

**PRELIMINARY REPORT OF THE 1996 SEASON
OF THE MADABA PLAINS PROJECT:
REGIONAL SURVEY, TALL AL-'UMAYRI AND
TALL JALUL EXCAVATIONS**
(June 19 to July 31, 1996)

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During the summer of 1996 Andrews University, along with La Sierra University, Canadian Union College, the University of Eastern Africa at Baraton, and Walla Walla College, conducted a sixth season of archaeological research in the Madaba Plains region of Jordan.¹ Our international team again consisted of over 120 archaeologists, students, and volunteers and over 50 Jordanian specialists and workers.² The

¹The authors of this report would like to thank all of the volunteers and staff members who participated in the project this season. Special thanks are extended to our major sponsoring institutions including Andrews University (principal sponsor), Canadian Union College, Walla Walla College, and La Sierra University.

We would also like to thank the Director-General of Antiquities, Dr. Ghazi Bisheh, for the support he provided this season, and Department of Antiquities representatives Rula Qussous and Adeeb Abu Shmais. Dr. Kamal Fakmawi, principal of the UNRWA-sponsored Amman Training Center, and his staff again graciously opened up their facilities to us for our base camp. In addition, we wish to again extend our sincere gratitude for the continued support we have received from the land owners: businessman/scholar Dr. Raouf Abujaber, landowner of Tall al-'Umayri, and Gen. Acash es-Zeben, landowner of Jalul.

Finally, we would like to extend thanks to Dr. Patricia Bikai and Dr. Pierre Bikai along with the staff of the American Center of Oriental Research (ACOR) for their support and the use of their facilities while we were in the field.

²The directors for the project this season continued to be Lawrence T. Geraty, Senior Project Director; Larry G. Herr, Director of the Tall al-'Umayri Excavations; Øystein S. LaBianca, Director of the Regional Survey; Randall W. Younker, Director of the Tall Jalul Excavations; Douglas R. Clark, Director of the Consortium.

Ruzica Gregor, Paul Ray, and Randall Younker served as dig administrators at the Institute of Archaeology during the early planning stages of this season's expedition. Najeeb

Madaba Plains Project continued the three major field research components that were undertaken during the 1992 and 1994 seasons. These components included the regional survey (including some hinterland excavations), excavations at Tall Jalul, and excavations at Tall al-'Umayri. In addition to these projects, restoration work was conducted at Tall Hisban. For a description of the project's research objectives and previous results, we refer the reader to the preliminary reports published in *AUSS*.³

1. *Regional Survey*⁴

The most important accomplishments of the hinterland team this season included: (1) the initiation of the Hisban Random Square Survey; (2) decipherment of a substantial portion of the Khirbat Rufeis inscription along with the discovery of over 40 Thamudic E texts by the Eastern Desert Epigraphical Survey; (3) the discovery of an important Paleolithic

Nakhle served as camp administrator in Jordan. Lloyd Willis served as camp chaplain and Dave Schafer as camp handyman. Leila Mashni served as head cook.

Pottery registrars were Stephanie Merling and Mary Ellen Lawlor. Processing of small finds was supervised by the Objects Registrars, Elizabeth Platt ('Umayri) and David Merling (Jalul). Photography was directed by Randy Seibold. Objects were drawn by Stephanie Elkins and Rhonda Root. Mark Ziese and Valentin Gligirov served as draftsmen/architects for Tall el-'Umayri and Jalul. The surveyor was Abbas Khammash.

³See 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; Randall W. Younker, Lawrence T. Geraty, Larry G. Herr, Øystein S. LaBianca, and Douglas R. Clark, "Preliminary Report of the 1994 Season of the Madaba Plains Project: Regional Survey, Tall al-'Umayri, and Tall Jalul Excavations (June 15 to July 30, 1996)," *AUSS* 34 (1996): 65-92.

