Madaba Plains Project:

The 1992 Season at Tall al-'Umayri and Subsequent Studies

4

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Editors

Larry G. Herr
Douglas R. Clark
Lawrence T. Geraty
Randall W. Younker
Øystein S. LaBianca

4

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Associate Editor

Philip R. Drey

Technical Assistants

Jennifer L. Groves, proofreader
Paul J. Ray, Jr., editorial assistant
Robert D. Bates, editorial assistant
Eric Shults, series cover designer

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Contributors

Douglas R. Clark *Walla Walla College*
Boguslav Dabrowski *Warsaw, Poland*
Malgorzata Daszkiewicz *ARHED, Warsaw, Poland*
Timothy P. Harrison *University of Toronto*
Larry G. Herr *Canadian University College*
Jacek Jelitto *Warsaw University, Poland*
John I. Lawlor *Grand Rapids Bible Seminary*
Russanne D. Low *University of Minnesota*
Elizabeth E. Platt *University of Dubuque Theological Seminary*

PREFACE

Planning, conducting, and publishing archaeological investigation is a costly and time-consuming business. The successful completion of the 1992 Madaba Plains Project to Tall al-'Umayri was no exception. This fourth season of excavation was sponsored by a consortium of colleges and universities consisting of Andrews University, Atlantic Union College, Canadian University College, and Walla Walla College. Combined with their financial support were volunteer fees and the special contributions of Elizabeth Platt, Leif and Grete Balkland, Wilfred Geschke, Landon and Nancy Kite, Mike Maxwell, Elmer and Darilee Sakala, Mitchell and Patsy Tyner,, Gary and Carolyn Waldron, and especially Ron and Sheila Geraty. In-kind contributions came from the Environmental Systems Research Institute of Redlands, CA, which provided GIS software support, Magellan System Corporation of San Dimas, CA, which provided a GPS receiver unit and Worthington Foods of Worthington, OH, which provided vegetarian canned foods.

Fieldwork was greatly facilitated by General-Director of Antiquities Dr. Safwan Tell; Department of Antiquities representative Rula Qussous; and businessman-scholar, Dr. Raouf Abujaber, one of the landowners of Tall al-'Umayri. Invaluable assistance was provided by the American Schools of Oriental Research through its local affiliate, the American Center of Oriental Research directed by Pierre Bikai, assisted by Patricia Bikai. Other essential aid was provided by Dr. Kamal Fakmawi, principal of the UNWRA-sponsored Amman Training Center, and his staff who graciously turned their excellent facilities over to us during the summer to use as our base camp.

The crucial work of gathering data was accomplished by an international team of 80 archaeologists, students, and laypersons who were assisted by about 40 Jordanian assistants. This team is mentioned in greater detail in chapter one as well as in pertinent chapters throughout this volume. However, their hard work, and persistence in reaching the goal must be especially commended here.

The post-season workforce involved the specialists who prepared the reports included herein, and particularly, chief editor, Larry G. Herr. Special mention should be made of several individuals without whose contribution this volume would not have been prepared. Text layout, editing, and production of printer-ready copy was accomplished by the Publications Department of the Andrews University Institute of Archaeology under the direction first of Jennifer Groves and then of Paul Ray, with special assistance from Philip Drey (layout and editing), Robert Bates (editorial assistant), and Jennifer Groves (proofreading).

Very little of this publication could have been completed without the diligent support at every phase by Andrews University administrators whose far-sighted vision and undaunted advocacy of archaeological research has been so obviously manifested and appreciated. Special thanks go to Neils-Erik Andreasen, Gary M. Ross, Werner K. Vyhmeister, and Randall W. Younker for their support during the publication phase.

Finally, most special recognition must go to the spouses and families of project members, whose emotional support, patience, and encouragement is more appreciated than they may ever imagine.

Larry G. Herr
Director of Excavation, Tall al-'Umayri

Canadian University College
College Heights, AB, Canada
06 January 2000

DEDICATION

It is truly a pleasure for the Madaba Plains Project directors to dedicate this volume in the Madaba Plains Project publication series to His Royal Highness Prince El-Hassan bin Talal of the Hashemite Kingdom of Jordan. His long-standing support of archaeology in Jordan is exemplary and well known throughout much of the world. A friend of archaeologists local and foreign and an extremely articulate spokesperson for the discipline, Prince Hassan has earned our abiding admiration and deep respect.

Prince Hassan is a 42nd generation direct descendant of the Prophet Mohammad, having been born in Amman in March of 1947. He attended primary school in Amman before going to Summerfields Preparatory School, and then to Harrow in England. Having obtained a B.A. with honors from Christ Church College, Oxford, in Oriental Studies in 1967, he went on to complete an M.A. also at Oxford.

He is married to Her Royal Highness Princess Sarvath and they have four children, Princess Rahrna, Princess Sumaya, Princess Badiya, and Prince Rashid.

In addition to serving the Kingdom of Jordan with distinction in a number of crucial, varied and demanding capacities, he has maintained an ongoing interest in and unflagging commitment to archaeology. It was he who, as the Kingdoms patron of archaeological research, recommended, founded and personally inaugurated the highly successful triennial series of international conferences on the history and archaeology of Jordan. These began at Oxford in March, 1980, and have continued in various international locations, including Jordan, most of which Prince Hassan has personally attended and officially opened. His words at Oxford signaled his hopes and intentions for the series: "[that we] recognize the achievements of the past in the task of identifying who we are, to whom we belong and what our perspective of our fixture will be."

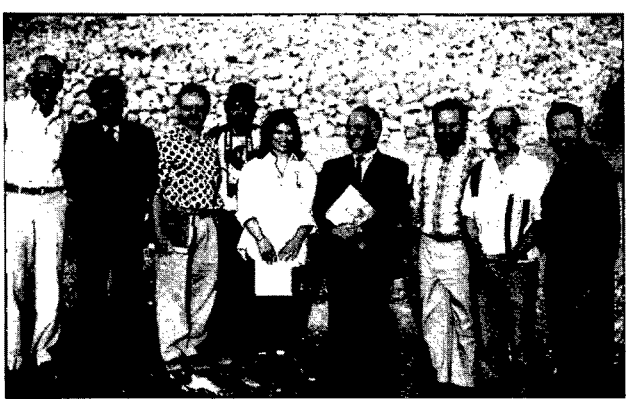
During the summer of 1998, the Madaba Plains Project enjoyed a visit by Prince Hassan on the very last day of excavation for the season, at just the time when everything was photo-ready and completed for the year. He was accompanied by his daughter, Princess Sumaya, who is as committed as he to the success of archaeological research in Jordan and to the preservation of its legacy for future generations who live in or visit the country. We are grateful to Prince Hassan and his family for their hospitality and continuing interest and support.

We have treasured our relationship with many members of the royal family of Jordan over the more than three decades the Madaba Plains Project has excavated in the country and hope his Highness patronage of and interest in the archaeology of Jordan will continue long into the future.

To Prince Hassan we owe an eternal debt of gratitude, and to him we proudly dedicate this volume.

Madaba Plains Project Directors:
Lawrence T. Geraty
Douglas R. Clark (dedication author)
Larry G. Herr
Øystein S. LaBianca
Randall W. Younker

Amman, Jordan
Summer 1999



From left: Ghazi Bisheh; Akel Baltaji; Øystein S. LaBianca; Paul J. Ray, Jr.; Princess Sumaya bint al-Hassan; Crown Prince El Hassan; Larry G. Herr; Douglas R. Clark; and Lawrence T. Geraty.

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CHAPTER 1

An Overview of the 1992 Season of the Madaba Plains Project at Tall al-'Umayri

Larry G. Herr *Canadian University College*

The fourth season of excavation at Tall al-'Umayri (formerly spelled "Tell el-'Umeiri") (fig. 1.1) took place during the summer of 1992 and was sponsored by Andrews University (Berrien Springs, MI) in consortium with Atlantic Union College (South Lancaster, MA), Canadian University College (College Heights, Alberta, Canada), and Walla Walla College (Walla Walla, WA).

In previous volumes of the Madaba Plains Project we have described the general goals and results of the earlier excavations, the layout and history of the site of Tall al-'Umayri, and the geography and history of its vicinity (see the references listed in the bibliography at the end of this chapter). The major objective of this fourth season was to continue the study of intensification/abatement cycles in settlement and landuse patterns and how Tall al-'Umayri influenced and partook in these processes. Strategies for obtaining this objective included expanded and deepened excavation and continued work on sub-surface mapping using Ground Penetrating Radar.

The excavations at Tall al-'Umayri were part of the larger Madaba Plains Project that also saw excavations at Tall Jalul (directed by Randall W. Younker), as well as hinterland excavations at three sites and an extensive regional survey. These latter projects will be reported independently. The work at 'Umayri was directed by Larry G. Herr and took place in four fields (illustrated in fig. 2.1).

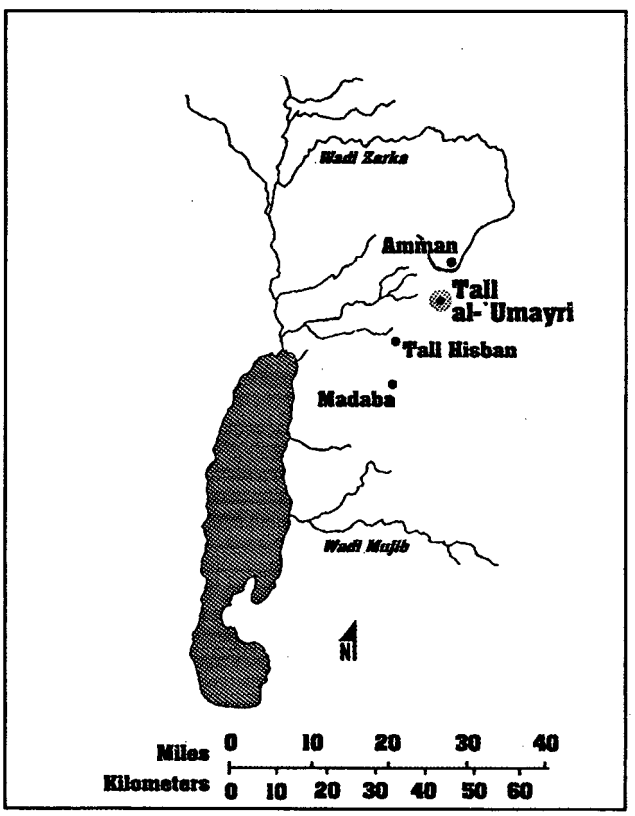

Fig. 1.1. Tall al-'Umayri and vicinity.

Fig. 1.2. The 1992 Madaba Plains Project team.

Discoveries included remains from the Early Bronze Age III (ca. 2500 B.C.), the Middle Bronze Age IIC (ca. 1600 B.C.), the early Iron I period (ca. 1200 B.C.), the mid Iron II period (ca. ninth to eighth century B.C.), and the late Iron II and early Persian periods (ca. 570 to 400 B.C.). Excavation included work in Fields A, B, D, and F. As was the case with *MPP 3*, the database containing all the records of the excavation will be posted on the Web in the near future.

A team of about 120 archaeologists, students, and laypersons made up the international staff (fig. 1.2); additionally about 40 Jordanian workers were hired from the village of Bunayat to help with the fieldwork. The directors of the overall project (MPP) were Lawrence T. Geraty (senior project director of MPP), Larry G. Herr (director of Tall al-'Umayri excavations), Douglas R. Clark (director of the consortium and field school), Øystein S. LaBianca (director of the hinterland excavations and survey), and Randall W. Younker (director of the Tall Jalul excavations).

The following list of staff includes only those connected with the 'Umayri operation. The representative for the Department of Antiquities was Rula Qussous. Camp staff included Bill Cash, Joseph Ghosn, and Trudy Stokes (administrators), Keith Stokes (handyman), Leila Mashni (head cook), Stephanie Merling (pottery registrar), Elizabeth Platt (object registrar), Richard Brenecke (architect), and Rhonda Root and Stefanie Elkins (artists). Specialists included Douglas Schnurrenberger (geologist), Russanne Low (palaeobotanist), Dorothy Irvin (textiles), Jon Cole and Gerald Sandness (subsurface mapping), and Boguslav Dabrowski (figurines). Field photography was done by Herr with Richard Brenecke doing object photography.

The field supervisors were John I. Lawlor (Field A), Douglas R. Clark (Field B), Timothy P. Harrison (Field D), and Russanne D. Low (Field F). They were assisted by square supervisors David Berge, Marie-Claude Boileau, Wendell Bowes, Boguslav Dabrowski, Carolyn Draper, Denise Herr, Dean Holloway, William Jeschke, Robert McDaniel, Gotthard Reinhold, Roland Stickle, Sara Strah, and Lloyd Willis. Assistant square supervisors included Aldeth Amundson, Joaquim Azevedo-Neto, Donna Bilek, Rita Bueche, Julie Coolen, John DuBourt, Christopher Edwards, Lisa Ford, Daniel Martin, Christian Reinhold, Michael Strah, Andrew Strah, and Phillip Strah.

Special thanks go to Safwan Tell, Director-General of the Department of Antiquities who helped us at many points. We are also grateful for the support of Raouf Abujaber, owner of the site, Pierre Bikai, the director of

ACOR, and Kamal Fakmawi, principal of the Amman Training Center where we were generously housed. Without the generosity and support of these individuals, the project could not have been successful.

The first two volumes of this series included the data summaries of the locus sheets at the end. Beginning with *MPP 3* this feature was abandoned in favor of future publication of the complete 'Umayri database on the World Wide Web. Although the address for the database site is not yet known, the following sites presently contain materials and reports from 'Umayri and, in the future, may provide links to the database: http://www.wwc.edu/academics/departments/theology/mpp and http://www.andrews.edu/ARCHAEOLOGY. It is presently planned that a manual can be downloaded from the site with instructions on how to use the database on-line.

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CHAPTER 2

Excavation and Cumulative Results at Tall al-'Umayri

Larry G. Herr *Canadian University College*

Introduction

During the 1992 (fourth) season of excavation at Tall al-'Umayri, work continued in four of the seven fields opened in previous seasons (figs. 2.1 and 2.2). Fields A, B, D, and F saw deepening of previous squares, while three fields were not worked: Field C was completed in 1987; Field E was discontinued in 1989; and the soundings of Field G were finished in 1989. For the results of the 1984, 1987, and 1989 seasons, see our seasonal reports, *Madaba Plains Project 1* (Geraty, Herr, LaBianca, and Younker, eds. 1989—hereafter *MPP 1*), *Madaba Plains Project 2* (Herr, Geraty, LaBianca, and Younker, eds. 1991—hereafter *MPP 2*), and *Madaba Plains Project 3* (Herr, Geraty, LaBianca, Younker, and Clark, eds. 1997—hereafter *MPP 3*). Because new data from each field season changes the phasing worked out in previous reports, we include a comparative stratigraphic chart by season for each field in the individual field reports. Each phase is called a Field Phase (abbreviated "FP") to emphasize its isolation to a specific field. Although the phasing is numbered from top to bottom, we discuss the remains in the order they were deposited, lowest to uppermost.

Summary of the 1992 Results

Field A. At the western edge of the acropolis (fig. 2.1), Field A includes a total of 12 squares for an overall area of 17 × 23 m (Lawlor, chapter 3, this volume; for previous seasons, see Lawlor 1989, 1991, and 1997). This season, four previously opened squares were deepened to Iron I levels (Squares 7K40, 7K41, 7K42, and 7K51). Unfortunately, restrictions in digging area caused by the presence of massive later walls allowed us to see only fragments of the structures. The upper courses of a possible LBA wall were encountered (FP 11), while, above it, FP 10, the earliest Iron I phase, is inferred by a thick layer of fallen stones which must have come from architecture dated to early Iron I by the pottery, which is actually transitional LB/Iron I. Above the stone tumble were north-south and east-west wall segments and door jambs of FP 9, too fragmentary as yet to reconstruct building plans. One wall was constructed of cyclopean stones. All were covered by a destruction layer of burned earth and bricks, also containing pottery of the LB/Iron I transition. In this destruction was a collared pithos apparently reused as an oven. Above the destruction was another phase of fragmentary walls (FP 8) with associated pottery dated to the early Iron II period (ninth or eighth centuries B.C.). No surfaces were found with these walls. Above them ran the founding courses and basement floors of the massive walls of the first phase of the Ammonite administrative complex (FP 6B). Floors in three of the rooms were excavated (one was cobbled), but nothing was found on them to suggest

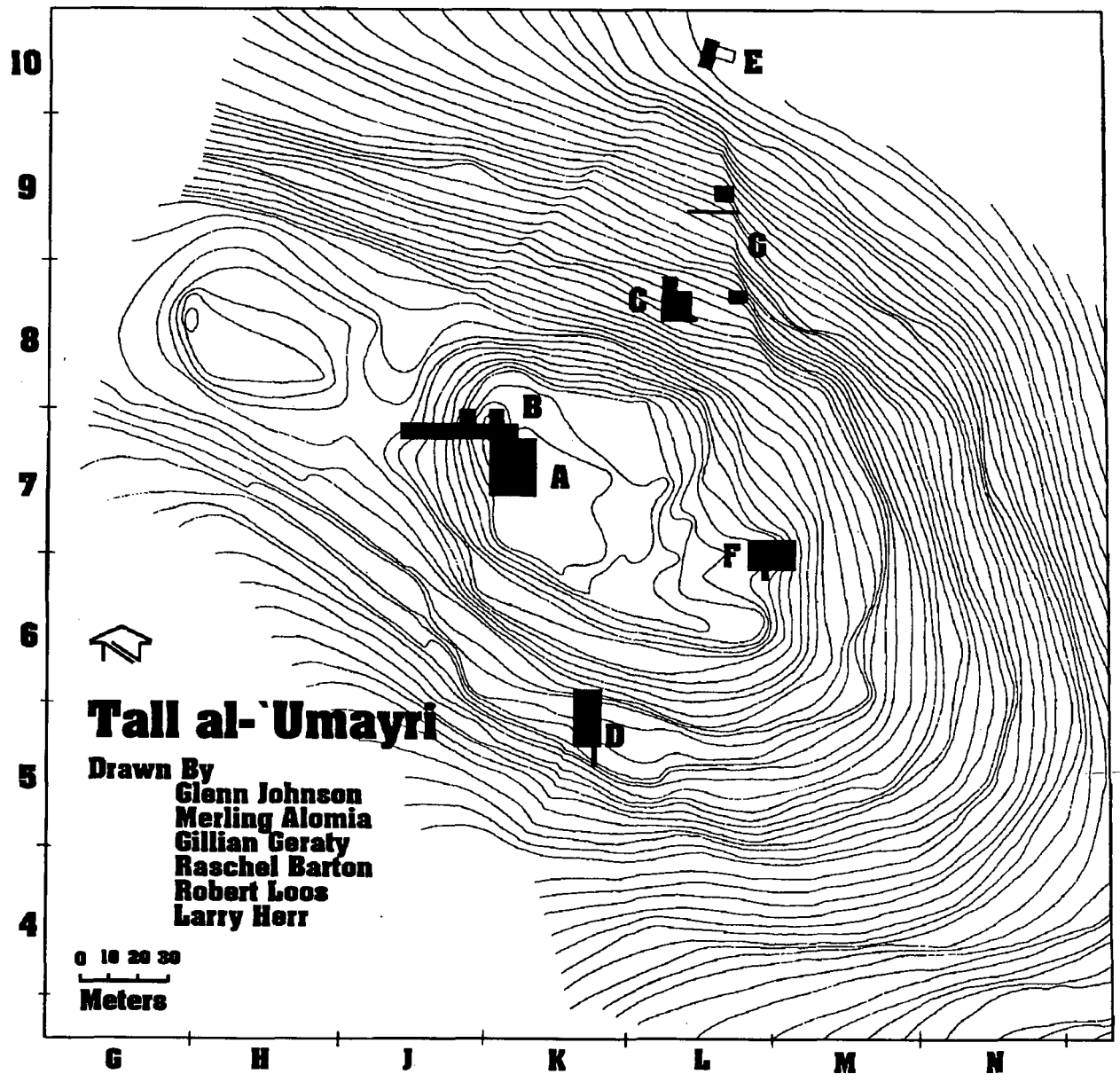

Fig. 2.1. Topographic map of Tall al-'Umayri with fields of excavation after the 1992 season.

Fig. 2.2. Aerial view of Tall al-'Umayri. (Balloon photo by E. and W. Myers)

use patterns. The floors of the upper phase (FP 5) had been excavated in earlier seasons.

Field B. Located on the western slope of the site (fig. 2.1), Field B was extended by opening a new square farther downhill to the west (7J84), giving a total of ten squares so far opened over an area of 35.0 × 5.0 m and 11.0 × 11.0 m (Clark, chapter 4, this volume; for previous seasons, see Clark 1989, 1991, and 1997). Four previously opened squares were continued (7J86, 7J87, 7J89, and 7K80). Bedrock was reached in a portion of one square (7J88) beneath the MB IIC rampart. In bedrock cavities small earth deposits contained EBA pottery (FP 13), evidently left behind when the rampart of FP 12 was constructed. The rampart was constructed in FP 12 in MB IIC to create an artificial slope on top of the virtually level bedrock by increasing the pitch of earth layers until it reached about 20°. The rampart disappeared beneath the fortifications of FP 11 and it is unknown if a wall surmounted the rampart at its crest. At the bottom of the slope, a dry moat was apparently dug out at this time to cut easy access from a high topographic shoulder connecting the *tall* with hills to the west (Clark 1997). The moat's flat bottom was discovered in 1989. This season the west face of the moat was cleared in Square 7J84. It is assumed the moat ran along the base of the *tall* on its western side only.

The most significant phase was that of the LB/Iron I transition (FP 11) in which a major new fortification system was constructed: the moat at the bottom was reused, but with about a meter of pre-FP 11 debris left in the bottom; a new rampart covered that of FP 12 with about 1.5 m of chalk stones and beaten earth, increasing the slope to about 30° (it also included a stabilizing wall); a steeply sloping retaining wall supported the rampart at the bottom to keep it from eroding into the moat and a casemate wall was constructed at the top of the moat with its founding course on top of the MB IIC rampart. These are the most complete and best preserved fortifications from this time yet uncovered in Palestine; part of the inner casemate wall is preserved over 2 m high. Inside the casemate fortifications, parts of two houses were uncovered. The southern house includes three rooms so far uncovered: 1) a dirt-paved courtyard with hearth, storage bin, bench, and food-processing tools on the floor; 2) to the west and separated from the courtyard by a curtain wall of post bases was another room paved with flagstones and including a cultic corner comprising a standing stone and flat-lying altar(?) stone; 3) a doorway led into the casemate room which included a stepped, plastered platform and several collared pithoi. The second house, to the north, contains two rooms so far discovered, both paved with flagstones. Covering everything was a massive destruction over two meters deep in places and made up of layers of collapse: first came the roofing material (dirt and wooden beams) followed by masses of mudbricks from the upper, second story walls, and then stones mixed with bricks from the upper courses of the first story. Within the destruction were tens of thousands of barley seeds (some from the base of a collared pithos), the articulated shanks of a horse and another large mammal with butchering marks, several types of pottery vessels, and over 20 crates of collared pithoi as yet unrestored.

Outside the fortifications, a small platform for a shack was constructed atop fill layers in the moat (late Iron II/Persian phase outside the fortifications). Pottery dated to late Iron II or Persian.

Field D. Located on the southern terrace (fig. 2.1), excavation in Field D returned to the five squares of the 1989 season (5K67, 5K76, 5K77, 5K86, and 5K87), giving a total of nine squares in the field covering an area of 11.0 × 23.0 m and 2.0 × 5.0 m (Harrison, chapter 5, this volume; for previous seasons, see Mitchel 1989; Daviau 1991; and Harrison 1997). This season, bedrock was reached in all four squares. The lowest earth layers (FP 7) contained a few potsherds that could be dated to EB I, but no architecture seemed to belong to them, except, possibly, a storage cave below house walls. The earliest wall fragments were of domestic buildings dated to EB II (FP 6). These reused the storage cave and house walls of FP 7; very few finds were made on the surfaces. Reusing some of these walls and with a surface that went over earlier wall phases, was a coherent house plan of FP 5, roughly square in plan. This was the lowest phase encountered in 1989.

Field F. Located on the eastern edge of the acropolis where a depression marked what appeared to be an opening into the ancient city (fig. 2.1), excavations in Field F returned to the two westernmost previously excavated squares (6L98 and 7L08). A total of seven squares have been opened here for a total area of 11 × 16 m (Low, chapter 6, this volume; for earlier seasons see Low 1991 and 1997). This season excavation penetrated to an early Iron I level represented by one wall fragment but did not dig deep enough to find associated floors (FP 10); this may equal the earliest of the two early Iron I phases in Fields A and B. Part of a house may have been discovered in the northwestern part of the field, made up of two walls at right angles and an installation (FP 9); this probably equals the second early Iron I phase in Fields A and B. Moreover, similar to that part of the site, a massive destruction, characterized by burned bricks and roofing beams, covered the floor. A well-preserved axehead came from this destruction. After a hiatus, represented by FP 8, small wall fragments found in earlier seasons were associated with shallow earth layers found this season and may belong to the early Iron II phase uncovered in Fields A and B. In FP 6 from the late Iron II period, a house was constructed during late Iron II. Although only the eastern portion of the house was within the limits of excavation, it may have had a four-room plan; the floors of the two rooms uncovered

IP	Period	Field A	Field B	Field C	Field D	Field E	Field F	Field G
23	EB I?	—	—	—	Sherds	—	—	—
22	EB II	—	—	FP 10?	FP 7	—	—	—
21	EB III	—	—	FP 9?	FP 6	—	—	—
20	EB III	—	—	FP 9?	FP 5	—	—	—
19	EB III	—	—	FP 8?	FP 4	—	—	Ph. 4?
18	EB III/IV	—	—	FP 7?	FP 3	—	—	Ph. 3?; Trench: Loci 6, 8?, 10
17	EB III/IV	—	—	—	FP 2	—	—	—
16	MB IIC	—	—	FP 6	—	—	FP 12?	Ph. 2; Trench: Loci 4, 11?, 12
15	MB IIC	—	FP 12	FP 5	—	—	FP 12?	Ph. 2; Trench: Loci 4, 11?, 12
14	LB IIB	FP 11	—	FP 4	—	—	FP 11	—
13	EIr I	FP 10	FP 11B	FP 4	—	FP 8?	FP 10?	Trench: Loci 9, 15
12	EIr I	FP 9	FP 11A	FP 4	—	FP 8?	FP 9?	Trench: Loci 9, 15
11	Ir I/Ir II	—	FP 10	—	—	FP 7	FP 8?	—
10	EIr II	FP 8	FP 9	—	—	FP 7	FP 7?	—
9	LIr II	FP 7	FP 8	FP 3?	—	FP 6	FP 6?	—
8	L Ir II/Per	FP 6	FP 7	FP 3?	—	FP 5	FP 5?	—
7	Per	FP 5	FP 6	FP 2?	—	FP 4	FP 4?	—
6	Per	FP 4	FP 5	FP 2?	—	FP 4	FP 3?	—
5	Per	FP 3	FP 4	FP 2?	—	FP 4	FP 3?	—
4	ER	FP 2	FP 3	FP 1	FP 1	—	—	FP 1
3	Byz	FP 1	FP 2	FP 1	FP 1	FP 3	FP 2	FP 1
2	Isl	FP 1	FP 1	FP 1	FP 1	FP 2	FP 1	FP 1
1	L Isl/Mod	FP 1	FP 1	FP 1	FP 1	FP 1	FP 1	FP 1

Fig. 2.3. Site-wide, Integrated Phase (IP) stratigraphic chart.

were cobbled. Parts of this house were reused in FP 5 along with another wall to the east. However, no surfaces were discovered. It was found that a wall attributed to earlier phases in 1989 really belonged to a later phase, FP 3.

Cumulative Integrated Stratigraphy

In the field reports published in this volume, the stratigraphy of each field is broken down into field phases numbered from top to bottom. Each phase is a coherent field-wide stratigraphic unit reflecting a single phase of architectural and human activity patterns. Each phase contains, theoretically, construction, use, and destruction/abandonment stages. Although this is much like a "stratum," we have avoided that term to emphasize both the preliminary state of our stratigraphy and the limited extent of correlations between fields. When the phasing from all fields is combined (we must emphasize the preliminary nature of many of the connections), a total of 23 "integrated" phases, stretching from the Early Bronze Age until modern times, is suggested.

We must emphasize that this stratification holds true only through the 1992 season. Future excavations will undoubtedly modify the picture significantly. Not only will more phases most likely be found, adding to the total, but many connections must remain tentative. The "Integrated Phase" (IP) numbers in fig. 2.3, therefore, are "working" numbers and probably will be changed in reports of subsequent seasons. The dotted horizontal lines indicate destructions or periods of abandonment.

Comments on the Stratification Chart. Figure 2.3 is an attempt to establish a site-wide stratification. However, none of the connections are certain between the fields, except some of those between Fields A and B, which are adjacent to each other. We have tried to avoid phase proliferation by suggesting connections if there is no evidence to deny them. A question mark beside a phase number indicates that the attribution is correct for the time period, but we are uncertain to which integrated phase it should be applied. Usually, the least certainty occurs in those fields outside the acropolis, such as Fields E, C, and F.

The assignment of FP 10 of Field C, carvings in bedrock, to IP 22 is far from certain. It is simply earlier than the other EB III phases in Field C, but may be EB III, as well.

Integrated Phases 21-17 were determined by the architecturally differentiated EB III phases in Field D. Pottery assemblages are not specific enough to be of help.

The phasing in Field C is clear, but the equation of its terraces to the phases of Field D is speculative, based on the room in Square 8L63 (Field C, FP 8), which was similar to those in Field D, FP 4. The same is true of the Field G remains: because bedrock was not reached there and because smashed pots were found, we simply equated the top two EB III phases with the two most significant upper occupational phases in Field D, which also had smashed vessels.

The two MB IIC phases (IPs 16-15) were separated clearly in Field C. Although we have yet found only one MB IIC phase in Field B, the rampart there infers two original phases: while the rampart dated to MB IIC, the pottery within the rampart was also MB IIC, indicating an earlier settlement for the origin of the pottery. We have thus equated the construction of the Field B rampart with the later MB phase in Field C. The MB evidence from Field G could be from either phase.

The strongest evidence for IP 14 (LB IIB, based on the pottery) was found in Field F in an extra-urban earth layer. Part of FP 4 in Field C was equated with it, because that phase seems to have straddled both LB IIB and Iron IA.

The interrelationships of the early Iron I deposits attributed to IPs 13 and 12 are very good for Fields A and B, both of which had two distinct phases of occupation and the second one was massively destroyed. Their relation to the preceding IP 14 was less happy. In Field C an extra-urban terrace wall seems to have carried on from LB IIB into early Iron I (FP 4). In Field F, only one phase was inside the city, while the separation into two phases is connected with an extra-urban terrace wall (FPs 10 and 9). The remains from Field E have simply been attributed to both IPs 13 and 12 because of their general ceramic date.

As for IP 10, the storeroom in Field B and the walls in Field A were clearly above the remains of IP 11 and 12. But because this is the only early Iron II *in-situ* architecture so far discovered on the mound, we feel relatively certain the remains from Field E (FP 7) overlapped it.

The determination of late Iron II/Persian IPs 9-5 is based on the stratification of Fields A and B, although stratigraphic connections between the fields are not yet certain. However, both fields have the same number of phases with similar relationships to earlier and later phases. The earliest phase in both fields is made up of pits (Field B) and small, weak installations (Field A), suggesting a poor settlement of newcomers. The last phase was that into which the Early Roman ritual bath was dug. However, it is possible that the intervening phases could have been isolated reconstructions limited to individual structures. Although also containing the same number of phases, the upper phases in Field F seem to be extra-urban in nature and probably had a separate history. The attribution of phases in Field C is guesswork, based on their general ceramic date and sequence. All the late Iron II/Persian materials from Field E have been grouped into one phase and connected with all *tall* phases; presumably, the water source would have been used throughout.

The early Roman ritual bath on the border of Fields A and B makes a clear connection for IP 4. Later phases have been connected based on general ceramic date.

Settlement Patterns at Tall al-'Umayri

The five broad cycles of intensification and abatement in our region have been outlined elsewhere (Herr 1991). Tall al-'Umayri (West) was occupied by urban settlements during Cycles 1 and 2 (Bronze and Iron Ages), but, as can be seen from the stratigraphic summary chart above, indications of non- or partial-occupational activities from the other cycles have been uncovered. The evidence unearthed by the 1984 random surface survey (Herr 1989c) and four seasons of excavation suggest a steadily shrinking settlement. From a maximum size in EB III each subsequent settlement gradually diminished to a minimum, possibly during the Late Bronze Age, but also during the Persian period at the end of the major occupational history of the site. However, the economic and social strategies of the inhabitants do not seem to have followed the same general pattern of degeneration. Indeed, the greatest prosperity and highest degree of job specialization probably occurred while the site was near its smallest size during late Iron II, a time of complex settlement systems in the region when our site seems to have been focused on administrative activities.

The following discussion is a synthesis of the data discovered during the past four seasons of excavation seen in the light of the cyclic pattern of regional history we have earlier outlined (Herr 1991). It is also intended to amplify the summary information given in the stratigraphic summary chart above. We can now be quite precise about the specific periods of occupation, and how long they lasted. For instance, it is now clear there was not a continuous intensification process for the Iron Age (Herr 1991: 11-12); instead, three periods of occupational growth were separated by two periods of abandonment. Also, during one of our regional cycles, more than one episode of intensification and abatement occurred at our site: during Regional Cycle 1, when there was an intensification process during the Early Bronze Age and an abatement during the Middle and Late Bronze Ages, 'Umayri saw two sub-cycles: 1) an intensification during EB I-III and an abatement during EB IV, and 2) another intensification and abatement during MB IIC. Moreover, the next regional cycle (Iron Age) seems to have begun at 'Umayri somewhat earlier at the end of the Late Bronze Age, stopped abruptly in the 12th century, sputtered to life briefly in the 10th-9th centuries and again in the 9th and 8th centuries,

and come on strong in the 6th and 5th centuries.

Regional Cycle 1 (Bronze Age): beginnings of the first intensification, EB I-II (IPs 23-22). The Chalcolithic settlement reported by Franken and Abujaber (1989: 408) was located in the valley immediately to the east of Tall al-'Umayri (West) and was apparently destroyed or covered by the present freeway. Our survey team could find no trace of it. However, a few pottery sherds were found in Field D which could belong to the Chalcolithic or EB I periods (Harrison, 1997; chapter 5, this volume), suggesting that our site may have been founded during one of those two periods. If so, it probably began on the top of the hill and gradually grew down the slopes. It is possible that the bedrock cuttings in Field C, such as cupholes, could have occurred outside the settlement during this period (Battenfield and Herr 1989: 259-261). The initial settlers were probably attracted to the site by the water source at the base of the *tall* on the north.

Regional Cycle 1 (Bronze Age): the first intensification, EB III (IPs 21-19). Although the site may have begun as early as the Chalcolithic or EB I periods, the largest settlement in its history seems to have developed during EB III. Domestic structures from this period have been found on both the northern and southern slopes (Fields C and G in the north, and Field D in the south). Moreover, not only was pottery found on the eastern shelf during the random surface survey in 1984 (Herr 1989c), but emerging (unexcavated) remains from Field F in that location are probably EB III, as well. The settlement thus covered ca. 4.25 hectares. So far, no evidence of fortifications has been found, even though excavation of Field D should have uncovered them had they existed.

The finds from Field D, on the southern slope, illustrate this period of activity best, suggesting moderately successful living strategies (Harrison, 1997; and chapter 5, this volume). At least two significant EB III phases of domestic structures were built (IPs 21-20) before the founding of the major phase (IP 19). Although little is yet known of IP 21, the structures in IP 20 (Harrison, this volume: FP 5) do not seem to have been as large or complex as those in subsequent IP 19 (Harrison 1997: fig. 5.11). Thus, there seems to have been an intensification from smaller, less ambitious settlements to that of a relatively booming one.

In IP 19, blocks of three domestic compounds (living rooms, animal pens, courtyards, storerooms) were separated by narrow passageways (Harrison 1997: fig. 5.11). In the largest of the southern compounds, we have a clear picture of multi-faceted activity patterns: The cobbled courtyard, where the family flocks may have been kept, contained two bins or mangers. Large patches of ashy earth and burned stones suggest fires, probably burned while the animals were in the fields. Passing through a doorway in the southeast corner of the courtyard, one emerged into a large storeroom with a floor on two levels, the upper one to the north held back by a small retaining wall. Here, about 30 storage vessels were strewn over the floor, becoming denser toward the south (Harrison 1997: fig. 5.11). The southern room was probably used for cooking and living. Against the north wall was a low wall, perhaps an ancient version of a counter or a seat used in food preparation, in which a stone-lined hearth-pit was embedded.

In the northern compound, where a series of beaten-earth surfaces corresponded to several sub-phases of architecture, we have a picture of change and development through a relatively long period of time with no evidence for destruction (Daviau 1991: figs. 6.3, 6.8, 6.12, 6.25, 6.35). The many shallow surfaces, one laid on top of the other, indicate that changes were frequently made to the complex. On the surfaces were finds reflecting agricultural activities, such as mortars and grinders for grain, pithoi for storage (one contained over 4000 chick peas), and flint knapping. Hearths reflected cooking activities in the courtyard, and several sizes of spindle whorls suggest a variety of textile products.

The overall picture of IP 19 is one of a mixed agricultural and pastoral subsistence system. Although evidence for trade was not clear beyond imported basalt grinders and three sherds of Khirbet Kerak ware, the inhabitants of each family seem to have practised all the necessary arts of survival associated with such a lifestyle: herding, agriculture, hunting, textile production, and food storage and processing. Because of the absence of a city wall, security does not seem to have played a major role in the concerns of the inhabitants, except that they gathered together into a settlement.

Although less well preserved, the remains on the north slope in Fields C (Battenfield and Herr 1989: 261-267; Battenfield 1991: 75-79) and G (Fisher 1997), suggest similar conclusions. Broken pots in ashy debris, small domestic rooms (Battenfield and Herr 1989: Figs 17.8, 11), and terrace walls were found in small soundings.

Regional Cycle 1 (Bronze Age): the first abatement, EB III-EB IV (IPs 18-17). Above the remains of IP 19 in Field D were two phases of buildings, still dated to EB III (although the upper one [IP 17] contains pottery which has EB IV elements [Mitchel 1989]). The earliest phase (IP 18) consisted of two single-room dwellings, each with a central pillar supporting the roof (Mitchel 1989: 287-292, figs. 18.5-7). The beaten-earth surfaces inside the houses were ca. .30 m lower than the outside exposure surface and very few finds were made on them, save for a mortar in one house. The lack of well-trodden exterior surfaces and the large space between the houses (ca. 5.00 m) with no intervening outbuildings suggests a sparsely settled village in decline. We have speculatively ascribed the top EB phases in small soundings from Fields C and G on the

north slope to this phase. They included small terrace walls and some smashed EB III storage vessels (Battenfield 1991: 75-79; Fisher 1997). The size of this settlement is unknown, but may have included the same area as the former settlements (ca. 4.25 hectares).

Only foundations from the latest settlement (IP 17) in Field D have been found (Mitchel 1989: 292-295, figs. 18.12-14). The walls were very narrow, made primarily of small, round cobbles with large spaces filled by mud mortar. The walls were too flimsy to support a significant superstructure and may have been nothing more than animal pens.

There is reason, therefore, to suggest that the IP 21-17 settlements represent a gradual transition from combined agriculture/pastoral strategies in early EB III toward primarily pastoral activities (perhaps including seasonal nomadism) in late EB III or early EB IV. Thus, the abatement process at the site seems to have included not only fewer inhabitants, but a shift in economic and social strategies. Finally, the site was completely deserted during the late EB IV and early MB II periods.

Regional Cycle 1 (Bronze Age): the second intensification, MB II (IPs 16-15). Although the rest of central Transjordan largely remained in an abated state throughout the Middle and Late Bronze Ages, Tall al-'Umayri, probably because of its proximity to a water source, received new settlement activity in MB IIC, albeit reduced in size from that of EB III. MB IIC remains have been found (many in secondary contexts) on every part of the site, except the southern slope in Field D, for a total size of ca. 3.4 hectares.

Evidence for two phases of MB IIC occupation is clear. The rampart in Field B contained significant amounts of MB IIC pottery (Herr 1997b; Clark 1997: figs. 4.6-7), inferring that, when it was constructed, an earlier MB IIC settlement was already present. This evidence seems to correlate with that from Field C, where two MB IIC phases were found (Battenfield 1991: 79-84).

In the first phase (IP 16), a cobble surface associated with a single wall, large enough to be a house wall, was found in Field C (Battenfield 1991: 79). A similar wall with a dirt surface was found in Field F (Low 1997) where the remains seem to have been supported by a terrace wall. In Field G, a possible surface was found in Square 9L46 and a large plaster surface was exposed in the trench (Fisher 1997). Although we cannot be certain these four groups of remains were contemporary, they were all outside the rampart fortification and may reflect an initial, unfortified MB IIC settlement spread over a large portion of the site. There seem to have been open spaces in this settlement, reflecting relatively few security concerns.

This must have changed, however, because the construction of the rampart fortification system, complete with a dry moat at the bottom (IP 15), indicates that security became necessary (Clark, chapter 4, this volume; Clark 1997). Although two short wall fragments with corresponding surfaces were found in Field C outside the rampart (Battenfield 1991: 80), a more intense settlement probably existed inside the rampart, which seems to have encircled the acropolis only (ca. 1.5 hectares). Nothing from that settlement inside the rampart has yet been found. Nor has any city wall been discovered in association with the rampart.

It would thus seem that the MB IIC intensification process began with an unwalled, scattered settlement, and developed into a fortified acropolis with some domestic structures outside the walls. Alternatively, the two phases in Field C could have both been part of the pre-rampart settlement. If so, there would have been no extra-urban settlement during IP 15.

In our MB IIC ceramic corpus (fig. 4.13; Herr 1997b; Clark 1997: figs. 4.6-7), there is one sherd of chocolate-on-white ware (Clark 1997: fig. 4.6:30). There were, however, many other body sherds with the same type of decoration which have not been published. Although chocolate-on-white ware has usually been taken as a hallmark of MB IIC\LB I, the rest of the forms in our corpus were all MB IIC. We thus refrain from suggesting that the rampart was LB I. The lack of LB I pottery elsewhere at the site indicates that the settlement associated with the rampart probably did not extend into LB I.

