 20 were smashed and scattered on top of them. Other objects included an

⁹Much of the work on the Iron I portion of this article was done by Larry Herr at the Albright Institute of archaeological research while he was Annual Professor there for the academic year 1993/94. Thanks are extended to the Trustees of the Albright for that appointment and the Dorot Foundation for providing an additional grant for the year.

alabaster vesse, six bronze weapons and a few stone ballistic missiles, and the burned bones of at least two individuals scattered around the room when they fell from the second story after burning.

A well-constructed door near the eastern edge of this house led to another house, but its excavation awaits next season. Exactly how these three buildings relate to one another is not clearly known. No signs of a street have been found. It may be that the eastern end of the posted rooms in Building B was a common area or courtyard for Buildings B and C (Plate 18:B1 and B2).

The destruction of this small city (about 1.5 hectares) was swift and violent, as suggested by the 1.5-2.5 m of destruction debris in the rooms, the ubiquitous signs of burning including burned beams, bricks and stones (some burned to lime), as well as the weapons in the northern casemate room. That the destruction was swift is clear from the masses of food (mounds of barley and two shanks of butchered large mammals) still uneaten, and the two individuals caught in the conflagration. The pottery from the floors and the destruction layer date to around 1200 B.C.E.

The 13th/12th-century date makes 'Umayri one of the earliest hill-country Iron I sites in Palestine, contemporary with Mount Ebal and Giloh. There were relatively few hill-country sites contemporary with it in Palestine, except perhaps for the eastern fringes of the hill country north of Jerusalem.

The types of pottery vessels and other finds classify 'Umayri as a hill-country site. Rather than finding the diversity and sophistication of contemporary coastal and valley sites, we have the same kind of limited repertoire of pottery and finds as hill-country sites in Cisjordan. The closest parallels to the material culture of 'Umayri come from the hill country north of Jerusalem, especially the region of Shechem.

Early Iron I hill-country sites in Cisjordan are primarily small, unfortified agricultural villages, perhaps limited to a single extended family or clan. But 'Umayri is very strongly fortified, larger than most other hill-country villages. In terms of the sedentarization process of sites in hill-country areas, the settlement at 'Umayri must be seen as more intensive and complex than at sites in Cisjordan.

So far, very few early Iron I sites from the central plateau of Transjordan are known. The work at Sahab was hampered by its urban setting and its Iron I pottery appears to be later than ours.¹⁰ The Iron I remains at Amman have so far not been clearly isolated. The pottery from the Baq'ah Valley north of Amman seems to be roughly

¹⁰Dr. M. Ibrahim was kind enough to allow us to examine the Sahab pottery in the storerooms at Irbid University.

contemporary with ours, but frequent forms which appear at 'Umayri, such as cooking pots and collared pithoi, do not appear in the Baq'ah corpus. Again, a tomb at Madaba contains some similar pottery forms, but many key vessels are lacking.

Unpublished, fragmentary, or partial evidence from sites in our region is beginning to surface. This may suggest a coherent series of settlements: Heshbon, Jalul, Jawa, and Madaba. The sites are within about 15 km of each other, seem to carry a similar material culture, and are within sight of at least one other site.

During the 13th and 12th centuries, we should speak of "tribes" rather than "nations" in the lands of the Bible. Tribal relationships consisted of fluid coalitions that rose, fell, swapped loyalties, and came and went throughout Iron I. At the risk of making an extremely complex picture overly simple, we might suggest that, as tribal relationships and loyalties became more consistent and less fluid, groups of allied tribes could have developed supratribal structures which slowly grew into small-scale states with these names. Thus, there would be no "national" groups or "states" called Israel and Ammon in early Iron I. Instead, there were tribes and tribal alliances.