⁴Øystein S. LaBianca (Andrews University) was director of the hinterland survey. Gary Christopherson was in charge of the random survey. Doug Schnurrenberger and Rick Watson undertook the geological and environmental survey. Jon Cole and Gerald Sandness conducted research with the ground-penetrating radar. Rhonda Root was staff artist. Frank and Michelle Spangler were the videographers. Rusty Low operated the floatation lab. Joan Chase was the physical anthropologist. Dr. Grover Fattic assisted with faunal remains. David Hopkins was the Field Supervisor for hinterland excavations. David Graf and Fawwaz al Khreishah conducted the epigraphic survey. Dorothy Irvin and Malcom Russell carried out ethnoarchaeology related to Project Rainkeep. Other staff members included Sharon Cregier, Tisha Entz, Bill Fagal, Muriel Geroli, Tim Gray, Ronald Haznedl, Alison Jerris, Eric LaBianca, Cindy Loh, Norwin Prasad, and Betsy Rodriguez.

kill and butchering site in the Azraq region by the Environmental Survey team; (4) the delineation of the indigenous knowledge involved in cistern construction and maintenance by the ethno-archaeological team; (5) and the recording, through digital videography, of a wide range of visual materials pertinent to telling the story of Jordan's indigenous people.

The Hisban Random Square Survey

This season, 50 randomly selected 200 x 200 m squares within the 5 km radius of Hisban were examined (out of nearly 2000 possible such squares). Twenty new sites were discovered within these 50 squares, despite the fact that the region had already been surveyed by the Heshbon Survey during the 1970s. An important finding of this season's survey was that, in spite of the discovery of a number of new sites, sites appear to be grossly under-represented in the plains around Madaba when compared to areas within the neighboring hill country. This is no doubt due to the greater intensity with which ruins and artifacts in this fertile plain were destroyed by intensive land use and settlement through the centuries and millennia. The two periods most represented by the pottery remains continue to be the Iron II and Byzantine.

The Eastern Desert Epigraphical Survey

The Eastern Desert Epigraphical Survey was organized in order to help solve the mystery of the graffiti cave at Khirbat Rufeis. The aim was to search the region to the east of the cave to ascertain whether markings could be found which would shed light on those seen in the cave. In this regard, the survey was very successful. Over 40 new inscriptions and tribal marks were discovered. These findings have begun to cast new light on what happened in the cave during the Roman-Byzantine and later periods.

The Environmental Survey

Perhaps the Hinterland Survey's most important discovery of the 1996 field season was the location of a new paleolithic site in Azrak. This was a serendipitous find, as the team was at the Azrak oasis looking for a suitable site to collect pollen cores to ascertain changes in the local environment through past ages. After three days of intensive, controlled surface collection, the team recovered over 500 worked stone objects and faunal samples.

The collection consists of nearly 100 bifaces, numerous unifacial flake tools, blades, points, and debitage. Preliminary indications are that the complete collection contains material from the final Acheulian and the Epipaleolithic cultures. Additional indications suggest Neolithic, Middle Paleolithic and Late Acheulian materials. The site appears to have been a

killing and butchering site, judging from the proportion of tools in the assemblage.

Tall Hisban Cleaning and Restoration

One of the major goals of the 1996 season was to start cleaning and restoring Tall Hisban. The work was directed by Sten LaBianca and Larry Geraty. This site, which was excavated by Andrews University archaeologists between 1968 and 1976, had deteriorated greatly since the last season of fieldwork twenty years ago. Since the site is important because of its long occupational history, which spans over three millennia, and its historic role in the development of archaeology in Jordan, it was felt imperative that such a restoration project be undertaken. The work benefited greatly from the strong support of Dr. Ghazi Bishah of the Department of Antiquities of Jordan and the mayor of the village of Hisban.

The cleaning effort included tearing down balks in Areas A, B and D and moving the rubble, stones, and boulders so that the exemplary Iron Age, Classical and Islamic installations and features could be brought into view. A number of pathways and steps were also constructed to guide visitors from the parking area to the tell and around the site to its main features. Also, interpretive platforms equipped with signs in Arabic and English were constructed overlooking various exemplary ruins. Thanks to assistance from the Department of Public Works, signs directing motorists coming from Madaba and Amman to the tell were also erected. A special effort was made to obtain local participation in the project, including numerous meetings with the mayor, use of village boys as laborers, the services of the local iron smith, and the training of a local guide.