Instead, the MB IIC settlement ceased suddenly, with no signs of an abatement process, for unknown reasons near the end of the Middle Bronze Age. Future excavations inside the acropolis may help us understand why. There seems to have been a hiatus until the end of the Late Bronze Age.

Regional Cycle 2 (Iron Age): the first intensification, LB IIB-early Iron I (IPs 14-12). Immediately on top of the MB IIC walls and surface in Field F was a thick layer of fill debris with LB IIB pottery (IP 14; Low 1997: figs. 7.6-7). From the debris came two ceramic female fertility figurines, typical of the Late Bronze Age. Because the debris seemed to have been extra-urban, it is likely that the LB inhabitants lived within the protection of the MB IIC rampart fortification system (ca. 1.5 hectares). We have ascribed the earliest stages of a terrace wall in Field C (Battenfield 1991: 85) to IP 14, because its date seems to have been LB IIB, as well. It may have been associated with refuse burning, again suggesting extra-urban activities.

The remains in both Fields C and F suggest a smooth transition from the LB IIB deposits to those of the earliest Iron Age (IP 13). In Field C, the terrace wall was expanded while the burning activities were continued (Battenfield 1991: 85). In Field F, a long terrace wall was constructed which preserved the IP 14 fill layer upslope (Low 1997: fig. 7.8) and allowed early Iron I debris to build up above

it; similar debris accumulated at the bottom of the wall's exterior. It would seem that these remains were again outside the contemporary settlement. This season a probable house fragment was found (Field F, FP 10). In Field E, the water source at the bottom of the north slope, Iron I materials probably belong here (Fisher 1997: fig. 6.6). Stone tumble and fragmentary walls in Field A probably also belong to IP 13. Although no architecture from this phase has yet been uncovered in Field B, the presence of significant numbers of early Iron I pottery in the rampart of the subsequent city (IP 12) infers a settlement that preceded the rampart construction.

But the most astonishing feature of excavations at 'Umayri so far is the IP 12 city, which includes the most extensive and best preserved fortification system so far discovered from this time in all of Palestine (Clark, chapter 4, this volume: FP 11A). Preserved by a massive destruction over 2.0 m deep in places, the fortifications comprised 1) a casemate wall at the top of the slope (the one casemate room so far cleared was used as a storeroom with several collared pithoi still standing against one of the walls [Clark 1997: fig. 4.13]); 2) a newly constructed rampart 1.5 m above the MB IIC rampart; 3) a retaining wall at the bottom of the rampart; and 4) a reuse of the MB IIC dry moat. The rampart was made of three layers of stones and earth where we excavated it. The bottom layer consisted of sharp, large cobble-sized stones to provide purchase on the slippery surface of the MB IIC rampart. A yellow clay was added to the upper stones and two earth layers were then laid above the stones. Each of the three layers corresponded to the lowest stone courses in the outer casemate wall, which were cantilevered outward until, aboveground, they extended straight upwards (Clark 1991: 57, fig. 4.5). This suggests the rampart was built as much to provide counterpressure against the debris inside the wall as it was defensive in nature. The rampart was stabilized about halfway down the slope by a line of stones (Clark 1989: fig. 16.4; 1997: fig. 4.8). The retaining wall sloped inward ca. 60°; the dry moat would not have continued around the site, but was only necessary on the narrow western side where a high ridge joins the base of the *tall*. The pottery from both the rampart and the destruction debris which put the system out of use dated to early Iron I (Herr 1997b; and chapter 7, this volume: "The Pottery"). Domestic structures were found inside the fortifications in both Fields B and A (Clark, chapter 4, this volume; Lawlor 1991: fig. 3.3; and chapter 3, this volume). One of the structures seems to have contained a small cultic corner.

The strong, fortified early Iron I settlement of IP 12 was abruptly and violently destroyed. The deep destruction debris in Field B suggests the original walls were high. Moreover, reconstructable collared pithoi found within the destruction debris, high above the floors, indicate the presence of at least one upper floor. At other locations on the site, this destruction was also very graphic. In both Fields A and F a thick layer of ash and burned bricks, including ballistic stones and a bronze axehead, covered the early Iron I walls, which have not yet been extensively exposed. Nothing has yet been found which might suggest the ethnicity of either the inhabitants or the destroyers. After this destruction, the city was not rebuilt. A hiatus occurred during the rest of Iron I until the very end of the period or early Iron II (IP 11).

The settlement at Tall al-'Umayri thus reflects the regional intensification pattern for the beginning of the Iron Age, although it began perhaps a little earlier than most, near the end of the Late Bronze Age, probably because of easy access to water. Although the site did not grow in size (probably still confined to the acropolis, ca. 1.5 hectares), it appears to have intensified economically, building from an unfortified settlement (IP 14) to one which constructed the elaborate casemate fortification system in Field B (IP 12). The pottery may also reflect this intensification process: the vessels from the rampart (the earlier settlement) reflect a utilitarian subsistence pattern, while those from the houses of the later period included rare examples of chalices and flasks, suggesting a somewhat more luxurious or complex lifestyle.

Regional Cycle 2 (Iron Age): a limited occupational interlude, Early Iron II (IPs 11-10). Above the inner wall of the casemate fortification system was a thin surface with transitional Iron I/early Iron II pottery (IP 11). No architecture and no other remains from the period have been found elsewhere on the site. It may represent squatter occupation.

Directly on top of the IP 11 surface a domestic storeroom was built (IP 10) during early Iron II, oriented at right angles to the outer casemate wall (Clark 1997: fig. 4.29). The outer casemate wall and the rampart may have continued in use, as well. Within the storeroom two storejars and a jug, dated possibly to the ninth century, were found (Clark 1989: 250-253, figs. 16.5-7).

In Field A, fragmentary walls, oriented similarly to the storeroom in Field B and also with associated early Iron II pottery, were found above the destruction of IP 12. At no other location on the *tall* were other finds made from this period. Only an earth layer or two at the water source could be attributed to it. It appears that the settlement was limited, perhaps to a few houses on the western acropolis built upon the ruins of the Iron I town.

No clear evidence for a settlement in the eighth and seventh centuries has been found. There would thus seem to have been another hiatus following the brief stutter of activity in IP 10.

Regional Cycle 2 (Iron Age): the second intensification, late Iron II to Persian (IPs 9-7). During the first half of the 6th century, a new settlement process began at 'Umayri (IP 9), probably after the Babylonian invasion of

582 brought about by Ammonite complicity in the murder of Gedaliah, the Babylonian-appointed governor of Judah (Jer. 40). The invasion is mentioned by Josephus (*Antiquities*, 10.9:7). In Field B several pits were dug into the IP 12 destruction debris (Clark 1989: 253-254; 1997) and in Field A a few isolated installations, such as bins, appear east of what would become the Ammonite administrative buildings in the next phase (Lawlor, this volume). Use of the water source is inferred by the presence of earth layers with late Iron II debris preceding the constructions of IP 8. Our tentative suggestion is that these remains represent the arrival of the live-in construction gang of IP 8 as they lived and worked on the administrative structures. For the evidence regarding the royal administrative character of the subsequent phase, see below, but the royal connection may be confirmed by an ostracon found within one of the Field B pits, which mentions the word *mlk*, "king" (Sanders 1997: 331-336). Moreover, the mid-sixth century paleographic date of the Ammonite cursive writing on the ostracon helps to date this phase because the wall of a house connected to the subsequent administrative buildings crossed over the pit, sealing it and its contents. However, we should refrain from pushing the founding date too late in the middle parts of the sixth century because of a seal impression found in topsoil above the administrative buildings in Field A. Belonging to an official of King Ba'alyasha of the Ammonites (Jer. 40:14: "Baalis"), it dates to the *early* parts of the sixth century. These two inscriptions "sandwich" a date roughly around 680 to 660, the estimated upper limit of the ostracon and the estimated lower limit of the seal impression, respectively. We therefore suggest that IP 9 represents the activities of the live-in builders who constructed a new administrative complex for the Ammonite monarchy following the Babylonian invasion of 582 B.C., which must have destroyed the earlier regional administrative infrastructure located at other sites.

The two southern buildings of IP 8 in Field A were the administrative structures the inhabitants of IP 9 built. The walls, averaging 1.2-1.7 meters thick, were not those of domestic dwellings. They were also constructed with basements (that is, the walls had no foundation trenches; instead a single large basement was dug to accommodate all wall foundations), not a typical way to construct domestic dwellings in Palestine. Moreover, the lack of owners' marks on pottery suggests a limited population (London 1991: 403). However, very few finds were made on the floors, perhaps confirming an administrative function. However, the northernmost building in Field A (with its domestic objects found on the floors) and the fragmentary walls in Field B represent the dwellings of the people serving and working in the administrative buildings. 'Umayri may have been chosen for a new administrative site because it could ideally govern the southern borders of Ammonite territory. Perhaps the Babylonian incursion pointed out a weakness in that area. That the ruling ethnic group was indeed Ammonite is shown from 1) the Ammonite script on both the ostracon of IP 9 and the seal impression of an official of King Ba'alyasha; 2) the Ammonite theophoric element in the name of the owner of the seal that made the impression, Milkom; 3) the iconography on the seal impression; 4) and other seals found in and around the administrative complex that carried Ammonite script and onomasticon (seal of 'Il'amats [Herr 1997c: 323] and Natsar'il [Herr, chapter 11, this volume], found in Field F). That it was a royal center is suggested by the official nature of the seal impression with King Baalyasha's name. A historical inference from this data is that the Babylonians did not remove Ammonite royalty as a result of the rebellion in 582 B.C. Instead, it is assumed that Baalyasha was retained by Babylon as a subject king.

The settlement does not seem to have been large, with only sporadic buildings across the acropolis (ca. 1.5 hectares). One side of a large domestic building (possibly in a four-room plan) with cobbled floors in at least two rooms was uncovered in Field F. Fortification of the settlement seems to have been light, if, indeed, any existed at all, although the construction in Field F could, alternatively, be a casemate fortification system (Low, chapter 6, this volume). The outer casemate wall of IP 12 in Field B, repairs to the IP 12 rampart and retaining wall in Field B, and a flimsy gate-like structure in Field F (Low 1991: 186; 1997: fig. 7.12) are all the "fortification" structures that can be attributed to this period. Perhaps the Babylonians, recognizing the threat of raids from local tribesmen but also desiring easy access in case of rebellion, allowed nothing more than meagre structures. Evidence of small, extra-urban features outside the acropolis comes from Field C (Battenfield and Herr 1989: 280) and, of course, the water source saw the construction of features to organize and ease water acquisition: a cobble and plaster floor surrounded by a stone wall (Fisher 1997: fig. 6.7). The settlement of IP 8 was thus most likely made up of Ammonite royal administrative structures and houses of the officials and their immediate support personnel (servants). In terms of our overall regional study of intensification and abatement, IP 8 represents rapid intensification based on the influx of significant royal capital.

The transition to the Persian period seems to have taken place peaceably during IP 8, with no destruction or interruption whatever to the administrative structures or associated buildings. An early Persian jar sat on the lower floor of the southernmost building, reflecting the period of its last use and in the fill separating the floors of IPs 8 and 7 was an Attic sherd datable to the late sixth or fifth centuries. There was no sign of destruction when IP 8 went out of use, but fills approximately a meter deep were deposited in all the basement rooms of both administrative

buildings creating new floors for IP 7. These fills were associated with slight alterations to the rooms (Lawlor 1989: 238; 1997: compare figs. 3.6 and 3.10; also chapter 3, this volume where minor corrections are made): some rooms were made larger, others smaller, and new doorways were cut through old walls. Changes also occurred in the domestic buildings north of the administrative complex in Fields A and B (Clark 1997: fig. 4.34) and those of Field F, as well (Low 1997). Meanwhile, the weak fortification system of IP 8 seems to have continued in use, while, at the water source, a plastered channel conducted water to the northeast, suggesting that a receiving feature of the contemporary water system lay in that direction (Fisher 1997: fig. 6.11). That the function of the administrative complex of IP 8 continued into IP 7 is suggested by the two Persian provincial *'mn* seal impressions from the end of the sixth or beginning of the fifth centuries (Herr 1993; 1997c: 325), if they originated from this phase as we suspect (they were both found in topsoil). The impressions also suggest that the population was still Ammonite, confirming Cross's observation that, around the mid-sixth century, the scribes changed from the Ammonite script to an Aramaic script, while retaining their indigenous Ammonite language (Cross 1975: 14). At present the data are not sufficient to suggest whether the settlement at the site intensified during IP 7 or not. Based on the weak surfaces encountered in the administrative buildings in Field A, the settlement's importance may have diminished, perhaps due to the Persian imposed peace, making secondary provincial centers, such as ours, less important.

Regional Cycle 2 (Iron Age): the second abatement, Persian (IPs 6-5). IP 6 represents the beginning of the abatement of the Persian settlement. The Ammonite administrative buildings apparently went out of use, no longer necessary in the larger, more centralized world of the Persian empire. New structures with small rooms were built to the east (Lawlor 1997: fig. 3.13). This seems to reflect a loss of governmental functions at the site, but the continued presence of domestic activities suggests that perhaps the descendants of those serving the administrative functions of earlier settlements continued; they apparently refused to abandon the site. Some walls incorporated earlier walls, but others did not. The domestic structures in Field B were altered (Clark 1997: fig. 4.35), but Field F contained only exposure surfaces and terrace walls, suggesting it was outside the shrinking settlement. The water source may have carried on unchanged.

Small fragments of walls in Field A (Lawlor 1997: fig. 3.19), further alterations to the domestic fragments in Field B (Clark 1997: fig. 4.36), and flimsy terrace walls with exposure surfaces in Field F (Low 1997: fig. 7.17) suggest a further thinning of the population in IP 5. Part of the site may have been used for agricultural activities (Field F). In Field F a *Pataikos* figurine was found, indicating trade with Egypt, most likely (Dabrowsky. this volume). At some point, perhaps during the late fifth or fourth centuries, settlement ceased to exist. There are no signs of a destruction. The site was not settled again in any significant way.

Regional Cycle 3 (Classical Age): limited activity, Early Roman (IP 4). When regional intensification began again in Cycle 3 (late Hellenistic) a new settlement was probably begun at the hill immediately to the east of us, Tall al-'Umayri (East), which lasted through the Classical Age. Our site, Tall al-'Umayri (West), was apparently used agriculturally, perhaps by Jewish inhabitants of a solitary farm (IP 4). This is inferred from a small plastered pool, probably a ritual bath similar to the scores found in the Jerusalem region, which was uncovered in 1987 where Fields A and B join (Lawlor 1991: 38, fig. 3.17; Clark 1991: 70; 1997: fig. 4.38). This may indicate that the Umayri region belonged to the Herodian kingdom in the first century CE. Because the fill in the pool produced nothing later than the Persian period, we assigned it to that period at first. However, in 1989 a portion of the foundation was removed in Field B (Clark 1997) and two Early Roman sherds were recovered. We must, therefore, revise its date. Although we discovered no other walls associated with the pool, it must have been part of a building that has disappeared since antiquity. We suggest that there was no more than this one building, because Roman pottery and objects were rare in topsoil and because no other signs of Roman occupation were found. The ritual pool was, of course, built below ground level and was thus preserved. The top portions of the pool, which appeared only a few centimeters beneath topsoil, were also missing, suggesting that a considerable amount of debris has disappeared after the destruction of the Early Roman building. Moreover, topsoil in all our excavated fields on the acropolis contained approximately triple the amount of objects and pottery found in lower, *in situ* levels, whereby we also infer that a significant amount of debris has disappeared from the top of the *tall*. We believe that this was caused by extensive agriculture which encouraged wind erosion. Topsoil was blown away, while stones, pottery, and objects remained. The various stone piles on the summit probably came from ancient structures gradually exposed through this erosional process.

Regional Cycle 3 (Classical Age): limited activity, Byzantine (IP 3). In the Byzantine period, a small farm may have been built near the western fringe of Field F, where wall fragments and Byzantine pottery (especially a type of basin) were found (Low 1991: 222-229; 1997: fig. 7.19). Because no other Byzantine remains, except only small amounts of pottery in topsoil, have been found at other locations on the site, it is unlikely that more than this single estate was present. The trench-pit in Field B (Clark 1991: 70-71; 1997: fig. 4.38) has also been assigned to this

phase, because it was later than the pool of IP 4. The Byzantine farmers may have created it by quarrying wall stones to be reused in their structures. At the water source (Field E), the present well structure belongs to the Byzantine period (Fisher 1997: figs. 6.13 and 14). Because it seems unlikely that a small agricultural estate, such as that found in Field F, would build such an imposing well all by itself, we should probably identify the builders with the inhabitants of Tall al-'Umayri (East), the major settlement of the immediate region at this time.

The northern slope was radically altered at some point long after Persian times. But because nothing later than Persian pottery was found, it is difficult to be precise about the date. Debris was pushed out to the sides, creating the two broad shelves which descend the slope and the "V"-shaped "wall" lines visible today. We suspect this to be an ancient earth-moving activity. But it was not too early, because the pottery of Fields C and G, as deep as 1.5 m, was universally worn, as if tumbled in the plow zone over a long period of time. It may have been Byzantine or subsequent agricultural activity which created the present topography.

Regional Cycle 4 (Islamic Age): limited activity, Middle Islamic (IP 2). Two sherds found in topsoil may indicate that farmers during the Middle Islamic Age (Ayyubid/Mamluk period) used the site for agricultural activities. Small field walls were found in Fields A and B which may belong to this period (Clark 1997: fig. 4.39), but a Byzantine date is also possible for them. No other pottery from the Islamic periods has been found, suggesting the site was probably used agriculturally by inhabitants from Tall al-'Umayri (North), which was occupied in the Middle Islamic Age. In Field E, at the water source, earth layers deposited after the present well shaft was built, but before the modern capping stones and cement were put in place, probably were deposited in post-Byzantine times.

Regional Cycle 4 (Islamic Age): limited activity, Late Islamic (IP 1). A single fragment of an Ottoman pipe was found in Field A (Lawlor 1991: fig. 3.29:13), perhaps from a Bedouin camp attracted by the nearby water source. The burials found in Field F, just off the acropolis, probably date to this period, as well (Low 1991: 229-230; 1997: fig. 7.21). No definite dating evidence was uncovered, however. There are also signs of more burials at places on top of the mound.

Regional Cycle 5 (Modern Age): limited activity, Modern (IP 1). The primary activity associated with the site in the recent past was the capping of the Byzantine well with cement. According to Raouf Abujaber, owner of much of the land in which the well is situated, it was capped while he was a child in the early 20th century.

The Field Reports

The methods of excavation and recording this season were identical to those used in the previous three seasons (Herr 1989a: 213-215; 1991: 8, 13; 1997a), except that computer data entry was not done in camp, but back home during the winter of 1992-1993.

In the field reports which follow, a number of conventions should be explained. The list of loci, which appears at the head of each field phase discussion, enumerates all loci associated with that phase excavated this season, including those reused from earlier phases. At times architectural loci from earlier seasons are also included. On the plans of the phases, architectural features, installations, surfaces (with levels above sea level), and some objects are located. All other loci are not necessarily included, though they are discussed in the text.

The sequence charts for each report represent an adaptation of the Harris matrix. They are intended to illustrate only the *sequence* of construction or deposition. Other relationships between the loci are mentioned in the text. On the charts, some locus numbers appear with letters: "W" indicates a wall; "I" indicates an installation; "S" indicates a surface; and no letter indicates an earth layer. Vertical lines are usually associated with walls and show how long they lasted.

The Pottery Descriptions

Because the pottery descriptions occur throughout the field reports, we include here an explanation of the codes (identical to that published in *MPP 3*: 18-19):

A. Colors—Munsell (number and verbal)
B. Non-Plastics
- I. Type:
  - L—lithic
  - P—pottery
  - S—straw
- II. Size:
  - 7—granule (4.0 mm)
  - 6—very coarse sand (2.0 mm)
  - 5—coarse sand (1.0 mm)
  - 4—medium sand (0.5 mm)
  - 3—find sand (0.25 mm)
  - 2—very fine sand (0.125 mm)
  - 1—silt (0.06 mm)
    - A—0-39% of total
    - B—40-69 % of total
    - C—70-89% of total
    - D—90-100% of total
- III. Shape:
  - A—angular
  - SA—sub-angular
  - SR—sub-round
  - R—round
    - A—0-39% of total
    - B—40-69% of total
    - C—70-89% of total
    - D—90-100% of total
- IV. Density:
  - H—high (fill <30% of sawn section)
  - MH—medium high (fill 25-30% of sawn section)
  - M—medium (fill 15-25% of sawn section)
  - L—low (fill 7-15% of sawn section)
  - VL—very low (fill >7% of sawn section)

C. Voids
- FS—fissure simple (linear structure)
- FC—fissure complex (root-like structure)
- PR—pit round (round hole)
- PA—pit angular (angular hole)
- JR—join rim
- JH—join handle
- JB—join base
- JD—join decoration
  - 7—granule (4.0 mm)
  - 6—very coarse sand (2.0 mm)
  - 5—coarse sand (1.0 mm)
  - 4—medium sand (0.5 mm)
  - 3—fine sand (0.25 mm)
  - 2—very fine sand (0.125 mm)
  - 1—silt (0.06 mm)
    - A—0-39% of voids
    - B—40-69 % of voids
    - C—70-89% of voids
    - D—90-100% of voids

D. Manufacture
- W—wheel (includes turnettes)
- H—hand
- C—coil
- P—pinch
- Pd—paddle
- S—slab
- M—mold

E. Surface Treatment
- S—slip
- WB—wheel (or turnette) burnished
- HB—hand burnished
- VB—vertical burnished
- Sm—smoothing
- Ca—carbon
  - L—Light
  - M—medium
  - H—Heavy
    - +—more than the vessel part
    - R—rim
    - N—neck
    - Sh—shoulder
    - Bo—body
    - Ba—base
    - H—handle

F. Decoration
- Ap—applique
- BB—black burnish
- Ca—carbon
- Co—combing
- DB—design burnish
- GB—gray burnish
- Gl—glazing
- Gr—grooving
- IF—impression (finger)
- IM—impression (mold)
- In—incising
- IT—impression (tool)
- Mo—Molding
- Pa—paint
- Pu—puncture
- Ri—ridging
- Ro—rouletting
  - +—more than the vessel part
  - R—rim
  - N—neck
  - Sh—shoulder
  - Bo—body
  - Ba—base
  - H—handle

G. Firing
- U—underfired (core present)
- O—oxidation (thoroughly fired)
- R—reduction (gray)
- V—vitrification (green or glassy)

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CHAPTER 3

Field A: The Administrative Complex

John I. Lawlor *Grand Rapids Baptist Seminary*

Introduction

Three previous seasons of excavation (1984 [Lawlor 1989], 1987 [Lawlor 1991], 1989 [Lawlor 1997]) in Field A, located at the western end of the acropolis of Tall al-'Umayri (fig. 2.1, this volume [Introduction]), have confirmed the presence of a large (15 × 25 m) complex of three late Iron II/Persian buildings which were apparently administrative in nature and function (fig. 3.1). The two in the south (Buildings A and B in fig. 3.2) are known to have gone through a substantive renovation, extending their use into a second major phase (Lawlor 1997). The earlier of the two phases has not yet been stratigraphically confirmed for Building C, the northernmost building in the complex.

The goal of the 1992 season was to reach the founding levels of the late Iron II construction in Buildings A and B and to probe beneath them in order to investigate the possibility of earlier Iron I occupation. We therefore returned to two squares opened in the initial 1984 season—7K41 and 7K51. Excavation in 7K41 had reached what was believed to be the earliest use surface (Phase 6B) in the eastern room (Room 3) of Building A (hereafter rooms will be labeled with a capital letter for the building followed by a number for the room within the building; for instance, Room A3 is Room 3 in Building A). In 7K51 excavation had uncovered the latest surface (Phase 5) in Room B3; the contemporary surface in Room B4 had not been found.

Since nearly half of A3 was situated in the extreme eastern portion of Square 7K40 and its east balk, we removed that balk, drew it in reverse, and then removed the remaining loci in 7K40 in a very small area to the west up to the eastern face of Wall 7K40:8—the Phase 6B divider wall between Rooms A3 and A4 (fig. 3.23). The upper course of Wall 8 had been initially encountered in the 1984 season. Room A3 thus emerged as approximately 2.80 m wide (E-W) and 4.10 m long (N-S), located mostly in 7K41, but also in 7K40. However, once the entire room was exposed to the earliest surface of the administrative complex, it was decided to excavate phases beneath the surface completely under the aegis of Square 7K41.

Excavation of Square 7K51 involved a somewhat similar situation, but on a smaller scale. In order to expose the entirety of Room B4, a small triangular portion (1.80 × 0.75 m) in the southwest corner of Square 7K61 was also excavated along with the removal of the northern balk of Square 7K51.

Furthermore, having reached what was believed to be the transition between Iron II and Iron I in the southeast corner of the field (Square 7K42) in 1989, we resumed excavation in that sector (Lawlor 1997). Initially, the contiguity of the three operations was perceived as appropri-

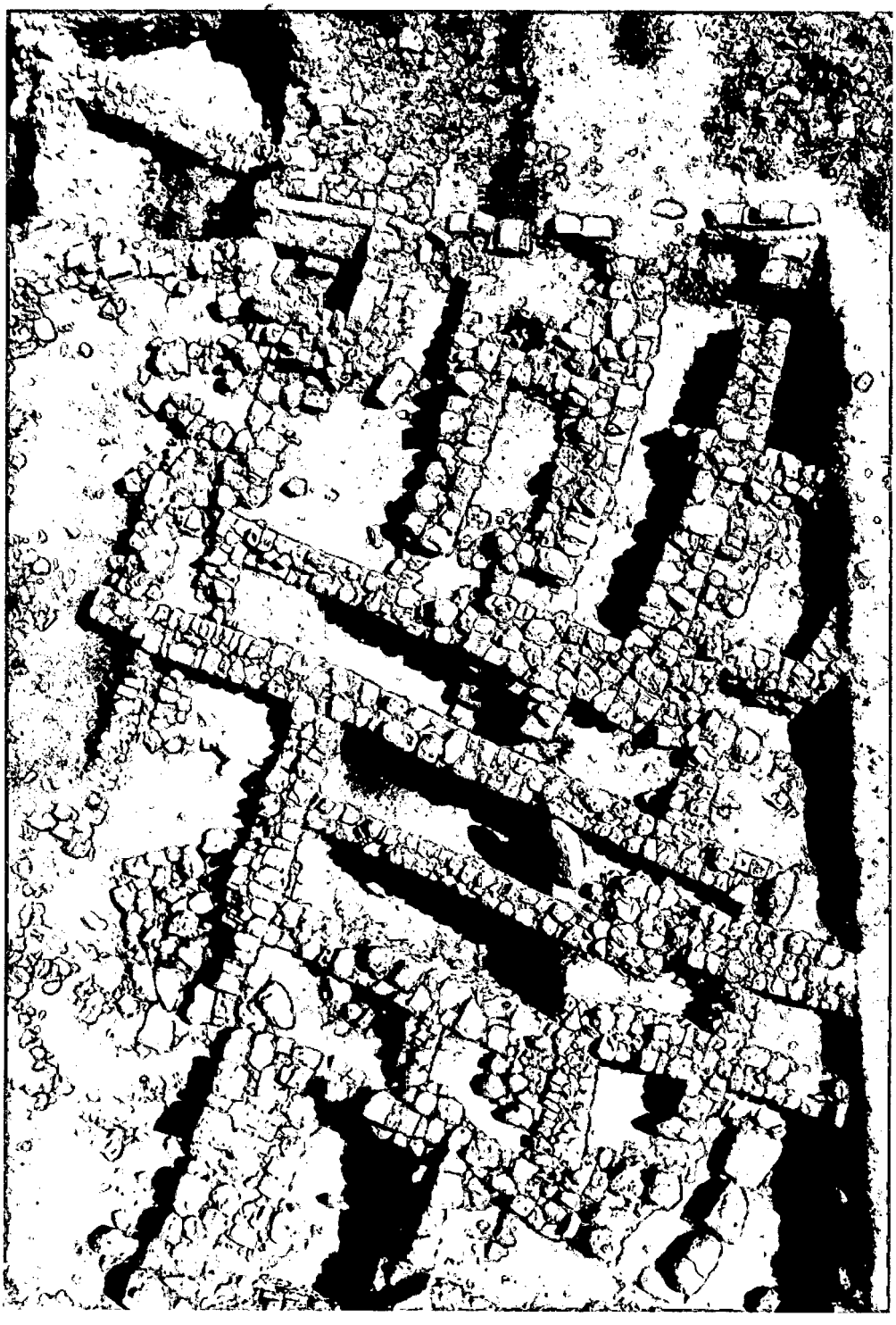


Fig. 3.1. Field A: Aerial photograph of Field A from a balloon. (Photo by E. and W. Myers)

Phase	Date	7K40	7K41	7K42	7K50	7K51	7K52	7K60	7K61	7K62	7K70	7K71	7K72
FP 11	LB			X									
FP 10	Ir I	X	X	X									
FP 9	Ir I	X	X	X		X		X	X				
FP 8	EIr II			X		X			X				
FP 7B	LIr II			X									
FP 7A	LIr II			X									
FP 6B	LIr II	X	X	X?	X	X	X	X	X	X	X	X	X
FP 6A	LIr II	X			X								
FP 5	Ir II/Per	X	X	X?	X	X	X	X	X	X		X	X
FP 4	Per		X	X		X	X		X	X			X
FP 3	Per			X			X			X			X
FP 2	ER										X	X	
FP 1	Byz-L Is		X	X		X	X			X			X

Fig. 3.2. Field A stratigraphic phasing chart by Square.

ate; however, the intervening walls between the three operations rendered specific stratigraphic connections impossible.

In 1989, Ground Penetrating Radar studies in a 20 × 40 m area south of Field A suggested a configuration of major walls parallel in orientation to those of the Phases 6B and 5 walls so far uncovered. Additional study was done during the 1992 season in a portion of the same area in an effort to confirm the initial findings.

Excavation this season illustrated the need to adjust the phasing proposed in the 1989 report (Lawlor 1997), expanding it to 11 phases from the Late Bronze Age to Late Islamic period (fig. 3.2). Figure 3.3 is a comparative phasing chart by season. Figure 3.5 is a Harris matrix-type sequence chart.

It should be noted that personnel from the Department of Land and Survey of Jordan established bench marks in Field A at the beginning of the 1992 season. These differed from those of previous seasons from 0.25 to 0.45 m. This discrepancy is particularly evident in the examination of the 1992 locus summaries and balk drawings against those of previous seasons.

1984 (*MPP1*)	1987 (*MPP2*)	1989 (*MPP3*)	1992 (*MPP4*)
---	---	---	FP 11 (LB)
---	---	---	FP 10 (Ir I)
---	FP 5	FP 7	FP 9 (Ir I)
---	---	---	FP 8 (E Ir II)
---	---	---	FP 7 (L Ir II)
FP 2B	FP 4B	FP 6B	FP 6B (L Ir II)
FP 2A	FP 4A	FP 6A	FP 6A (L Ir II)
FP 1B	FP 3B	FP 5	FP 5 (Ir II/Per)
FP 1A	FP 3A	FP 4	FP 4 (Per)
---	---	FP 3	FP 3 (Per)
---	FP 2	FP 2	FP 2 (ER)
---	FP 1	FP 1	FP 1 (Byz-L Is)

Fig. 3.3. Field Phase comparison in Field A by season.

Field Phase 11 (fig. 3.4)

Loci: 7K42:53 Rock tumble
7K42:54 N-S wall

Evidence for Phase 11 is tentative and limited to one wall and its tumble. Pottery from the lowest earth layers

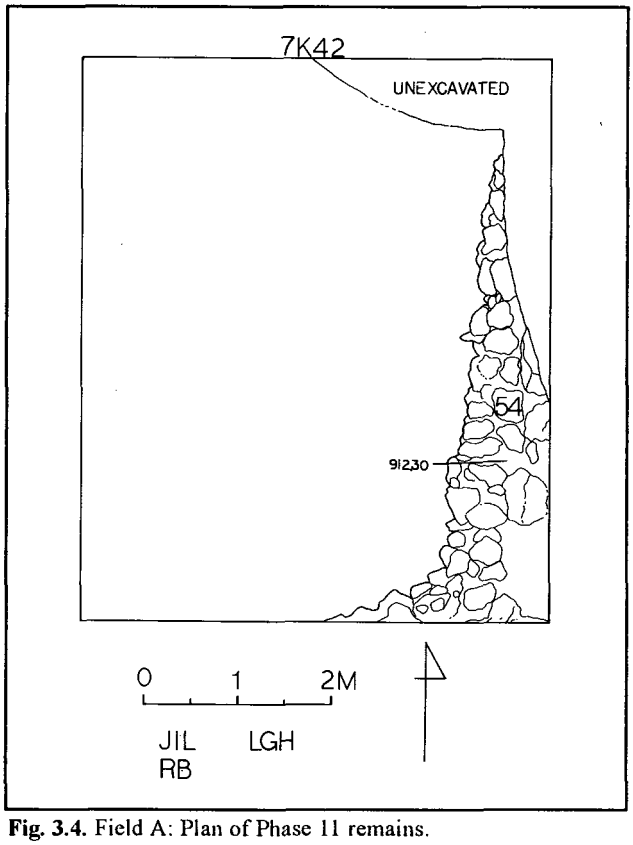


Fig. 3.4. Field A: Plan of Phase 11 remains.

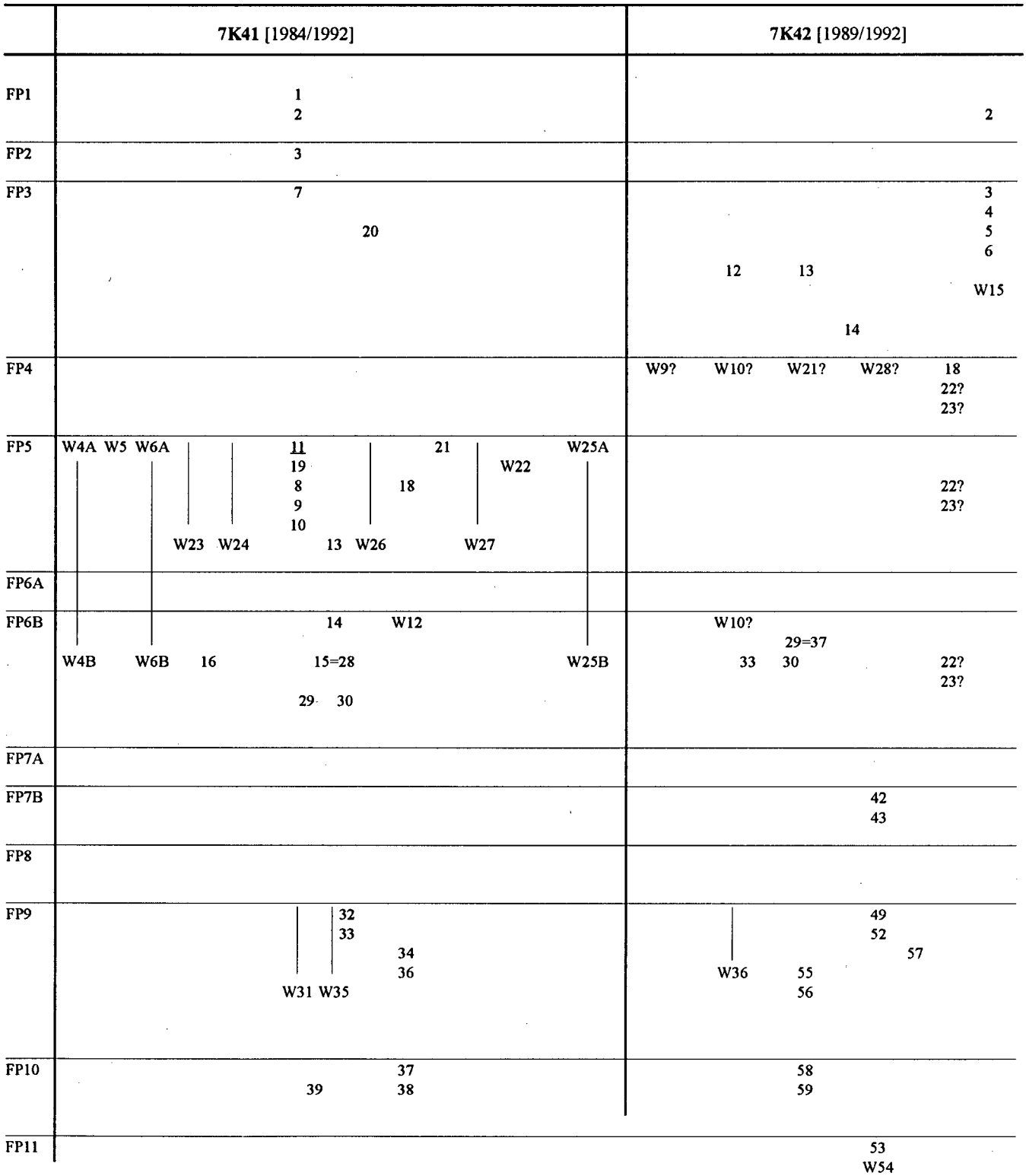


Fig. 3.5. Stratigraphic sequence chart for Field A.

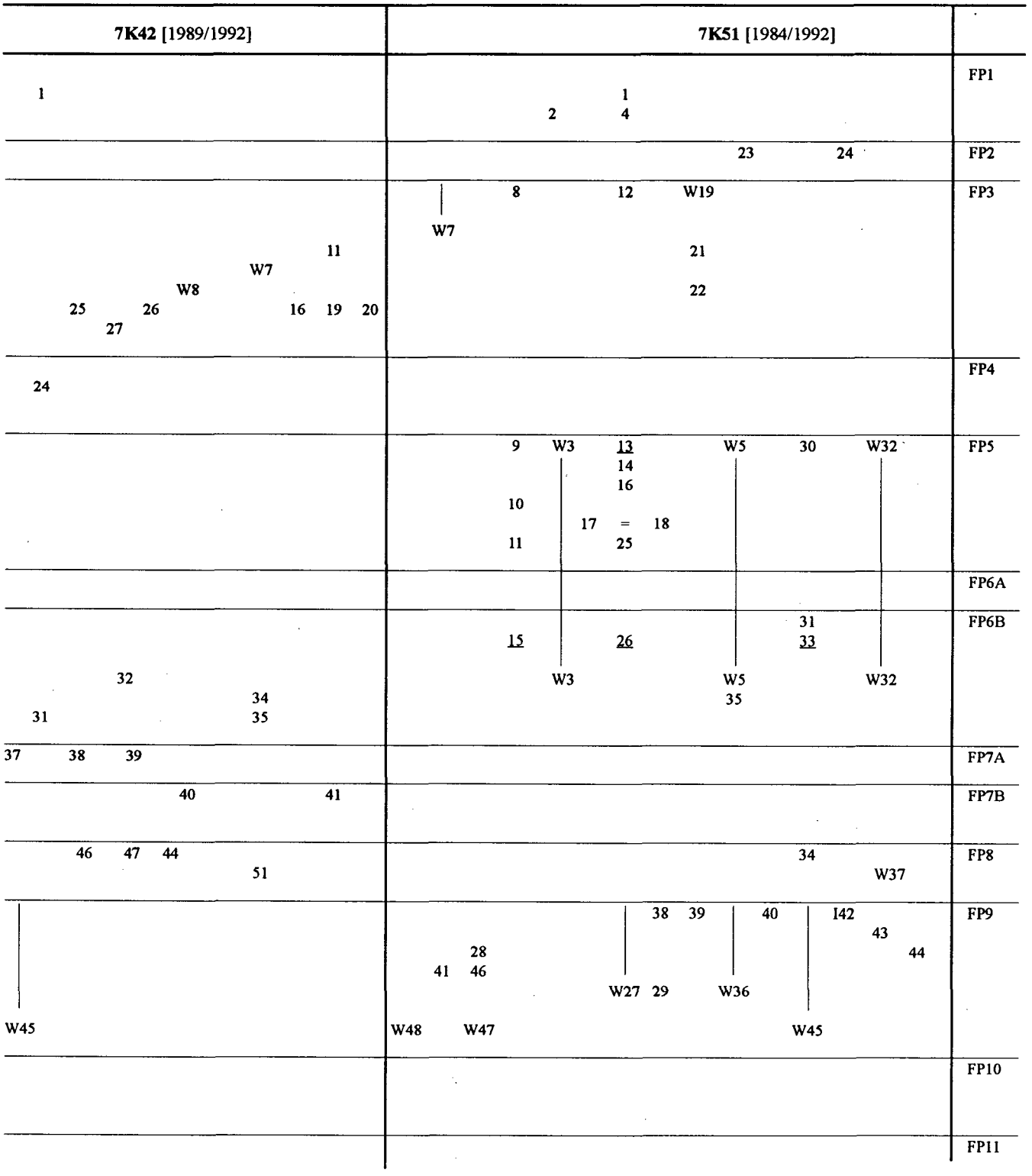


Fig. 3.5, *continued.* Stratigraphic sequence chart for Field A.

excavated in the eastern half of Square 7K42 dated to Iron I, but was accompanied by a steady presence of Late, Middle, and Early Bronze Age pottery, as well. These earth layers, interpreted as fill, sealed against the west face of Wall 7K42:54, which was two rows wide in the extreme eastern part of the square and oriented at 35°. Only three courses, made of small boulders (0.25-0.40 m) with a high percentage of cobbles (0.06-0.25 m), were exposed, but the founding level has not been reached (fig. 3.6). The poorer quality and smaller stones of the construction clearly differentiate it from the later Iron I and II walls encountered elsewhere in the field, suggesting a settlement transition at the site. We tentatively argue that the wall belonged to the Late Bronze Age. Further excavation is required to clarify the matter. Rock Tumble 7K42:53, a layer of small boulders and large cobbles 0.13-0.28 m deep and located immediately above Wall 54, appears to have represented a "slumping" of the wall's uppermost preserved course which had shifted to the west.