It is at the beginning of this process, characterized by fluid tribal allegiances, that the settlement at 'Umayri should be placed. But unfortunately, because archaeology does not usually provide evidence for finely tuned tribal distinctions, we cannot be certain which tribal group settled at our site. Three possibilities come most easily to mind. First, 'Umayri could represent the settling process of the tribe or tribal alliance that became Ammon. But there is no literary hint that this was so other than the textual evidence that 'Umayri was in Ammonite territory centuries later.

Second, using the biblical narratives of the conquest as a clue to history, we could suggest that 'Umayri was part of Sihon's "Amorite" kingdom and that the massive destruction of the site was accomplished by the Israelites (Num 21). Some have thought that the biblical story may have centered on Heshbon because it was the most famous settlement at the time of writing. Sites like 'Umayri, Jalul, and Jawa would have been ignored because later Israelite historical memory, centered as it was in Cisjordan, had forgotten them. The most serious objection to this model is that no conquest/settlement site with hill-country material culture is normally seen as belonging to the "pre-Israelites." However, this objection does not take into account the fluidity of tribal loyalties outlined above. The early Iron I settlements in the hill country of Transjordan and Cisjordan were not "Israelite" in the sense of a coherent, unified, and long-lasting league of tribes. Thus, the presence

of highland material culture does not necessarily identify a site with a specific tribal alliance, but rather reflects a highland tribal lifestyle.

Third, Frank Cross has argued that, because the tribe of Reuben is consistently listed in the Bible as the firstborn of Jacob in Israelite genealogies, and because old genealogies normally represent social (tribal) relationships, the tribe of Reuben was the first of the tribes that would later become Israel to achieve prosperity.¹¹ If we identify 'Umayri as a Reubenite site, the settlement process of that tribe may have begun during the 13th century, growing to a prosperous walled town with a developed complex society by about 1200 B.C.E. At the same time, other hill-country tribes were just beginning to settle in small villages. This model explains Reuben's prominent position in the biblical genealogies and makes stronger the argument that the "Israel" of the Merneptah inscription was in Transjordan, as Na'aman suggests.¹² The much-debated determinative after "Israel," indicating a "people" rather than a "city," could apply to a group of settlements the Egyptians knew primarily as a tribal entity rather than a city state. In this model the military destruction of 'Umayri, early in the 12th century, could have been caused by the growing ambitions of Ammonites, who were also settling the region at the time; Midianites attempting to open trade routes along the King's Highway for their caravans to Beth Shean and Tall Abu Hawam; or other tribal groups as allegiances were broken. Surviving Reubenites moved westward. This means that the biblical account of tribal movements into Cisjordan from east of the Jordan River is historically correct.

Late Iron II and Persian Administrative Center

At the western edge of the city two large administrative buildings and one domestic complex were excavated in previous seasons. The walls of the administrative structures are well over a meter thick (some are almost two meters thick) and must have stood at least two stories high. In fact, our walls are basements, dug deep into the ruins of earlier cities. Basements are rare in this part of the ancient world and only serve to emphasize the importance of their public role at 'Umayri.

This season Field H was opened south of these buildings. More walls oriented in the same directions and built in the same type of

¹¹F. M. Cross, "Reuben, First-Born of Jacob," *Zeitschrift für die alttestamentliche Wissenschaft*, 100 Supplement (1988): 46-65.

¹²N. Na'aman, "The 'Conquest of Canaan' in the Book of Joshua and in History," in *From Nomadism to Monarchy*, ed. I. Finkelstein and N. Na'aman (Jerusalem: Israel Exploration Society, 1994), 248.

masonry and style, but even larger in size, were found. This means that the farther south our complex extends, the larger the buildings seem to become. A significant inscribed seal was found in the topsoil above these walls (Plate 20). It reads *l'lnbn/brk'l* and may be translated as "belonging to 'Ilan son of Barak'il." Future seasons will expose more of these rooms, but in several cases the walls are so thick and so close to one another that it is difficult to excavate between them. The thickest wall of the complex so far found (2.1 m wide) is the westernmost wall and may have had a defensive function as well.