2. *Tall Jalul*⁵

Excavations at Tall Jalul, located 5 km east of Madaba, were

⁵Randall W. Younker was the director of excavations at Tall Jalul. David Merling (Andrews University) was the associate director. Field Supervisors included Zeljko Gregor (Andrews University), Jim Fisher (Andrews University), Jennifer Groves (University of Arizona), and Richard Dorsett. Associate Field Supervisors were Stephanie Elkins, Ruzica Gregor, Teddy Burgh, and Paul Ray. Staff included Alexander Bolotnikov, Kathy Boyd, Ainsley Cameron, Charles Castleberg, Warren Clark, David Curtis, Hernan DePaiva, Jodi DiPratio, Kathy Dorsett, Phil Drey, Bill Fagal, Geneva Fatic, Claoma Fearing, Ken Haines, Christina Higgins, Gabriella Kunze, Sara Little, Pete Love, Bill McCarthy, Julianna McKinley, Mark Michael, Anna Mitchell, Kyle Mitchell, Yuki Mizumoto, Jiri Moskala, Dewey Murdick, Dena Nakhle, Sarah Orr, Sandra Perkovic, Chand Prince, Jalyynn Prince, Barbara Read, Robert Regan, Betsy Rodriguez, Michael Schadler, Zdravko Stefanovic, Chad Summa, Lyndelle Webster, Marilyn Webster, Robyn Webster, Gary Webster, Elizabeth Willet, and Zacharias Vargas.

Mark Ziese and Valentin Gligirov were the architects. Stephanie Merling was the pottery registrar and David Merling was the objects registrar. Yuki Mizumoto was the photographer. The Department of Antiquities representative was Adeb Abu Shmais. Karen Borstad was in charge of data entry and processing.

conducted in four fields this season (A, B, C, and D) and uncovered remains from the Early Iron II to the Late Iron II and Persian periods (ca. 10th to 5th centuries B.C.E.).

Early Iron II (10th/9th centuries B.C.E.)

Architectural remains from the Early Iron II continued to be exposed in Field B (east side of the tell) in the area where the paved approach ramp and outer gatehouse were discovered during the previous two seasons. This season, additional flagstones from the Early Iron II were found between the outer gatehouse and what appears to be the threshold of the inner gatehouse of the 10th/9th centuries B.C.E. Stratigraphic evidence suggests that this gateway's entrance was resurfaced with flagstones at least four times during the Early Iron II period. What appears to be the threshold of the inner gatehouse was indicated by the presence of a north-south line of several large foundation stones which could have supported the external wall of the outermost northern chamber or tower. Such chambers/towers are typical of Iron Age multiple-entryway gates. As noted in previous reports, the remains of this Early Iron II gateway were founded directly upon a massive, ashy debris layer that contained mostly Iron I pottery, including typical collared-rim jars and carinated bowls. Some forms, however, could date as late as the Early Iron II. This debris layer appears to be at least 1 meter thick, suggesting a massive destruction of the site near the Iron I/II transitional period.

Iron Age II (9th/8th centuries B.C.E.)

This season, evidence was uncovered to suggest that part of the gateway of the Early Iron II period was rebuilt, perhaps a century or so after the original construction. While it appears that the lower portion of the paved approach ramp continued to be used with this later gateway, the original, small outer gatehouse was replaced by a larger one, slightly to the south. Only four stones of this new gatehouse survive—two large foundation stones of the northeast pylon, and two paving stones at the threshold. Between the threshold of this new outer gatehouse and the inner gatehouse (which continued in use) was a stretch of light gray clay which appears to have served as a roadbed between the two gatehouses. In places, this roadbed was covered with crushed *nari*, plaster, or flagstones. Near the threshold of the inner gatehouse, it appears that the builders decided to simply reuse the flagstones of the Early Iron II pavement as they had further down slope below the outer gatehouse. In summary, only the outer gatehouse and a small stretch of road leading up to the inner gatehouse were reconstructed during this period.