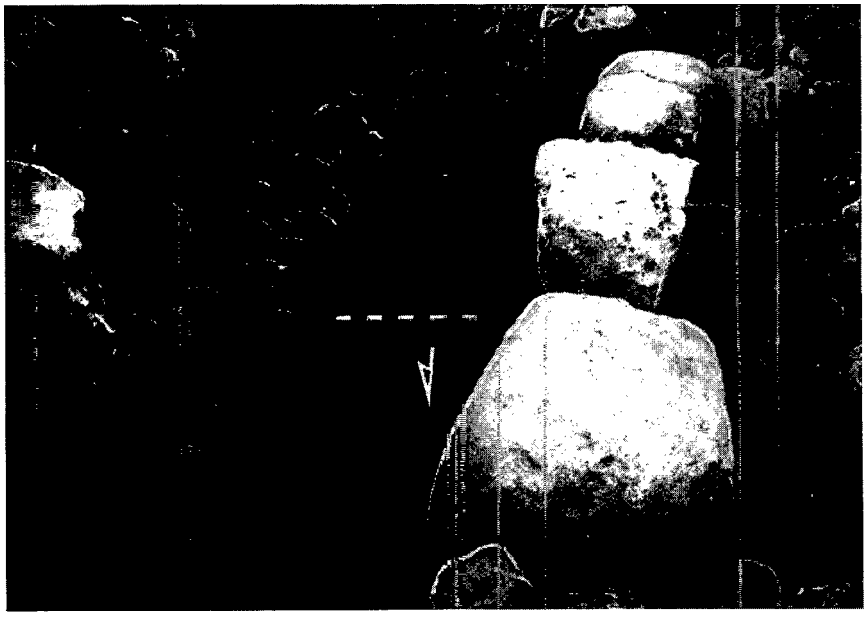


Fig. 3.6. Field A: Wall 7K42:54 of Phase 11 (left of the meter stick); the wall with very large boulders to the right of the meter stick is Wall 7K42:36 of Phase 9; view to the south.

Field Phase 10 (fig. 3.7)

Loci:	7K41:37	Earth layer
	7K41:38	Earth layer
	7K41:39	Large boulders
	7K42:45	N-S wall stub
	7K42:58	Ash layer
	7K42:59	Earth layer

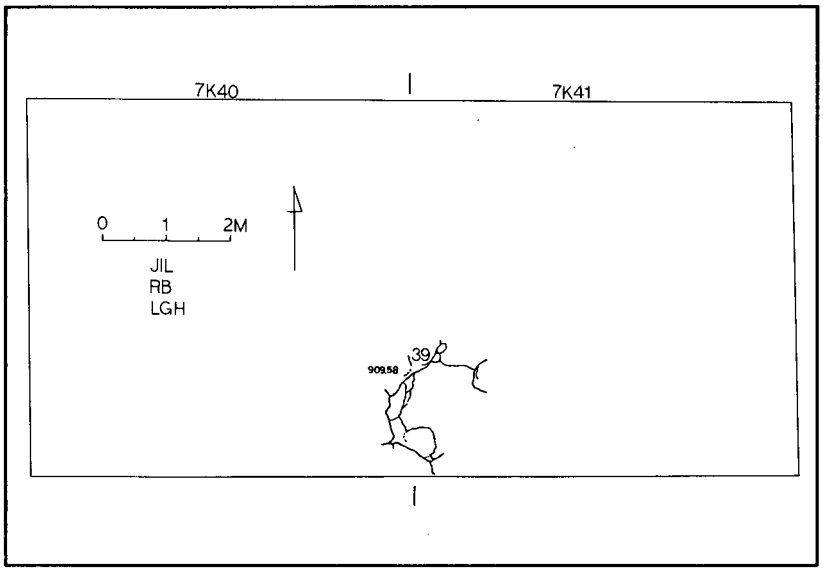


Fig. 3.7. Field A: Plan of Phase 10 remains.

A probe nearly five meters deep was made in the southeast corner of Square 7K41 where two Iron I phases were identified (Phases 10 and 9). The earlier of these two phases (Phase 10) was represented by an amorphous concentration of large boulders, identified as 7K41:39, upon which the later Phase 9 materials were founded (fig. 3.8). Although the original function of these boulders was undetermined, perhaps they were part of destruction debris. Two earth layers sealing against the boulders, 7K41:37 and 7K41:38, yielded only body sherds identified as "post-Early Bronze." Earth Layer 38 was 0.12-0.25 m thick, but was exposed over an area only 1.3 × 0.40 m because of limitations in digging space. It had the appearance of destruction debris. Immediately above, Earth Layer 37, approximately 0.25 m thick and 1.6 × 0.70 m in area (again restricted by digging space), was hard and firm. It may have represented fragments of a surface.

To the east in 7K42, Earth Layer 59, an apparent fill layer 0.07-0.13 m deep, was traced over an area 5 m (N-S) × 1.85 m (E-W) between Wall 36 (Phase 9) and Wall 54 (Phase 11). While it sealed against the west face of Wall 54, it was visible in the subsidiary balk under Wall 36. The latest pottery taken from this layer was Iron I (figs. 3.12-13). Immediately above Earth Layer 59, Ash Layer 58, 0.05 m thick, was likewise encountered in the northeastern sector of the square. Like Layer 59, it was visible in

Fig. 3.8. Field A: Large Iron I boulders (7K41:39) of Phase 10 (beneath the meter stick); the later Iron I walls of Phase 9 (7K41:31, 7K41:35) were constructed on them.

the subsidiary balk 0.30-0.40 m under Wall 36. This black (10YR 2/1) ash layer sloped down toward the north and was visible in the eastern portion of the north balk for 1.20 m about 2.0 m in the east balk; at the point where Wall 54 entered the east balk, Ash Layer 58 appeared to seal against Wall 54 of Phase 11. Three diagnostic sherds obtained from this ash were "possible Late Bronze" (fig. 3.10).

Earth layer 7K42:59 sealed against the lowest exposed courses of a wall stub extending from the south balk into the square (fig. 3.9). It was reused in Phase 9. Its function is not known presently (below).

Field Phase 9 (FP 7 in 1989) (fig. 3.9)

Loci:	7K41:3	E-W wall
	7K41:32	Cobble floor
	7K41:33	Earth layer
	7K41:34	Earth layer
	7K41:35	N-S wall
	7K41:36	Earth layer
	7K42:34	Earth layer
	7K42:36	N-S wall
	7K42:44	Earth layer
	7K42:45	Wall/Pedestal

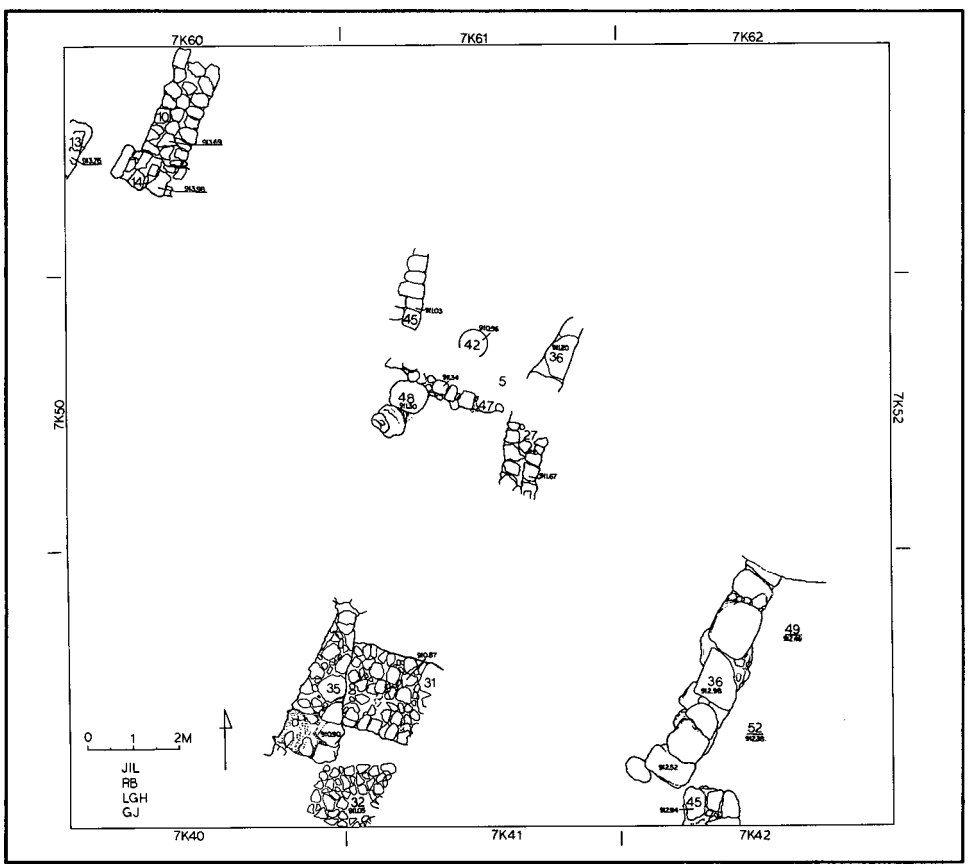
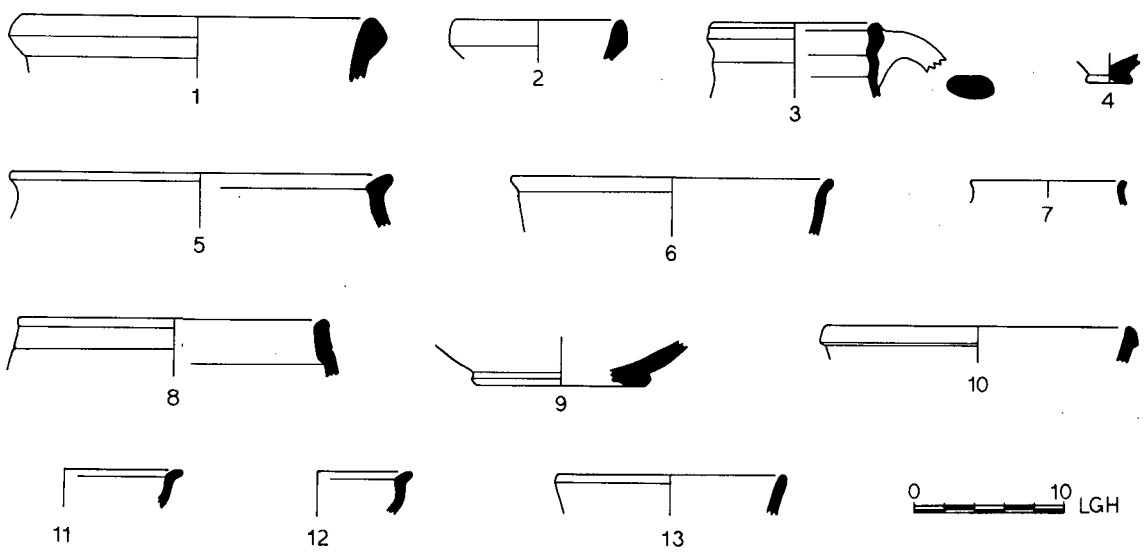


Fig. 3.9. Field A: Plan of Phase 9 remains.



No.	Vessel Type	Provenance Sq	Locus	Pail	Reg.	Fabric Color Ext	Core	Int	Non-Plastic Type	Size	Shape	Density	Voids	Manu	Surface Treatment Ext	Color	Int	Color	Decor	Fire
1	Pithos	7K42	59	179	7	5YR7/3 Pink	2.5YRN6/ Gray	5YR7/3 Pink	L	7A 6A 5A 4A 3A	SAA SRA RA	M	FS7A PA6A PA5A PR6A PR5A PR4A PR3A	CW	---	10R6/6 Light Red	---	5YR5/4 Reddish Brown	---	U
2	Jar/Jug	7K42	59	181	2	5YR7/3 Pink	5YR7/1 Light Gray	5YR7/3 Pink	L	6A 5A 4A 3A	AA SAA SRA RA	MH	FS5A PR5A PR4A PR3A	W	---	5YR6/4 Light Reddish Brown	---	5YR6\4 Pink	---	O
3	Jug	7K42	59	181	1	5YR6/3 Light Reddish Brown	7.5YRN5/ Gray	5YR6/3 Light Reddish Brown	L	7A 6A 5A 4A 3A	SAA SRA RA	M	FS5A FS4A PR6A PR5A PR4A JH6A	W	---	7.5YR7/4 Pink	---	7.5YR8/2 Pinkish White	---	U
4	Juglet?	7K42	59	179	2	---	5YR7/4 Pink	---	L	5A 4A 3A	SAA SRA RA	L	PA4A PR4A PR3A	W	SM	5YR8/3 Pink	---	5YR8/4 Pink	---	O
5	Krater	7K42	59	179	1	5YR7/6 Reddish Yellow	7.5YRN5/ Gray	5YR7/4 Pink	L	6A 5A 4A 3A	AA SAA SRA RA	MH	PA6A PA4A PR4A PR3A	W	---	5YR7/3 Pink	---	5YR7/4 Pink	---	U
6	Bowl	7K42	59	179	4	5YR7/4 Pink	7.5YRN7/ Light Gray	5YR7/4 Pink	L	6A 5A 4A	SAA SRA RA	M	PA5A PA4A PR5A PR4A PR3A	W	SM	10YR8/3 Very Pale Brown	SM	10YR8/3 Very Pale Brown	---	U
7	Bowl	7K42	59	181	3	5YR6/6 Reddish Yellow	2.5YRN5/ Gray	5YR6/4 Light Reddish Brown	L	6A 5A 4A 3A	SAA SRA RA	M	PA5A PR4A PR3B	W	---	5YR6/4 Light Reddish Brown	---	5YR6/4 Light Reddish Brown	---	U
8	Bowl	7K42	59	179	5	---	2.5YR6/6 Light Red	---	L	6A 5A 4A 3A	AA SAA SRA RA	M	FS5A PR5A PR4A PR3A	W	---	2.5YR6/6 Light Red	---	2.5YR6/6 Light Red	---	O
9	Bowl?	7K42	59	179	3	5YR7/6 Reddish Yellow	5YR7/1 Light Gray	5YR7/3 Pink	L	6A 5A 4A 3A	SAA SRA RA	M	PA5A PA4A PR5A PR4A PR3A	W	SH	7.5YR8/6 Reddish Yellow	SL	5YR7/6 Reddish Yellow	---	U
10	Cook Pot	7K42	59	179	6	5YR6/2 Pinkish Gray	5YR5/1 Gray	5YR6/2 Pinkish Gray	L	5A 4A 3A	SAA SRA RA	MH	FS5A PA6A PA5A PR4A PR3A	W	---	2.5YRN4/ Dark Gray	---	5YR8/2 Pinkish White	---	R
11	Lamp	7K42	59	182	1	5YR6/3 Light Reddish Brown	2.5YRN6/ Gray	5YR6/3 Light Reddish Brown	L	5A 4A 3A	SAA SRA RA	MH	PR4B PR3B	W	---	5YR8/3 Pink	---	5YR8/2 Pinkish White	---	U

Fig. 3.10. Field A: Late Bronze Age II ceramics from FP 10 and descriptions for nos. 1-11.

Vessel No.	Type	Provenance Sq	Locus	Pail	Reg.	Fabric Color Ext	Core	Int	Non-Plastic Type	Size	Shape	Density	Voids	Manu	Ext	Surface Treatment Color	Int	Color	Decor	Fire
12	Lamp	7K42	59	181	4	5YR6/2 Pinkish Gray	2.5YRN4/ Dark Gray	5YR6/2 Pinkish Gray	L	6A 5A 4A 3A	SAA SRA RA	MH	FS5A PA3A PR5A PR4A PR3A	W	---	5YR6/2 Pinkish Gray	---	5YR6/2 Pinkish Gray	---	R
13	Goblet?	7K42	58	178	1	5YR7/4 Pink	5YR7/1 Light Gray	5YR7/6 Reddish Yellow	L	5A 4A 3A	AA SAA SRA RA	M	PA4B PR4B	W	---	5YR7/3 Pink	---	5YR7/6 Reddish Yellow	Pa 5YR5/3 Reddish Brown	O

Fig. 3.10, *continued.* Field A: Pottery descriptions for nos. 12-13.

7K42:48	Earth layer
7K42:49	Exposure surface (=7K42:52)
7K42:50	Earth Layer
7K42:52	Exposure surface (=7K42:49)
7K42:55	Earth layer
7K42:56	Earth layer
7K42:57	Earth layer
7K51:27	N-S wall
7K51:28	Earth layer
7K51:29	Earth layer
7K51:36	E-W wall
7K51:38	Earth layer
7K51:39	Earth layer
7K51:40	Earth layer
7K51:41	Earth layer
7K51:42	Oven
7K51:43	Earth layer
7K51:44	Mudbrick
7K51:45	N-S wall
7K51:46	Earth layer
7K51:47	E-W wall
7K51:48	Large boulders

Fig. 3.11. Field A: Top course of Phase 9 N-S Wall 7K41:35 angling under Wall 7K40:8 of Phase 6B (upper left); it is abutted by Wall 7K41:31 to the east (right).

Evidence for Phase 9 formerly came from the western portion of the field, Walls 7K60:13 and 14, excavated in 1987. Meanwhile, work during the 1989 season in Square 7K42 prompted the proposal that Ash Layer 29 and Surface 30 signalled the transition between Iron II and Iron I in the southeastern sector of the field (Lawlor 1997). Numerous other features discovered this season in Squares 7K41, 7K42, and 7K51 provided additional remains, some of which helped to clarify the proposal concerning the transition from Iron II to Iron I.

Two walls from Phase 9 were discovered in 7K41 beneath Room A3 of Phase 6B: Walls 31 and 35. A three-meter stretch of the uppermost course of Wall 35, oriented due north, was partially observable in plan. It was abutted by Wall 31 on the east, and Wall 7K40:8, the divider wall between the two rooms of Building A in Phase 6B, was founded over it (fig. 3.11); consequently, neither the number of rows nor courses of Wall 35 could be determined with certainty. The southern part of this wall appears to have slumped towards the east (fig. 3.11), but the fact that the northern half of the east face was abutted by the west end of Wall 31, a six-row, nine-course wall, oriented at 100°, may have prevented the slumping there. The function of the two walls could not be determined in our limited exposure. Earth Layers 7K41:33, 34, and 36 sealed against the south face of Wall 31. They contained Iron I pottery as the most recent ceramic material (figs. 3.12-13). The rocky make-up of Layer 36 was 0.75 m thick and may have been tumble from Wall 35. Layer 34, probably fill, was 0.90 m thick and covered the tumble of Layer 36. Above Layer 34 was Layer 33, also probably fill 0.27-0.50 thick. It served as a base for Cobble Floor 32. Excavation of debris north of Wall 31 was denied by the presence of Wall 7K41:4B of Phase 6B, just 0.25-0.50 m farther to the north.

Cobble Floor 32, discovered in the southwest corner of 7K41, covered an area approximately 1.50 m (E-W) × 1.25 m (N-S); a patch of the cobbling (0.75 × 0.50 m) was missing in the extreme southwest cor-

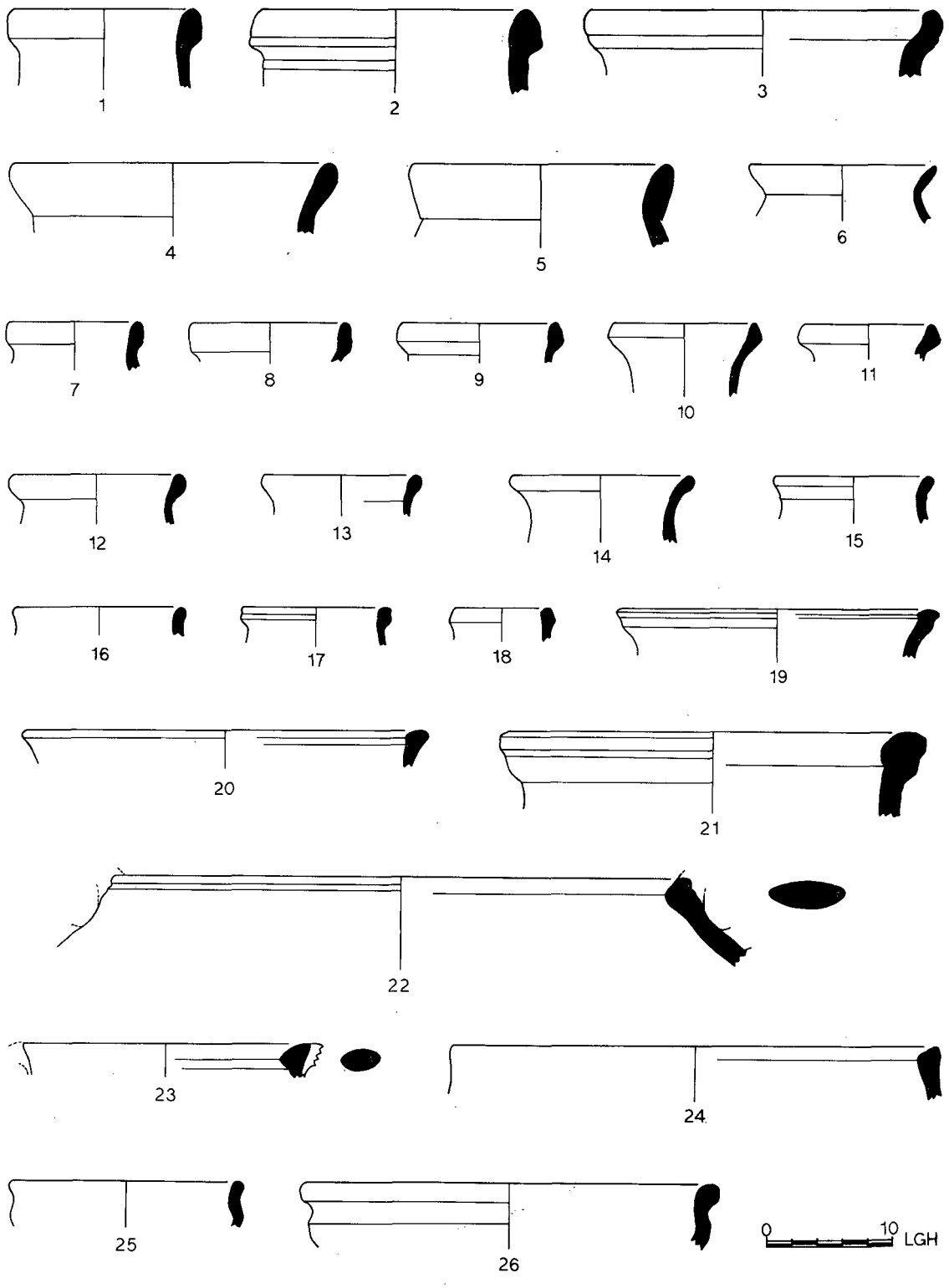


Fig. 3.12. Field A: Iron I ceramics from Phase 9 Earth Layers 7K41:34, 7K41:36, 7K42:52, and 7K42:55.

No.	Vessel Type	Sq	Provenance Locus	Pail	Reg.	Fabric Color Ext	Core	Int	Non-Plastic Type	Size	Shape	Density	Voids	Manu	Ext	Surface Treatment Color	Int	Color	Decor	Fire
1	Pithos	7K42	52	166	2	7.5YR7/2 Pinkish Gray	7.5YRN6/ Gray	7.5YR7/2 Pinkish Gray	L	6A 5A 4A 3A	SAA SRA RA	MH	FS5A PR6A PR4A PR3A	CW	SM	7.5YR8/4 Pink	---	7.5YR7/4 Pink	---	U
2	Pithos	7K42	52	166	1	7.5YR7/4 Pink	7.5YRN/7 Light Gray	7.5YR7/4 Pink	L	6A 5A 4A 3A	SAA SRA RB	M	FS5A PA6A PA4A PR7A PR6A PR5A PR4A	CW	---	7.5YR8/4 Pink	---	7.5YR7/4 Pink	---	U
3	Pithos	7K51	46	167	1	5YR6/1 Gray	2.5YRN3/ Very Dark Gray	5YR6/2 Pinkish Gray	L	7A 6A 5A 4A 3A	SAA SRA RA	M	FS6A FS5A FS4A PA6A PA5A PA4A PA3A PR5A PR4A PR3A	CW	---	5YR6/3 Light Reddish Brown	---	5YR7/3 Pink	---	U
4	Pithos	7K42	52	168	1	7.5YR7/6 Reddish Gray	7.5YRN/6 Gray	7.5YR7/4 Pink	L	6A 5A 4A 3A	SAA SRA RA	MH	FS7A FS6A FS5A PA4A PR5A PR4A PR3A	CW	---	7.5YR7/4 Pink	---	7.5YR7/4 Pink	---	U
5	Jar	7K41	36	188	1	7.5YR7/4 Pink	7.5YRN6/ Gray	7.5YR7/4 Pink	L	6A 5A 4A	SAA SRA RA	M	PA6A PA5A PA4A PR6A PR5A PR4A PR3A	CW	---	7.5YR8/6 Reddish Yellow	---	7.5YR7/4 Pink	---	U
6	Jar	7K51	44	166	2	2.5YR6/6 Light Red	5YR6/2 Pinkish Gray	10R6/6 Light Red	L	6A 5A 4B 3A	SAA SRA RB	MH	PA5A PA4A PR5A PR4A	W	---	2.5YR6/6 Light Red	---	10R6/6 Light Red	---	U
7	Jar/Jug	7K42	50	156	1	5YR7/4 Pink	5YR6/1 Gray	5YR7/4 Pink	L	6A 5A 4A 3B	SAA SRA RA	M	PA6A PA4A PR6A PR5A PR4A PR3A	W	---	5YR7/3 Pink	---	5YR7/3 Pink	---	U
8	Jar/Jug	7K41	33	182	2	---	2.5YRN5/ Gray	---	L	6A 5A 4A 3A	SAA SRA RA	M	PA5A PA4A PR5A PR4A PR3A	W	SM	5YR8/2 Pinkish White	SM	5YR8/2 Pinkish White	---	R
9	Jar/Jug	7K42	56	175	1	---	5YR7/1 Light Gray	---	L	7A 6A 5A 4A 3A	AA SAA SRA RA	M	PR3D	W	SL	5YR6/4 Light Reddish Brown	SL	5YR6/6 Reddish Yellow	---	O
10	Jar	7K42	56	175	2	5YR5/8 Yellowish Red	5YR8/1 White	---	L	6A 5A 4A 3A	SRB RB	VL	PA5A PR4A PR3A	W	SH	5YR5/8 Yellowish Red	SM	5YR6/6 Reddish Yellow	---	O
11	Jar/Jug	7K42	52	168	2	2.5YR6/6 Light Red	2.5YRN6/ Gray	2.5YR6/6 Light Red	L	6A 5A 4A 3A	SAA SRA RA	M	PA6A PA4A PR5A PR4A PR3A	W	---	10R6/6 Light Red	---	10R6/6 Light Red	---	U
12	Jar/Jug	7K42	52	167	1	5YR7/4 Pink	5YR6/1 Gray	---	L	6A 5A 4A 3A	SAA SRA RA	MH	FS5A FS4A PA5A PA4A PA3A PR5A PR4A PR3A	W	---	5YR7/3 Pink	---	5YR7/3 Pink	---	U
13	Jar/Jug	7K42	52	170	3	5YR6/6 Reddish Yellow	5YR6/1 Gray	---	L	6A 5A 4A 3A	SAA SRA RA	M	PA4A PA3A PR3A	W	SM	5YR8/2 Pinkish White	SM	5YR6/6 Reddish Yellow	---	U
14	Jar/Jug	7K42	48	150	1	7.5YR6/2 Pinkish Gray	7.5YRN4/ Dark Gray	---	L	6A 5A 4A 3A	AA SAA SRA RA	MH	PA6A PR5A PR4A PR3A	W	---	7.5YR6/2 Pinkish Gray	---	7.5YR6/2 Pinkish Gray	---	R

Fig. 3.12, *continued.* Field A: Pottery descriptions for nos. 1-14.

No.	Vessel Type	Sq	Provenance Locus	Pail	Reg.	Fabric Color Ext	Core	Int	Non-Plastic Type	Size	Shape	Density	Voids	Manu	Ext	Surface Treatment Color	Int	Color	Decor	Fire
15	Jar/Jug	7K42	52	170	4	5YR7/4 Pink	5YR6/1 Gray	---	L	6A 5A 4A 3A	SAA SRA RA	M	PA4A PR6A PR5A PR4A PR3A	W	---	5YR6/6 Reddish Yellow	---	5YR7/3 Pink	---	U
16	Jar/Jug	7K42	52	170	1	5YR6/6 Reddish Yellow	5YR5/1 Gray	---	L	5A 4A 3A	SAA SRA RA	M	FS5A FS4A PA4A PR5A PR4A PR3A	W	---	5YR7/4 Pink	---	5YR7/3 Pink	---	U
17	Jug	7K42	49	154	3	7.5YR6/6 Reddish Yellow	10YR6/1 Gray	7.5YR6/6 Reddish Yellow	L	6A 5A 4A 3A	SAA SRA RA	M	PA4A PR4A PR3B	W	SM	10YR8/2 White	SM	10YR7/2 Light Gray	---	O
18	Jug	7K42	52	166	3	7.5YR7/2 Pinkish Gray	7.5YRN6/ Gray	7.5YR7/2 Pinkish Gray	L	6A 5A 4A 3A	SAA SRA RA	L	FS6A FS5A PR4A PR3A	W	---	7.5YR6/4 Light Brown	---	7.5YR5/2 Brown	---	U
19	Krater	7K42	52	160	4	5YR7/3 Pink	7.5YRN6/ Gray	5YR7/3 Pink	L	6A 5A 4A 3A	AA SAA SRA RA	M	PA4A PR5A PR4A PR3A	W	---	5YR7/4 Pink	---	5YR7/4 Pink	---	U
20	Krater	7K42	49	154	2	5YR7/3 Pink	7.5YRN6/ Gray	5YR7/3 Pink	L	6A 5A 4A 3A	SAA SRA RA	MH	PA5A PA4A PA3A PR3A	W	---	5YR7/3 Pink	---	5YR7/3 Pink	---	U
21	Krater	7K41	34	187	1	7.5YR7/6 Reddish Yellow	7.5YRN6/ Gray	7.5YR7/4 Pink	L	7A 6A 5A 4A 3A	AA SAA SRA RA	M	FS7B FS6A PA5A PR4A PR3A	CW	SM	7.5YR7/6 Reddish Yellow	---	7.5YR6/4 Light Brown	---	U
22	Krater	7K51	44	166	1	---	5YR7/4 Pink	---	L	7A 6A 5A 4A 3A	SAA SRA RA	M	FS7A FS6A PA6A PA4A PR5A PR4A PR3A	CW	---	5YR7/4 Pink	---	5YR7/4 Pink	---	O
23	Krater	7K42	48	150	3	5YR7/3 Pink	5YR5/1 Gray	5YR7/4 Pink	L	6A 5A 4A 3A	SRB RB	M	FS7+A PA4A PR5A PR4A PR3A	W	---	5YR7/4 Pink	---	5YR7/3 Pink	---	U
24	Krater	7K42	50	156	3	5YR7/3 Pink	5YR5/1 Gray	5YR7/3 Pink	L	6A 5A 4A 3A	SAA SRA RA	M	PA5A PA4A PR6A PR5A PR4A PR3A	CW	---	5YR6/3 Light Reddish Brown	---	5YR6/4Light Reddish Brown	---	U
25	Bowl	7K42	50	155	4	2.5YR6/4 Light Reddish Brown	2.5YRN5/ Gray	2.5YR6/4 Light Reddish Brown	L	6A 5A 4A 3A	SAA SRA RA	L	PA5A PA4A PR5A PR3A	W	---	2.5YR6/6 Light Red	---	2.5YR6/4 Light Reddish Brown	---	U
26	Bowl	7K42	56	175	3	5YR8/1 White	5YR5/1 Gray	---	L	6A 5A 4A 3A	AA SAA SRA RA	M	PA6A PA5A PR4A PR3A	CW	---	5YR6/3 Light Reddish Brown	---	5YR7/4 Pink	---	R

Fig. 3.12, *continued.* Field A: Pottery descriptions for nos. 15-26.

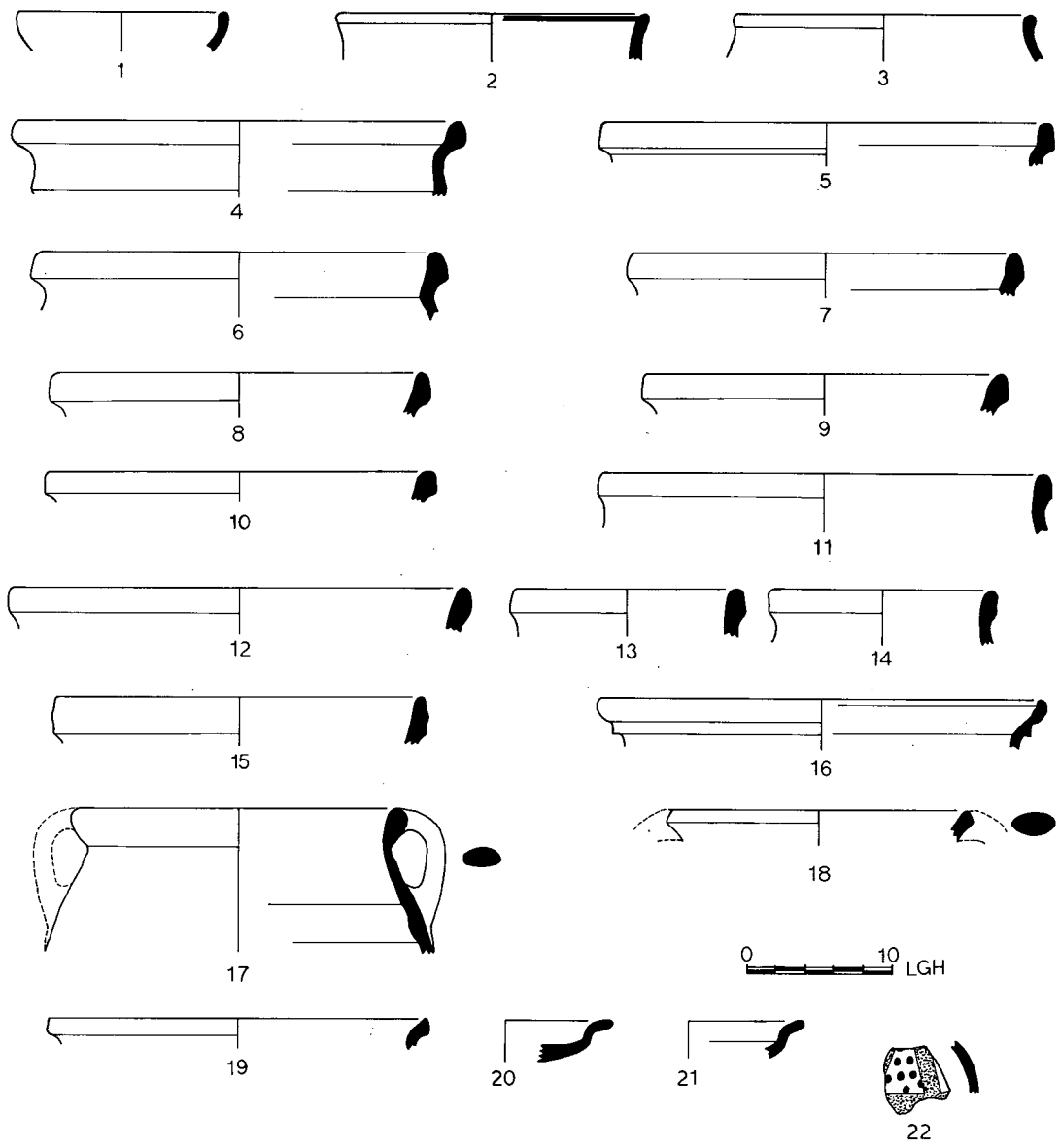


Fig. 3.13. Field A: Iron I ceramics from Phase 9 Earth Layers 7K41:34, 7K41:36, 7K42:52, and 7K42:55, *continued.*

	Vessel		Provenance			Fabric Color			Non-Plastic				Voids	Manu		Surface Treatment			Decor	Fire
No.	Type	Sq	Locus	Pail	Reg.	Ext	Core	Int	Type	Size	Shape	Density			Ext	Color	Int	Color		
1	Bowl	7K42	52	170	5	5YR7/4 Pink	5YR5/1 Gray	5YR7/4 Pink	L	5A 4A 3A	SAA SRA RA	M	PA4A PR5A PR4A PR3A	W	SM	5YR8/2 Pinkish White	SM	5YR8/1 White	---	U
2	Bowl	7K42	52	160	1	---	5YR7/3 Pink	---	L	6A 5A 4A 3A	AA SAA SRA RA	M	PR5A PR4A PR3A	W	---	5YR6/4 Light Reddish Brown	---	5YR7/3 Pink	PaR 5YR5/3 Reddish Brown	O
3	Bowl	7K42	52	168	4	2.5YR5/6 Red	2.5YRN4/ Dark Gray	2.5YR5/6 Red	L	6A 5A 4A 3A	SAA SRA RA	M	PA5A PA4A PR4A PR3A	W	---	2.5YR6/6 Light Red	---	2.5YR6/4 Light Reddish Brown	---	U
4	Cook Pot	7K42	50	155	3	5YR6/4 Light Reddish Brown	5YR5/1 Gray	5YR7/4 Pink	L	7A 6A 5A 4A 3A	SAA SRA RA	MH	PA5A PR6A PR5A PR4A PR3A	W	---	10R5/4 Weak Red	---	10R5/3 Weak Red	---	U
5	Cook Pot	7K42	49	154	1	7.5YR5/2 Brown	5YR5/1 Gray	7.5YR6/4 Light Brown	L	5A 4A 3A	AA SAA SRA RA	M	PA4A PR4A PR3A	W	---	5YR5/3 Reddish Brown	---	5YR5/3 Reddish Brown	---	U
6	Cook Pot	7K42	52	170	2	5YR5/3 Reddish Brown	5YR5/1 Gray	5YR5/3 Reddish Brown	L	6A 5A 4A 3A	SAA SRA RA	M	PR6A PR5A PR4A PR3A	W	---	5YR5/3 Reddish Brown	---	5YR5/3 Reddish Brown	---	U
7	Cook Pot	7K42	56	177	1	5YR5/8 Yellowish Red	5YR6/1 Gray	5YR5/8 Yellowish Red	L	6A 5A 4A 3A	AA SAA SRA RA	M	PA5A PA4A PR4A PR3A	W	---	5YR4/4 Reddish Brown	---	5YR4/4 Reddish Brown	---	U
8	Cook Pot	7K42	52	169	2	5YR5/6 Yellowish Red	5YR5/1 Gray	5YR5/8 Yellowish Red	L	6A 5A 4A 3A	SAA SRA RA	M	PA4A PR5A PR4A PR3A	W	---	5YR4/4 Reddish Brown	---	5YR4/6 Yellowish Red	---	U
9	Cook Pot	7K42	48	150	2	5YR5/6 Yellowish Red	---	5YR5/6 Yellowish Red	L	5A 4A 3A	AA SAA SRA RA	MH	PA6A PA5A PR6A PR4A PR3A	W	---	5YR5/4 Reddish Brown	---	5YR5/4 Reddish Brown	---	O
10	Cook Pot	7K42	52	168	3	2.5YR5/6 Red	2.5YRN6/ Gray	2.5YR5/6 Red	L	6A 5A 4A 3A	SAA SRA RA	M	PR5A PR4A PR3A	W	---	2.5YR4/4 Reddish Brown	---	2.5YR5/4 Reddish Brown	---	U
11	Cook Pot	7K42	52	166	5	2.5YR6/4 Light Reddish Brown	2.5YRN6/ Gray	2.5YR6/4 Light Reddish Brown	L	6A 5A 4A 3A	SAA SRB RA	MH	PR5B PR4A	W	---	2.5YR5/4 Reddish Brown	---	2.5YR5/4 Reddish Brown	---	U
12	Cook Pot	7K42	50	156	2	5YR6/6 Reddish Yellow	5YR5/1 Gray	5YR6/4 Light Reddish Brown	L	6A 5A 4A 3A	SAA SRA RB	M	PR6A PR4A PR3A	W	---	5YR4/4 Reddish Brown	---	5YR4/6 Yellowish Red	---	U
13	Cook Pot	7K42	50	155	2	7.5YR6/6 Reddish Yellow	7.5YRN5/ Gray	7.5YR6/6 Reddish Yellow	P L	6A 5A 4B 3A	AA SAB SRA RA	M	FS6B PR6A PR5A PR4A PR3A	W	---	7.5YR7/4 Pink	---	7.5YR6/4 Light Brown	---	U
14	Cook Pot	7K42	50	155	1	7.5YR8/4 Pink	7.5YRN5/ Gray	7.5YR7/4 Pink	L	6A 5A 4A 3A	SAA SRA RA	M	FS6A PA5A PR6A PR5A PR4A	W	---	7.5YR6/4 Light Brown	---	7.5YR6/4 Light Brown	---	U
15	Cook Pot	7K42	52	160	2	5YR6/3 Light Reddish Brown	5YR6/1 Gray	5YR6/3 Light Reddish Brown	L	5A 4A 3A	SAA SRA RA	M	PA4A PR6A PR5A PR4A PR3A	W	---	5YR5/3 Reddish Brown	---	5YR5/3 Reddish Brown	---	U
16	Cook Pot	7K42	52	167	2	---	5YR5/1 Gray	5YR6/4 Light Reddish Brown	L	5A 4A 3A	AA SAA SRA RA	MH	PA5A PA4A PR4A PR3A	W	---	5YR3/1 Very Dark Gray	---	5YR5/4 Reddish Brown	---	R
17	Cook Pot	7K41	34	187	2	5YR7/4 Pink	5YR5/1 Gray	5YR7/6 Reddish Yellow	L	7A 6A 5A 4A 3A	SAA SRA RA	L	FS7A PA5A PA4A PR5A PR4A PR3A JH7+A	W	---	5YR6/6 Reddish Yellow	---	5YR7/4 Pink	---	U
18	Cook Pot	7K42	48	150	4	5YR7/2 Pinkish Gray	5YR5/1 Gray	5YR7/2 Pinkish Gray	L	6A 5A 4A 3A	AA SAA SRA RA	M	FS7A PA5A PR5A PR4A PR3A	W	---	5YR6/4 Light Reddish Brown	---	5YR6/3 Light Reddish Brown	---	O

Fig. 3.13, *continued.* Field A: Pottery descriptions for nos. 1-18.