When was this complex of buildings built and why? Because of the seal impression of an official of the Ammonite king Baalis found in 1984, we can identify our public buildings with the Ammonite monarchy.¹³ Moreover, four other inscribed seals and two uninscribed ones have been found in the earth layers around the administrative buildings.

One of the uninscribed seals depicts a figure in typical Neo-Babylonian style which is reminiscent of two other seals we found at a hinterland site about 2 km south of 'Umayri. The site probably was a farm for the production of wine, judging by the three winepresses and several storage caves surrounding the building. Scores of other similar "farmstead" sites, most constructed of very large stones, have been discovered by our hinterland survey, but none produced the well-preserved finds of this one. However, all were associated with winepresses and the pottery is identical to that of each other and to that from the administrative complex at 'Umayri. Because of the ceramic and glyptic similarities between the farmsteads and their similar material culture compared with 'Umayri, it is reasonable to conclude that these hinterland farms were contemporary with our administrative center.

It is not a major leap of reason to suggest that the administrators at 'Umayri were organizing wine-production at the farmsteads for the Ammonite monarchy. But why? Again, the regional survey provides an answer. Sites dated earlier than the foundation of 'Umayri were not frequent in our region. Tall Jawa, ca. 4 km to the east, probably was occupied, but the immediate region of 'Umayri was relatively empty. Most likely, the hillsides were being underutilized agriculturally. It seems that the 'Umayri administrative center and the farmsteads were part of a well-orchestrated governmental infrastructure for the production of wine.

¹³Larry G. Herr, "The Servant of Baalis," *Biblical Archaeologist* 48 (1985): 169-172; R. W. Younker, "Israel, Judah, and Amman and the Motifs on the Baalis Seal from Tell el-Umeiri," *Biblical Archaeologist* 48 (1985): 173-180.

But why did the Ammonite monarchy decide to invest so heavily in our region? Josephus gives us a strong clue in *Antiquities* 10.9.7 where he mentions that, after the murder of Gedaliah in 582, the Babylonians overcame Ammon, presumably subjecting them to their empire. It might be suggested that the 'Umayri administrative center was built by the Ammonite monarchy to administer government-sponsored grape plantations at the farmsteads to produce wine for export to Babylon as tribute. The collection and shipment of the wine was handled by the officials living and working at 'Umayri. The seals represent the officials or the farmers who sold their production to the crown.