Late Iron Age II (8th/7th centuries B.C.E.)

This season's work suggests that the entire gateway system of Field B was reconstructed sometime during the middle of the Iron II period, perhaps during the 8th century, since no typical late Iron II pottery forms were found under its flagstones and retaining walls. The approach ramp of this gate follows the same line as the original Early Iron II gateway. Pavers from this later gateway could be traced in places up to the threshold of the inner gatehouse, although only a few large stones have survived from the gatehouse, itself.

In Field A, on the north side of the tell, a large "tripartite pillared building" dating to this same period was uncovered (**Plate 1**). Although badly damaged from later Persian period activity, parts of all four walls of the structure could be traced. Indeed, the west wall has survived intact. Typical of these pillared buildings, this structure was divided internally by two rows of stone pillars, creating a central chamber and two flanking aisles. The aisles were both paved with flagstones, while the central chamber had a packed-earth floor. Most of the surviving pillars were either tilted or had completely fallen toward the north. These buildings are well-known from western Palestine where they have been dated from both the Iron I and II periods (c. 11th to 6th centuries B.C.E.), although the building at Jalul may be the first such pillared building found in Transjordan. The function of these pillared buildings has been controversial among scholars; suggestions include storehouses, stables, barracks, administrative centers, and emporiums.

A number of well-preserved clay figurines depicting humans and various animals were found in this building. The animal forms included the typical horse-and-rider figurines. One particularly interesting human figurine appeared to wear a headdress that reflected Egyptian style.

Also from this period were found a couple of engraved seals, although neither was *in situ*. The more interesting was found by R. Younker near the sift dumps of Field C. It was written in an Ammonite script typical of the 7th century B.C.E. The inscription reads "belonging to 'Aynadab, son of Zedek'il" (**Plate 2**). The name 'Aynadab appears elsewhere in the Ammonite onomasticon. The presence of this seal might suggest that the border of the Ammonites extended as far south as Madaba during the latter part of the Iron Age.

Late Iron Age II/Persian Period (6th-5th centuries B.C.E.)

Remains from the Late Iron II/Persian period were excavated in Fields C and D this season. In Field D, a number of wall lines were exposed; these appear to belong to domestic structures. Large quantities

of bowl fragments typical of the Late Iron II/Persian period were found in association with the walls, as well as a few figurines and a limestone cosmetic palette.

In Field C, a large Persian-period building was uncovered (**Plate 3**). This building was supported by at least two, and possibly three, rows of stone pillars. The building was buried by the debris of a collapsed mud roof. Artifacts found in the ruins included two stone incense altars, a stone roof roller, numerous basalt food-preparation vessels, and two large iron tools.

3. Tall al-'Umayri⁶

The sixth season of excavation at Tall al-'Umayri, located on the Airport Highway about 10 km south of the Seventh Circle, uncovered remains from three different cities (**Plate 4**). The first dates to the foundation of the site during the Early Bronze Age (c. 3000 B.C.E.); the second comes from the beginning of the Iron Age in Jordan (c. 1200 B.C.E.) when local tribal groups were beginning to settle down; and the last dates to the end of the Late Iron II period (c. 6th century B.C.E.) when the Ammonite monarchy was absorbed into the Babylonian empire.

Early Bronze Age (ca. 3000 B.C.E.)

The earliest settlement dates to the Early Bronze Age, around 3000 B.C.E., when a dolmen was constructed at the base of the site on the southeast side (**Plate 5**). Over 20 burial sites were found in it during the 1994 excavations. This season, archaeologists found seven floor surfaces, one on top of the other, immediately outside the dolmen, that date to the same time period as the burials. This suggests that the people living at the site celebrated funerary rites at the dolmen long after the burials had begun.