No.	Vessel Type	Sq	Provenance Locus	Pail	Reg.	Fabric Color Ext	Core	Int	Non-Plastic Type	Size	Shape	Density	Voids	Manu	Ext	Surface Treatment Color	Int	Color	Decor	Fire
19	Cook Pot	7K41	33	182	1	5YR6/4 Light Reddish Brown	5YR6/1 Gray	5YR5/4 Reddish Brown	L	6A 5A 4A	SAA SRA RA	M	PR3D	W	---	5YR3/4 Dark Reddish Brown	---	5YR4/3 Reddish Brown	---	U
20	Lamp	7K42	52	169	1	---	7.5YRN5/ Gray	---	L	7A 6A 5A 4A 3A	AA SAA SRA RA	M	PA4A PR5A PR4A PR3A	W	---	7.5YR6/2 Pinkish Gray	---	7.5YR6/2 Pinkish Gray	---	R
21	Lamp	7K42	52	166	4	5YR7/6 Reddish Yellow	7.5YRN6/ Gray	---	L	6A 5A 4A 3A	SAA SRA RA	MH	FS5A FS4A PR4A PR3A	W	---	7.5YR6/2 Pinkish Gray	---	7.5YR6/2 Pinkish Gray	---	U
22	Flask?	7K42	52	160	3	---	10YR5/1 Gray	---	L	5A 4A 3A	SRB RB	M	PA4D	H	SH	10YR8/2 White	---	10YR6/1 Gray	Pa 5YR4/3 Reddish Brown 5YR3/2 Dark Reddish Brown	R

Fig. 3.13, *continued.* Field A: Pottery descriptions for nos. 19-22.

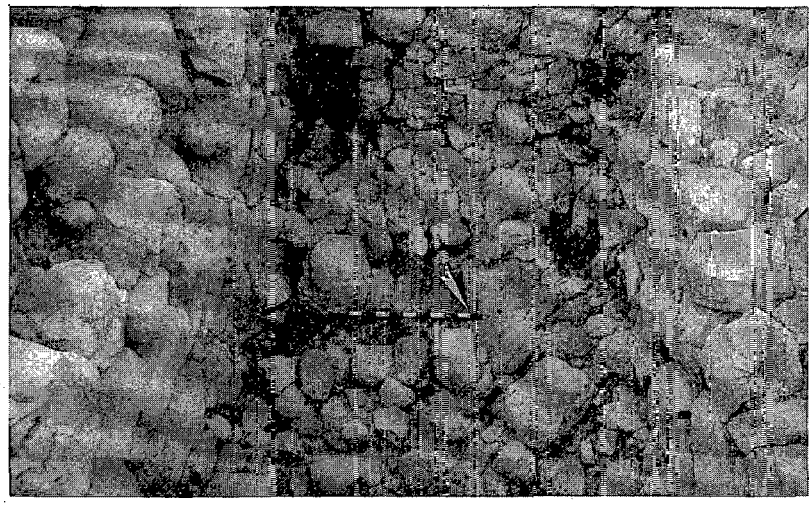


Fig. 3.14. Field A: Phase 9: Cobble Floor 7K41:32 (above meter stick).

Fig. 3.15. Field A: Phase 9: Wall 7K42:36 (left of meter stick).

Fig. 3.16. Field A: Phase 9: Wall Stub 7K42:45 (at top above the very large boulders of Wall 36).

ner of the square (fig. 3.14). Wall 7K41:12 (=7K40:14), the southern wall of Phase 6B Room A3, was founded on top of the cobbles (fig. 3.14). We could not clarify the relationship of Cobble Floor 32 to Walls 31 and 35. If Cobble Floor 32 was contemporary with the walls, one must conclude that the height of both walls was reduced when Building A of Phase 6B was subsequently founded.

To the east, in Square 7K42, two primary architectural features represented Phase 9. Wall 36 was a one-row, two-course wall, constructed of very large boulders. Oriented at 38° for a length of 5.15 m, it ranged from 0.70-1.10 m wide and stood 1.0 to 1.16 m high (fig. 3.15; see also fig. 3.6). It was founded on Earth Layer 56, the pottery of which was read as Iron I. Sealing against the bottom course of the wall on its east face were Earth Layers 7K42:52 and 55, both dated ceramically to Iron I (figs. 3.12-13). (The two Iron II body sherds found in Layer 52 are best treated as intrusive.) The firmness of Layer 52 suggested that it was an exposure surface, while Layer 55 beneath was less firm and appeared to be fill. Sealing against the west side of Wall 36 were Earth Layers 7K42:50, 44, and 39. Fill Layer 50, 0.16-0.22 m deep, was probably associated with the disuse of Wall 36 and was dated ceramically to Iron I. Above, Earth Layer 44 was 0.20 m deep and pale brown (10YR 6/3) in color. In addition to its Iron I ceramic contents, it yielded two grinders (Object Nos. 3073 and 3074), two slingstones, a broken stone bowl (Object No. 3099) and sheep/goat bones. Earth Layer 39 was dated to Iron II and is treated below. It seems likely that, while founded during Phase 9, the upper course of this cyclopean wall was still exposed during Phase 8 when Layer 39 was laid. Whether or not it was functional during Phase 8 could not be determined.

Possibly to be attributed to Phase 10 for its construction, but certainly used during this phase, Wall 7K42:45 was encountered directly south of Wall 36. Initially identified as a "pedestal," this wall stub protruded from the south balk about 0.75 m (fig. 3.16), nearly touching the southeast end of Wall 36 (fig. 3.9). Its width was 0.95 m and it was exposed to a height of 1.26 m (5 courses). Its northern end was sealed against by Earth Layers 59, 56 and 55, collectively 0.40 m thick. Probably fill debris, they lay beneath Exposure Surface 52, which also sealed against the northern end of

Wall 45. Exposure Surface 49, 0.10 m thick and moderately firm, is best equated with Exposure Surface 52, though we could not connect them stratigraphically. The ceramic contents of each of these layers dated them to Iron I. Earth Layer 34, also dated by its pottery to Iron I, sealed against the west side of Wall 45. The founding course of Wall 45 was not reached and its precise phase and function will be finally clarified only through further investigation.

Earth Layer 57, 1.23 × 1.0 m in size, was an arbitrary separation made on the east side of Wall 54 (Phase 11) in the southeastern corner of the square. The purpose of the separation was to delineate a portion of the east edge of Wall 54. A few Iron I sherds were retrieved.

The fact that the founding courses of neither Phase 11 Wall 7K42:54 nor Phase 9 Wall 7K42:45 have been reached raises a question concerning their chronological and stratigraphic relationships. As pointed out above, however, the nature of the construction of these two walls was considerably different. Furthermore, the relationship of Wall 7K42:45 to Wall 7K42:36 is also ambiguous. The drastic difference in the nature and size of the boulders is noteworthy. The construction technique of Wall 45 was quite similar to that of Wall 7K60:14, the Iron I wall uncovered in the western part of Field A in 1987. Answers to these questions must await further excavation.

In Square 7K51, several Phase 9 features were encountered. Excavation reached the founding courses of Phase 6B Walls 7K51:3 and 5, the southern and northern walls of Room B3 (see the discussion on Phase 6B below).

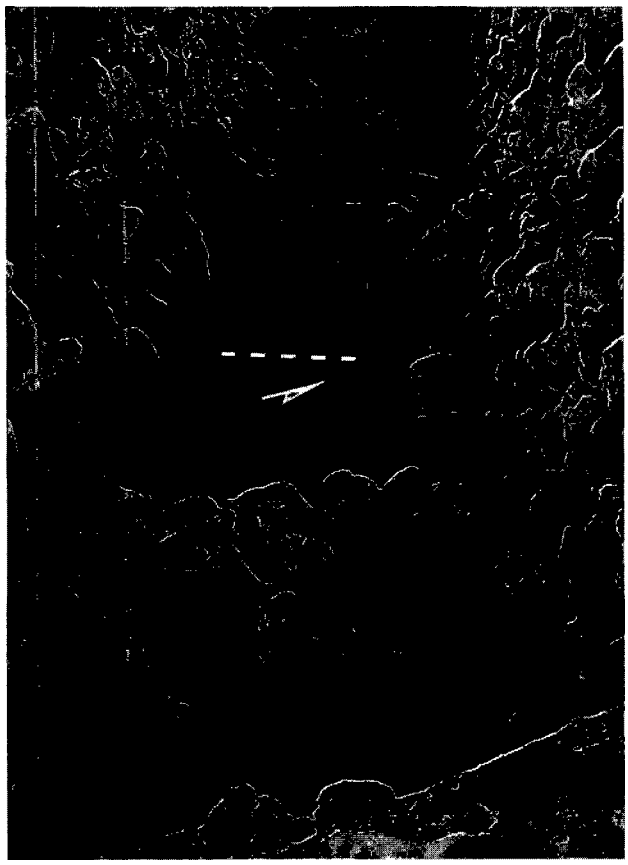


Fig. 3.17. Field A: Phase 9: Wall 7K51:27 (foreground) under Phase 6B Walls 7K51:5 (right) and 7K51:3 (left).

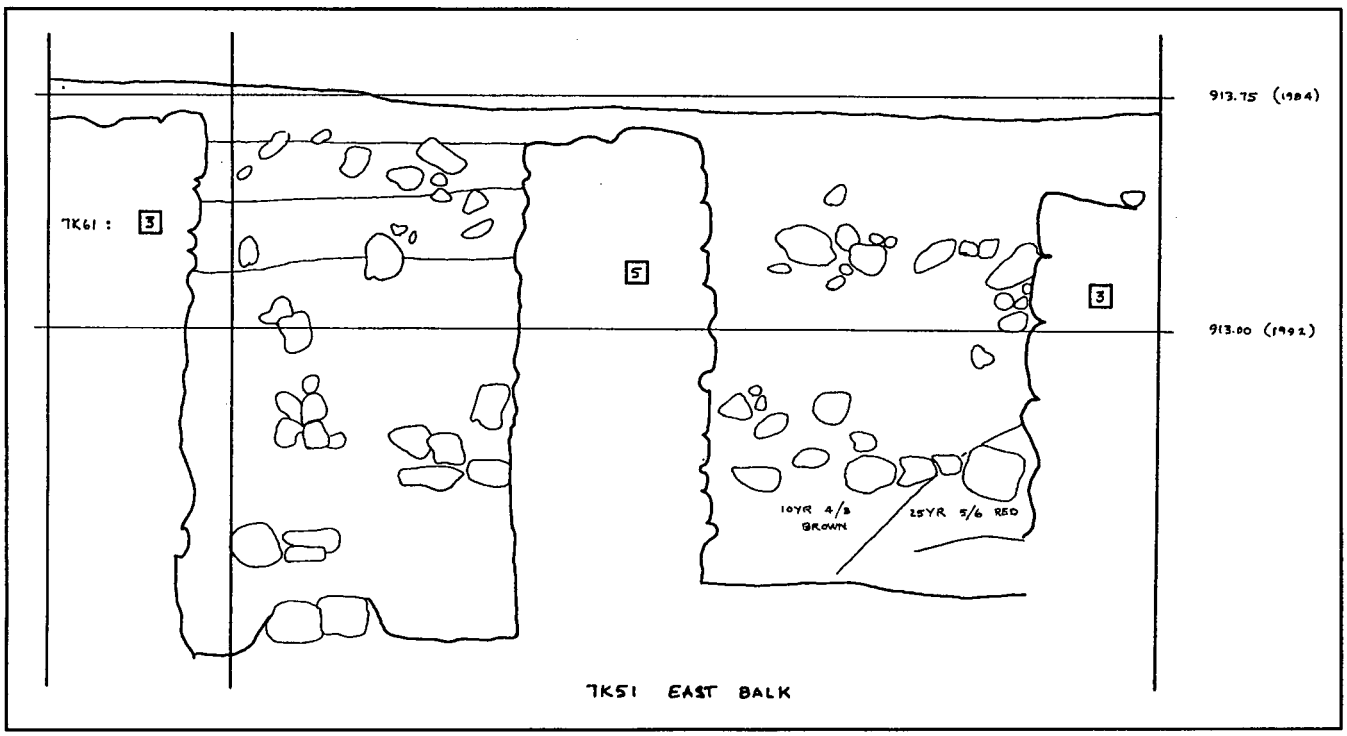


Fig. 3.18. Field A: East balk of Square 7K51, showing Phase 9 Earth Layer 7K51:41 at bottom of Wall 7K51:3.

They were constructed over Wall 7K51:27 at the eastern end of the room (fig. 3.17). Wall 27 was two rows (0.85 m) wide, with an exposed length of 1.53 m, and oriented at 5°. Although excavation to the west of Wall 27 resulted in the exposure of four courses of this wall, approximately 1 m, its founding course was not reached. However, examination of the face of Phase 6B Wall 3 showed that Wall 27 ascended three courses high into Wall 3. That is, when Wall 3 was constructed, the builders simply incorporated the top three courses of Wall 27 into their construction (fig. 3.17). Consequently, seven courses of this wall (nearly 1.60 m) have been preserved.

Not detected in excavation but evident in the east balk of 7K51 (fig. 3.18) was a hard, reddish (2.5YR 5/6) earth layer, 7K51:41, on which the east end of Wall 3 (Phase 6B) was founded. This layer sealed against the east face of Wall 27, which was further clarified by the removal of Earth Layer 7K51:29, a fill layer 0.30 m deep from which only eight LB body sherds were obtained. The western face of Wall 27 was exposed to a depth of 1 m by the removal of Earth Layers 7K51:46 and 28. Layer 46 was, at 0.95 m, the deepest layer excavated in Phase 9. It appeared to be destruction debris, including a mixture of black (2.5YR 2/0), red (2.5YR 5/6), and white (5YR 8/1) bricky material with Iron I pottery. It was similar to the deep Iron I destruction phase in Field B (Phase 11). Since the founding courses of Wall 27 were not reached, apart from further excavation it is not possible to determine with certainty if Layer 46 was destruction debris associated with Phase 9 or fill which prepared for later construction, although we strongly suspect the former. Earth Layer 28, immediately above Layer 46, was fill covering an area approximately 3.50 × 1.50 m and 0.20-0.30 m deep. Only 30 body sherds were retrieved, identified as "post-Early Bronze" and "pre-Hellenistic."

At the west end of Room B3 (Phase 6B), Wall 7K51:47 and Large Boulders 7K51:48 (fig. 3.19) were covered by Earth Layer 46. Wall 47 was exposed for a length of 2.20 m oriented at 117°. Its partial location under Earth Layer 7K51:35, the unexcavated layer upon which Wall 5 of Phase 6B was founded, prevented a determination of the actual width of the wall; only a 0.50 m wide portion of the uppermost preserved course was discernable. Wall 48 ended 0.90 m west of Wall 27, apparently creating a doorway between two rooms (fig. 3.9). Earth Layer 46, described above, both covered and sealed against the south face of this wall.

Abutting the south face of Wall 47 were two large boulders, identified as 7K51:48. Their size was similar to those in Locus 7K41:39 of Phase 10; however, their contiguity to the south face of Wall 47 and their top level (911.3 m) compared to the top level of 7K41:39 (909.58 m) would appear to disallow their stratigraphic identity with Phase 10.

Fig. 3.19. Field A: Phase 9: boulders of 7K42:48 (foreground) and E-W Wall 7K51:47 emerging under a Phase 6B wall at left (7K51:5) (immediately left of the meter stick).

Additional Phase 9 features were encountered below Room B4 of Phase 6B. Probable Wall 7K51:36 was a single stone located below the eastern end of this room. Positioned under Earth Layer 7K51:35, the unexcavated Phase 6B earth layer under Wall 7K51:5 (Phase 6B), Wall 36 protruded 0.30 m north of Wall 5, where it appeared to be aligned with Wall 7K51:27 south of Wall 5; it may signal the northern end of that wall. Immediately north of Wall 36, however, were two large boulders which may have been its continuation, but more likely made up the blockage of a doorway at this point.

West of Wall 36 were Earth Layers 7K51:38 and 39. Layer 38 was red (2.5YR 4/8) in color and its consistence was crumbly and rubbly. An arbitrary separation was made between Earth Layers 38 and 40, the deposit beneath Wall 32 (Phase 6B); however, it appeared that Layer 40 was a continuation of and thus equal to Layer 38. It should be noted that top levels of Layers 38 and 46, discussed above, were virtually the same, as was their soil matrix. This would suggest that Layer 35, the unexcavated material under Wall 5, was a continuation of Layer 38, as well. Earth Layer 39, a predominantly white (5YR 8/1) deposit, extended both west and east of Layer 38, and appeared to blend with white inclusions in the latter, as well.

Oven 7K51:42 was also exposed west of Wall 36. It

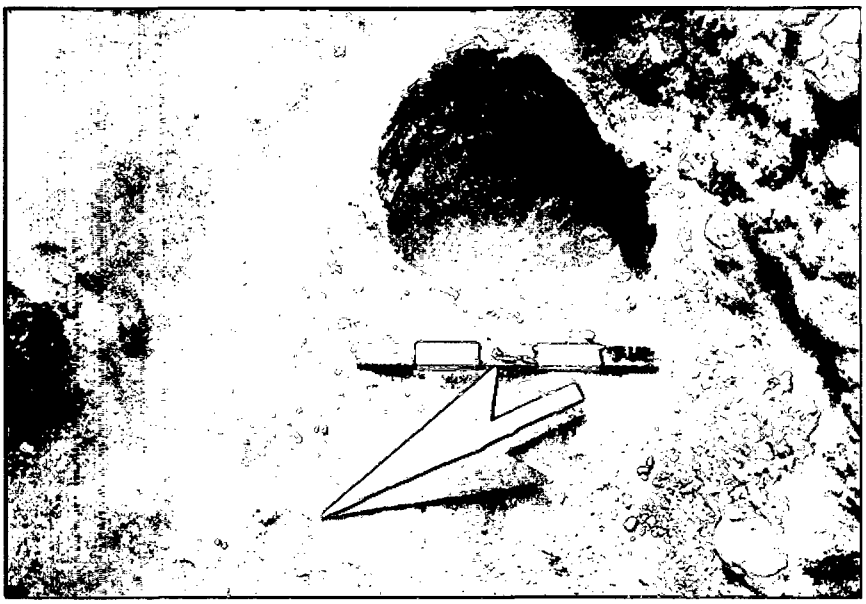


Fig. 3.20. Field A: Phase 9: Iron I collared pithos in an upside-down position, reused as Oven 7K51:42; or fallen from upper story in destruction.

was an upside-down jar (probably a collared pithos) with an approximate diameter of 0.55 m and a preserved height of 0.45 m (fig. 3.20). The rim and neck—down to the shoulder—had apparently been carefully chipped off. That the jar had been intentionally placed in this position and used, most likely, as an oven seems apparent. The earth filling the inside (7K51:43) was light gray in color (10YR 7/2), most likely the product of burning. Two to three courses of mudbrick 0.42 to 0.55 m high were preserved around the jar (7K51:44). Three of four diagnostic sherds removed from some of the mudbrick were Iron I and the other was Late Bronze. That this was not mudbrick tumble is suggested by the relatively level position of the mudbrick, together with the fact that the bricks abutted Oven 42 as though intended to buttress it. Had the jar tumbled as part of roof collapse in destruction it probably would not have retained its form in its present upside-down position. The major problem with this interpretation, however, is the absence of any surface connected with the oven. An alternative explanation is that the oven fell in the destruction along with its mudbrick support.

Wall 7K51:45, a two-row wall oriented at 20°, was situated below the west end of Room B4 (Phase 6B) (fig. 3.21). Two courses (0.44 to 0.53 m) of the wall were exposed by the removal of Earth Layer 7K51:44. Phase 8 Wall 7K51:37 was founded over the west side of Wall 44, so its width is unknown.

Top levels on Wall 7K51:45 (911.03 to 910.94) and 7K51:47 (911.34 to 911.07), the position of the walls, and their common orientation suggest a possible functional relationship between them; however, the presence of Wall 5 (Phase 6B) makes it impossible to offer a definite or meaningful proposal.

Although several Iron I features were encountered in three contiguous squares, they appeared "scattered" because later architecture of Phase 6B broke up excavation into small patches. Clear stratigraphic and functional relationships will remain ambiguous apart from large scale removal of the Phase 6B/5 walls.

Field Phase 8 (fig. 3.22)

Loci:	7K42:46	Bin
	7K42:47	Fill in bin 46
	7K42:51	Earth layer
	7K51:34	Earth layer
	7K51:37	N-S wall

Square 7K51 yielded the first clear stratigraphic evidence of an early Iron II phase in Field A. Wall 7K51:37 was a two-row wall (ca. 0.90 m wide), two courses of which (0.70 m) were preserved below the west end of Room B4 of Phase 6B, but above Wall 45 of Phase 9 (fig.

Fig. 3.21. Field A: Phase 9: Wall 7K51:45 (at bottom above the meter stick); angling above it is Wall 7K51:37 of Phase 8.

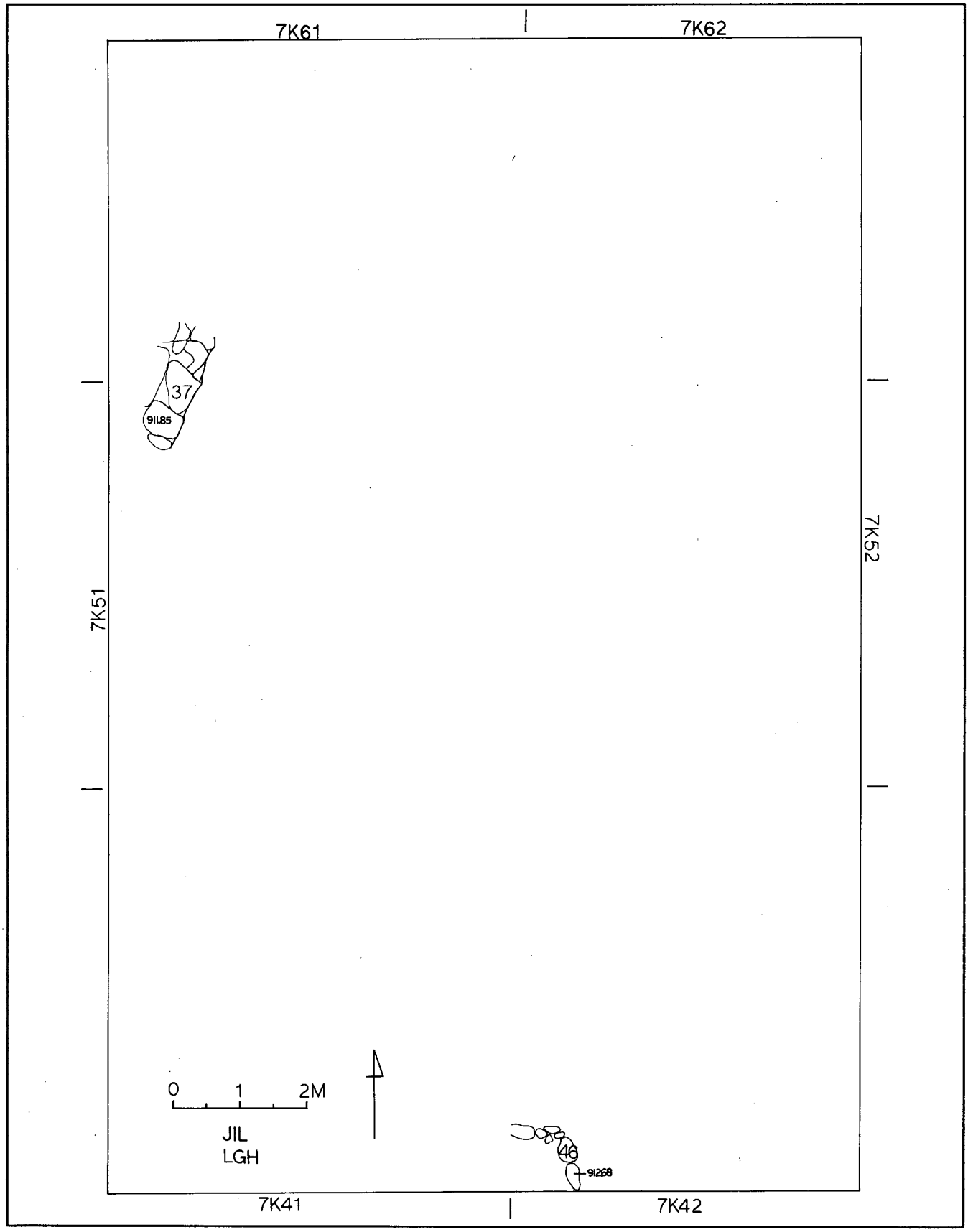


Fig. 3.22. Field A: Plan of Phase 8 remains.

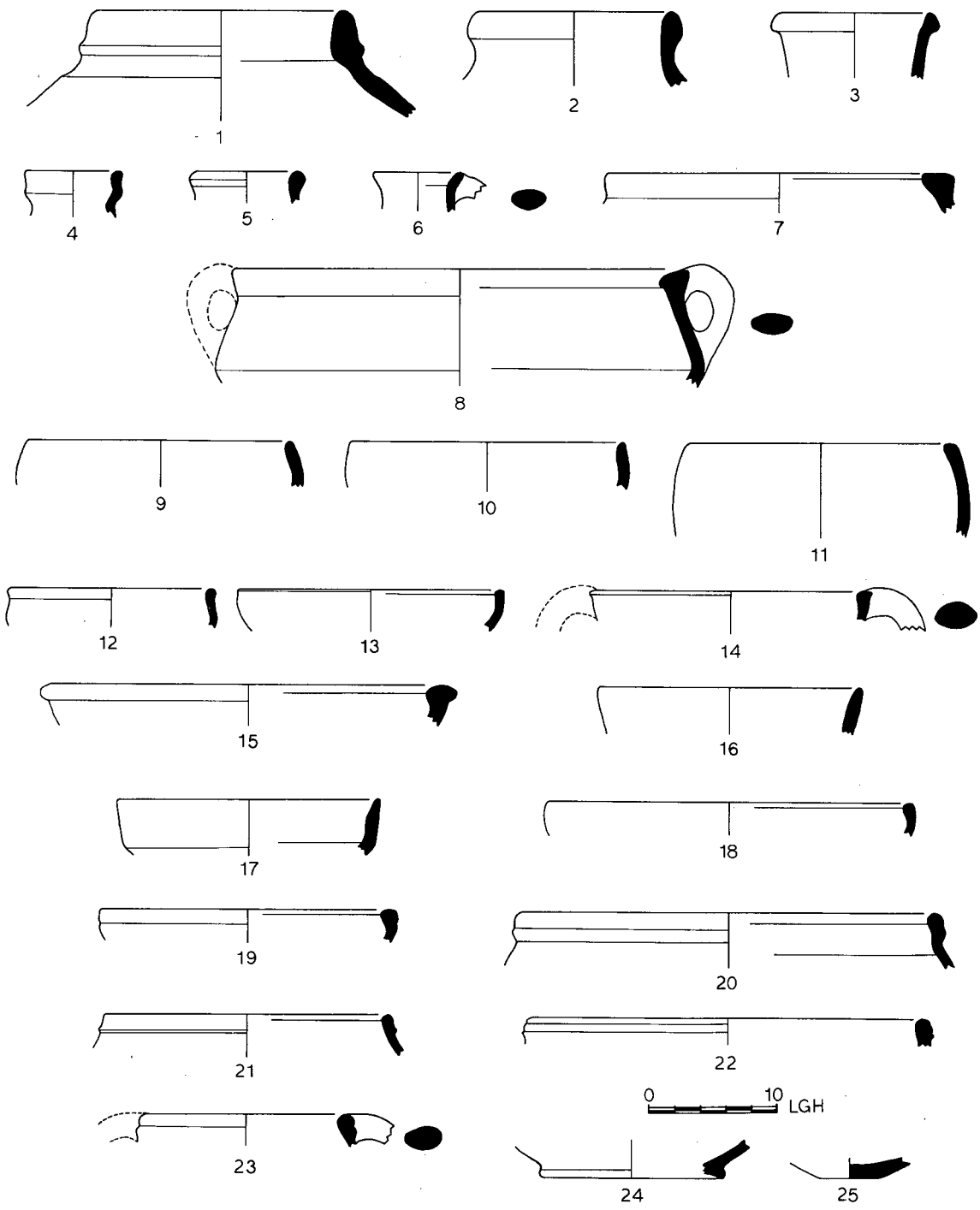


Fig. 3.23. Field A: Early Iron II ceramics from Phase 8 Earth Layer 7K51:34.

Vessel		Provenance			Fabric Color			Non-Plastic				Voids	Manu		Surface Treatment			Decor	Fire
No.	Type	Sq	Locus	Pail	Reg.	Ext	Core	Int	Type	Size	Shape	Density			Ext	Color	Int	Color		
1	Pithos	7K51	34	156	1	2.5YR6/8 Light Red	5YR6/1 Gray	5YR6/3 Light Reddish Brown	L	7A 6A 5A 4A 3B	SAA SRA RB	H	FS6A PA6A PR5A PR4A PR3A	CW	---	2.5YR5/4 Reddish Brown	---	2.5YR5/2 Weak Red	---	U
2	Jar	7K51	34	160	3	5YR5/8 Yellowish Red	5YR5/8 Yellowish Red	5YR5/6 Yellowish Red	L	5A 4A 3A	SRB RB	M	PR5A PR4A PR3A	CW	---	7.5YR5/4 Brown	---	7.5YR6/6 Reddish Yellow	---	O
3	Jar/Jug	7K42	44	148	2	10R6/6 Light Red	2.5YRN5/ Gray	2.5YR6/4 Light Reddish Brown	L	6A 5A 4A 3B	SAA SRA RB	MH	FS4A PR4A PR3A	W	---	10R6/6 Light Red	---	2.5YR6/4 Light Reddish Brown	---	U
4	Jug	7K51	34	157	2	5YR6/4 Light Reddish Brown	7.5YRN6/ Gray	5YR6/1 Gray	L	6A 5A 4A 3A 2A	AA SAA SRA RA	M	FS5A FS4A PR3A	W	SM+	5YR6/6 Reddish Yellow	---	5YR5/1 Gray	---	U
5	Jug	7K42	44	151	2	5YR6/2 Pinkish Gray	---	5YR6/2 Pinkish Gray	L	5A 4A 3A	SAA SRA RA	L	PR6A PR4A PR3A	W	---	5YR7/4 Pink	---	5YR7/4 Pink	---	O
6	Jug/ Juglet	7K42	44	148	4	7.5YR7/4 Pink	---	7.5YR7/4 Pink	L	6A 5A 4A 3B	SAA SRA RB	MH	PA4B PR4B	W	---	7.5YR7/4 Pink	---	7.5YR7/4 Pink	---	O
7	Krater	7K42	47	147	1	7.5YR6/8 Reddish Yellow	7.5YRN6/ Light Gray	---	P L	6A 5A 7A 6A 5A 4B 3A	SRA RA SAB SRA RA	L	FS7A FS5A PR6A PR5A PR4A PR3A	W	WBR	7.5YR7/4 Pink	---	5YR7/1 Light Gray	---	U
8	Krater	7K42	44	148	1	2.5YR6/6 Light Red	7.5YRN5/ Gray	7.5YR7/6 Reddish Yellow	L	6A 5A 4A 3B	SAA SRA RC	MH	FS5A FS4A PA4A PR4A PR3A	W	---	2.5YR6/6 Light Red	---	7.5YR7/6 Reddish Yellow	---	U
9	Bowl	7K42	47	159	1	5YR7/4 Pink	5YR7/1 Light Gray	5YR7/4 Pink	L	5A 4A 3A	SRB RB	VL	PA5A PR4A PR3A	W	SMHB	5YR6/4 Light Reddish Brown	SM	2.5YR6/6 Light Red	---	U
10	Bowl	7K42	47	159	2	5YR7/4 Pink	5YR5/1 Gray	5YR7/4 Pink	L	7A 6A 5A 4A 3A	SRB RB	L	PA3A PR4A PR3A	W	HBL	5YR6/8 Reddish Yellow	---	5YR6/6 Reddish Yellow	---	U
11	Bowl	7K51	34	156	3	5YR7/4 Pink	7.5YRN6/ Gray	5YR7/4 Pink	L	6A 5A 4A 3A	SAA SRA RA	M	PR6A PR5A PR4A PR3A	W	---	2.5YR6/6 Light Red	---	5YR7/4 Pink	---	U
12	Bowl	7K42	44	148	3	7.5YR7/4 Pink	7.5YRN6/ Gray	7.5YR7/4 Pink	L	6A 5A 4A 3B	SAA SRA RB	MH	PR4A PR3B	W	---	7.5YR7/4 Pink	---	7.5YR7/4 Pink	---	U
13	Bowl	7K51	34	160	4	5YR7/3 Pink	5YR6/1 Gray	5YR6/1 Gray	L	5A 4A 3B	SAA SRA RA	M	PA5A PA3A PR5A PR3A	W	---	5YR6/4 Light Reddish Brown	---	5YR6/6 Reddish Yellow	---	R
14	Bowl	7K42	44	151	1	10R6/6 Light Red	2.5YRN6/ Gray	10R6/6 Light Red	L	6A 5A 4A 3A	AA SAA SRA RA	M	FS7+A FS6A FS5A FS4A PA6A PR6A PR5A PR4A PR3A	W	---	10R6/6 Light Red	---	2.5YR6/6 Light Reddish Brown	---	U
15	Bowl	7K51	34	158	1	5YR7/4 Pink	7.5YN6/ Gray	---	L	7A 6A 5A 4A 3A	SRB RB	M	PR5A PR4A PR3A	W	---	2.5YR6/6 Light Red	---	5YR7/3 Pink	---	U
16	Bowl	7K42	47	147	5	2.5YR6/6 Light Red	2.5YRN5/ Gray	2.5YR6/6 Light Red	L P	5A 4A 3A 6A	SAA SRA RA	M	PA6A PA5A PR4A PR3A	W	WB	2.5YR6/6 Light Red	---	5YR7/4 Pink	---	U
17	Bowl	7K42	47	147	2	---	7.5YRN5/ Gray	---	L	6A 5A 4A 3A	SAA RB	L	PR5A PR4A PR3A	W	SM WB	7.5YR5/4 Brown	WB	7.5YRN4/ Dark Gray	---	R

Fig. 3.23, *continued.* Field A: Pottery descriptions for nos. 1-17.

No.	Vessel Type	Sq	Provenance Locus	Pail	Reg.	Fabric Color Ext	Core	Int	Non-Plastic Type	Size	Shape	Density	Voids	Manu	Ext	Surface Treatment Color	Int	Color	Decor	Fire
18	Bowl	7K51	34	160	1	7.5YR7/6 Reddish Yellow	7.5YRN7/ Light Gray	7.5YR6/8 Reddish Yellow	L	6A 5A 4A 3A	SAA SRA RA	L	PA5A PA3A PR5A PR4A	W	SL	10YR6/2 Light Brownish Gray	SL	10YR5/3 Brown	---	U
19	Bowl	7K51	34	161	1	5YR7/4 Pink	5YR6/1 Gray	5YR7/3 Pink	L	6A 5A 4A 3A	SAA SRA RA	M	PR3D	W	---	5YR7/3 Pink	---	5YR7/6 Reddish Yellow	---	O
20	Cook Pot	7K51	34	161	2	5YR6/2 Pinkish Gray	5YR6/1 Gray	5YR6/6 Reddish Yellow	L	6A 5A 4A 3A	AA SAA SRA RA	MH	PR4B PR3B	W	---	5YR4/2 Dark Reddish Gray	---	5YR5/3 Reddish Brown	---	U
21	Cook Pot	7K51	34	156	4	---	5YR6/2 Pinkish Gray	---	L	6A 5A 4A 3B	SAA SRA RA	MH	PA4A PR6A PR5A PR4A PR3A	W	---	5YR5/1 Gray	---	5YR4/1 Dark Gray	---	R
22	Cook Pot	7K51	34	157	1	2.5YR6/4 Light Reddish Brown	2.5YRN6/ Gray	2.5YR6/4 Light Reddish Brown	L	5A 4A 3B 2A	SAA SRA RA	H	PR5D	W	---	2.5YR5/2 Weak Red	---	2.5YR5/4 Reddish Brown	---	U
23	Cook Pot	7K42	47	147	3	---	7.5YR5/6 Strong Brown	---	L	6A 5A 4A 3A	SAA RA	L	FS5A PA7A PA5A PR6A PR4A PR3A	W	---	7.5YR6/2 Pinkish Gray	---	7.5YR6/2 Pinkish Gray	---	O
24	Bowl	7K42	47	147	4	5YR7/3 Pink	---	5YR7/3 Pink	L P	6A 5A 4A 3A 5A	SAA SRA RA	L	FS6A PA6A PR4A PR3A JB7A	W	SH	2.5YR5/6 Red	SH	2.5YR6/6 Light Red	---	O
25	Bowl	7K51	34	157	3	2.5YR6/4 Light Reddish Brown	2.5YRN6/ Gray 5YR7/1 Light Gray	2.5YR6/4 Light Reddish Brown	L	6A 5A 4A 3B 2A	SRB RB	Mh	FC7A FS7A FS6A PR6A	W	---	2.5YR6/4 Light Reddish Brown	---	2.5YR6/4 Light Reddish Brown	---	U

Fig. 3.23, *continued.* Field A: Pottery descriptions for nos. 18-25.

3.21). Only 1.72 m of the wall along its eastern face was observable because Phase 6B architecture covered it. Earth Layer 7K51:34 both covered and sealed against Wall 37; it consistently yielded early Iron II ceramic evidence (fig. 3.23).

Another somewhat ephemeral feature was in the extreme southwest corner of Square 7K42. Bin Wall 7K42:46, the preserved interior of which was 1.06 m × 0.68 m, stood 0.48 m high (two courses). This bin differed from the several encountered elsewhere in Field A in that its bottom was stone-lined as well. Fill 7K42:47, the debris inside the bin, contained early Iron II sherds. Layer 7K42:51 was a patch of debris located north of Bin 46 and south of Wall 36 (Phase 9) and sealed against both. It was 1.20 m × 0.65 m in size and 0.33 m deep. Of three diagnostic sherds, one was early Iron II, the other two were Iron I.

Field Phase 7B (fig. 3.24)

Loci:	7K42:40	Earth layer
	7K42:41	Bin
	7K42:42	Earth layer
	7K42:43	Earth layer

Bin Wall 41, approximately semi-circular in shape, comprised five stones of cobbles and small boulders in a one-row, one-course construction. It was situated east of Wall 36 (Phase 9) in the northeast quadrant of the square and was founded on Earth Layer 43, which contained several Iron I diagnostic sherds and a few from Late Bronze. Earth Layer 42, which contained Iron II ceramics, sealed against the north face of Bin 41, while Layer 7K42:40, containing nothing later than Iron I, sealed against the south face.

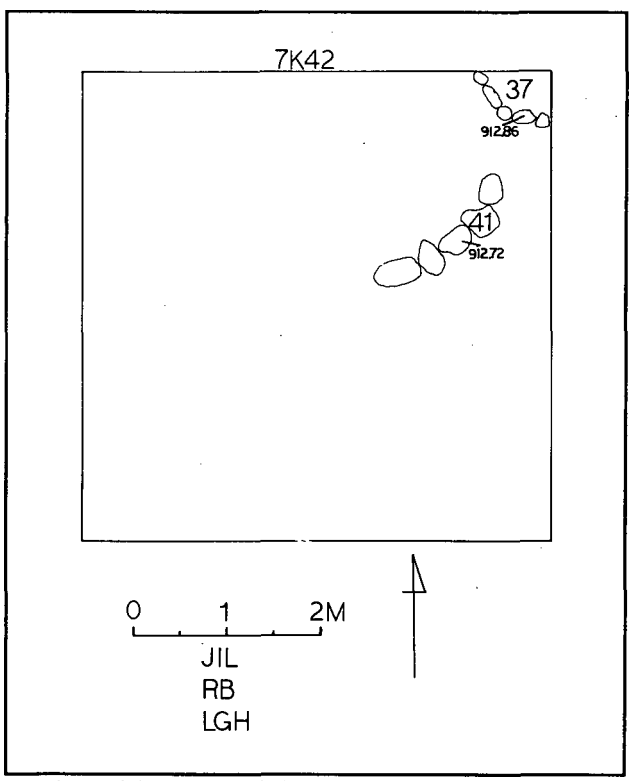


Fig. 3.24. Field A: Plan of Phases 7A and 7B remains.

Field Phase 7A (fig. 3.24)

Loci:	7K42:37	Bin
	7K42:38	Earth layer
	7K42:39	Earth layer

Bin Wall 7K42:37 was a one-course, one-row wall of cobble size stones in the extreme northeast corner of the square. It delineated an area 0.65 × 0.65 m before it entered the east and north balks. In the north balk it appeared to have been cut by Wall 7K42:21 (Phase 3). Earth Layer 7K42:38, situated northeast of the bin wall, was 0.12 m deep and contained Iron II ceramics. The bin wall sat on Earth Layer 42 (Phase 7B).

Earth Layer 7K42:39, located west of Wall 36 (Phase 9), was 0.08-0.12 m deep and yielded scant ceramic evidence, which, nevertheless, was dated to Iron II. Half a spindle whorl (Object No. 3068) was among other meager evidence from this locus.