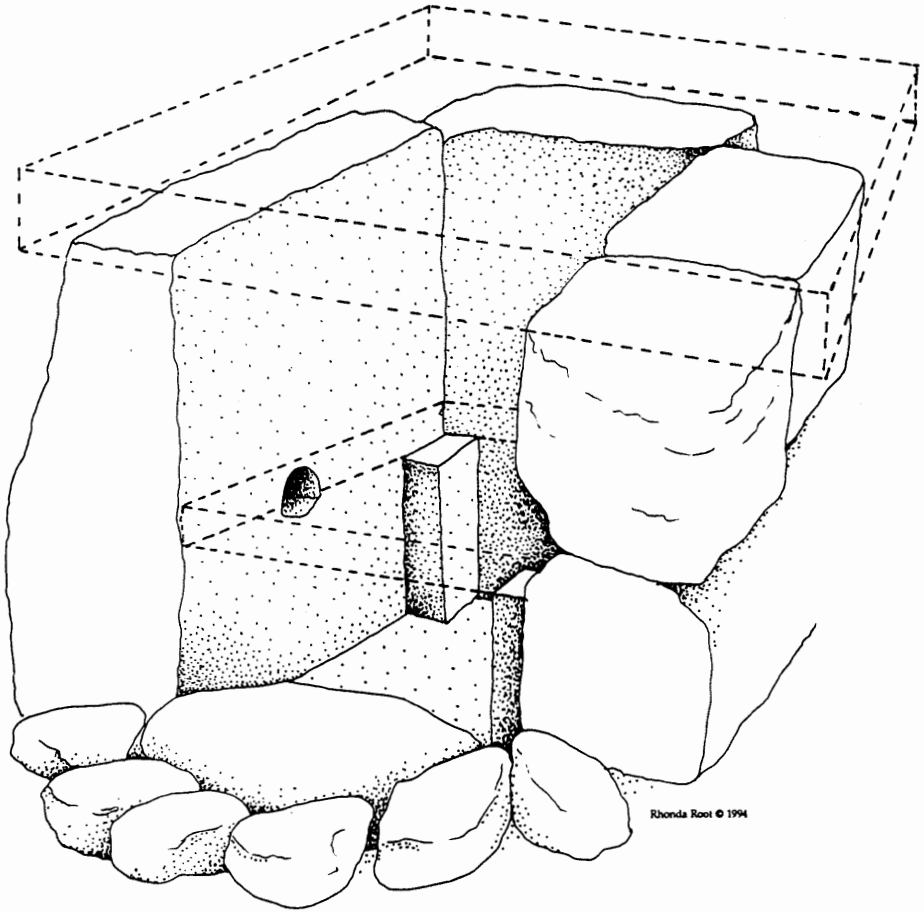
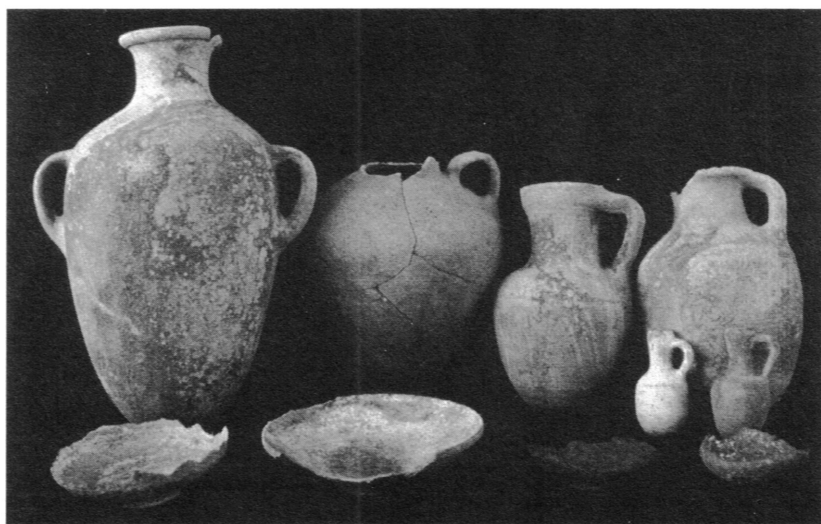
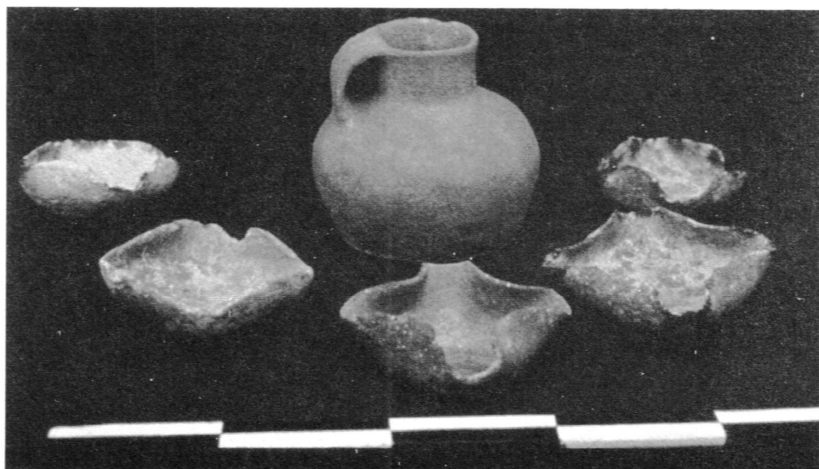
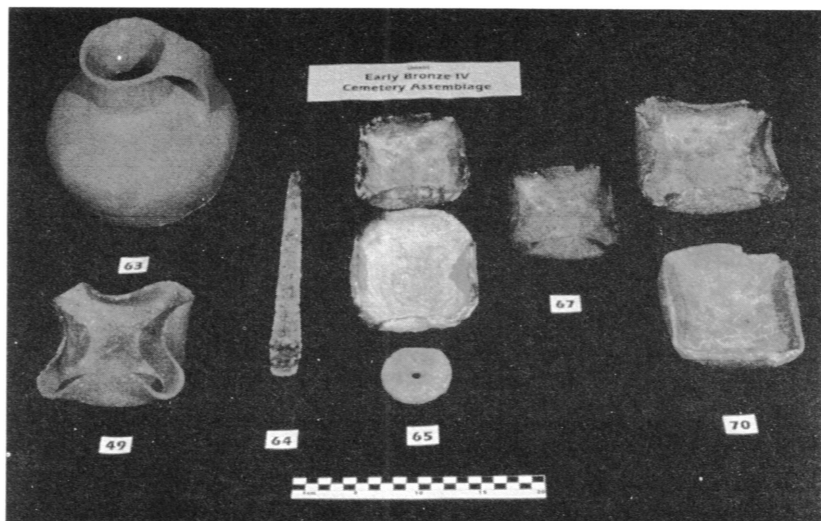