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

The second settlement has been excavated for over 10 years. In previous seasons, the team found part of the best-preserved site from the

⁶Larry G. Herr (Canadian University College) was the director of excavations at Tall al-'Umayri. Supervisors included Doug Clark (Walla Walla College), John Lawlor (Baptist Bible Seminary), and Lloyd Willis (Southwestern Adventist University). Dana Langlois was the photographer. Staff at 'Umayri included Anthony Aavlik, David Berge, Glenn Blackwelder, Alpin Bowes, Mary Boyd, Kent Bramlett, Diana Britten, Laura Cage, Glenda Condon, Emanuel Donkor, Carolyn Draper, Elzbieta Dubis, Juerg Egger, Christina Fields, Judith Frederick, Garey Gantz, Jonathan Gantz, Marilyn Gantz, Fred Holcomb, Sally Holcomb, Camille Holloway, Gerald Klingbeil, Carolyn Majewski, Brad Matson, Robert McDaniel, Roberta Meade, Jane Mitchell, Donald Mook, Joel Ogot, Josephine Old, Sarah Orr, Ed Palar, Gotthard Reinhold, Doris Roth, and Joyce Taylor.

early Iron Age (ca. 1200 B.C.E.) anywhere in Palestine. This season more of that city was uncovered, including more of the city wall (**Plate 6**) and the houses that it protected (**Plates 7, 8, 9**). The city wall has now been exposed for about 30 meters and more will undoubtedly be found in succeeding seasons of excavations. At its southern end, the wall curves into the site, suggesting that a gate may be found there. The cultural finds suggest a simple people with a limited repertoire of pottery and objects, reflecting the settlement of local tribal groups. As noted previously, their pottery corpus included collared-rim jars, so well-known from contemporary sites in western Palestine. The city was destroyed in the early 12th century B.C.E. On top of the destruction, which accumulated to a depth of over two meters, was a small storeroom with 18 large jars that included grape and olive seeds. The jars date to the 11th century B.C.E. (**Plate 10**).

Late Iron II and Persian Periods

A large complex of buildings from the ancient Ammonite kingdom (ca. 550 B.C.E.) administered scores of rural sites that were dedicated to wine production in the hills around Tall al-'Umayri. This season, the largest room of the administrative center was uncovered, complete with three levels of plastered floors. The room was so large that it was probably an open courtyard. However, since no domestic objects were found on the floors, and the broken pieces of pottery on and just above the floors were consistently of a very fine quality, the excavators suggest the building was not a private residence. Many of the walls from this administrative center contained very large stones, typical of structures from the period of the ancient Ammonite monarchy.

Summary

All of the projects will be continued in the next excavation season, scheduled for June 24 to August 5, 1998. Further information and application forms are available from the Institute of Archaeology, Andrews University, Berrien Springs, MI 49104-0990, or on the web: <http://www.andrews.edu/ARCHAEOLOGY> or <http://www.wvc.edu/academics/departments/theology/mpp/welcome.htm>.



Plate 1. Tripartite pillared building from Early Iron II, in Jalul Field A.

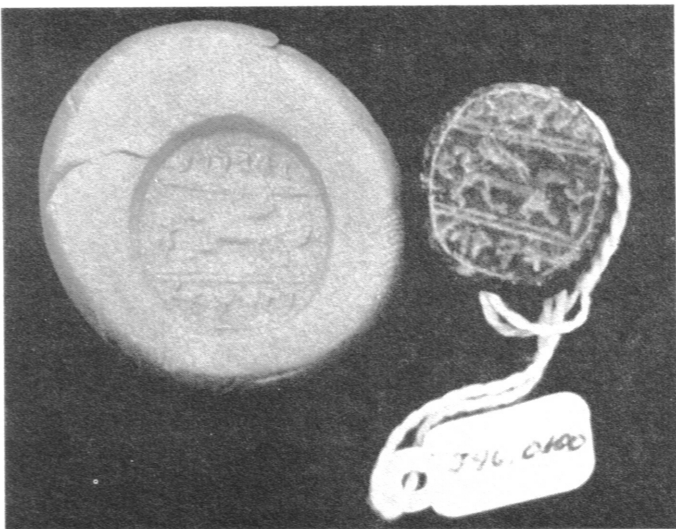


Plate 2. Seventh-century Ammonite seal belonging to 'Aynadab, son of Zedek'il.