Field Phase 6B (fig. 3.25)

Loci:	7K40:8	N-S wall
	7K40:14	E-W wall (=7K41:12)
	7K40:26	Earth deposit
	7K40:27	Earth layer
	7K40:28	Surface (=7K41:28, 7K41:15)
	7K40:29	Rock tumble (=7K41:29)
	7K40:30	Earth layer (=7K41:30)
	7K41:12	E-W wall (=7K40:14)
	7K41:14	Bin
	7K41:15	Surface (=7K41:28, 7K40:28)
	7K41:28	Surface (=7K41:15, 7K40:28)
	7K41:29	Rock tumble (=7K40:29)
	7K41:30	Earth layer (=7K40:30)
	7K42:31	Earth layer
	7K42:32	Earth layer
	7K42:33	Earth layer
	7K42:35	Earth layer
	7K51:3	E-W wall
	7K51:5	E-W wall
	7K51:26	Surface
	7K51:31	Earth layer
	7K51:32	E-W wall (=7K61:3/7K52:7)
	7K51:33	Cobble floor
	7K51:35	Earth layer

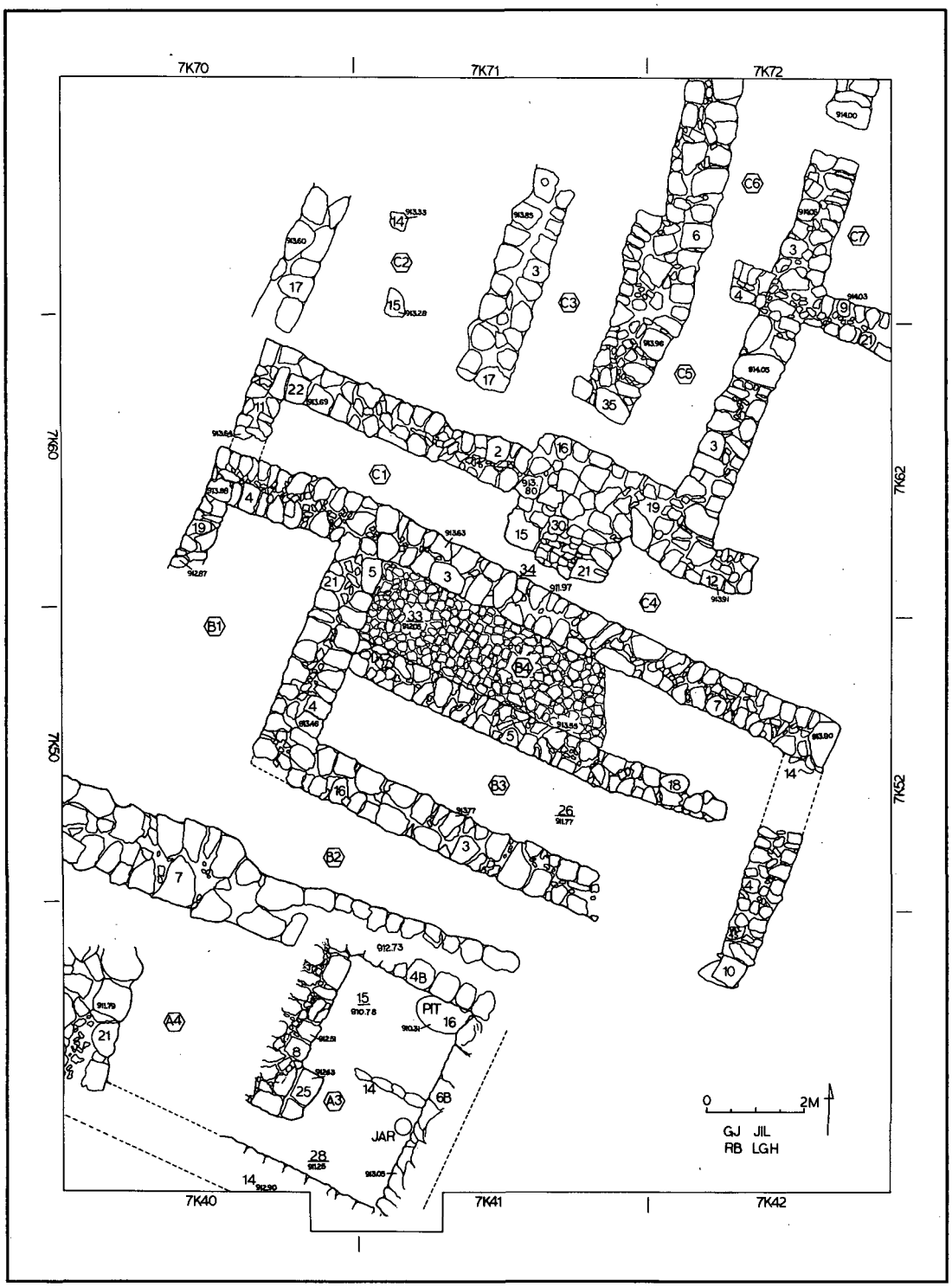


Fig. 3.25. Field A: Plan of Field Phase 6B remains.

This season's results yielded evidence which confirmed certain earlier proposals concerning Phase 6B and necessitated the revision of others. The upper course of Wall 7K40:8 was partially exposed during the 1984 season, at which time it was interpreted as a divider wall between Rooms A3 and A4 (fig. 3.25). Excavation of Room A3 this season, which required work in Squares 7K40 and 7K41, confirmed the function of Wall 8 as a divider wall. The balk between 7K40 and 7K41 had been left standing after the 1984 season. The debris which had eroded from the balk over the intervening eight years came from fill layers overlying the surface of Phase 6B and contained a spindle whorl (Object No. 3002), a spindle rest (Object No. 3009), an iron point (Object No. 3013), a button (Object No. 3015), a pestle (Object No. 3019), and a cylinder seal (Object No. 3021).

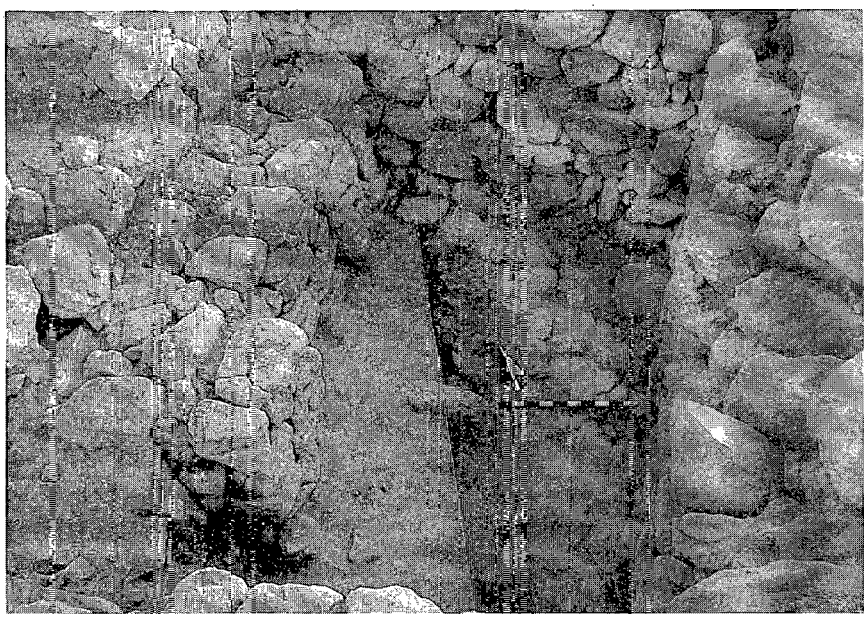


Fig. 3.26. Field A: Phase 6B: Room A3 with west Wall 7K40:8 (left of the meter stick), north Wall 7K41:4B (above the meter stick), east Wall 7K41:6B (right of the meter stick), and a portion of the top of south Wall 7K40:14 (immediate foreground); the doorway into Room A4 is at lower left, here incompletely excavated; Surface 7K40:28=7K41:15 still remains unexcavated left of the meter stick; the tops of Phase 9 features are just emerging where the surface has been removed beneath the meter stick; the eastern end of Bin Wall 7K41:14 is at the left end of the meter stick.

Wall 7K40:8 was oriented at 23° (fig. 3.26). Although Wall 7K40:5, the western wall of the later Phase 5 room, was founded over the top of the western edge of Wall 8 and one could not therefore determine with certainty the number of rows in Wall 8, it probably was a two-row wall. The number of courses varied from three to five (1.30-1.50 m) and its length was 3.70 m. The construction style, like the other walls in Phase 6B, was boulder-and-chink, but the size of the wall stones ranged from cobbles to large boulders, with very irregular coursing. Wall 8 abutted Wall 7K41:4B to the north, while it terminated 0.90 m from Wall 7K40:14 to the south, providing access from Room A3 to A4 (fig. 3.25).

Earth Deposit 7K40:26 was the debris associated with Pedestal 25; it contained late Iron II/Persian ceramic remains. Earth Layer 7K40:27 was a patch of firm debris, 1.10 m × 0.60 m, immediately under Pedestal 25. Its isolation to that area suggests that it was floor build-up on which the pedestal was founded.

Rock Tumble 7K41:29 (=7K40:29) and Earth Layer 7K41:30 (=7K40:30) levelled the area for the floor of Room A3 (Surface 7K41:15=7K41:28=7K40:28). Tumble 29 was located in the northern part of the room and contained five body sherds which could only be identified as "Iron Age," while Layer 30 was found in the southern part and had Iron I to Middle Bronze pottery. The depth of Layer 30, which covered an area 2.25 × 2.75 m, ranged from 0.04-0.23 m.

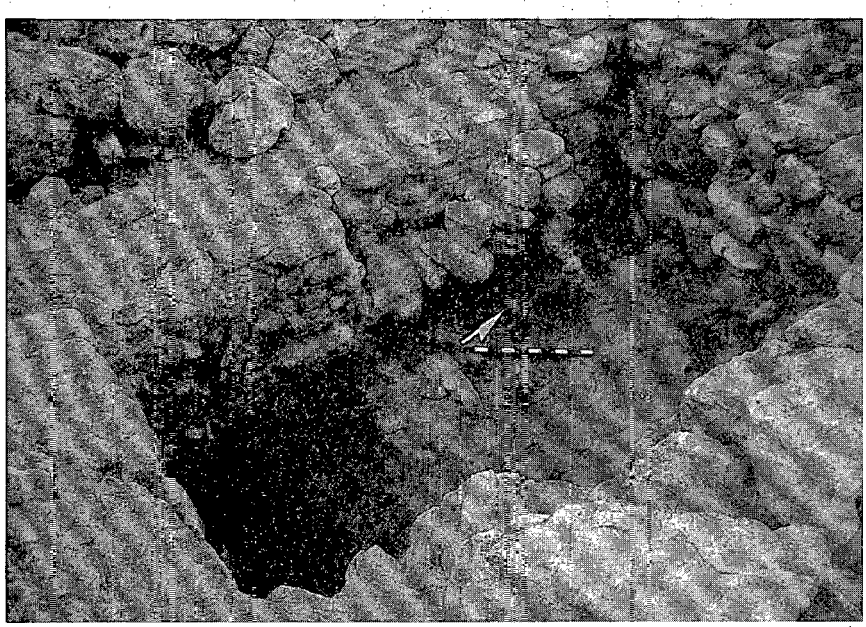


Fig. 3.27. Field A: Phase 6B: Room A3 at an earlier stage of excavation than fig. 26 (the doorway into Room A4 has not yet been cleared—middle left; nor has the top of east Wall 8 been cleared—above the meter stick); the meter stick rests on Surface 7K41:15; the western end of Bin Wall 7K41:14 is visible near the left end of the meter stick; north Wall 7K41:4B is to the right of the meter stick; and the top of east Wall 7K41:6B is in the foreground.

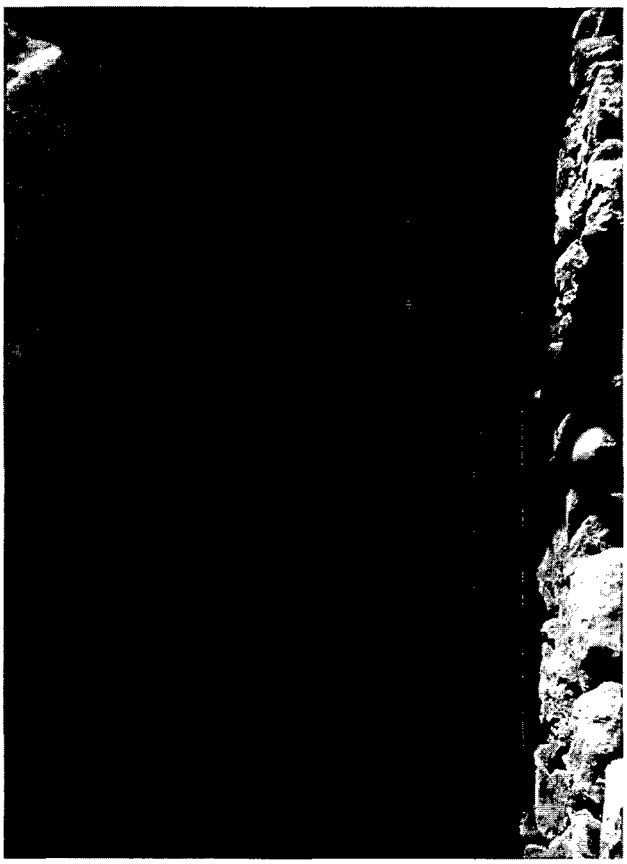


Fig. 3.28. Field A: Phase 6B: Room B4 with Cobble Floor 7K51:33; also visible are associated Walls 7K51:3 (left) and 7K51:5 (right).

Surface 7K40:28 (=7K41:15 =7K41:28) was initially exposed in the eastern half of Room A3 in 1984. Excavation this season confirmed the assumption that the beaten-earth surface extended over the entire room, sealing against Walls 7K41:4B in the north, 7K41:6B in the east, 7K41:12 (=7K40:14) in the south, and 7K40:8 in the west. A portion of Bin Wall 7K41:14, initially identified in 1984, was still intact on the surface (fig. 3.27). For purposes of control, the surface south of Bin Wall 14 was identified as Surface 7K41:28. Subsequently, it was demonstrated that Surfaces 7K40:28, 7K41:28 and 15 were all equal.

Farther north, excavation in Square 7K51 proceeded to the founding levels of Walls 7K51:3, 5 and 32. Wall 32 (=7K61:3=7K52:7), the northern wall of Building B, had two rows and eight to nine courses (2.45-2.70 m high). Wall 3, the southern wall of the central room in Building B, was five to six courses high (1.50-2.0 m). Wall 5, the divider wall between Rooms B3 and B4, has, since 1984, been interpreted as an addition in Phase 5 (Lawlor, 1991). However, the founding of Wall 5 was shown to be contemporaneous with the others (below). Consequently, the four-room plan of Building B was introduced at the time of its initial construction rather than at the time of the Phase 5 renovation.

Surface 7K51:26 appeared to have been the original use surface of Room B3, but no domestic or commercial artifacts were preserved; the absence of such artifacts suggests non-destructional abandonment or abatement. The pottery recovered from the surface was late Iron II. In Room B4, Cobble Floor 7K51:33 represented the earliest use surface. The floor against Walls 7K51:32, 7K50:4 (=7K61:5), and 7K51:5 was exposed to a length of 4.80 m and a width of 1.65 m (fig. 3.28). Once again, no artifacts were found. Because the top levels of Surface 26 in Room B3 ranged from 912.11 to 912.19 m and those of Cobble Floor 33 in Room B4 ranged from 912.02 to 912.19 m, and because they were the earliest surfaces associated with Building B in their respective rooms, they were probably contemporary.

Excavation in 1987, north of Wall 7K51:32 (=7K61:3) in Building C, exposed a similar section of cobbling, Floor 7K61:34, at the base of Stairway 7K61:30 (Lawlor 1991: 20-21). The level reported for Floor 34 was 911.97 m, almost identical to that of Floor 7K51:33 in Building B. However, with the variation in bench mark levels mentioned at the outset of this report, Floor 7K61:34 was actually about 0.25 m higher than Floor 7K51:33 to the south. Nevertheless, they would both appear to have been part of Phase 6B architecture.

Earth Layer 7K51:31, 0.05-0.07 m thick, covered Cobble Floor 33. Initially thought to be the Phase 6B surface of Room B4, its compactness suggests that it was surface build-up above the cobbles. The latest pottery dated to the late Iron II period; no Persian ceramic material could be clearly isolated.

Phase 6B was probably represented in 7K42 by Earth Layers 31, 32, 33, 34, and 35. Layer 35, a fill 0.15-0.20 m deep located in the southeast quadrant of the square, lay directly beneath Layer 34, another fill 0.15-0.20 m deep. Although Earth Layer 34 contained pottery ranging from Iron I to Early Bronze, it must be dated to late Iron II, since Layer 35, immediately beneath it, clearly contained late Iron II pottery. Layer 33 was a small (0.75 × 0.60 m) deposit situated under Platform 7K42:27 of Phase 3. Layer 32 was the debris on which Wall 8 and Bin 20, both Phase 3 installations, were founded. Layer 31 was the remnant of interseasonal erosion in the northeast corner of the square.

With the exception of a complete jar found standing on Surface 7K41:15 in 1984, all Phase 6B surfaces have been remarkably void of artifacts. This, together with the absence of destruction evidence, military or natural, seems to point toward a non-violent conclusion to this phase of the administrative complex in Field A. The evidence, rather, seems to suggest that it was brought to an end either as a gradual process of abatement or, perhaps more likely, with the renovations of Phase 5. The pottery from Phase 6B dates to the end of the Iron Age (figs. 3.29-30).

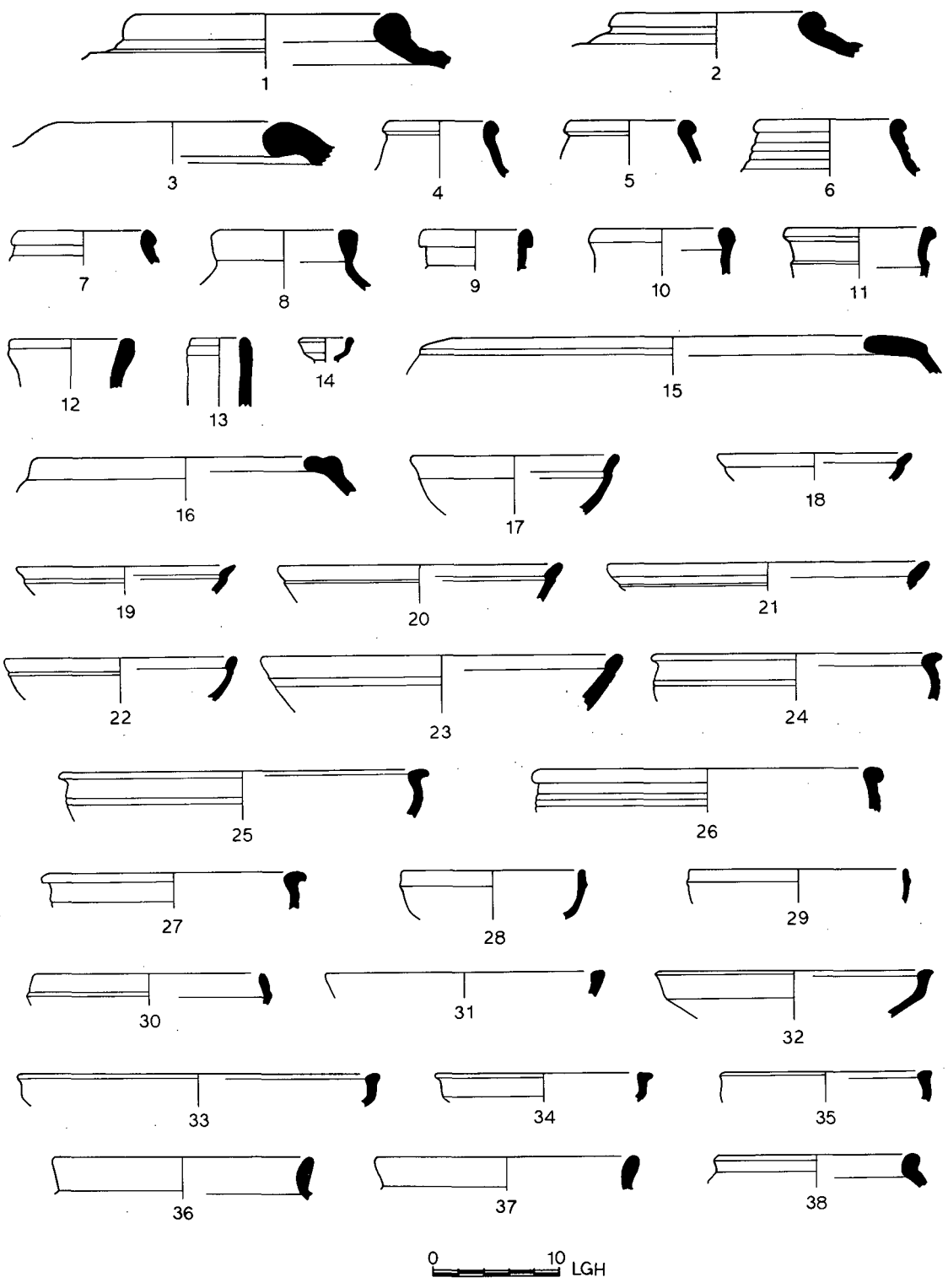


Fig. 3.29. Field A: Late Iron II ceramics from Phase 6B.

Vessel		Provenance			Fabric Color			Non-Plastic				Voids	Manu	Surface Treatment				Decor	Fire
No.	Type	Sq	Locus	Pail	Reg.	Ext	Core	Int	Type	Size	Shape	Density			Ext	Color	Int	Color		
1	Pithos	7K51	30	139	1	2.5YR6/6 Light Red	2.5YRN5/ Gray	2.5YR6/6 Light Red	L	7A 6A 5A 4A 3A	SAA SRA RA	M	FS5A PA6A PA5A PA4A PR6A PR5A PR4A PR3A	CW	---	2.5YR6/6 Light Red	---	2.5YR6/6 Light Red	---	U
2	Pithos	7K41	15	174	5	7.5YR7/4 Pink	7.5YRN6/ Gray	7.5YRN4/ Dark Gray	L	6A 5A 4A 3A	SAA SRA RA	L	PA5A PA4A PR5A PR4A PR3A	W	---	5YR6/3 Light Reddish Brown	---	5YR5/1 Gray	---	U
3	Pithos	7K40	28	114	8	5YR6/6 Reddish Yellow	7.5YRN6/ Gray	5YR6/6 Reddish Yellow	L	7+A 6A 5A 4A 3A	SAA SRA RA	M	PA4A PR5A PR3A	CW	---	5YR7/4 Pink	---	5YR7/4 Pink	---	U
4	Jar	7K40	28	114	16	---	10YR5/1 Gray	---	L	5A 4A 3A	SAA SRA RA	MH	PR3D	W	---	5Y7/3 Pale Yellow	---	10YR7/2 Light Gray	---	U
5	Jar	7K40	28	114	10	5YR7/3 Pink	7.5YRN5/ Gray	---	L	5A 4A 3A	SAA SRA RA	M	FS5A FS4A PR6A PR5A PR4A PR3A	W	---	10YR7/2 Light Gray	---	5YR7/3 Pink	---	U
6	Jar	7K40	28	114	6	5YR7/4 Pink	5YR6/1 Gray	5YR7/4 Pink	L	5A 4A 3A	SAA SRA RA	L	PA3B PR5B	W	SM	2.5YR6/4 Light Reddish Brown	---	5YR7/2 Pinkish Gray	---	U
7	Jar	7K40	28	114	12	2.5YR6/6 Light Red	2.5YRN6/ Gray	2.5YR6/6 Light Red	L	6A 5A 4A 3A	SAA SRA RA	M	FS7A PA5A PR5A PR4A PR3A	W	---	2.5YR6/4 Light Reddish Brown	---	2.5YR6/6 Light Red	---	O
8	Jar/Jug	7K41	28	175	2	---	5YR7/4 Pink	---	L	7A 6A 5A 4A 3A	SAA SRA RA	M	PA4A PR4A PR3A	W	---	5YR7/3 Pink	---	5YR7/3 Pink	---	O
9	Jug	7K41	28	175	1	2.5YR6/6 Light Red	5YR7/4 Pink	2.5YR6/6 Light Red	L	7A 5A 4A 3A	SAA SRA RA	L	---	W	---	2.5YR6/6 Light Red	---	2.5YR6/6 Light Red	---	O
10	Jug	7K51	26	135	2	2.5YR6/6 Light Red	5YR6/6 Reddish Yellow	2.5YR6/6 Light Red	L	6A 5A 4A 3A	SAA SRA RA	M	PA7A PA6A PA4A PA3A	W	---	2.5YR6/6 Light Red	---	2.5YR6/6 Light Red	---	O
11	Jug/ Bottle	7K41	15	174	3	---	7.5YRN5/ Gray	---	L	6A 5A 4A 3A	SAA SRA RA	M	FS6A PA5A PR5A PR4A PR3A	W	---	7.5YR5/2 Brown	---	7.5YR6/2 Pinkish Gray	---	R
12	Jug	7K40	30	115	1	5YR7/3 Pink	5YR6/1 Gray	5YR7/3 Pink	L	7A 6A 5A 4A 3A	AA SAA SRA RA	H	FS6A FS5A FS4A PA3A PR5A PR4A PR3A	W	---	5YR6/3 Light Reddish Brown	---	5YR7/3 Pink	---	U
13	Jug/ Bottle	7K51	26	134	1	5YR7/4 Pink	2.5YRN5/ Gray	5YR7/4 Pink	L	6A 5A 4A 3A	AA SAA SRA RA	ML	FS7A PA6A PR6A PR5A PR4A PR3A	W	---	2.5YR6/4 Light Reddish Brown	---	2.5YR6/4 Light Reddish Brown	---	U
14	Juglet	7K41	29	176	2	5YR7/3 Pink	5YR5/1 Gray	5YR7/3 Pink	L	6A 5A 4A 3A	SAA SRA RA	M	PR3D	W	---	5YR7/4 Pink	---	5YR7/4 Pink	---	U
15	Krater	7K40	28	114	5	7.5YR7/4 Pink	7.5YRN4/ Dark Gray	---	L	6A 5A 4A 3A	SAA SRA RA	M	PR6A PR5A PR4A PR3B	CW	---	5YR7/3 Pink	---	7.5YRN4/ Dark Gray	---	U
16	Krater	7K40	28	114	15	7.5YR7/6 Reddish Yellow	7.5YRN4/ Dark Gray	---	L	7A 6A 5A 4A 3A	SAA SRA RA	M	PA6A PA5A PA4A PR6A PR5A PR4A PR3A	W	---	5YR7/2 Pinkish Gray	---	7.5YRN5/ Gray	---	U

Fig. 3.29, *continued.* Field A: Pottery descriptions for nos. 1-16.

Vessel			Provenance			Fabric Color			Non-Plastic				Voids	Manu	Surface Treatment				Decor	Fire
No.	Type	Sq	Locus	Pail	Reg.	Ext	Core	Int	Type	Size	Shape	Density			Ext	Color	Int	Color		
17	Bowl	7K40	28	114	4	2.5YR6/4 Light Reddish Brown	2.5YRN6/ Gray	2.5YR6/4 Light Reddish Brown	L	5A 4A 3A	SRB RB	VL	PR5B PR3B	W	SH WBL	2.5YR5/6 Red	WBL	2.5YR6/6 Light Red	---	U
18	Bowl	7K41	28	175	10	---	5YR7/3 Pink	---	L	5A 4B 3B	SAB SRB RA	M	PA4A PA3B PR4A	W	WBL	5YR7/3 Pink	WBM	5YR7/3 Pink	---	O
19	Bowl	7K41	28	175	9	5YR7/4 Pink	5YR7/3 Pink	5YR7/4 Pink	L	5A 4B 3B	SAA SRB RA	M	PR4D	W	SM WBM	2.5YR6/6 Light Red	WBL	5YR7/4 Pink	---	O
20	Bowl	7K40	28	114	14	---	5YR7/3 Pink	---	L	4B 3B	SAA SRA RA	VL	PR3D	W	WBM	5YR7/4 Pink	WBM	5YR7/4 Pink	---	O
21	Bowl	7K40	28	120	1	5YR7/4 Pink	7.5YRN6/ Gray	5YR7/3 Pink	L	5A 4A 3A	SAA SRA RA	M	PA4A PR5A PR4A PR3A	W	SM WBH	5YR6/6 Reddish Yellow	WBH	5YR6/6 Reddish Yellow	GB	U
22	Bowl	7K40	28	114	17	5YR7/3 Pink	2.5YRN6/ Gray	5YR7/3 Pink	L	5A 4A 3A	SAA SRA RA	VL	PA5A PA4A PR4A PR3A	W	SM WBL	2.5YR5/8 Red	WBL	2.5YR6/6 Light Red	---	O
23	Bowl	7K40	28	120	2	5YR8/4 Pink	7.5YRN6/ Gray	5YR8/3 Pink	L	5A 4A 3A	SAA SRA RA	L	PA5A PA4A PR5A PR4A PR3A	W	WBL	5YR6/4 Light Reddish Brown	WBM	5YR6/8 Reddish Yellow	---	U
24	Bowl	7K40	28	114	3	7.5YR7/6 Reddish Yellow	7.5YRN6/ Gray	7.5YR7/6 Reddish Yellow	L	6A 5A 4A 3A	SRB RB	ML	PR4B PR3B	W	WBL	7.5YR6/4 Light Brown	WBL	7.5YR7/8 Reddish Yellow	---	U
25	Bowl	7K41	28	175	5	5YR7/3 Pink	5YR6/1 Light Gray	5YR7/3 Pink	L	7A 5A 4A 3A	AA SRA RA	L	FS5A PR5A PR4A PR3A	W	WBL	5YR6/3 Light Reddish Brown	WBL	5YR6/3 Light Reddish Brown	Gr	O
26	Bowl	7K41	28	175	3	5YR6/4 Light Reddish Brown	5YR5/1 Gray	5YR6/4 Light Reddish Brown	L	4B 3B	SAA SRA RA	M	FS4A PA3A PR4A PR3A	W	SH WBL	5YR4/1 Dark Gray	SH	5YR4/1 Dark Gray	Gr	R
27	Bowl	7K41	15	174	7	7.5YR7/4 Pink	7.5YRN6/ Gray	7.5YR7/4 Pink	L	6A 5A 4A 3A	SRB RB	L	PA5A PA3A PR4A PR3A	W	SL WBM	5YR6/4 Light Reddish Brown	SL WBM	5YR6/6 Reddish Yellow	---	U
28	Bowl	7K41	15	174	4	5YR8/4 Pink	---	5YR8/4 Pink	L	4A 3A	RD	VL	PR4A	W	SM WBM	5YR6/6 Reddish Yellow	SM WBM	5YR7/6 Reddish Yellow	---	O
29	Bowl	7K40	28	114	18	5YR7/3 Pink	7.5YRN5/ Gray	---	L	5A 4A 3A	SAA SRA RA	L	PR3D	W	---	5YR8/3 Pink	---	5YR6/1 Gray	---	U
30	Bowl	7K40	28	114	9	5YR7/4 Pink	5YR6/1 Gray	5YR7/4 Pink	L	5A 4A 3A	SRB RB	VL	PA5A PR4B PR3B	W	SM WBM	2.5YR5/6 Red	SM WBL	2.5YR5/6 Red	---	O
31	Bowl	7K40	28	120	5	---	2.5YRN5/ Gray	---	L	5A 4A 3A	AA SAA SRA RA	L	PR3D	W	WBH	2.5YRN2.5/ Black	WBM	2.5YRN3/ Very Dark Gray	BB	R
32	Bowl	7K41	28	175	4	5YR7/4 Pink	5YR7/3 Pink	5YR7/4 Pink	L	6A 5A 4A 3A	AA SRA RA	L	PR5B PR4B	W	SL WBL	10R6/4 Pale Red	SM WBH	2.5YR6/4 Light Reddish Brown	---	O
33	Bowl	7K51	26	134	2	2.5YR6/4 Light Reddish Brown	5YR7/4 Pink	2.5YR6/4 Light Reddish Brown	L	6A 5A 4A 3A	SAA SRA RA	VL	PA6A PA5A PA4A PR4A PR3A	W	SM WBH	10R6/6 Light Red	SM WBM	10R6/6 Light Red	---	O
34	Bowl	7K41	15	174	2	5YR7/4 Pink	---	2.5YR6/4 Light Reddish Brown	L	6A 5A 4A 3A	SAA SRA RA	M	PA5A PA4A	W	SH WBH	2.5YR6/6 Light Red	SH WBH	2.5YR6/6 Light Red	---	O
35	Bowl	7K40	28	114	11	---	7.5YRN6/ Gray	---	L	5A 4A 3A	RD	VL	PR3D	W	---	7.5YR6/2 Pinkish Gray	WBM	7.5YR6/2 Pinkish Gray	---	R
36	Bowl	7K40	28	120	4	2.5YR6/4 Light Reddish Brown	2.5YR6/2 PaleRed	2.5YR6/4 Light Reddish Brown	L	5A 4A 3A	SAA SRA RA	M	PA5A PA4A PR6A PR4A PR3A	W	SH WBH	2.5YR5/4 Reddish Brown	SH WBH	2.5YR5/4 Reddish Brown	---	O

Fig. 3.29, *continued.* Field A: Pottery descriptions for nos. 17-36.

	Vessel		Provenance			Fabric Color			Non-Plastic				Voids	Manu	Surface Treatment				Decor	Fire
No.	Type	Sq	Locus	Pail	Reg.	Ext	Core	Int	Type	Size	Shape	Density			Ext	Color	Int	Color		
37	Bowl	7K41	28	175	7	---	5YR7/3 Pink	---	L	5A 4A 3A	SRB RB	VL	PA4A PR5A PR3A	W	SH WBM	10R5/6 Red	SH WBH	10R5/6 Red	---	O
38	Bowl	7K40	28	114	14	5YR6/6 Reddish Yellow	5YR6/1 Gray	5YR6/8 Reddish Yellow	L	6A 5A 4A	SRB RB	L	FS6A FS5A FS4A PA4A PR5A PR4A PR3A	W	---	5YR6/6 Reddish Yellow	---	5YR6/8 Reddish Yellow	---	U

Fig. 3.29, *continued.* Field A: Pottery descriptions for nos. 37-38.

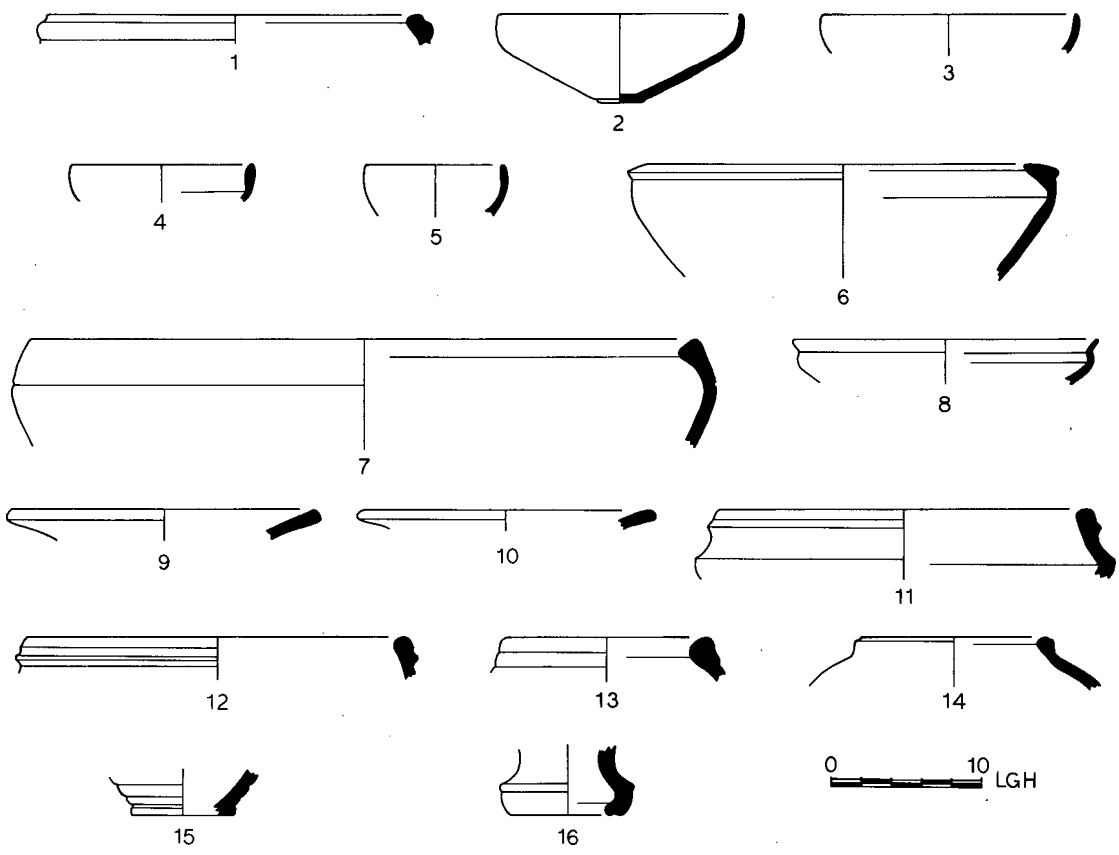


Fig. 3.30. Field A: Late Iron II ceramics from Phase 6B.

Vessel		Provenance			Fabric Color			Non-Plastic				Voids	Manu	Surface Treatment				Decor	Fire
No.	Type	Sq	Locus	Pail	Reg.	Ext	Core	Int	Type	Size	Shape	Density			Ext	Color	Int	Color		
1	Bowl	7K41	28	175	6	5YR6/2 Pinkish Gray	---	5YR6/2 Pinkish Gray	L	6A 5A 4A 3A	SAA SRA RA	L	PR5B PR3B	W	SL WBM	5YR7/3 Pink	WBM	5YR7/3 Pink	---	R
2	Bowl	7K40	28	114	1	---	7.5YR8/4 Pink	---	L	5A 4A 3A	AA SAA SRA RA	VL	PA5A PA3A PR6A PR4A PR3A	W	---	7.5YR8/4 Pink	---	10YR8/3 Very Pale Brown	---	O
3	Bowl	7K41	28	175	8	---	5YR8/2 Pinkish white	---	L	4B 3B	SRB RB	L	PA4A PR4A PR3A	W	---	7.5YR8/4 Pink	---	7.5YR8/4 Pink	---	O
4	Bowl	7K40	28	120	3	---	5YR7/4 Pink	---	L	5A 4A 3A	SRB RB	L	PA4A PR3B	W	SM	5YR6/6 Reddish Yellow	SM	5YR6/6 Reddish Yellow	---	O
5	Bowl	7K51	30	139	4	---	5YR8/3 Pink	---	L	6A 5A 4A 3A	SAA SRA RA	M	PR4B PR3B	W	---	5YR6/4 Light Reddish Brown	---	5YR8/2 Pinkish white	---	O
6	Bowl	7K51	30	139	2	5YR7/3 Pink	2.5YRN5/ Gray	5YR7/3 Pink	L	6A 5A 4A 3A	SAA SRA RA	M	PA6A PA4A PR7A PR6A PR5A PR4A PR3A	W	SM WBM	2.5YR6/6 Light Red	WBM	5YR7/4 Pink	---	U
7	Bowl	7K41	29	176	1	5YR6/4 Light Reddish Brown	5YR5/1 Gray	5YR6/4 Light Reddish Brown	L	7A 6A 5A 4A 3A	SAA SRA RA	M	PA4A PR6A PR5A PR4A PR3A	CW	---	5YR7/3 Pink	---	5YR6/6 Reddish Yellow	---	U
8	Bowl	7K40	28	114	20	---	7.5YR8/4 Pink	---	L	5A 4A 3A	AA SAA SRA RA	VL	PA5A PA4A PR6A	W	---	7.5YR8/4 Pink	---	10YR8/3 Very Pale Pink	---	O
9	Plate	7K51	30	139	3	---	5YR7/4 Pink	---	L	6A 5A 4A 3A	SRB RB	M	PR5A PR4A PR3A	W	SM	10R6/6 Light Red	SM	10R6/6 Light Red	---	O
10	Plate	7K40	28	114	13	---	5YR7/3 Pink	---	L	5A 4A 3A	SRB RB	L	FC7A PA4A PR5A PR4A PR3A	W	SM	2.5YR6/6 Light Red	SM WBM	2.5YR6/4 Light Reddish Brown	---	O
11	Cook Pot	7K51	31	153	2	2.5YR6/6 Light Red	2.5YRN4/ Dark Gray	2.5YR5/6 Red	L	6A 5A 4A 3B	AA SAA SRA	H	FS6A PA6A PR5A PR4A PR3A	W	---	2.5YR5/6 Red	---	2.5YR5/4 Reddish Brown	---	U
12	Cook Pot	7K51	26	135	1	5YR7/4 Pink	7.5YRN5/ Gray	5YR7/4 Pink	L	6A 5A 4A 3A	SAA SRA RB	MH	FC5A PA4A PR6A PR5A PR4A PR3A	W	---	5YR6/3 Light Reddish Brown	---	5YR6/3 Light Reddish Brown	---	U
13	Cook Pot	7K40	28	114	7	5YR5/6 Yellowish Red	5YR6/3 Light Reddish Brown	5YR6/6 Reddish Yellow	L	6A 5A 4A 3A	SAA SRA RA	M	---	W	---	5YR5/4 Reddish Brown	---	5YR5/4 Reddish Brown	---	O
14	Cook Pot	7K51	31	153	1	---	2.5YR5/4 Reddish Brown	---	L	7A 5A 4A 3A	SAB RB	MH	FS5A PA7A PR6A	W	---	2.5YR5/6 Red	---	2.5YR5/8 Red	---	U
15	Jug?	7K41	15	174	6	5YR7/6 Reddish Yellow	5YR6/1 Gray	5YR7/4 Pink	L	6A 5A 4A	SRB RB	L	PA5A PA4A PR4A	W	---	5YR6/4 Light Reddish Brown	---	5YR7/4 Pink	GR	O
16	Pedestal?	7K40	28	114	2	---	7.5YRN4/ Dark Gray	7.5YR7/4 Pink	L	6A 5A 4A 3A	AA SAA SRA RA	M	FS7A PR5A PR4A PR3A	W	---	7.5YR7/4 Pink	---	7.5YR7/4 Pink	---	U

Fig. 3.30, *continued.* Field A: Pottery descriptions.

Field Phase 6A

Locus: 7K40:25 Pedestal

Abutted against the southeastern end of Wall 7K40:8 was Pedestal 25, 1.10 m long, 0.50-0.60 m wide, and 1.0 m high (5 courses) (fig. 3.26). Mostly long, flat stones were stacked in one to two rows. The fact that it appeared to have been founded slightly above the surface in Room A3 (7K41:15=7K41:28=7K40:28) suggests that it may have been a slightly later addition; perhaps it was intended to buttress Wall 8 at the doorway (fig. 3.26).