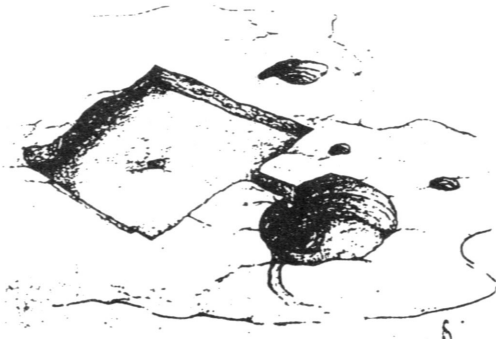
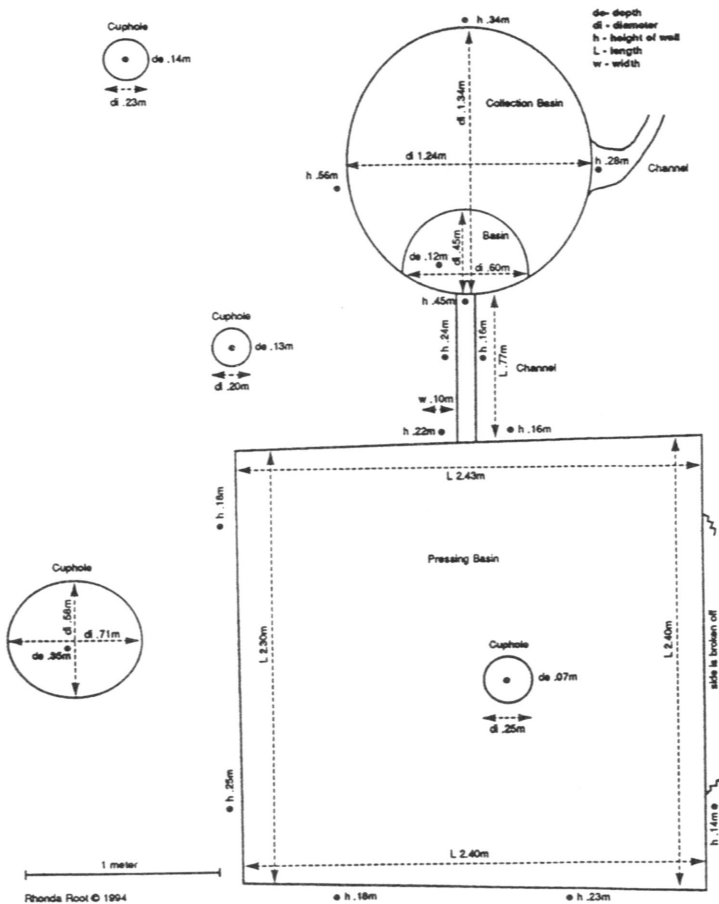
Plate 1. The dolmen tomb near Tall al-'Umayri, showing probable location of covering stone. The hole in the upright stone on the left, along with the small stone pillars in the corners, seems to indicate that there was a platform across the middle. This platform, probably made of wood since no remains were found, would have increased the burial capacity of the dolmen. Drawing by Rhonda Root.