Plate 3. Persian period pillared building, Jalul Field C.



Plate 4. Tall al-'Umayri, Field K: the EB I dolmen with surrounding surfaces.

Tall al-'Umayri

Topographic Plan, April 1, 1987
 Created from Data Collected during
 Madaba Plains Project 1986 season by:
 Anthony Aalvik
 Glenn Blackwelder
 Jon Cole

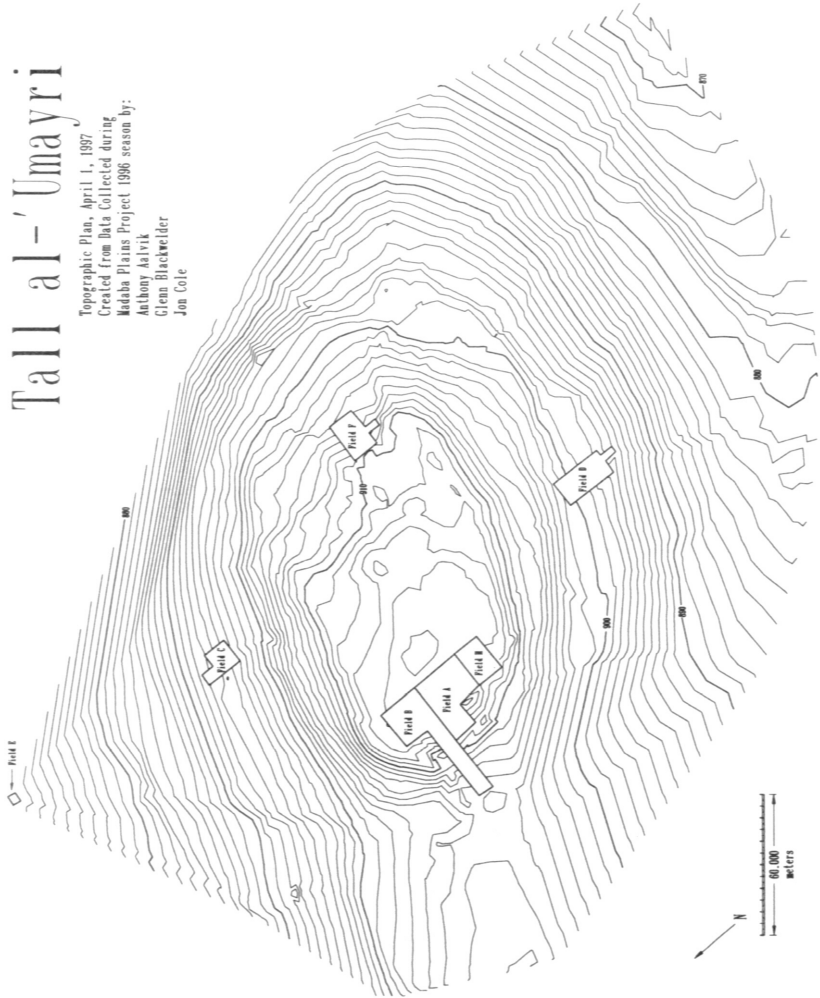


Plate 5. Tall al-'Umayri: Topographic map with Fields of excavation.