Field Phase 5 (fig. 3.31)

Loci:		
	7K40:24	Earth layer
	7K51:3	E-W wall (continued from FP6B)
	7K51:5	E-W wall (continued from FP6B)
	7K51:25	Earth layer
	7K51:30	Earth layer

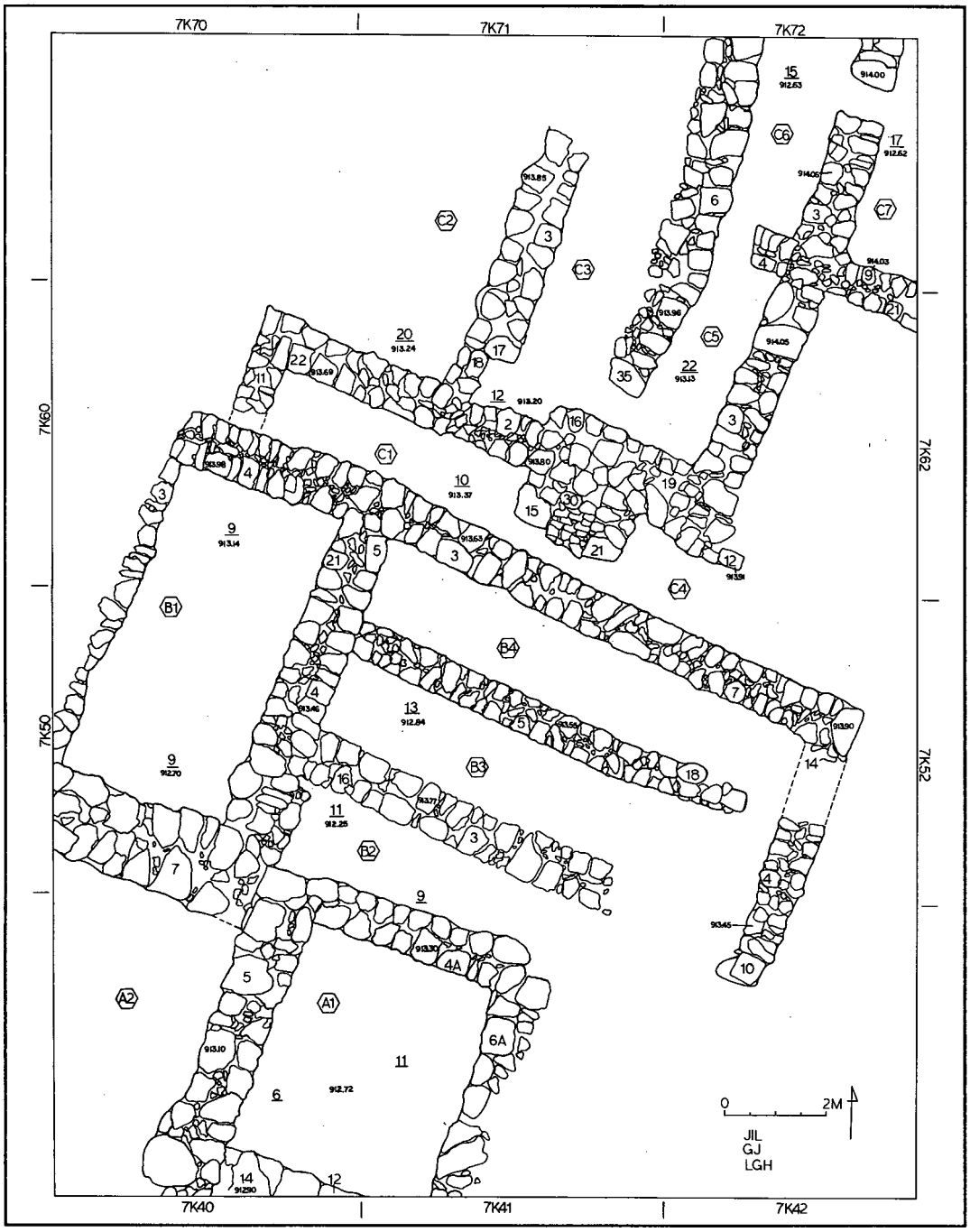


Fig. 3.31. Field A: Plan of Phase 5 remains.

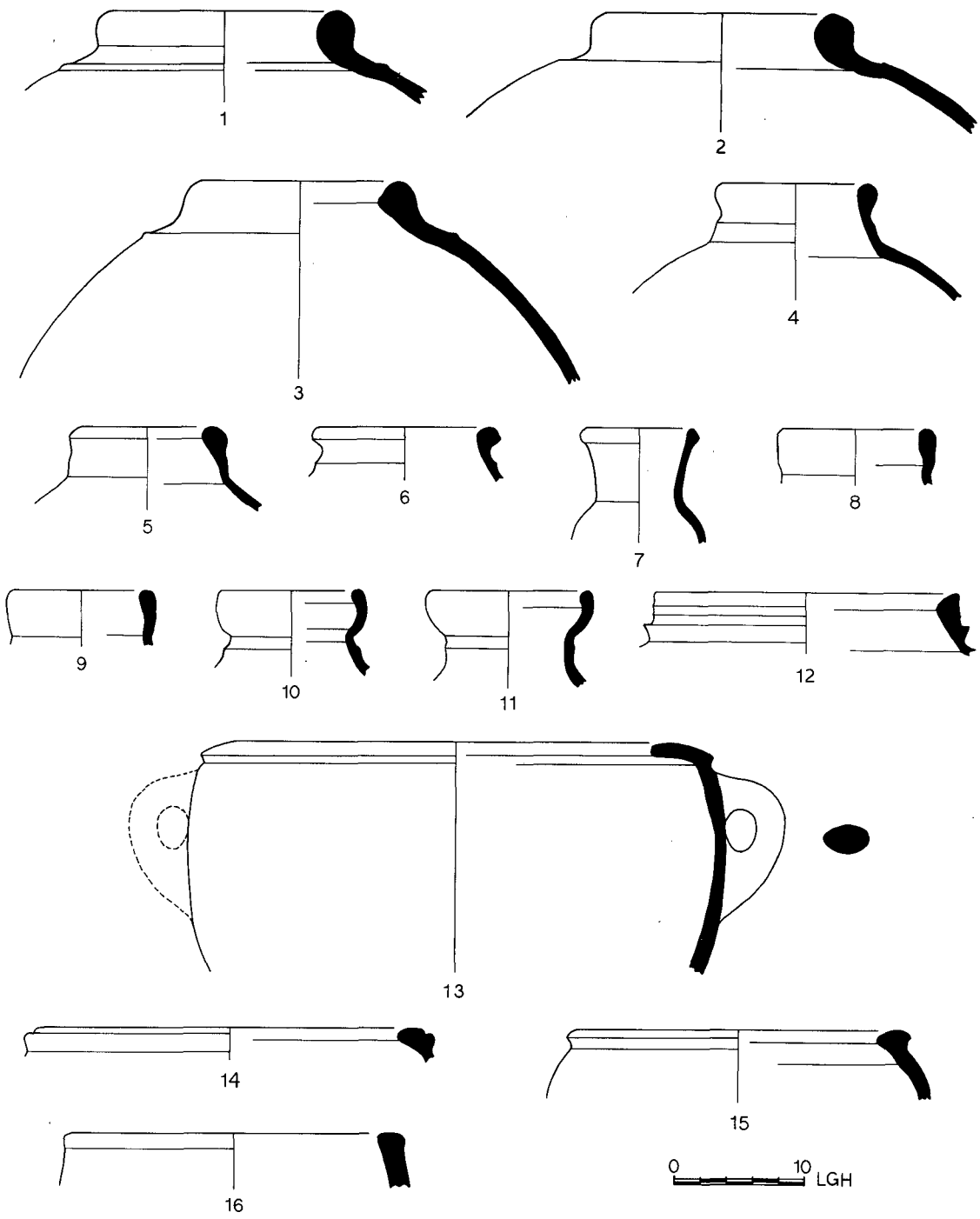


Fig. 3.32. Field A: Late Iron II/early Persian ceramics from Phase 5.

	Vessel		Provenance			Fabric Color			Non-Plastic				Voids	Manu		Surface Treatment				Decor	Fire
No.	Type	Sq	Locus	Pail	Reg.	Ext	Core	Int	Type	Size	Shape	Density			Ext	Color	Int	Color		
1	Pithos	7K51	30	146	1	5YR6/6 Reddish Yellow	7.5YRN5/ Gray	5YR6/6 Reddish Yellow	L	6A 5A 4A 3A	SAA SRA RA	M	PA6A PA4A PR7A PR6A PR5A PR4A PR3A	CW	---	5YR6/4 Light Reddish Brown	---	5YR6/6 Reddish Yellow	---	U
2	Pithos	7K51	30	145	1	5YR7/6 Reddish Yellow	7.5YRN5/ Gray	5YR7/4 Pink	L	6A 5A 4A 3A	SAA SRA RA	M	PA5A PA4A PR5A PR4A PR3A	CW	---	5YR7/4 Pink	---	5YR7/4 Pink	---	U
3	Pithos	7K51	30	147	2	7.5YR6/8 Reddish Yellow	7.5YRN5/ Gray	7.5YR6/8 Reddish Yellow	L	7A 6A 5A 4A 3A	SAA SRA RA	M	FS5A FS4A PA7A PA6A PA5A PA4A PA3A PR6A PR5A PR4A PR3A	CW	---	10YR7/3 Very Pale Brown	---	7.5YR6/4 Light Brown	---	U
4	Jar	7K51	30	148	1	5YR7/4 Pink	7.5YRN6/ Gray	5YR7/4 Pink	L	6A 5A 4A 3A	SAA SRA RB	L	FS6A PA6A PR5A PR4A PR3A	W	---	7.5YR8/4 Pink	---	5YR7/4 Pink	---	U
5	Jar	7K51	30	149	2	5YR8/3 Pink	5YR7/1 Light Gray	5YR8/3 Pink	L	6A 5A 4A 3A	SRB RB	MH	FS6A FS5A PA5A PR6A PR5A PR4A PR3A	W	---	2.5YR6/6 Light Red	---	5YR8/2 Pinkish White	---	U
6	Jar	7K51	30	148	2	5YR7/3 Pink	---	7.5YRN7/ Light Gray	L	6A 5A 4A 3A	SAA SRA RA	VL	PA7A PA5A PR4A PR3A	W	---	5YR7/3 Pink	---	5YR6/3 Light Reddish Brown	---	U
7	Jug	7K51	30	137	4	10YR7/4 Very Pale Brown	---	10YR7/4 Very Pale Brown	L	6A 5A 4A 3A	AA SAA SRA RB	M	PR5B PR3B	W	---	10YR7/2 Light Gray	---	10YR7/3 Very Pale Brown	---	O
8	Jug	7K51	30	148	6	2.5YR6/6 Light Red	2.5YRN5/ Gray	2.5YR6/6 Light Red	L	6A 5A 4A 3A	AA SAA SRA RA	L	PA5A PR6A PR4A PR3A	W	SL	5YR7/4 Pink	---	2.5YR6/4 Light Reddish Brown	---	U
9	Jug	7K51	30	137	7	5YR6/4 Light Reddish Brown	5YR6/1 Gray	5YR6/6 Reddish Yellow	L	6A 5A 4A 3A	SAA SRA RA	M	PR5A PR4A PR3A	W	---	5YR5/1 Gray	---	5YR7/1 Light Gray	---	U
10	Jug	7K51	30	143	1	5YR7/4 Pink	7.5YRN6/ Gray	5YR7/4 Pink	L	6A 5A 4A 3A	SAA SRA RA	M	FS4A PA4A PR5A PR4A PR3A	W	---	5YR7/4 Pink	---	5YR7/4 Pink	---	U
11	Jug	7K51	30	137	5	5YR6/6 Reddish Yellow	5YR5/1 Gray	5YR6/6 Reddish Yellow	L	6A 5A 4A 3A	SAA SRA RA	M	FS5A PA6A PA5A PA4A PR5A PR4A PR3A	W	---	5YR7/4 Pink	---	5YR7/6 Reddish Yellow	---	U
12	Krater	7K51	30	151	1	7.5YR7/4 Pink	7.5YRN6/ Gray	7.5YR7/4 Pink	L	6A 5A 4A 3A	SAA SRA RA	M	PA7A PA6A PA5A PR4A PR3A	W	---	2.5YR6/4 Light Reddish Brown	---	2.5YR6/6 Light Red	---	U
13	Krater	7K51	25	126	1	5YR7/4 Pink	7.5YRN5/ Gray	---	L	6A 5A 4A 3A	SAA SRA RA	M	PA6A PA5A PA4A PR5A PR4A PR3A JH7+A	CW	---	5YR7/3 Pink	---	5YR6/4 Light Reddish Brown	---	U
14	Krater	7K51	30	137	8	5YR7/4 Pink	5YR5/1 Gray	5YR7/4 Pink	L	6A 5A 4A 3A	SRB RB	M	PA4A PA3A PR4A	W	---	5YR6/4 Light Reddish Brown	WBL	5YR6/3 Light Reddish Brown	---	U

Fig. 3.32, *continued.* Field A: Pottery descriptions for nos. 1-14.

Vessel No.	Type	Provenance Sq	Locus	Pail	Reg.	Fabric Color Ext	Core	Int	Non-Plastic Type	Size	Shape	Density	Voids	Manu	Ext	Surface Treatment Color	Int	Color	Decor	Fire
15	Krater	7K51	30	137	1	5YR7/6 Reddish Yellow	2.5YRN6/ Gray	5YR7/4 Pink	L	6A 5A	AA SAA	M	PA6A PA5A	CW	---	5YR7/3 Pink	---	5YR7/4 Pink	---	U
									P	4A 3A	SRA RA		PA4A PR5A							
										5A 4A 3A	SRB RB		PR4A PR3A							
16	Basin	7K51	30	147	1	7.5YR6/8 Reddish Yellow	7.5YRN6/ Gray	7.5YR6/8 Reddish Yellow	L	6A 5A 4A 3A	SAA SRA RA	L	FS4A PA5A PA4A PA3A PR5A PR4A PR3A	CW	---	10YR7/3 Very Pale Brown	---	10YR7/3 Very Pale Brown	---	U

Fig. 3.32, ***continued.*** Field A: Pottery descriptions for nos. 15-16.

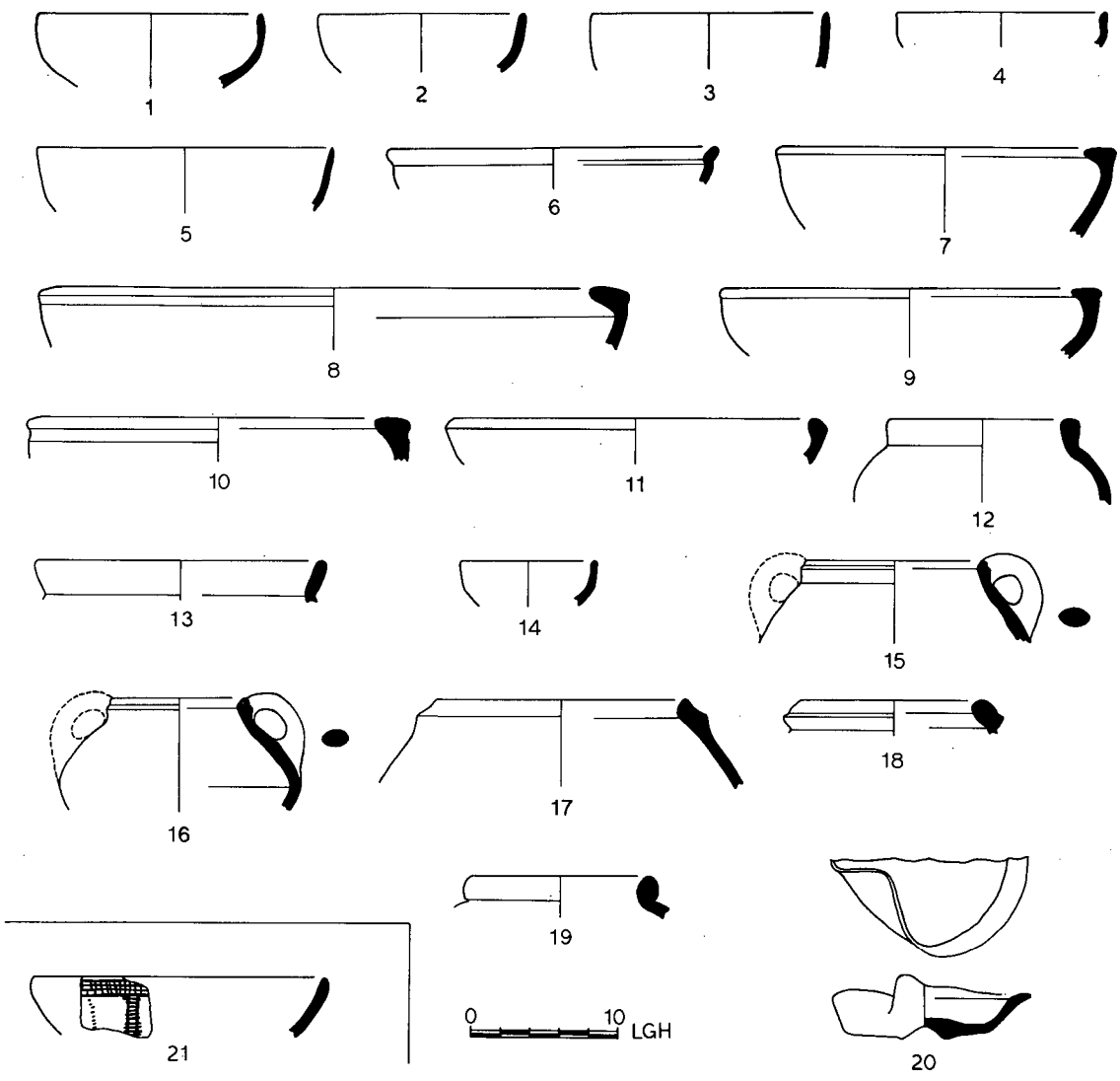


Fig. 3.33. Field A: Late Iron II/early Persian ceramics from Phase 5.

Vessel			Provenance			Fabric Color			Non-Plastic				Voids	Manu	Surface Treatment				Decor	Fire
No.	Type	Sq	Locus	Pail	Reg.	Ext	Core	Int	Type	Size	Shape	Density			Ext	Color	Int	Color		
1	Bowl	7K51	25	127	3	---	5YR7/4 Pink	---	L	5A 4A 3A	SAA SRA RA	L	PA5A PA4A PR5A PR4A	W	WBM	5YR6/6 Reddish Yellow	WBM	5YR5/4 Reddish Brown	---	O
2	Bowl	7K51	25	127	1	2.5YR6/4 Light Reddish Brown	---	5YR7/4 Pink	L	6A 5A 4A 3C	SAB SRA RA	ML	FS5A FS4A PR4B PR3B	W	WB LRCa	2.5YR6/4 Light Reddish Brown	WBM	5YR7/4 Pink	---	O
3	Bowl	7K51	25	127	2	2.5YR5/6 Red	5YR7/4 Pink	2.5YR5/6 Red	L	5A 4A 3C	SAB AB	ML	PR4D	W	WBM	2.5YR5/6 Red	WBM	2.5YR5/6 Red	---	O
4	Bowl	7K51	30	148	5	---	2.5YR6/4 Light Reddish Brown	---	L	5A 4A 3A	SAA SRA RA	L	---	W	SH	10R5/6 Red	SH	10R5/6 Red	---	O
5	Bowl	7K51	30	151	2	2.5YR6/6 Light Red	2.5YRN6/ Gray	2.5YR6/6 Light Red	L	5A 4A 3A	SRB RB	L	PR4A	W	SH WBH	2.5YR5/6 Red	SH WBH	2.5YR5/6 Red	---	U
6	Bowl	7K51	30	144	2	5YR7/4 Pink	2.5YRN6/ Gray	5YR7/4 Pink	L	7A 4A 3A	SAA SRA RA	L	PR3D	W	WBM	5YR7/4 Pink	WBM	5YR7/4 Pink	---	U
7	Bowl	7K51	30	143	2	5YR7/4 Pink	7.5YRN5/ Gray	7.5YRN5/ Gray	L	6A 5A 4A 3A	SRB RB	M	PA4A PR6A PR5A PR4A PR3A	W	WBL	5YR6/6 Reddish Yellow	---	7.5YRN5/ Gray	---	U
8	Bowl	7K51	30	148	3	2.5YR6/6 Light Red	2.5YRN4/ Dark Gray	5YR7/3 Pink	L	6A 5A 4A 3A	AA SRA RA	VL	PR5A PR4A PR3A	W	WBL	2.5YR6/6 Light Red	WBL	5YR7/6 Reddish Yellow	---	U
9	Bowl	7K51	30	137	2	5YR7/4 Pink	5YR5/1 Gray	5YR7/4 Pink	L	6A 5A 4A 3A	SAA SRA RA	M	PA5A PR5A PR4A PR3A	W	WBM	2.5YR6/6 Light Red	---	2.5YR6/6 Light Red	---	U
10	Bowl	7K51	30	137	3	5YR7/3 Pink	---	5YR7/3 Pink	L	6A 5A 4A 3A	AA SAA SRA RB	M	PR5A PR4A PR3A	W	WBL	5YR7/3 Pink	---	5YR7/2 Pinkish Gray	---	O
11	Bowl	7K51	30	148	4	5YR7/4 Pink	7.5YRN6/ Gray	5YR7/4 Pink	L	5A 4A 3A	SAA SRA RA	VL	PR4B PR3B	W	WBM	5YR6/4 Light Reddish Brown	WBM	5YR6/4 Light Reddish Brown	---	U
12	Bowl	7K51	30	138	1	---	5YR7/3 Pink	---	L	7A 6A 5A 4A 3A	AA SAA SRA RA	M	PA5A PR4A PR3A	W	SM WBM	2.5YR5/4 Reddish Brown	SM WBM	2.5YR6/6 Light Red	---	O
13	Bowl	7K51	30	137	6	---	2.5YR6/2 Pale Red	---	L	6A 5A 4A 3A	SRB RB	L	PR6A PR5A PR4A PR3A	W	SH WBH	2.5YR5/6 Red	SM	2.5YR6/4 Light Reddish Brown	---	O
14	Bowl	7K51	30	137	9	---	10YR7/4 Very Pale Brown	---	L	5A 4A 3A	SRB RB	L	PR4B PR3B	W	---	10YR7/2 Light Gray	---	10YR7/3 Very Pale Brown	---	O
15	Cook Pot	7K51	30	143	3	---	2.5YR6/6 Light Red	---	L	7A 6A 5A 4A 3A	SAA SRA RA	MH	FS7A FS6A FS5A PR5A PR4A PR3A JH7A	W	---	5YR7/3 Pink	---	2.5YR5/6 Red	---	O
16	Cook Pot	7K51	30	149	1	---	2.5YR6/6 Light Red	---	L	7A 6A 5A 4A 3A	SAA SRA RA	M	FS6A FS5A PA5A PR4A PR3A JH7A	W	---	2.5YR5/6 Red	---	5YR7/2 Pinkish Gray	---	O
17	Cook Pot	7K51	30	145	2	2.5YR5/6 Red	2.5YRN4/ Very Dark Gray	2.5YR5/8 Red	L	5A 4A 3A	SRB RB	M	FS5A FS4A PA4A PR5A PR4A PR3A	W	---	2.5YR5/2 Weak Red	---	2.5YR5/4 Reddish Brown	---	U
18	Cook Pot	7K51	30	146	2	2.5YR5/4 Reddish Brown	---	2.5YR5/4 Reddish Brown	L	5A 4A 3A	SAA SRA RA	MH	FS7A FS6A PR5A PR4A PR3A	W	---	2.5YR5/4 Reddish Brown	---	2.5YR5/4 Reddish Brown	---	O
19	Cook Pot	7K51	30	144	1	10R6/6 Light Red	5YR7/3 Pink	10R6/6 Light Red	L P	6A 5A 4A 3A 6A 5A 4A	SAA SRA RB	M	---	W	---	10R6/6 Light Red	---	10R6/6 Light Red	---	O

Fig. 3.33, *continued.* Field A: Pottery descriptions for nos. 1-19.

Vessel No.	Type	Provenance Sq	Locus	Pail	Reg.	Fabric Color Ext	Core	Int	Non-Plastic Type	Size	Shape	Density	Voids	Manu	Ext	Surface Treatment Color	Int	Color	Decor	Fire
20	Lamp	7K51	30	137	10	---	2.5YRN5/ Gray	---	L	6A 5A 4A 3A	SAA SRA RA	L	PA4A PA3A PR6A PR4A PR3A	W	---	10YR6/1 Gray	---	10YR6/1 Gray	---	R
21	Bowl	7K42	35	133	1	7.5YR6/4 Light Brown	10R5/6 Red	10R5/6 Red	L	5A 4A 3B	AA SAC SRA	M	FS3A PA4A PA3A PR4B PR3A	H	SH HBH	10YR8/3 Very Pale Brown	SH HBH	10YR8/3 Very Pale Brown	Pa 7.5YR 5/2 Brown	O

Fig. 3.33, *continued.* Field A: Pottery descriptions for nos. 20-21.

7K51:32 E-W wall (continued from FP6B)
7K61:5 N-S wall (continued from FP6B)
(=7K50:4/7K60:21)

Phase 5 was essentially a continuation of the Phase 6B architecture: Wall 7K51:32 (=7K61:3=7K52:7), the northern wall of Building B; Wall 7K51:5, the southern wall of Room B4; Wall 7K51:3, the southern wall of Room B3; and Wall 7K61:5, the western wall of Rooms B3 and B4. The Phase 5 surface in Room B3 was identified as Surface 7K51:13 in 1984. Beneath this surface, Earth Layers 7K51:14, 16, and 17/18 were also identified in 1984 as fill layers. One additional fill layer, 7K51:25, 0.50 m thick and located under 7K51:17/18, was excavated this season.

In Room B4, three seasons of excavation (1984, 1989, and 1992) have failed to isolate a clear Phase 5 surface. Earth Layer 7K51:30, removed this season, was 1.0 m thick, mixed with a large amount of small boulders, and contained late Iron II/Persian ceramics, typical of Phase 5 fills elsewhere beneath surfaces.

In Room A3, Earth Layer 7K40:24 represented an arbitrary identification of sub-surface Phase 5 fill in the deteriorated east balk of 7K40. It was above the Phase 6B surface. The pottery suggested a late Iron II/Persian date. Numerous objects were found: two weaving spatulae (Object Nos. 3028 and 3029), a ring bezel (Object No. 3043), a pestle (Object No. 3040), a hand grinder (Object No. 3054), a fibula fragment (Object No. 3047), a figurine fragment (Object No. 3064), a bead (Object No. 3033), and some bead fragments. Because this collection of objects seems to reflect no particular relationship but were found in the same locus, they appear to suggest that Earth Layer 24 was fill. The fact that all of these objects was obtained from balk erosion over eight years renders them essentially unstratified.

The Phase 5 surfaces have been characteristically poor in quality, difficult to identify, and, like the phase 6B surfaces, essentially void of artifacts. This, together with the lack of any evidence of destruction, suggests a non-violent conclusion to the Phase 5 settlement. The pottery from Phase 5 dates to the late Iron II/early Persian transition (figs. 3.32-33).

Field Phase 3

Loci: 7K42:8 E-W wall
7K42:15 N-S wall

Although no additional evidence for Phase 3 was discovered during the 1992 season, Walls 7K42:8 and 15 were removed at the outset of the season in order to excavate beneath them.

Conclusion

Strategy for further excavation in Field A based on the Ground Penetrating Radar results briefly outlined above suggests an extension of the architecture of Field A to the south, probably including more of Building A. Another alternative for consideration is the excavation of each of the present twelve squares to the founding level of Phase 6B. This would bring the entire field into phase as well as provide insight concerning the extent of the early Iron II and Iron I occupation emerging beneath Phase 6B. The difficulty with this latter approach is that excavation, confined within the small spaces of the Phase 6B rooms, would allow only fragmentary glimpses of the emerging architecture. Dismantling and removing the Phase 6B/5 walls would be very difficult.

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CHAPTER 4

Field B: The Western Defense System

Douglas R. Clark *Walla Walla College*

Introduction

As previous seasons of excavation on the western slope of Tall al-'Umayri have shown and as continuing work confirms, this side of the tall was vulnerable to enemy assault (fig. 2.1). The ancient inhabitants intensified efforts here to fortify their site at its potentially weakest point. To the west a saddle joins the *tall* to a ridge of hills running north-south, yielding a vertical rise for the site of only 10.5 m from the base of the slope to the top (fig. 4.1).

Squares of excavation in Field B were initially laid out in a checkerboard fashion in order to gain as wide a horizontal exposure as possible, while extending the excavations down the length of the slope. In subsequent seasons this was abandoned, because the checkerboard did not allow coherent stratigraphic connections. Since the first season, a line of eight adjacent squares have been opened, forming a trench which stretches the entire length of the defense system, from the outer edge of a dry moat at the bottom of the slope to a significant portion of at least one domestic building inside the defenses at the top of the *tall*. The squares in this trench include, from bottom to top: 7J84, 7J85, 7J86, 7J87, 7J88, 7J89, 7K80, and 7K81. Only two squares (7J98 and 7K90) lie outside this straight line (figs. 4.2 and 2.1).

Excavation during previous seasons delineated the basic contours of the Iron Age defenses, parts of Iron Age

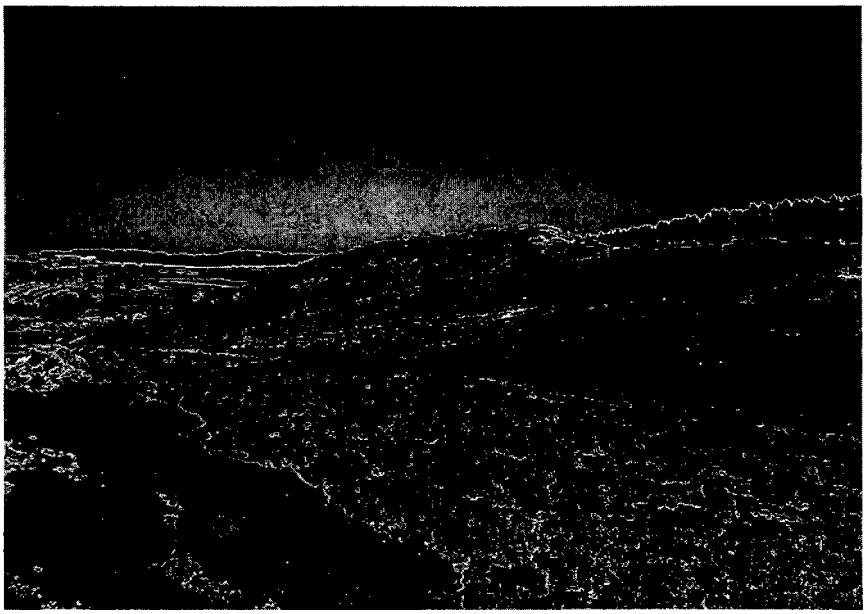


Fig. 4.1. Field B: The join of the saddle ridge with the western portion of Tall al-'Umayri; the saddle connects the *tall* with the hills farther west.

Fig. 4.2. Field B: Aerial view of Field B (north is up). Compare with fig. 4.12 below. (Balloon photograph by E. and W. Myers)

and Persian domestic structures inside the defenses, and a small part of the Middle Bronze rampart which lay beneath a second rampart from early Iron I. Squares 7K80 and 7K81 were opened first in 1987 and rest on the very edge of and adjacent to the western escarpment of the *tall* directly inside the inner casemate wall line. Square 7K80 has provided occupational remains from more phases (10) than any other square in the field. Adjacent to 7K80 on the west, Square 7J89 was begun in 1984. Work here intensified in 1989, the full season having been dedicated to clearing an Iron I casemate room occupying almost the entire square. While excavation exposed nearly the full length of all four walls of the room, each wall also extended partially into one of the balks. Square 7J88, adjoining 7J89 downslope to the west, was also opened in 1984 with work continuing through most of the 1987 season to section against the exterior face of the outer casemate wall and to expose the top of the MB II rampart. This was completed in 1989. Farther down the slope, the Iron I rampart appeared in 7J87 (opened in 1984) and 7J86 (excavated in 1987), where a retaining wall at the bottom of the rampart was also found. The 1989 season saw the excavation of 7J85 near the very bottom of the slope, excavating the fill in a large dry moat below the retaining wall.

Our work in 1992 had several objectives. 1) We intended to deepen some of the squares already in operation in order to understand better the early Iron I defense system and associated structures. 2) We had further work to do in examining and dating more definitively the findings in the casemate storeroom. 3) Important here was the presence of collared pithoi, about which theories of liquid and grain storage have surfaced intermittently over the past couple decades. Based on our finds, we had proposed that grain storage was a significant function, but needed to test that hypothesis further. 4) The depth and construction technique of the Middle Bronze rampart could be tested by a sounding. 5) We needed to locate the western edge of the dry moat at the bottom of the slope. 6) The date of the construction of the moat needed to be established.

To realize these goals, excavations this season continued in three adjacent squares: 7J88 (the MB 2 rampart adjacent to and below the early Iron I outer casemate wall), 7J89 (the early Iron I casemate room), and 7K80 (early Iron I domestic remains inside the inner casemate wall). In addition, one new square was begun at the lowest extent of the western slope (7J84) to uncover the western edge of the moat. Limited digging took place on the rampart in Squares 7J87 and 7J86 and at the lower retaining wall in

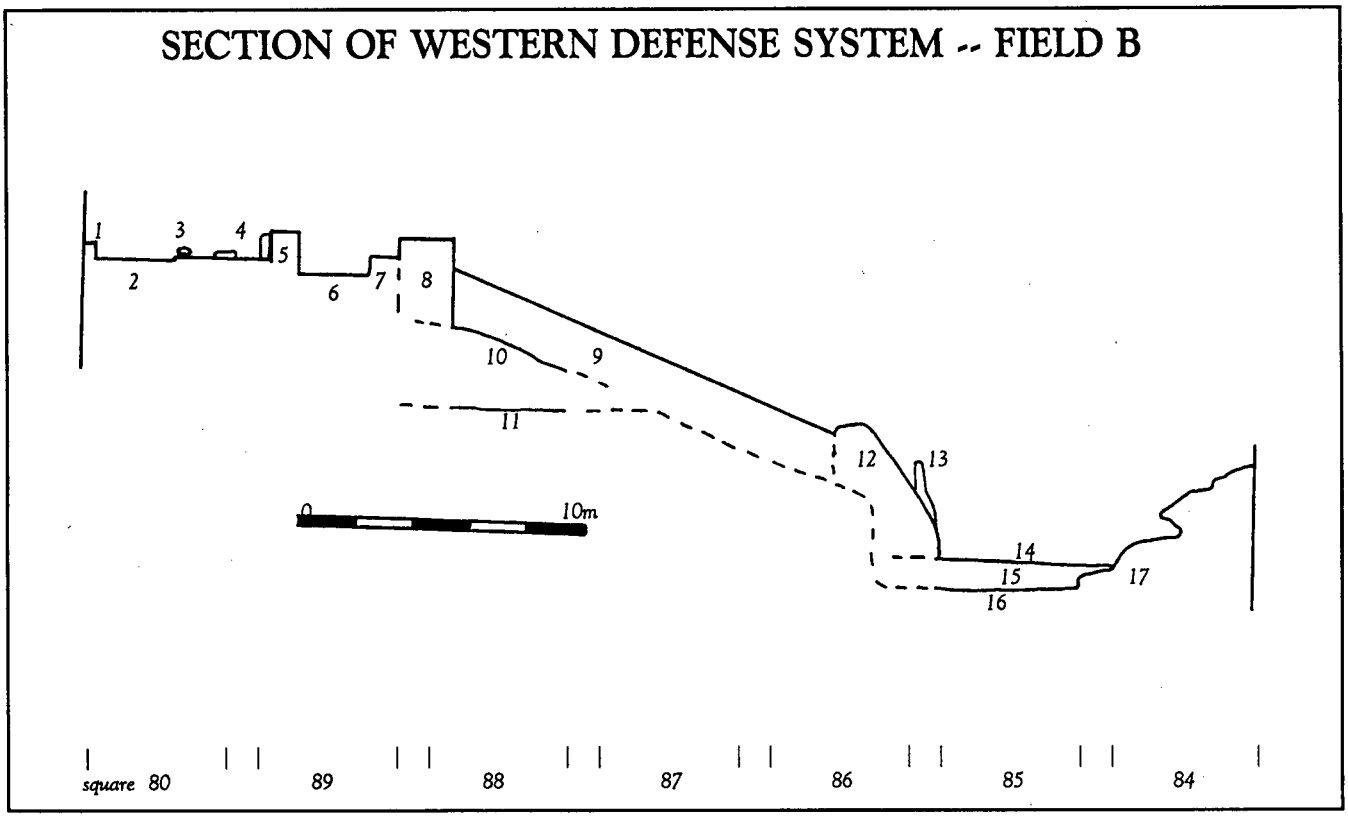


Fig. 4.3. Field B: Schematic section showing the western defense systems. The components include: 1) the eastern wall of Phase 11A (early Iron I) Building A; 2) the Phase 11A house surface; 3) a row of three stones (perpendicular to the drawing) forming a pillared curtain wall; 4) a flat stone (altar[?]) and a standing stone against 5) the inner casemate wall; 6) the floor of the casemate room; 7) the stepped platform; 8) the outer casemate wall; 9) the Phase 11A rampart; 10) the Phase 12 (MB IIC) rampart; 11) bedrock; 12) the Phase 11A rampart retaining wall; 13) the late Iron II addition to the retaining wall; 14) the bottom of the Phase 11A dry moat; 15) the fill in the moat upon which the Phase 11A retaining wall was built; 16) the bedrock bottom of the Phase 12 moat; and 17) the western bedrock face of the moat.

Squares 7J86 and 7J85.

As a result, we can now speak confidently of the dimensions, nature, and features of the early Iron I western defenses at 'Umayri, which have been preserved in remarkable condition. Also, because of the preservation of carbonized support posts and rafters in the domestic building inside the defense system, we can more precisely date the destruction of the city through 14C analysis (at present, samples have been taken, but not analyzed). Other remains have helped us understand the domestic, cultic, and storage structures and functions of the rooms in the complex at the top of the slope. Although the casemate room itself received limited treatment this year, the rooms to the east (in 7K80) emerged beneath two meters of destruction debris, revealing a probable cultic feature, an adjacent domestic courtyard, and two additional rooms to the north. In addition, the rare discovery of carbonized residue in the base of a collared pithos will help answer the question about the utilization of these vessels.

We are also now in a position to outline some of the features of the Middle Bronze defensive strategies. A cross-section of the dry moat is largely complete from its outer bedrock facing to the early Iron I retaining wall (fig. 4.3), providing stratigraphic proof that it was dug out before the construction of the early Iron I defenses. We also now know the shape and function of the moat during the early Iron Age. Finally, the bottom of the Middle Bronze rampart was reached this season, but only in Square 7J88.

Prior to this season, 12 field phases were found, extending from Middle Bronze IIC to post-Roman periods. Phase 12 consisted of a Middle Bronze beaten-earth rampart, only the upper portion of which was exposed and on which the early Iron I outer casemate wall was built. Phase 11 was the early Iron I defensive complex. Phase 10 included only an Iron I rubble layer apparently separating two clearly defined phases. A late Iron I storeroom and associated surfaces comprised Phase 9. The next three phases (8-6) all belonged to the late Iron II period and consisted of limited remains, stratigraphically well defined in only one or two squares each (on the top of the *tall*). These remains included a number of pits and a stone-lined silo, later covered with a temporary hearth. Persian remains, apparent in Phases 5 and 4, included mainly domestic structures. An early Roman ritual bath (in Squares 7K80 and 7K81) made up Phase 3. At some time in the post-

Phase	Date	7J84	7J85	7J86	7J87	7J88	7J98	7J89	7K80	7K81	7K90
Bedrock		X	X			X					
FP 13	EB					X					
FP 12	MBIIC	X	X			X					
FP 11B	EIr I		X	X	X	X					
FP 11A	EIr I	X	X	X	X	X	X	X	X	X	X

	Outside the Wall							Phase	Date	Inside the Wall			
---	LIr I				X	X		FP 10	Ir I	X	X?		
---								FP 9	LIr I	X	X		

---								FP 8	LIr II		X		X
---	LIr II	X	X	X	X	X		FP 7	LIr II/P				X
---								FP 6	Per	X	X	X	X
---								FP 5	Per	X	X	X	
---	LIr II/P	X	X					FP 4	Per		X	X	X
---								FP 3	Rom		X	X	
---								FP 2	Post-Rom		X	X	
---		X	X	X	X	X	X	FP 1	Post-Rom	X	X	X	X

Fig. 4.4. Field B stratigraphic phasing chart by Square.

Roman period a massive pit/trench was dug around most of the installation and refilled (Phase 2), over which was topsoil (Phase 1).

This season's work requires only minor adjustments to the 1989 phasing with the addition of Phase 13 (two thin earth deposits from the Early Bronze Age), changes in the assignments of rampart layers and the way we have represented their relationship to remains inside the fortifications, and a sub-division of Phase 11 into 11A and 11B to distinguish between remains used in construction of the defenses and those contemporary with their use. The following two charts (figs. 4.4-5) indicate, respectively, the phasing as plotted in 1992 and how this compares with our understanding based on earlier seasons (the hyphenated lines in fig. 4.4 indicate destruction levels). Figure 4.7 is a Harris matrix-type sequence chart of loci.

In the discussions which follow, only the loci which were excavated in 1992 are included in the lists that belong to each phase.

1984 (*MPP1*)	1987 (*MPP2*)	1989 (*MPP3*)	1992 (*MPP4*)
			Bedrock
----	----	----	FP 13 (EB)
----	----	FP 12	FP 12 (MB IIC)
FP 7-6	FP 10-9	FP 11	FP 11B (E Ir I)
FP 7-6	FP 10-9	FP 11	FP 11A (E Ir I)
FP 5	FP 8	FP 10	FP 10 (Iron I)
FP 4	FP 7	FP 9	FP 9 (L Ir I)
FP 3	FP 6	FP 8	FP 8 (L Ir II)
FP 2	FP 5	FP 7	FP 7 (L Ir II/ Per)
FP 1	FP 4	FP 6	FP 6 (Per)
FP 1	FP 3	FP 5	FP 5 (Per)
FP 1	FP 2	FP 4	FP 4 (Per)
FP 1	FP 2	FP 3	FP 3 (Roman)
----	FP 1	FP 2	FP 2 (Post-Roman)
----	FP 1	FP 1	FP 1 (Post-Roman)

Fig. 4.5. Field Phase comparison in Field B by season.

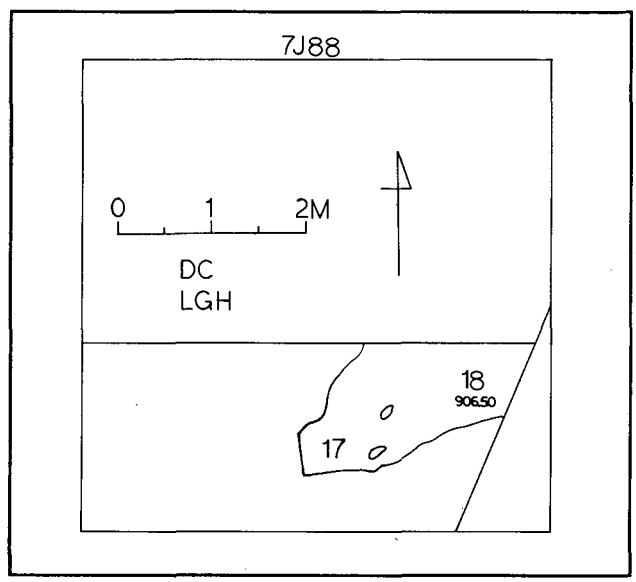


Fig. 4.6. Field B: Phase 13: Plan of earth deposits in bedrock; the Phase 11A outer casemate wall line is at right.