Plates 2a and 2b. Pottery findings from one tomb in the EB IV cemetery near 'Umayri West.



Plates 3a and 3b. Pottery findings from the MB IIC hewn cave-tomb near Tall al-'Umayri.



Plates 4a and 4b. Schematic and drawing of winepress found at a rural complex. Both by Rhonda Root.



Plate 5. A restored rainkeep cistern.

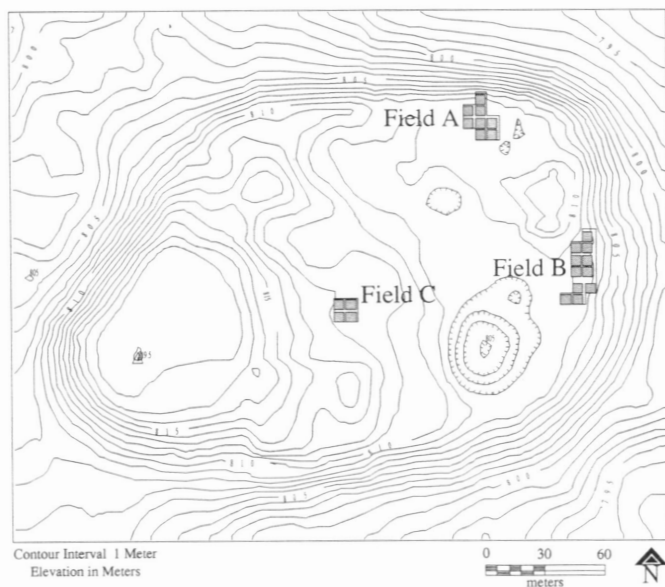


Plate 6. Topographic map of Tall Jalul.



Plate 7. Iron II wall coming out of the corner of a Persian-period building in Field C; possible Iron I wall in the lower right corner of the photograph.

Plate 8. The western wall of the early-Iron II building of Field A is seen on the left side of the photograph.



Plate 9. The Iron II approach ramp in Field B stops at the threshold of the outer gatehouse, the western piers of which can be seen in the upper right corner of the photograph.



Plate 10. Late Iron II pillared building in Field A.



Plate 11. The north wall of a seventh-century floor of a domestic dwelling; Assyrian pottery was found under the floor below the meter stick.



Plate 12. Iron II crowned male figurine.



Plate 13. Upper portion of a late-Iron II female figurine.

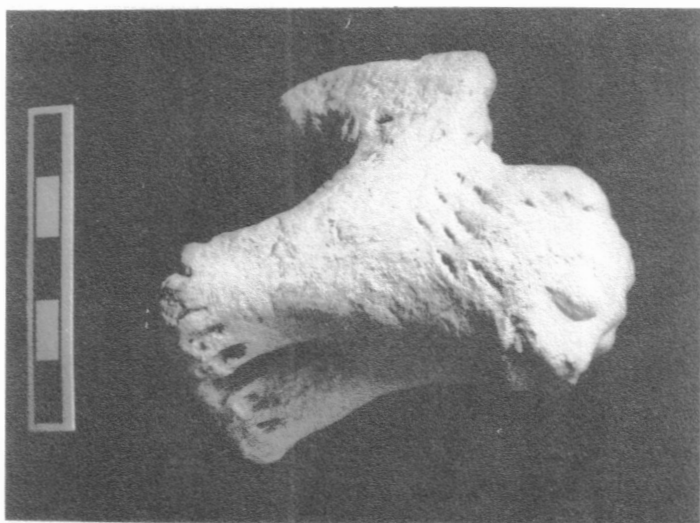


Plate 14. Lion figurine.