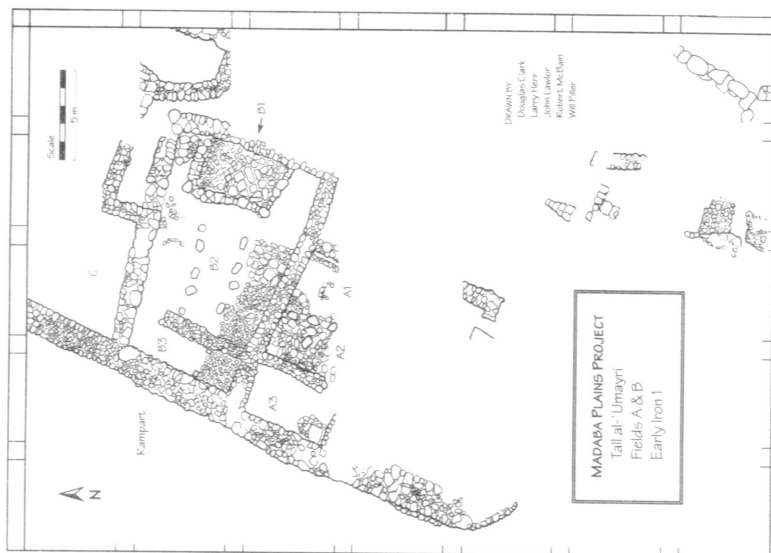


Plate 7. Tall al-Umayri, Fields A and B: Plan of the LB IIB/Early Iron I architecture; the rooms labeled with A, B, and C are in Field B; the wall fragments are in Field A.



Plate 6. Tall al-Umayri, Fields A and B (view is to the north): Outer fortification wall of Phase 11 (A in foreground, B behind); two casemate rooms can be seen in the upper part.

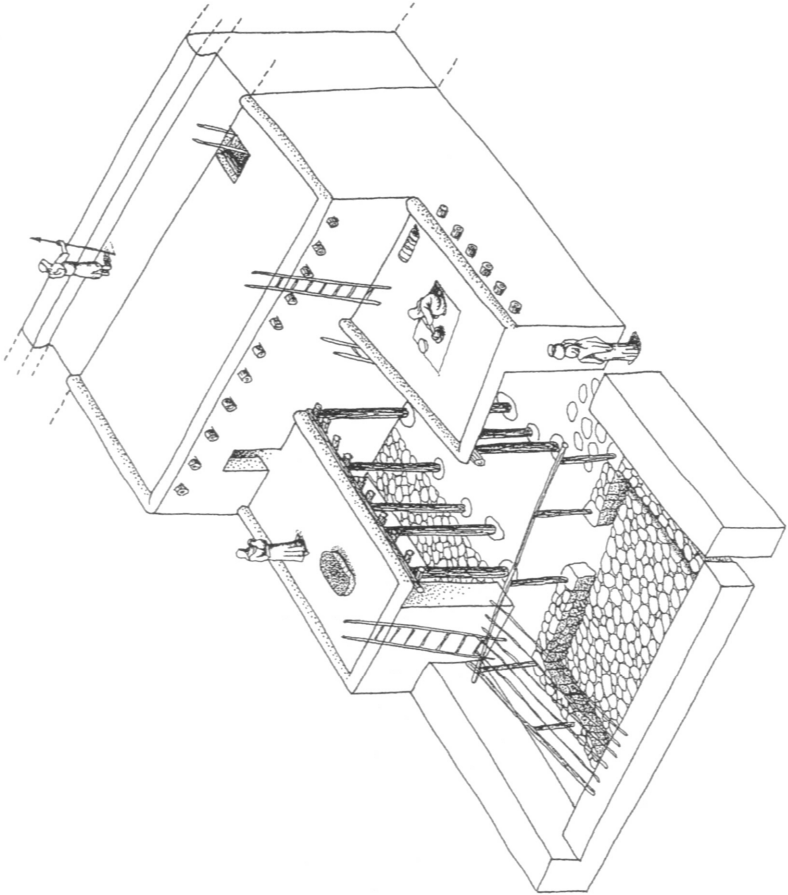


Plate 8. Tall al-'Umayri, Field B: Artist's reconstruction of the four-room house in Phase 11A (Rhonda Root, artist).



Plate 9. Tall al-Umayri, Field B: Four-room house in Phase 11A (looking west).



Plate 10. Tall al-Umayri, Field A: Broken collared pithoi in Phase 10 storeroom.