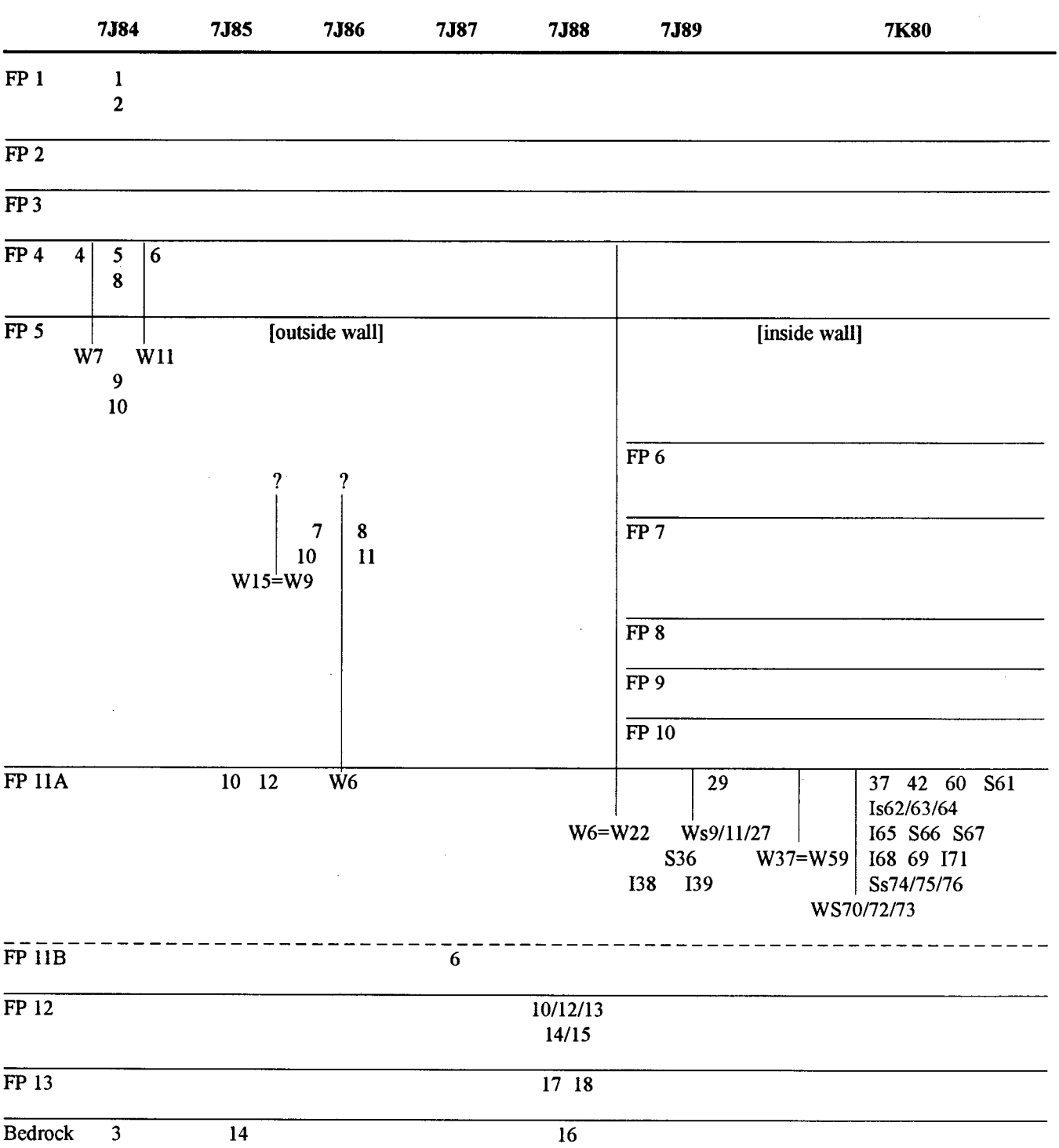


Fig. 4.7. Stratigraphic sequence chart for Field B.

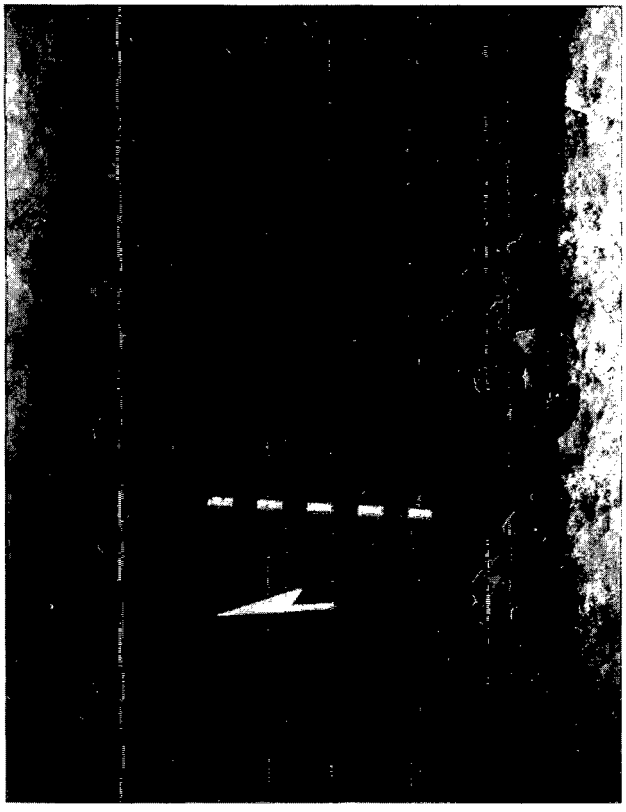


Fig. 4.8. Field B: Phase 12: Bedrock in Square 7J88 beneath the Phase 12 rampart; cavities contained Phase 13 deposits; the crack near the arrow was free of earth when excavated.

Field Phase 13 (figs. 4.6 and 4.8)

Loci:	7J88:17	Earth Layer
	7J88:18	Earth Layer

Two shallow depressions in the bedrock of Square 7J88 contained thin deposits of earth: 7J88:17 and 18. Both consisted of crumbly, strong/dark brown debris a few centimeters in depth within bedrock cavities. Their consistence indicated that they were not part of the Phase 12 rampart layers (below) and all twenty pottery sherds from them dated to the Early Bronze Age. Apparently, the deposits represented debris remaining after bedrock was cleared for the construction of the Middle Bronze rampart of Phase 12.

Field Phase 12 (fig. 4.9)

Loci:	7J84:3	W bedrock face of dry moat
	7J85:15	Bedrock bottom of dry moat
	7J88:10	Beaten-earth rampart layer
	7J88:12	Beaten-earth rampart layer
	7J88:13	Beaten-earth rampart layer
	7J88:14	Beaten-earth rampart layer
	7J88:15	Beaten-earth rampart layer
	7J88:16	Bedrock bottom of MB IIC rampart

Phase 12 was first encountered in 1989 with the discovery of a Middle Bronze II rampart in Square 7J88 below the early Iron I rampart (Phase 11). This season a sounding 2.0 × 5.0 m in size was cut through the rampart for a depth of 2 m before the season was finished. As a result, we can now be specific as to its depth, durability, and construction technique. At the bottom of the rampart, we can also suggest the general dimensions and shape of the dry moat, which also came from this period. It is only in these two locations where bedrock has surfaced in Field B to this point.

The western (outer) bedrock face of the dry moat at the base of the slope (7J84:3) showed no signs of working or shaping; its natural ruggedness and overhanging shelves provided an artless outer face to the moat (figs. 4.3, 4.10, and 4.11). The upper portions of bedrock were found ca. 0.07 m below top soil, with levels ranging from 905.40 to 905.08 m in the west balk, 4.2 m above the bottom of the moat. Descent into the moat by an approaching military assault would not seem to have been particularly difficult. Precisely at the join between Squares 7J84 and 7J85 (to the east and toward the rampart) the western bedrock face of the moat ended and the flat and level bottom began. The width of the moat at its base was at least 5.0 m, covering the bottom of 7J85. Further excavation is required in order for us to delineate the eastern extent of the moat. Currently, the massive Phase 11 retaining wall (7J86:6) obscures access (fig. 4.3).

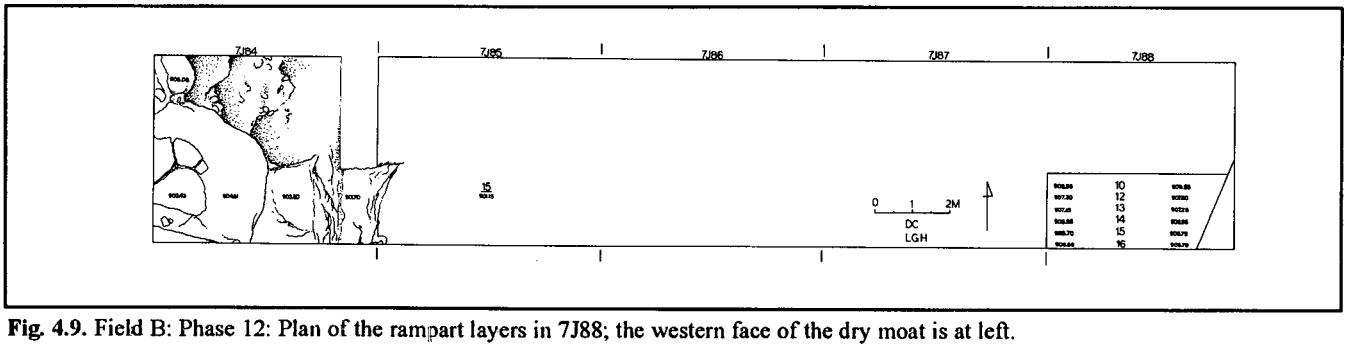


Fig. 4.9. Field B: Phase 12: Plan of the rampart layers in 7J88; the western face of the dry moat is at left.

Just how long the moat stretched in a north-south direction is unknown. We have only transected it in one place and are not in a position to define its length or, if it only extended along the western side of the *tall*, how the ends were constructed. Results from further excavation and from Ground Penetrating Radar may provide some answers to these queries, although we assume it was needed only where the shelf to the west met the hill upon which the settlement was built.

Farther up the slope in Square 7J88, where the Middle Bronze rampart was first encountered in the 1989 sounding, deepening of the sounding this season uncovered several layers of the rampart before reaching bedrock (fig. 4.12). As they were laid, one on top of the other, the layers gradually steepened from the level bedrock shelf (the elevations on the bedrock varied only from 906.57 to 906.68 m across the square) to a surface slope of 20° in the uppermost locus: beaten-earth Layer 10 (fig. 4.3). If the rampart resembled the later Phase 11 rampart, its slope may have become steeper, closer to 35°, as it continued down the western side of the *tall*.

The bedrock (7J88:16) on which the rampart rested revealed a crack across it, perpendicular to the slope and near the center of the square. It measured ca. 0.01 m in width, but was free of debris (fig. 4.8). Likely, an earthquake created the crack sometime after the firmly packed rampart layers were in place.

The rampart itself consisted of five fairly easily distinguishable layers of beaten earth. The four lower layers (Loci 7J88:12, 13, 14, and 15) were nearly the same color (variations of dark brown) and Layers 12, 13, and 14 were about the same thickness (0.13-0.5 m, 0.13-0.27 m, and 0.16-0.4 m, respectively). Layer 15 was only 0.02-0.10 m thick. Differences in compactness and stone inclusions

Fig. 4.10. Field B: Phase 12: Bottom and western face of the dry moat.

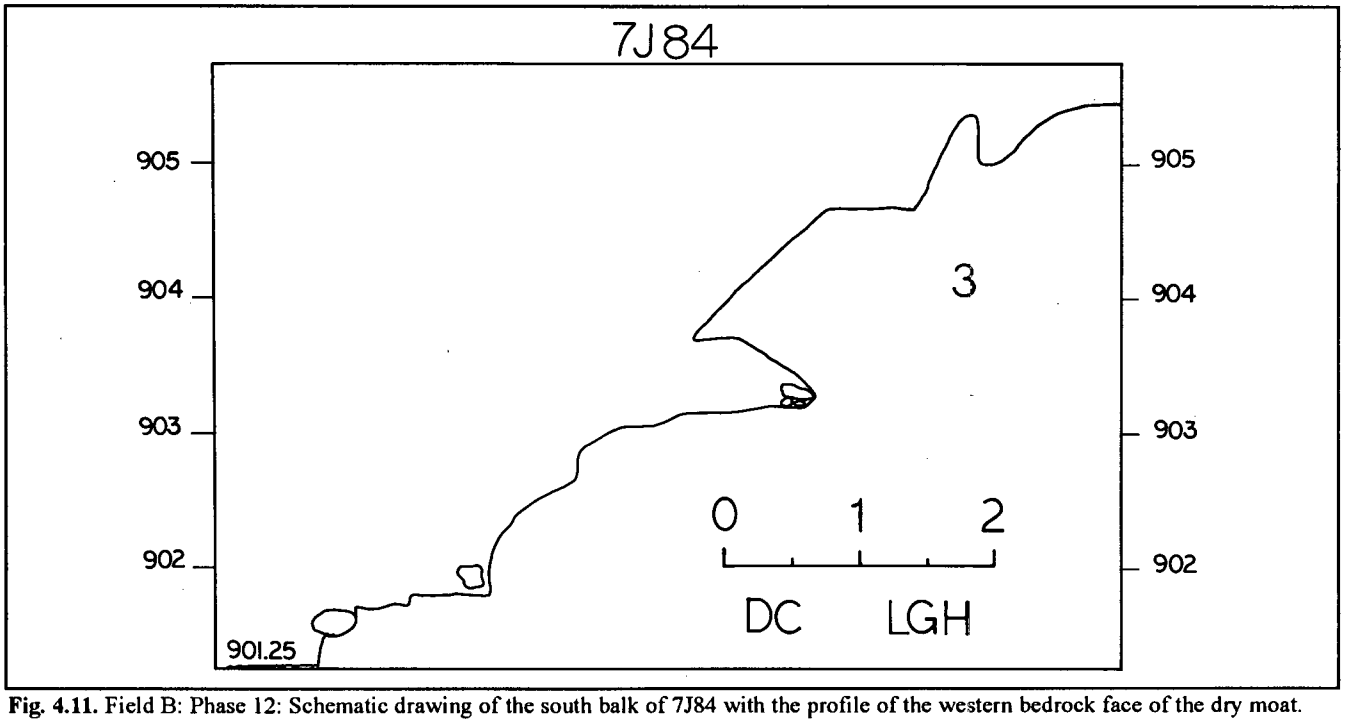


Fig. 4.11. Field B: Phase 12: Schematic drawing of the south balk of 7J84 with the profile of the western bedrock face of the dry moat.

helped demarcate the layers from each other. Layer 12 and especially 14 contained substantially more pebbles and cobbles than others, reflecting a purposeful construction technique of alternating rampart layers containing larger stone concentrations with those more stone-free. In terms of objects, all layers produced only a worked stone and a spindle whorl fragment.

The top rampart layer, Locus 10, measured 2.25 m thick at the eastern balk of the square, narrowing to 1.0 m down the slope in the western balk. Dark brown earth and thin nari lenses (0.01 m at the thickest) characterized the entire layer. Except for random pebbles and ash pockets, the homogeneous layer was free of stones and other large inclusions. Although surviving evidence in the balk is scanty, there is some reason to believe the rampart was surfaced with a thin layer of crushed nari. The latest ceramic evidence from all the layers consistently indicated a date of Middle Bronze IIC (fig. 4.13), including chocolate-on-white ware.

The data show that construction of the Middle Bronze rampart was a massive undertaking. The builders constructed an artificial slope on flat bedrock by importing specifically designated soil of uniform description (the frequent EB potsherds in the layers making up the rampart show it to have been obtained from earlier site deposits), interlacing them with nari lenses, and tipping the layers as they were laid to a depth ranging from 1.5 to 3.1 m in thickness where our sounding was located. Combined with what we know of the Middle Bronze moat at the foot of the slope, this evidence provides a partial cross-section of the western rampart as it looked immediately before the middle of the second millennium B.C. (fig. 4.3). The resulting elevation difference between the bottom of the moat and the top of the rampart was almost 10 m. By digging down and raising the rampart, they had created an artificial hill. As at other Middle Bronze sites in Palestine, 'Umayri reflects the extent to which inhabitants of the time went in order to protect their urban centers.

Field Phase 11B (fig. 4.15)

Loci:	7J85:10	Beaten-earth layer
	7J85:12	Earth layer
	7J86:4	Beaten-earth rampart layer (=7J87:6?)
	7J86:6	Rampart retaining wall
	7J87:6	Beaten-earth rampart layer (=7J86:4?)

The early Iron I settlement has presented us with the best preserved and most coherent defense system so far discovered in Palestine from that time. After previous seasons, we already knew that the Phase 11 defenses consisted of the reuse of the dry moat at the base of the western slope, a retaining wall on the east side of the moat (toward the *tall*), a steep rampart (35°, although this leveled as it approached the outer wall), a stabilizing row of stones to help hold the top rampart layer in place against erosion, and a casemate wall complete with storeroom and a ladder platform(?) (fig. 4.3). The casemate and adjoining rooms were covered by thick destruction debris indicating stone walls on the ground level and mudbrick walls making up a second story. Phase 11 is represented in every square in the field and has, over the last three seasons of excavation, demanded most of our attention.

This was also the case in 1992. Phase 11 accounted for over half the loci treated this season. However, because the rampart layers contained significant amounts of early Iron I pottery which must have been deposited by occupants of the site before the system was built, we have separated Phase 11 into two sub-phases: Phase 11B is the earlier (hypothesized) settlement from which the rampart debris came, while Phase 11A is the fortification system itself, including its construction.

At this point in Field B we have only the debris in the rampart on which to base any conclusions about Phase 11B (but see Lawlor's report of the Field A results, where two phases of early Iron I occupation are documented). But since these remains are stratigraphically part of the Phase 11A rampart construction, they will be treated below. However, because

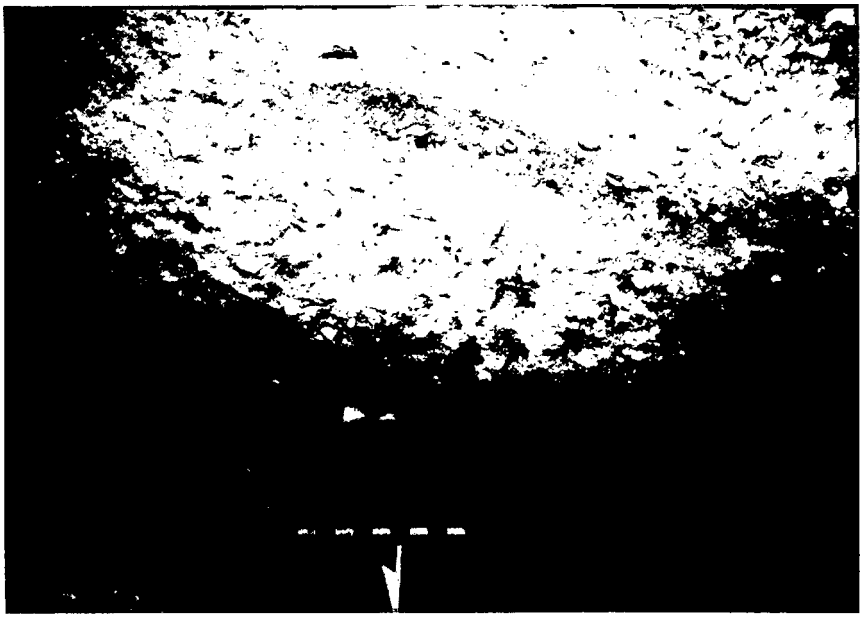


Fig. 4.12. Field B: Phase 12: Section through the rampart in Square 7J88; bedrock is at bottom; the white layer in the upper right is the base of the Phase 11A rampart.

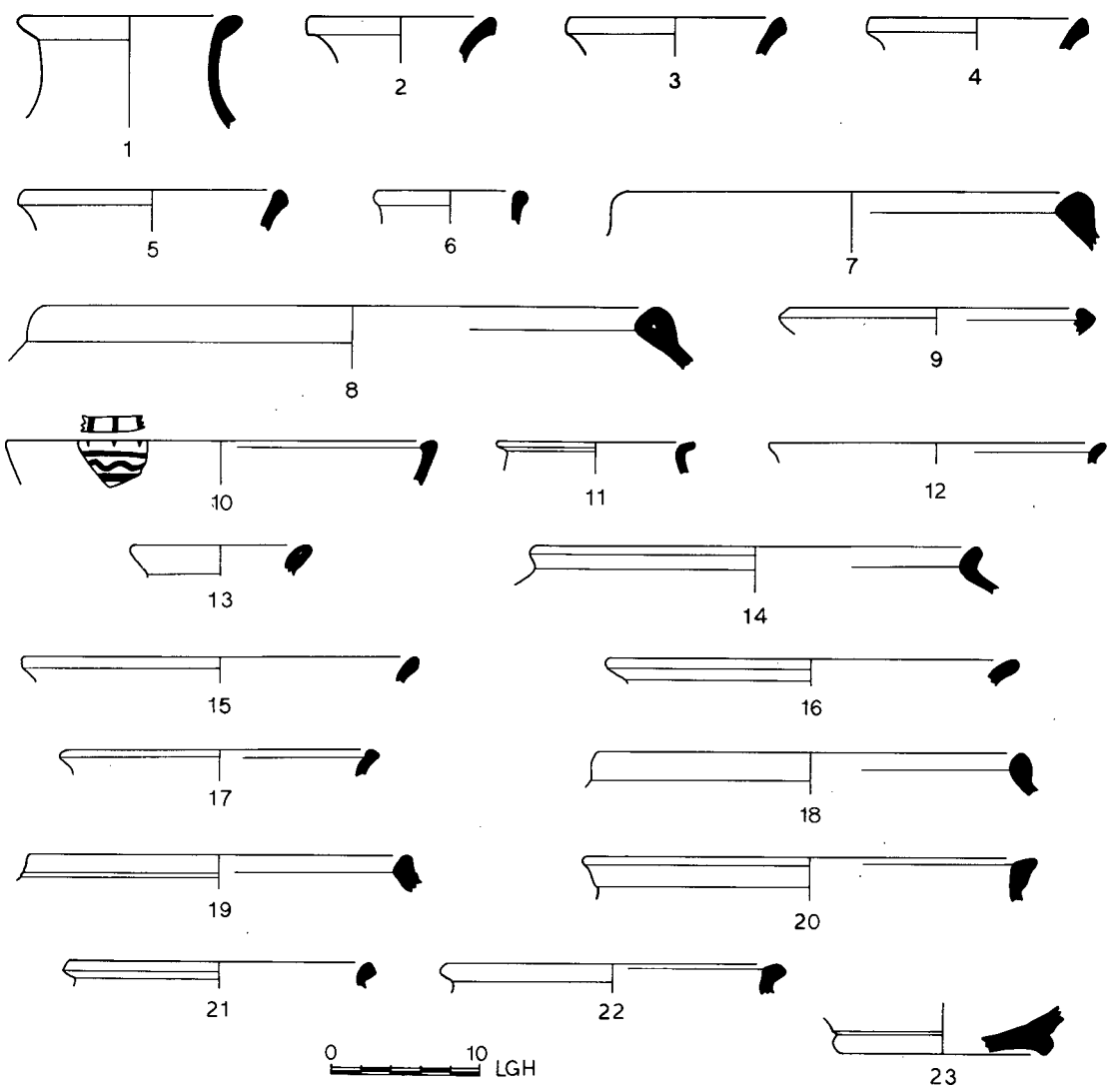


Fig. 4.13. Field B: Phase 12: MB IIC ceramics from the rampart.

	Vessel		Provenance			Fabric Color			Non-Plastic				Voids	Manu		Surface Treatment			Decor	Fire
No.	Type	Sq	Locus	Pail	Reg.	Ext	Core	Int	Type	Size	Shape	Density			Ext	Color	Int	Color		
1	Jar	7J88	12	108	1	---	10YR6/1 Gray	---	L	7A 6A 5A 4A 3A	SRB RB	M	PA4A PR6A PR5A PR3A	W	SH	10YR8/2 White	SHR	10YR8/2 White	---	RO
2	Jug	7J88	12	107	2	---	7.5YR7/4 Pink	---	L	6A 5A 4A 3A	SRA RB	M	FS4A PR4A PR3B	W	SL	7.5YR7/4 Pink	SM	7.5YR7/4 Pink	---	O
3	Jug	7J88	12	106	1	---	7.5YR6/2 Pinkish Gray	---	L	6A 5A 4A 3A	SAA SRA RA	L	FS4A PA5A PA4A PA3A PR6A PR5A PR4A PR3A	W	SH	7.5YR8/4 Pink	SM	10YR8/3 Very Pale Brown	---	O
4	Jug	7J88	12	105	1	---	5YR7/3 Pink	---	L	5A 4A 3A	SRB RB	VL	FS3A PA4A PA3A PR4A PR3A	W	SH	5YR8/3 Pink	SH	5YR8/2 Pinkish White	---	O
5	Jug	7J88	12	110	4	---	5YR7/3 Pink	---	L	6A 5A 4A 3A	SAA SRA RA	L	PA7A PA5A PA3A PR5A PR4A PR3A	W	SM	5YR8/4 Pink	SM	5YR8/3 Pink	---	O
6	Jug	7J88	14	114	1	5YR7/4 Pink	5YR7/1 Light Gray	5YR7/4 Pink	L	5A 4A 3B	SAA SRA RA	L	PA5A PA4A PR4A PR3A	W	SL	5YR7/4 Pink	---	5YR7/3 Pink	---	U
7	Krater	7J88	13	111	2	10YR7/3 Very Pale Brown	10YR6/1 Gray	10YR7/4 Very Pale Brown	L	6A 5A 4A 3A	AA SAA SRA RA	H	FS6A FS5A PA6A PA5A PA4A PR5A PR4A PR3A JR7A	CW	---	10YR6/1 Gray	---	10YR6/3 Pale Brown	---	U
8	Krater	7J88	12	109	1	7.5YR6/2 Pinkish Gray	7.5YRN6/ Gray	7.5YR6/2 Pinkish Gray	L	6A 5A 4A 3A 2A	AC SAA SRA RA	MH	JR7+D	W	SL	10YR7/3 Very Pale Brown	---	10YR6/4 Light Yellowish Brown	---	U
9	Platter/ Bowl	7J88	12	107	3	5YR7/3 Pink	5YR6/1 Gray	5YR7/3 Pink	L	5A 4A 3A 2A	RD	L	PR4A PR3B	W	SM	5YR8/1 White	SM	5YR8/1 White	---	U
10	Bowl	7J88	12	105	2	---	10YR7/1 Light Gray	10YR7/2 Light Gray	L	6A 5A 4A 3A	SRB RB	VL	PA5A PA4A PA3A PR4A PR3A	W	SH	10YR8/2 White	SH	10YR8/2 White	PaRBo 2.5YR 4/6 Red	R
11	Bowl	7J88	12	110	2	5YR7/4 Pink	5YR7/1 Light Gray	5YR7/6 Reddish Yellow	L	4A 3A	SAA SRA RA	VL	PA4A PR4A PR3A	W	SH	5YR8/1 White	SH	5YR8/2 Pinkish White	---	U
12	Bowl	7J88	12	108	6	---	7.5YR8/4 Pink	---	L	5A 4A 3A	SRB RB	VL	PR4B PR3B	W	---	7.5YR7/4 Pink	---	7.5YR7/4 Pink	---	O
13	Goblet?	7J88	12	109	2	7.5YR7/4 Pink	10YR6/2 Light Brownish Gray	7.5YR7/4 Pink	L	6B 3A	AA RB	L	FS5A PR5A PR3B JR7A	W	SH	10YR8/4 Very Pale Brown	SH	10YR8/3 Very Pale Brown	---	U
14	Cook Pot	7J88	12	107	1	2.5YR6/4 Light Reddish Brown	---	5YR6/1 Gray	L	6A 5A 4B 3A	AA SAA SRA RB	M	FS6A PR5B PR4A	W	---	5YR5/2 Reddish Gray	---	5YR5/2 Reddish Gray	---	R
15	Cook Pot	7J88	12	108	4	---	10YR4/1 Dark Gray	---	L	6A 5A 4A 3A	AA SAA SRA RA	L	PR3D	W	---	10YR5/3 Brown	---	10YR4/2 Dark Grayish Brown	---	R
16	Cook Pot	7J88	12	110	3	---	5YR6/3 Light Reddish Brown	---	L	6A 5A 4A 3A	SAA SRA RA	M	PA4A PA3A PR4A PR3A	W	---	5YR4/2 Dark Reddish Gray	---	5YR5/4 Reddish Brown	---	R

Fig. 4.13, ***continued.*** Field B: Pottery descriptions for nos. 1-16.

No.	Vessel Type	Sq	Provenance Locus	Pail	Reg.	Fabric Color Ext	Core	Int	Non-Plastic Type	Size	Shape	Density	Voids	Manu	Ext	Surface Treatment Color	Int	Color	Decor	Fire
17	Cook Pot	7J88	13	111	3	7.5YR5/8 Strong Brown	7.5YRN5/ Gray	7.5YR5/6 Strong Brown	L	6A 5A 4A 3A	SAA SRA RA	M	FS4A FS3A PA5A PA4A PR5A PR4A PR3A	W	---	7.5YR4/6 Strong Brown	---	7.5YR5/6 Strong Brown	---	U
18	Cook Pot	7J88	12	108	3	5YR6/4 Light Reddish Brown	5YR4/1 Dark Gray	---	L	6A 5A 4A 3A	SAA SRA RA	MH	PA5A PR5A PR4A PR3A	W	---	5YR5/3 Reddish Brown	---	5YR5/1 Gray	---	R
19	Cook Pot	7J88	13	111	1	5YR6/6 Reddish Yellow	5YR7/1 Light Gray	5YR6/6 Reddish Yellow	L	7A 6A 5A 4A 3A	AA SAA SRA RA	M	FS5A FS4A PA6A PA5A PR4A PR3A	W	---	5YR3/2 Dark Reddish Brown	---	5YR5/8 Yellowish Red	---	O
20	Cook Pot	7J88	13	112	1	5YR5/2 Reddish Gray	5YR5/4 Reddish Brown	---	L	6A 5A 4A 3A 2A	AA SAA SRA RB	M	PR5A PR4A PR3A JR7+A	W	---	7.5YR5/2 Brown	---	5YR5/3 Reddish Brown	---	R
21	Cook Pot	7J88	10	97	1	5YR6/6 Reddish Yellow	7.5YRN6/ Gray	5YR6/6 Reddish Yellow	L	6A 5A 4A 3A	SAB RB	M	PA4A PA3A PR5A PR4A PR3A	W	---	5YR4/4 Reddish Brown	---	5YR4/6 Yellowish Red	---	U
22	Cook Pot	7J88	12	108	5	---	2.5YR5/6 Red	---	L	6A 5A 4A 3A	SRB RB	ML	FS5A FS4A PA4A PR4A PR3A	W	---	2.5YR4/8 Red	---	2.5YR5/6 Red	---	O
23	Krater	7J88	12	108	2	10YR6/6 Brownish Yellow	10YR6/1 Gray	10YR6/6 Brownish Yellow	L	7A 6A 5A 4A 3A	SAA SRA RA	M	FS6A FS5A FS4A PA5A PR7A PR5A PR4A PR3A JB7+A	W	SH	10YR7/4 Very Pale Brown	---	10YR6/3 Pale Brown	---	U

Fig. 4.13, *continued.* Field B: Pottery descriptions for nos. 17-23.

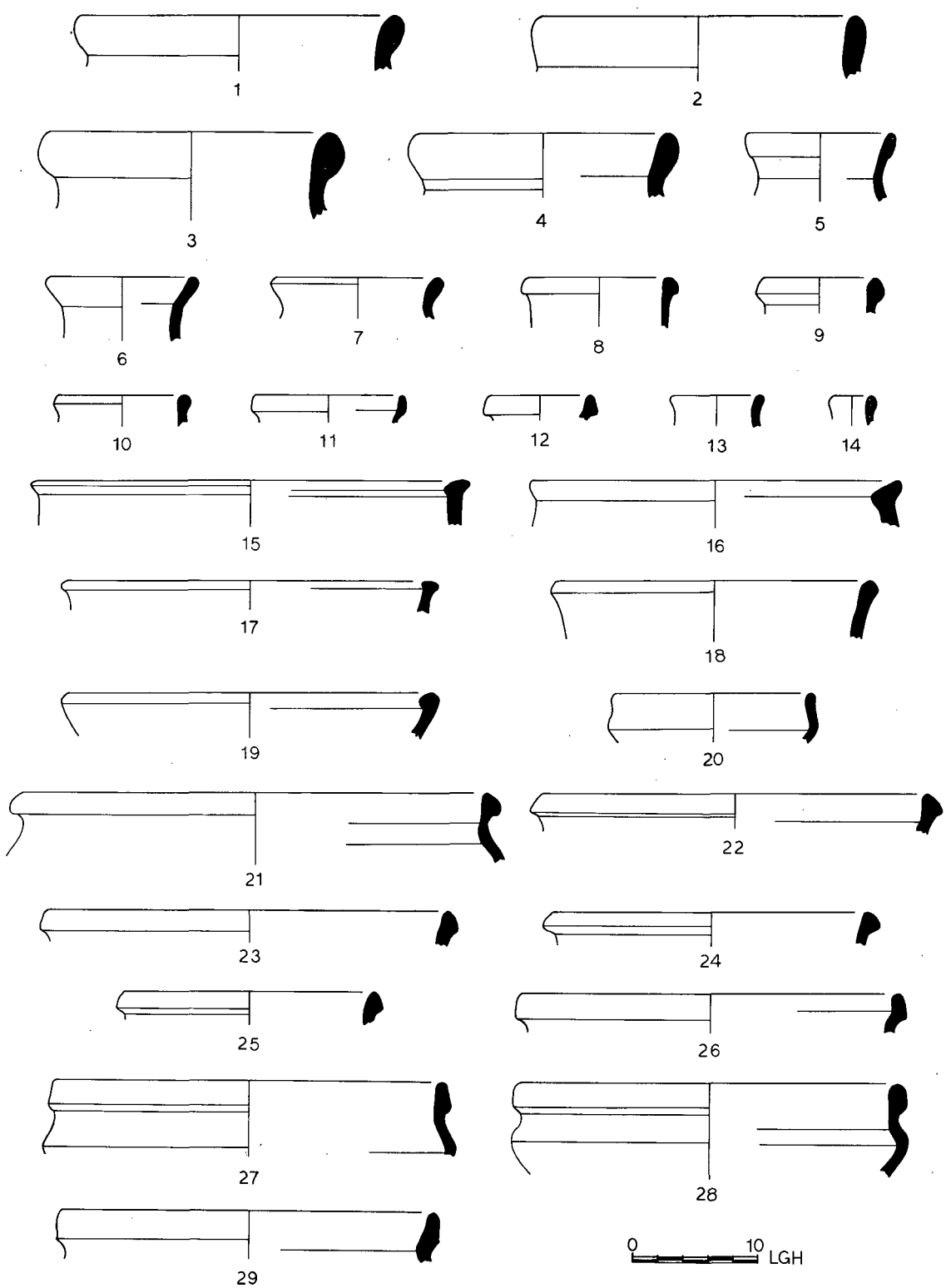


Fig. 4.14. Field B: Phase 11B: Early Iron I ceramics from the rampart.

Vessel		Provenance			Fabric Color			Non-Plastic				Voids	Manu		Surface Treatment				Decor	Fire
No.	Type	Sq	Locus	Pail	Reg.	Ext	Core	Int	Type	Size	Shape	Density			Ext	Color	Int	Color		
1	Pithos	7J87	6	74	2	5YR7/3 Pink	5YR7/1 Light Gray	5YR7/3 Pink	L	7A 6A 5A 4A	AA SAA SRA RA	M	PR7A PR6A PR5A PR4A PR3B JR7+A	CW	---	5YR8/3 Pink	---	5YR8/3 Pink	---	U
2	Pithos	7J87	6	71	6	7.5YR7/4 Pink	7.5YRN5/ Gray	7.5YR7/4 Pink	L	7A 6A 5A 4A 3A	AA SAA SRA RA	M	PA7A PA6A PA5A PR4A PR3A	CW	---	7.5YR7/4 Pink	---	7.5YR7/4 Pink	---	U
3	Pithos	7J87	6	74	1	7.5YR7/4 Pink	7.5YRN6/ Gray	7.5YR7/4 Pink	L	6A 5A 4A	AA SAA SRA RA	M	FS7+A FS7A FS6A FS5A PR7A PR6A PR5A PR4A PR3A	CW	SM	10YR7/2 Light Gray	---	7.5YR7/2 Pinkish Gray	---	U
4	Pithos	7J87	6	73	5	5YR7/3 Pink	2.5YRN4/ Dark Gray	5YR7/3 Pink	L	7A 6A 5A 4A 3A	SAA SRA RA	M	FS6A FS5A PA6A PA5A PA4A PA3A PR6A PR5A PR4A PR3A	CW	SM	5YR8/2 Pinkish White	---	5YR8/2 Pinkish White	O	U
5	Jar	7J87	6	72	2	5YR7/3 Pink	7.5YRN6/ Gray	5YR7/3 Pink	L	6A 5A 4A 3A	RD	L	PR5A PR4B	W	---	5YR8/2 Pinkish White	---	5YR7/3 Pink	---	U
6	Jar/Jug	7J87	6	72	1	5YR6/6 Reddish Yellow	7.5YRN6/ Gray	5YR6/2 Pinkish Gray	L	6A 5A 4A 3A	SAA SRA RA	L	PA7A PR5A PR4B	W	---	7.5YR8/4 Pink	---	10YR8/2 White	---	U
7	Jar/Jug	7J87	6	70	7	---	2.5YR6/4 Light Reddish Brown	---	L	5A 4A 3A	SRB RB	M	PR4B PR3B	W	---	2.5YR5/8 Red	---	2.5YR5/8 Red	---	O
8	Jug	7J87	6	71	8	2.5YR6/6 Light Red	10YR6/1 Gray	7.5YR7/4 Pink	L	5A 4A 3A	SRB RB	M	PA5A PA4A PR5A PR4A PR3A	W	---	2.5YR6/4 Light Reddish Brown	---	5YR7/6 Reddish Yellow	---	U
9	Jug	7J87	6	71	7	---	10YR6/1 Gray	---	L	6A 5A 4A 3A	SAA SRA RA	M	PA6A PA5A PR4A	W	---	7.5YR7/2 Pinkish Gray	---	7.5YR7/4 Pink	---	R
10	Jug	7J87	6	73	2	---	10YR7/1 Light Gray	---	L	7A 6A 5A 4A 3A	SAA SRA RA	M	FS6A FS5A PR4A PR3A	W	---	10YR7/3 Very Pale Brown	---	10YR7/3 Very Pale Brown	---	O
11	Jug	7J87	6	70	4	---	5YR6/2 Pinkish Gray	---	L	6A 5A 4A 3A	SRB RB	M	PR4B PR3B	W	---	5YR6/3 Light Reddish Brown	---	5YR6/3 Light Reddish Brown	---	U
12	Jug	7J87	6	71	9	10YR7/3 Very Pale Brown	10YR7/1 Light Gray	10YR7/3 Very Pale Brown	L	5A 4A 3A 2A	AA SAA SRA RA	L	---	W	---	2.5YR6/4 Light Reddish Brown	---	2.5YR6/4 Light Reddish Brown	---	U
13	Juglet	7J87	6	71	10	7.5YR7/4 Pink	10YR6/1 Gray	7.5YR7/4 Pink	L	7A 6A 5A 4A 3A	AA SAA SRA RA	L	PR4B PR3B	W	---	7.5YR7/4 Pink	---	2.5YR6/6 Light Red	---	U
14	Juglet	7J87	6	73	4	5YR7/2 Pinkish Gray	2.5YRN6/ Gray	5YR7/2 Pinkish Gray	L	4B 3B	SRB RB	M	PA3A PR4A PR3A	W	SL	2.5YR6/6 Light Red	SL	2.5YR6/6 Light Red	---	O
15	Krater	7J87	6	70	3	2.5YR6/4 Light Reddish Brown	2.5YRN6/ Gray	2.5YR6/6 Light Red	L	5A 4A 3A	SAA SRA RA	M	PR4B PR3B	CW	---	2.5YR6/6 Light Red	---	2.5YR6/6 Light Red	---	U
16	Krater	7J87	6	71	3	10YR7/3 Very Pale Brown	10YR6/1 Gray	10YR7/3 Very Pale Brown	L	5A 4A 3A	AA SAA SRA RA	M	PR3D	CW	---	5YR6/4 Light Reddish Brown	---	5YR6/4 Light Reddish Brown	---	U
17	Krater	7J87	6	72	3	---	7.5YRN5/ Gray	---	L	6B 4B	SRB RB	L	---	W	SL	10YR7/2 Light Gray	SL	10YR7/3 Very Pale Brown	---	R

Fig. 4.14, *continued.* Field B: Pottery descriptions for nos. 1-17.