Plate 15. Corner of Persian-period building in the upper left corner; Iron II wall in the lower right of photograph (see Plate 7).



Plate 16. Persian-period incense stand from Tall Jalul.

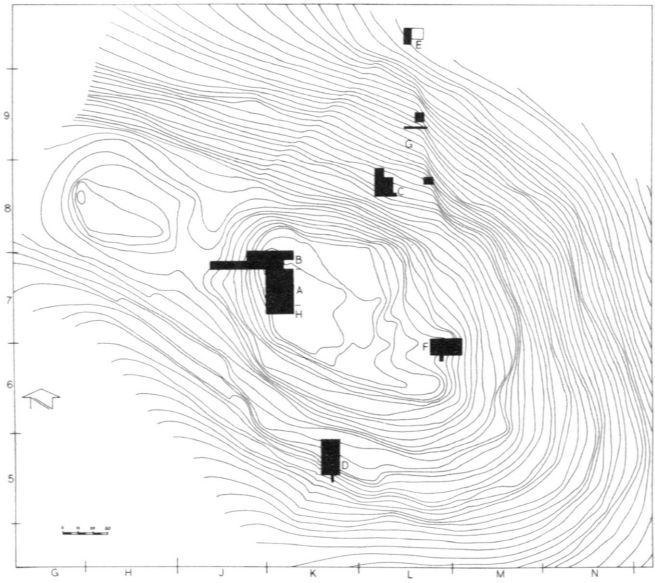


Plate 17. Topographic map of Tall al-'Umayri.

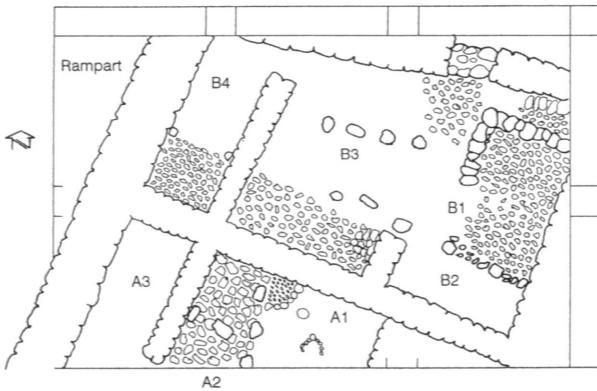


Plate 18. Early Iron I buildings A and B from western perimeter of Field B of Tall al-'Umayri.

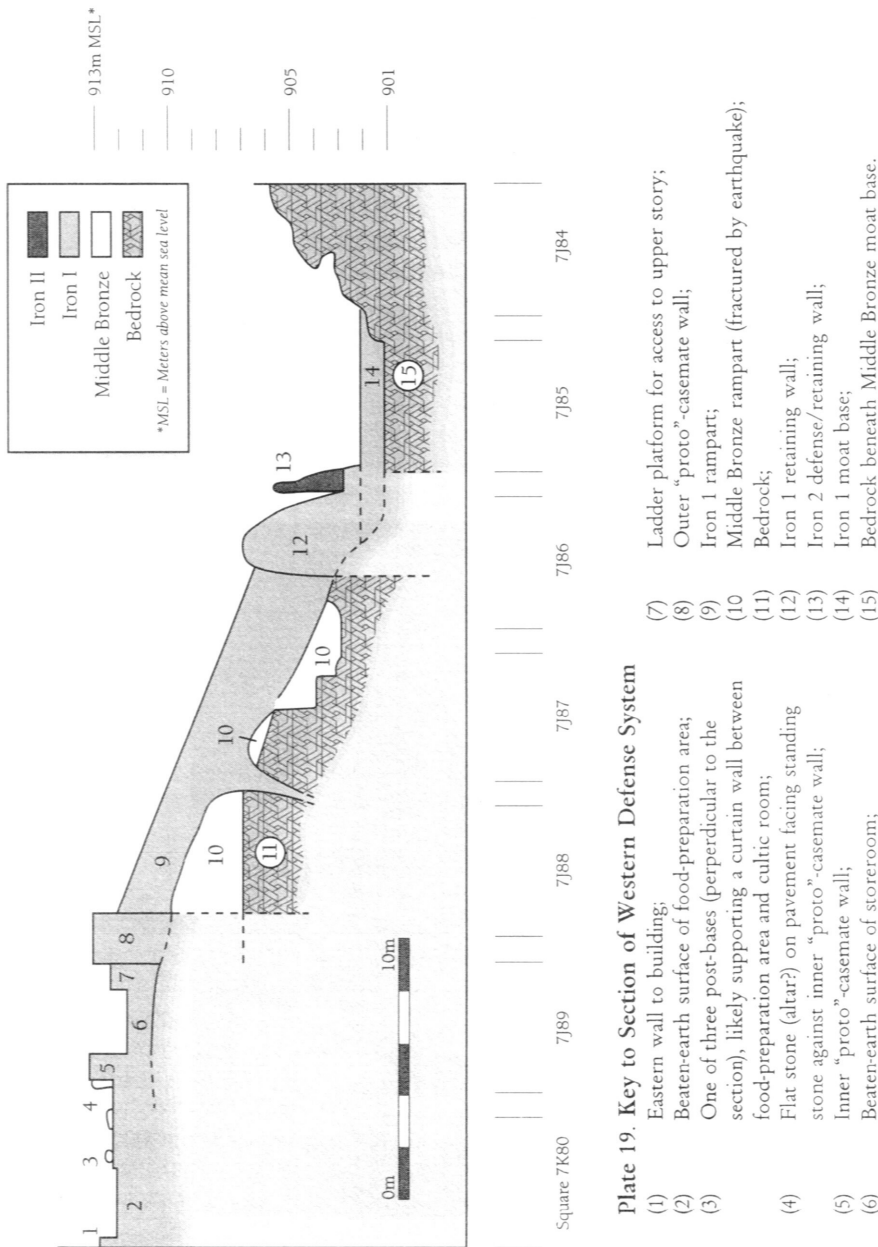


Plate 19. Key to Section of Western Defense System

- | | | | |
|-----|---|------|---|
| (1) | Eastern wall to building; | (7) | Ladder platform for access to upper story; |
| (2) | Beaten-earth surface of food-preparation area; | (8) | Outer "proto"-casemate wall; |
| (3) | One of three post-bases (perpendicular to the section), likely supporting a curtain wall between food-preparation area and cultic room; | (9) | Iron 1 rampart; |
| (4) | Flat stone (altar?) on pavement facing standing stone against inner "proto"-casemate wall; | (10) | Middle Bronze rampart (fractured by earthquake); Bedrock; |
| (5) | Inner "proto"-casemate wall; | (11) | Bedrock; |
| (6) | Beaten-earth surface of storeroom; | (12) | Iron 1 retaining wall; |
| | | (13) | Iron 2 defense/retaining wall; |
| | | (14) | Iron 1 moat base; |
| | | (15) | Bedrock beneath Middle Bronze moat base. |



Plates 20a and 20b. Inscribed seal and its impression. The seal reads “belonging to ’Ilan son of Barak’il.” Photo by Bruce Zuckerman.