Vessel			Provenance			Fabric Color			Non-Plastic				Voids	Manu		Surface Treatment			Decor	Fire
No.	Type	Sq	Locus	Pail	Reg.	Ext	Core	Int	Type	Size	Shape	Density			Ext	Color	Int	Color		
18	Krater	7J87	6	174	4	7.5YR7/2 Pinkish Gray	10YR7/1 Light Gray	---	L	6A 5A 4A 3A	AA SAA SRA RA	M	PR6A PR5A PR4A PR3A PR2A	CW	---	7.5YR8/4 Pink	---	10YR7/2 Light Gray	---	U
19	Bowl	7J87	6	70	2	2.5YR6/6 Light Red	2.5YRN5/ Gray	2.5YR6/6 Light Red	L	5A 4A 3A	SAA SRA RA	M	PA5A PA4A PR4B PR3A	W	SL	7.5YR7/4 Pink	---	2.5YR6/6 Light Red	---	U
20	Bowl	7J87	6	70	6	---	5YR7/3 Pink	---	L	5A 4A 3A	SRB RB	L	PA5A PA4A PR4A	W	---	5YR6/6 Reddish Yellow	---	5YR7/4 Pink	---	O
21	Cook Pot	7J87	6	71	4	5YR6/4 Light Reddish Brown	10YR6/1 Gray	5YR6/4 Light Reddish Brown	L	5A 4A 3A	AB SAA SRA RA	M	PR5A PR4B	W	---	10YR5/2 Grayish Brown	---	10YR5/2 Grayish Brown	---	U
22	Cook Pot	7J87	6	70	1	5YR5/3 Reddish Brown	5YR4/1 Dark Gray	5YR5/4 Reddish Brown	L	6A 5A 4A 3A	AA SAA SRA RA	MH	PR6A PR5A PR4B PR3A	W	---	5YR4/2 Dark Reddish Gray	---	5YR4/3 Reddish Brown	---	U
23	Cook Pot	7J87	6	73	1	7.5YR6/4 Light Brown	7.5YRN4/ Dark Gray	7.5YR6/4 Light Brown	L	5A 4A 3A	SAA SRA RA	H	FS7A FS6A PA5A PA4A PR6A PR5A PR4A PR3A	W	---	7.5YR5/2 Brown	---	7.5YR6/2 Pinkish Gray	---	U
24	Cook Pot	7J87	6	74	3	---	5YR6/3 Light Reddish Brown	---	L	5A 4A 3B	SRB RB	M	PR5B PR4B	W	---	2.5YR6/2 Pale Red	---	2.5YR6/2 Pale Red	---	R
25	Cook Pot	7J87	6	73	3	7.5YR6/4 Light Brown	7.5YRN5/ Gray	7.5YR6/6 Reddish Yellow	L	5A 4A 3A	SAA SRA RA	MH	FS6A FS5A PA6A PA5A PA4A PR5A PR4A PR3A	W	---	10YR6/1 Gray	---	10YR5/3 Brown	---	U
26	Cook Pot	7J87	6	71	2	10YR6/3 Pale Brown	10YR6/1 Gray	10YR6/3 Pale Brown	L	5A 4A 3A	AB SAA SRA RA	M	PR5A PR4A	W	---	2.5YR5/2 Weak Red	---	2.5YR5/4 Reddish Brown	---	U
27	Cook Pot	7J87	6	71	5	10YR6/3 Pale Brown	10YR6/1 Gray	10YR6/3 Pale Brown	L	6A 5A 4A 3A	AB SAA RA RA	M	PR6B PR4B	W	---	2.5YR4/2 Weak Red	---	2.5YR5/4 Reddish Brown	---	U
28	Cook Pot	7J87	6	71	1	2.5YR6/4 Light Reddish Brown	7.5YR6/4 Light Brown	2.5YR6/4 Light Reddish Brown	L	6A 5A 4A 3A	AA SAA SRA RA	M	PR4D	W	---	2.5YR5/4 Reddish Brown	---	2.5YR6/4 Light Reddish Brown	---	U
29	Cook Pot	7J87	6	70	5	---	5YR7/3 Pink	---	L	6A 5A 4A 3A	SAA SRA RA	M	PA5A PR5A PR4A PR3A	W	---	5YR7/2 Pinkish Gray	---	5YR6/3 Light Reddish Brown	---	O

Fig. 4.14, ***continued.*** Field B: Pottery descriptions for nos. 18-29.

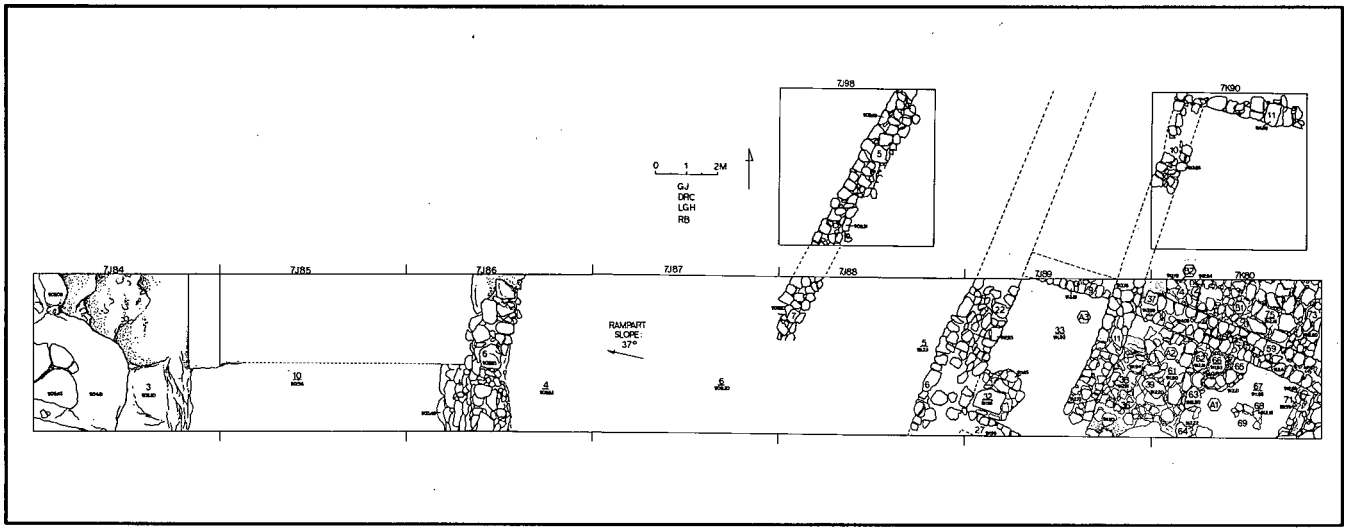


Fig. 4.15. Field B: Phase 11: Plan of Phases 11B and 11A.

their contents belong to the earlier settlement, we consider the finds separately (fig. 4.14).

Field Phase 11A (fig. 4.15)

Loci:	7J89:29	Destruction layer in casemate room
	7J89:36	Paved stone surface (=7K80:61)
	7J89:37	East-west wall (=7K80:59)
	7J89:38	Standing stone
	7J89:39	Large, flat-topped stone E of standing stone 7J89:38
	7K80:37	Mudbrick tumble and destruction debris
	7K80:42	Stone tumble and destruction debris
	7K80:59	East-west wall (=7J89:37)
	7K80:60	Tumble and destruction debris
	7K80:61	Paved stone surface (=7J89:36)
	7K80:62	Flat-topped stone (in line with 7K80:63 & 64)
	7K80:63	Flat-topped stone (in line with 7K80:62 & 64)
	7K80:64	Flat-topped stone (in line with 7K80 62 & 63)
	7K80:65	Stone-lined storage bin (in conjunction with 7K80:62)
	7K80:66	Cobble surface inside storage bin 7K80:65
	7K80:67	Beaten-earth domestic floor
	7K80:68	Stone-ringed fire hearth
	7K80:69	Ash from fire hearth 7K80:68
	7K80:70	North-south wall
	7K80:71	Stone and mudbrick bench?
	7K80:72	North-south wall
	7K80:73	North-south wall
	7K80:74	Paved stone surface
	7K80:75	Paved stone surface
	7K80:76	Paved stone surface

This season's results addressed questions about the utilization of rooms associated with the early Iron I casemate wall, the way in which the Phase 11A inhabitants reused the Phase 12 dry moat, and the nature of the destruction of the settlement.

Beginning our treatment of the Phase 11A defenses at the bottom, much as attackers would have encountered them, we start with the moat. Rather than dig it entirely to the bedrock level of Phase 12, the early Iron I inhabitants appear to have been content leaving ca. 1 m of debris at the bottom of the moat. Four layers making up this debris were excavated in 1989: Nari 7J85:11, Clay 7J85:13, and Nari-and-Clay 7J85:12 were topped by another layer of dark brown earth (Layer 7J85:10 [attributed to Phase 8 in *MPP 3*]) 0.14-0.30 m thick, covering the entire area of the moat. Layer 10 contained early Iron I ceramics of Phase 11B, likely the result of erosion during the occupation of that settlement. This was the bottom of the Phase 11A moat, with elevations ranging from 901.65-902.35 m.

Retaining wall 7J86:6, the inner (eastern) side of the moat, was founded upon Layer 10 (fig. 4.16), and not bedrock. It was therefore constructed later than the beginning of the early Iron I settlement (which we have labeled Phase 11B). Because of the early Iron I date for the rampart layers sealing against the retaining wall as well as the layer in the moat upon which it was founded (7J85:10), we can confidently date the retaining wall to early Iron I. Further excavation is needed to clarify whether the wall covered an earlier Phase 12 retaining wall.

Above the retaining wall the rampart was excavated in Square 7J88 in 1987 and 1989. This season, work on a section through the rest of the rampart was begun during the

last week by excavating 7J86:4 and 7J87:6, both of which contained early Iron I pottery.

At the top of the slope was the outer casemate wall (7J89:22), the major fortification those who might wish to assault the city at this location would encounter. The wall measured 2 m thick and was preserved to a height of 3 m from its base on the Phase 12 rampart (see Clark [*MPP 2* and *MPP 3*]) for more complete descriptions of the wall).

Our discussion of finds inside the defense system will proceed from the eastern extent of current excavations toward the casemate wall, including the casemate room and its contents.

The bulk of our energies in 1992 was focused on the Phase 11A remains in Squares 7J89 and 7K80 which have yielded information about two adjacent buildings just inside the defensive structures (fig. 4.15); the inner casemate wall (7J89:11), 1 m thick; the casemate room, 2.75 × 5 m in size; the outer casemate wall (7J89:22) at the top of the rampart; and the destruction which demolished and preserved these features. The outer casemate wall and room received little attention in 1992 (see Clark [*MPP 2* and *MPP 3*]), although fortuitous interseasonal erosion of the south balk of Square 7J89 left the southern crosswall of the room (7J89:27) almost completely exposed and, in the process, helped confirm the location of the entrance into the room in its southeast corner. Previous conclusions need no substantial adjustments.

Inside the inner casemate wall were two buildings which shared a common divider wall between them (fig. 4.15): Building A on the south with Rooms A1, A2, and A3 (the casemate room); and Building B on the north, with Rooms B1 and B2. Building A was bounded by Walls 7J89:22 on the west, 7K80:59 (=7J89:37) on the north, and 7K80:70 on the east. Excavations have not exposed a southern wall to this point. The building so far measures nearly 10 m long inside and was at least 5 m wide in the casemate room; until further excavations occur, the width of rooms A1 and A2 cannot be determined. All the exposed intact walls were of boulder-and-chink stone construction and were ca. 1 m thick where measurable. They consisted mostly of small boulders and some large cobbles. The inner casemate wall (7J89:11) and the building divider wall (7K80:59) bonded together and survived to a height of 2 m where they joined. The east wall (7K80:70) survived only 0.50 m high and its relationship to Wall 59 in the northeast corner of the building remains unclear, since the join is partially in the east balk of the square and extant remains from the Phase 2 ritual pool have blocked further work for the present.

Rooms A1 and A2 were partitioned by three medium- to large-sized boulders (7K80:62, 63, and 64), aligned somewhat perpendicularly to Wall 59 and spaced ca. 0.5 m apart. Each is roughly flat on its top (with top levels among them varying only 0.11 m). They appear to be a row of pillar bases, supporting posts for a curtain wall. A paved stone surface in Room A2 (7J89:36=7K80:61, described below) came to an end along the line of this curtain wall, leaving a beaten-earth floor in Room A1. Room A1 measured 3.50-3.75 m wide and at least 4 or 5 m long. Along its eastern wall was a small installation resembling a short bench (7K80:71) with Wall 70 as its back (fig. 4.17). It consisted of flat-lying mudbricks in the center (as the seat?) and small boulders apparently serving as armrests. The structure stood 0.37 m from the floor (the "armrests" 0.46 m) and was 0.55-0.70 m wide and 1.60-1.72 m long. At the base of the bench was a row of flat large cobbles lying at the same level as the paved stone surface in Room A2. Perhaps the entirety of Rooms A1 and A2 had once been paved and what we have uncovered in Room A1 was a reuse, the paving stones having been removed for some other use.

The floor of Room A1 (Locus 7K80:67), only identified and not excavated at this point, was 0.08-0.10 m lower

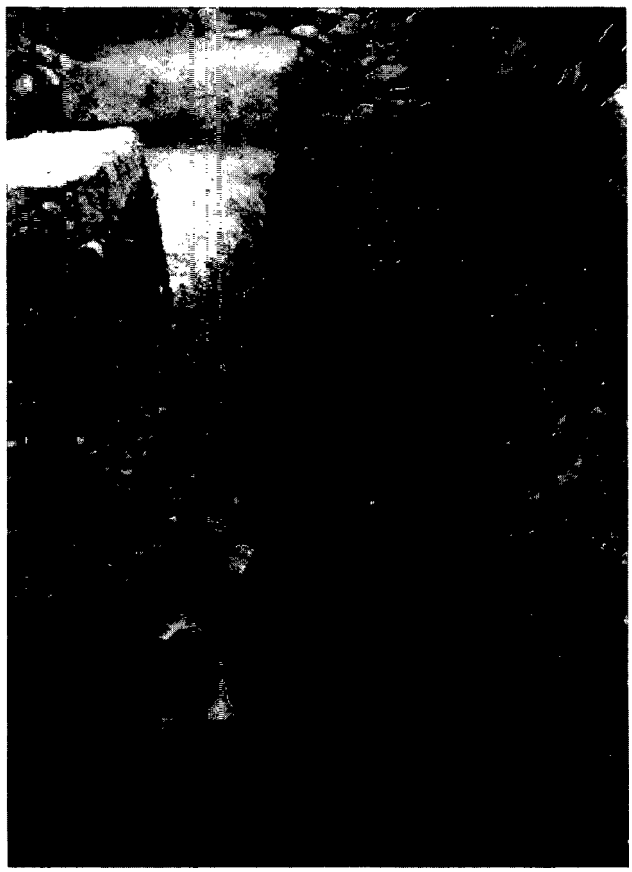


Fig. 4.16. Field B: Phase 11A: Foundation stones of the retaining Wall 7J86:6 (visible as the large dark stones above the meter stick) resting on Earth Layer 7J85:10; the Phase 12 moat bottom and western edge is in the foreground; the late Iron II addition to the retianing wall is visible as the smaller stones immediately above the large founding stones; the upper courses of the Phase 11 retaining wall slope upward behind the late Iron II addition and appear as the larger stones at the top of the picture.

Fig. 4.17. Field B: Phase 11A: Brick Bench(?) 7K80:71 against Wall 70, the eastern wall of Building A; the stones, upon which the 0.50 m stick is resting, probably founded the front part of the bench.

than the stone pavement in Room A2 and consisted of hard-packed earth, easily separable from the destruction debris above. Placed on this surface or set into it were several domestic features and furnishings, including a shallow storage bin in the northwestern corner of the room and a hearth, a mortar, and a grinding stone near the center.

The storage bin (7K80:65) evidently utilized the northernmost pillar base (7K80:62) as part of its construction on the west side (fig. 4.18). It measured 0.36-0.37 m high (off Surface 67) and between 1.20 and 1.64 m across the exterior. Its interior measurements were ca. 0.30 m high and 0.85 m across. The bottom of the bin was made of tightly packed cobbles (7K80:66), which we did not remove.

Near the center of the room and 0.80 m to the southeast of the storage bin was a stone-ringed hearth (7K80:68). Between these two features, a large, flat basalt mortar (fig. 4.18) lay on the floor 0.20 m from the bin and 0.55 m from the hearth. The associated hand grinder (Object No. 3134) was found just south of the hearth, 0.10 m away. The circular hearth itself, only slightly over half preserved, measured 0.95 m in diameter externally and 0.60 m internally. The stones were mostly large cobbles and were set partially into the floor. Light brownish-gray ash in the hearth (Locus 69) was scarcely 0.02-0.03 m thick and probably reflected domestic cooking activities.

Room A2 differs from Room A1 in almost every respect. Although sharing common walls, the dimensions, flooring material, furnishings, implements, and function are all different. In fact, for two rooms so close together, the contrasts are striking. Room A2, measuring ca. 5 m × 2.0-2.5 m, as thus far excavated, consisted of the inner casemate wall on the west, a portion of Wall 7K80:59 on the north, and the pillared curtain wall on the east. The floor (7J89:36=7K80:61) was constructed of flagstones ranging from small cobbles to small boulders, most lying flat. Some stones were missing from the northwest corner of the room and the floor was disturbed part way along the west wall. The surface sloped slightly to the south and lay between 0.20-0.30 m higher than the floor in the casemate room.

Interestingly, the paved floor, while sealing against Wall 7K80:59, ran under the inner casemate wall. Thus, although the two walls bonded (not abutted), the same paved floor sealed against one and extended beneath the other. The only way to explain this is by suggesting one premeditated building activity for all three features.

Fig. 4.18. Field B: Phase 11A: Building A; in the foreground is beaten-earth Surface 67 in Room A1; a mortar lies between Hearth 7K80:68 (below the left end of the meter stick) and Bin 65 (at the right edge of the meter stick); the cultic corner in Room A2 is visible on the flagstone floor behind three post bases; casemate Room A3 is visible at the very top of the picture.

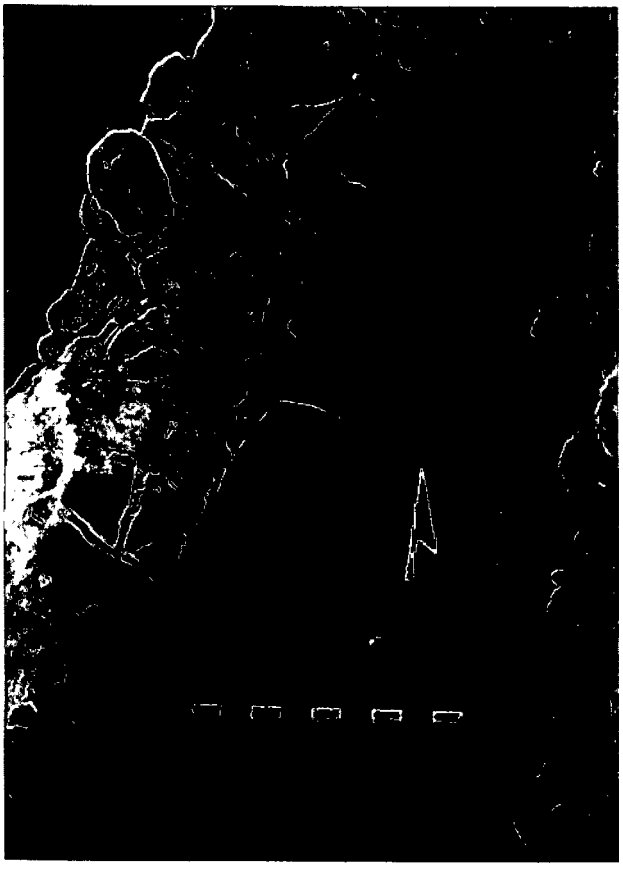


Fig. 4.19. Field B: Phase 11A: View from above of Standing Stone 7J89:38 resting on Pavement 7J89:36 against the inner casemate wall.

Within Room A2 other features may help us understand its use. Against the inner casemate wall, ca. 2 m from the corner with the north wall, a standing stone was uncovered (7J89:38), positioned directly on Stone Pavement 36 (fig. 4.19). The smooth gray limestone measured 0.20 m thick, 1.00 m high, and 0.45 m wide and was found *in situ*. It was unlike any kind of limestone used for building purposes at 'Umayri, being harder and finer grained, and was naturally formed and rounded by water solution. There were no marks of artistic scenes or inscriptions on any side. The smooth, rounded top contained no chisel marks. The stone may have been chosen because of this natural appearance.

Another, similar stone (7J89:39) was placed on the pavement, directly in front of the standing stone 0.75 m away, near the center of the room. It was relatively flat and smooth on top, again with no chisel marks apparent, and measured 0.70 m long (east-west), 0.50 m wide, and 0.32 m high (fig. 4.20). It rested on the pavement, apparently in some sort of purposeful relationship with the standing stone and the pillar bases. One is tempted to see in these features the remains of a cultic installation. And, although no cultic objects have surfaced on the floor to confirm this hypothesis and further lateral excavation is needed to help resolve the question, features comparable to other Iron Age sanctuaries are present and deserve continued investigation.

A doorway led from Room A2 into A3 (the casemate room). Although the southwest corner of Room A2 has not yet been excavated, it appears that the doorway, probably 1 m wide, was located there. Room A3 was cleared in earlier seasons (Clark, *MPP 3*) and interpreted as a storeroom because of the presence of about 10 collared pithoi in the northern half. With the discovery that the cultic center and domestic courtyard to the east are part of the same building, should we rethink our understanding of the casemate room? Is it possible that the stepped, plastered platform in the southwest corner, which we have interpreted as a base for a ladder leading to a second story, had some sort of cultic function instead? Only further excavation will be able to answer this question.

To the north in Building B, excavation in 1992 cleared only a pie-shaped portion along the divider wall (7J89:59) including parts of two rooms (fig. 4.15). Both rooms had floors with stones similar in size to, but ca. 0.20 m higher than, the stone surface in Building A.

Room B1 was only partially cleared (fig. 4.15). Walls 72 on the west (shared by Room B2), 59 on the south (shared by Building A), and 73 on the east enclosed the

Fig. 4.20. Field B: Phase 11A: Flat Stone 7J89:39 shown in relationship to Standing Stone 7J89:38, Pavement 7J89:36, and Pillar Bases 7J80:62, 63, and 64 forming a curtain wall.

room on three sides. The northern wall remains buried in the adjoining square (7K90). Like the other two walls of Room B1, Wall 73 included large cobbles and small boulders. The surviving three courses measured 0.54 m wide, from 0.20 to 0.60 m high, and ca. 1.50 m long. The room, like nearly all the early Iron I architecture in Field B, was oriented ca. 20° off a north-south orientation. Wall 72, consisting of large cobbles and small boulders, measured 1.00 m long (before disappearing into the north balk), 0.40-0.56 m wide, and 0.23-0.39 m high, and was not well preserved. More excavation to the north will allow a clearer description. At 3.50 m by at least 2.50 m, Room B1 was rectilinear, as far as we can determine.

There were two levels of stone paving in the room (fig. 4.21), suggesting reuse. The lower pavement (Locus 75), made up of large cobbles and unworked flagstones the size of small boulders, covered the western half of Room B1 at levels ranging from 912.15 to 912.20 m. This surface sealed against Wall 59 and extended under Wall 72.

Pavement 76, made of unworked flagstones of small- to medium-sized boulders, overlay Pavement 75 in the eastern half of the room. Floor levels varied slightly from 912.27 to 912.34 m, 0.12 to 0.14 m higher than Pavement 75. It also sealed against Wall 59 and apparently extended beneath Wall 73. Answers to questions about use (and reuse?) of Room B1 will only be available following further excavation to the north, since nothing was found on either floor.

In the limited portion we have exposed of Room B2, it was bounded on the south by Wall 7K80:59 and on the east by Wall 7K80:72; it extended into both the north and west balks where they join, but presumably it would have used the inner casemate wall as its western limit. Measuring from Wall 72 to a presumed extension of the inner casemate wall, it appears the room was ca. 2 m wide, similar to Room A2. The associated stone-paved surface (7K80:74), made of large cobbles and small boulders, appeared to have sealed against Wall 59 and seems to have extended beneath Wall 72. At this stage of excavation, however, it is impossible to say much more about these features or about the room.

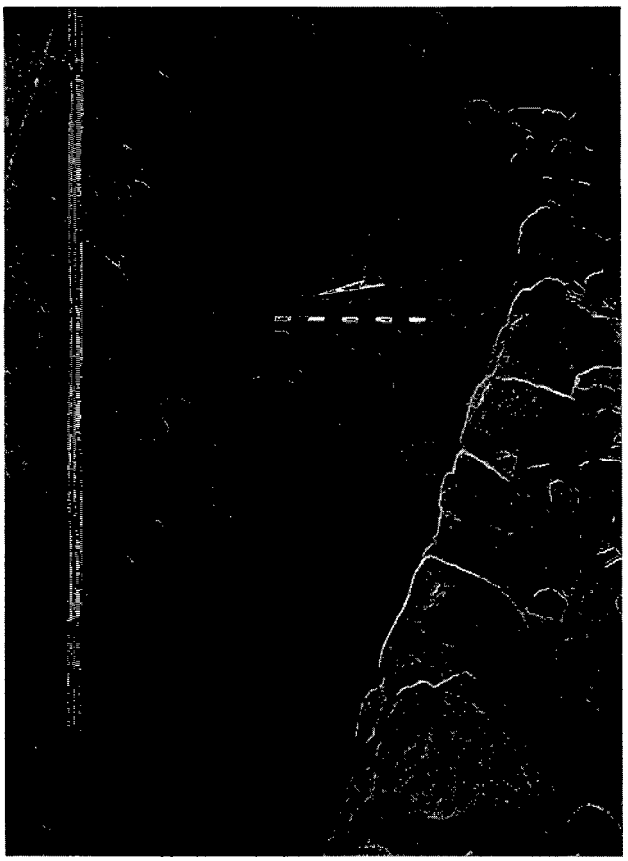


Fig. 4.21. Field B: Phase 11A: Pavement 7K80:76 (below the meter stick) overlapping Pavement 75 (in foreground) in Building B.

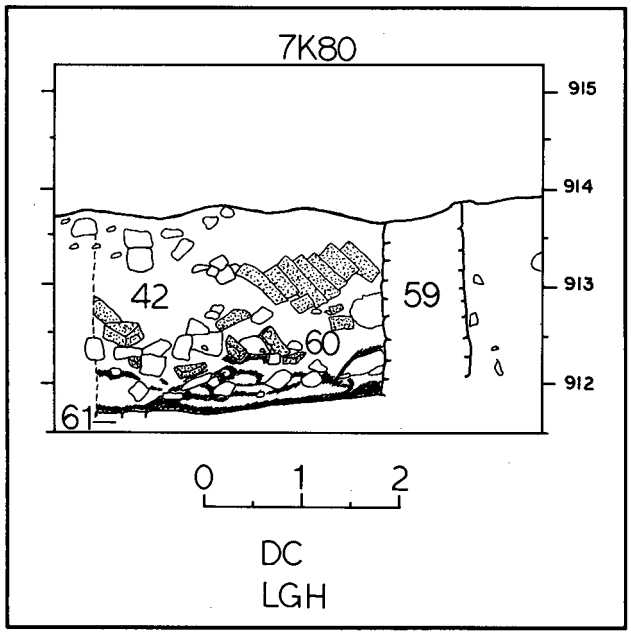


Fig. 4.22. Field B: Drawing of west balk of 7K80, showing layering of the Phase 11A destruction debris with burned roofing material on the bottom, second story mudbrick in the middle, and stones from the upper courses of the first story on top.

Of tremendous interest in terms of the goals of the 1992 season, the massive layer of destruction debris covering Buildings A and B offered significant data illustrating the nature of the original buildings and extent of their collapse. The casemate wall and attached buildings were apparently at least two story structures (figs. 4.22 and 4.23). The collapsed architectural debris in Building A lay 2 m deep on the floors in inverted fashion: mud roofing material with burned wooden beams fell first to the floors; then came thick piles of mudbrick from the second story walls, some fallen together in huge clumps, others randomly scattered over the roofing; then large cobbles and

Fig. 4.23. Field B: West balk of 7K80; same as Fig. 4.22.

Fig. 4.24. Field B: Phase 11A: Charred post or rafter in the destruction debris lying on flagstone Pavement 7K89:36.

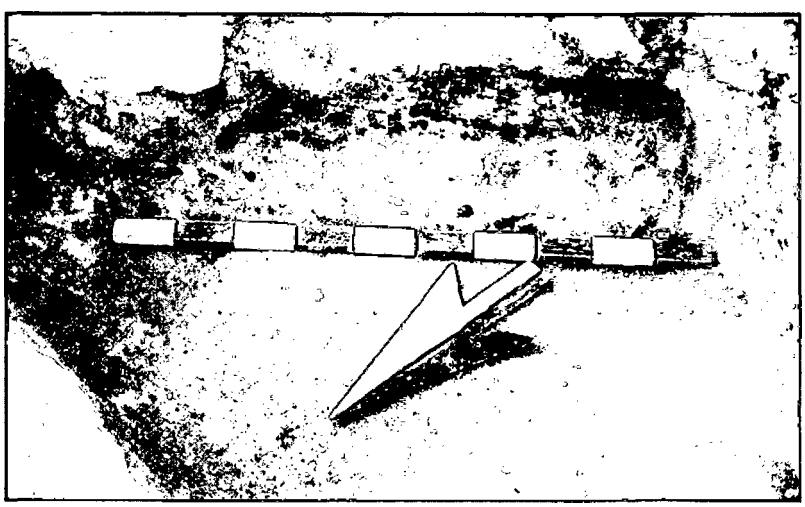


Fig. 4.25. Field B: Phase 11A: Charred post or rafter in the destruction debris.

small boulders fell from the upper parts of the first story walls. The deepest levels of destruction material were against the walls, leaving a depression in the center of the rooms.

The destruction debris in Building A (Loci 7J89:29 and 7K80:42 and 60) showed evidence of intense burning: colorfully fired mudbricks (black, blue-gray, pink, red), portions of limestone wall boulders reduced to powder, large chunks of burned beams and rafters (some ca. 0.20 m in diameter and 0.30 m long—figs. 4.24 and 4.25), blackened layers of debris and stone, and carbonized grain.

The debris in Room A1 contained a large number of animal bones ca. 0.80 m above the floor, indicating they came from the second story or the roof (fig. 4.26). The bones included the partially articulated remains of a small horse (with butcher marks), part of another large mammal (bovine?), fragments of several smaller mammals, and some bird bones, as well. Evidently, the large mammals had been butchered, then the surviving portions stored on the upper floor or the roof. Their sudden burial in the collapsing room likely protected them from scavengers. A lamp and other domestic implements, along with metal slag, were also found. Little or no evidence of military projectiles was located.

Room A2 bore the brunt of the most severe fire damage of anything excavated in the Field so far. Near the standing stone (7J89:38), at mid-depth of the destruction layer, and therefore originating from the second floor or roof, a large cache of carbonized barley was located, containing thousands of grains. The barley was so well preserved and so tough to destroy in its carbonized state (one needed a hammer to crush them) that the fire which carbonized them must have been very hot and smoldered for a long time. Not more than 2 m away from the standing stone, at the southern end of the divider wall between Rooms A1 and A2, we discovered (at the join of the south balks of 7J89 and 7K80) the base of a collared pithos 0.25 m above the floor of the room. The base, ca. 0.25 m in diameter and 0.10 m deep, was upright and contained hundreds of carbonized grains of barley (figs. 4.27 and 4.28). Upon impact of the falling jar, some of the barley spilled out nearby before being covered by other falling debris. This find contributes to the argument of those contending that collared pithoi were used to store dry foodstuffs. It may not rule out liquid storage as

another function, but certainly dry storage is now proved.

Divider Wall 7K80:59 between the two buildings not only separated them architecturally, but also drew a sharp line between the types of destruction deposits. Although the debris was just as deep as in Building A, that in Building B (Locus 37) consisted primarily of unburned mudbricks in various states of preservation. There were no burned wooden beams, no rocks turned to lime, and no evidence for multi-colored bricks. The debris also included many fragmented but restorable collared pithoi, most of them upside down. Evidently, they fell from the second story and/or roof, broke, and spilled any contents they may have held. Since there was no burning in this building, the contents were not preserved. The destruction layer also produced some domestic animal bone fragments, a small ceramic jar, a well preserved basalt tripod bowl (Object No. 3181), and possibly a ballistic missile or two.

All evidence points to a sudden, unexpected destruction: the collared pithoi were still in place in the casemate storeroom rather than removed and replaced with fill; the partially articulated large mammal bones had been left on the roof (or second floor) probably with meat on them; the presence of grain stores also suggests undepleted food resources; and domestic furnishings were in an apparently undisturbed state. These all point to a short time to prepare for exiting the buildings. The data also indicate an intensely hot and smoldering fiery collapse to the casemate wall and associated buildings, especially Building A.

As is often the case, it is the cause of the destruction that remains unclear. One immediately thinks of military assault, but very few artillery objects, such as ballistic missiles, arrows, and javelin points, have been found. While not ruling out some sort of natural disaster or peace-time accident, we might also consider the possibility of a military breach in the city's defenses at another, less well fortified, point along its perimeter wall with subsequent destruction of stronger fortifications from inside once the city had been taken. However it was caused, the destruction, which the pottery evidence suggests occurred around 1200 B.C. (figs. 4.29-32), was complete and long lasting. 'Umayri was not occupied again until late in Iron I.

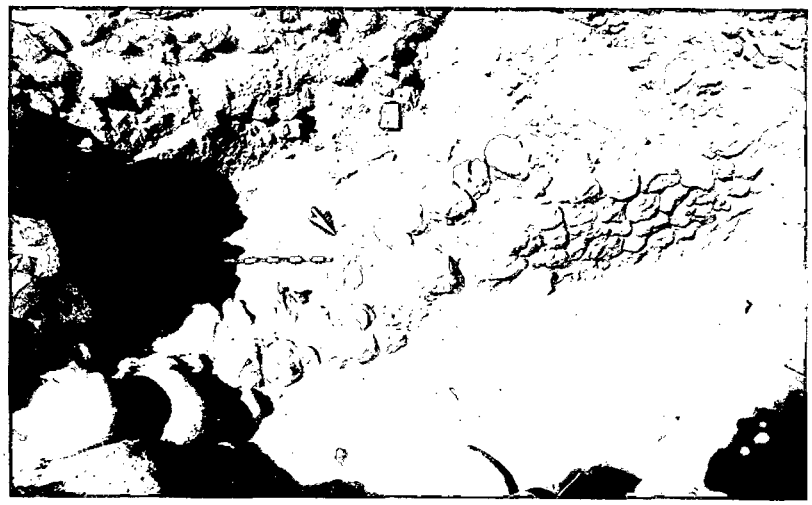


Fig. 4.26. Field B: Phase 11A: Bones of large mammals in the destruction debris.

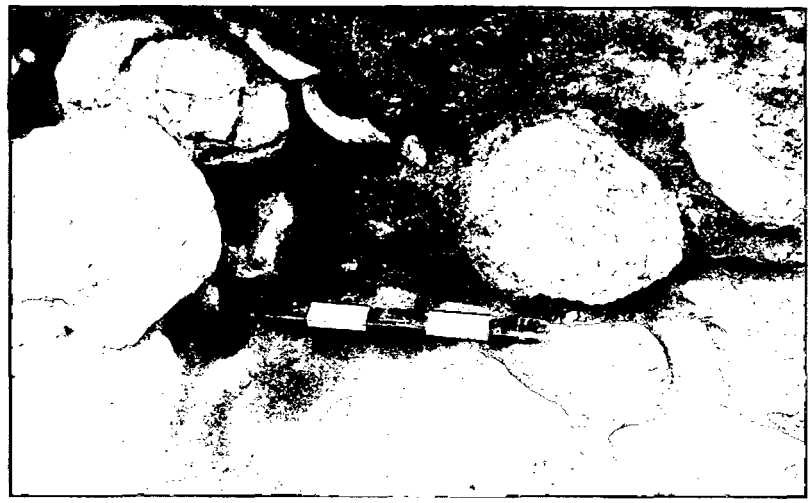


Fig. 4.27. Field B: Phase 11A: South balk of 7J80 with a base of a collared pithos containing carbonized barley and flowing out to the right; it was in the destruction debris above the flagstone pavement.

Fig. 4.28. Field B: Phase 11A: Detail of the pithos base containing barley seeds in Fig. 4.27.

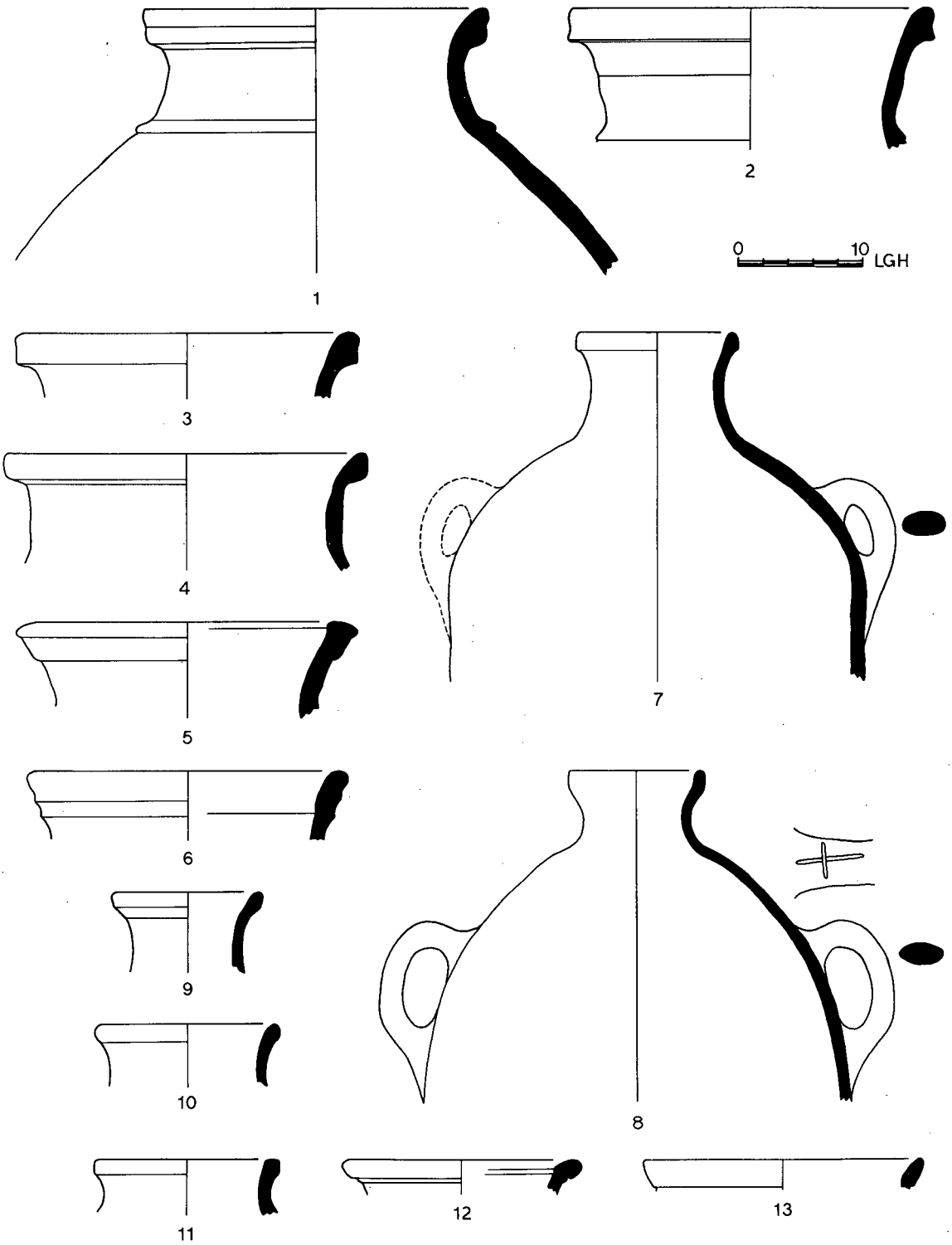


Fig. 4.29. Field B: Phase 11A: Early Iron I ceramics from floors and destruction debris.

Vessel		Provenance				Fabric Color			Non-Plastic				Voids	Manu		Surface Treatment				Decor	Fire
No.	Type	Sq	Locus	Pail	Reg.	Ext	Core	Int	Type	Size	Shape	Density			Ext	Color	Int	Color		
1	Pithos	7J89	Cl.Up	200	1	5YR7/4 Pink	---	5YR7/4 Pink	L	7A 6A 5A 4A 3A	AA SAA SRA RA	MH	FS6A PA7+A PR6A PR5A PR4A PR3A	CW	---	10YR7/3 Very Pale Brown	---	5YR7/6 Reddish Yellow	---	O
2	Pithos	7J89	29	237	1	2.5YR6/4 Light Reddish Brown	10YR6/1 Gray	2.5YR6/4 Light Reddish Brown	L	7A 6A 5A 4A 3A	AA SAA SRA RB	M	FS7+A PA6A PR7A PR6A PR5A PR4A	CW	---	7.5YR7/4 Pink	---	7.5YR7/6 Reddish Yellow	---	U
3	Pithos	7K80	60	270	2	7.5YR7/4 Pink	7.5YRN5/ Gray	7.5YR7/4 Pink	L	7A 6A 5A 4A 3A	SAA SRA RA	M	FS7A PA6A PA5A PA4A PR6A PR5A PR4A PR3A	CW	---	10YR7/3 Very Pale Brown	---	7.5YR6/6 Reddish Yellow	---	U
4	Pithos	7K80	37	268	1	---	7.5YR7/4 Pink	---	L	6A 5A 4A	SRA RB	L	FS6A PR6A PR5A PR4A PR3A	CW	---	5YR6/4 Light Reddish Brown	---	5YR6/6 Reddish Yellow	---	O
5	Pithos	7K80	60	273	1	2.5YR6/6 Light Red	7.5YRN5/ Gray	2.5YR6/6 Light Red	L	5A 4B 3A	AB SAA SRA RA	M	PR7A PR6A PR5A PR4A PR3A	CW	SM	10YR8/2 White	SL	7.5YR7/4 Pink	---	U
6	Pithos	7K80	60	271	1	5YR7/6 Reddish Yellow	5YR6/1 Gray	5YR7/6 Reddish Yellow	L	7A 6A 5A 4A 3A	SRB RB	M	PA6A PR7A PR6A PR5A PR4A PR3A	CW	---	5YR7/3 Pink	---	5YR7/4 Pink	---	U
7	Jar	7K80	60	279	1	5YR7/4 Pink	7.5YRN5/ Gray	5YR7/4 Pink	L	7A 6A 5A 4A 3A	AA SAA SRA RA	M	FS7+A FS7A FS6A FS5A PA7A PA6A PA5A PA4A PR7A PR6A PR5A PR4A PR3A JH7+A	CW	---	2.5YR6/4 Light Reddish Brown	---	5YR7/3 Pink	---	U
8	Jar	7J89	29	228	1	5YR6/3 Light Reddish Brown	5YR5/1 Gray	2.5YR5/4 Reddish Brown	L	7A 6A 5A 3B	SAA SRA RA	M	PA5A PR5A PR4A	CW	---	---	---	---	---	U
9	Jar	7K80	60	282	2	7.5YR7/4 Pink	7.5YRN6/ Gray	7.5YR7/4 Pink	L	6A 5A 4A 3A	SAA SRA RA	M	PR6A PR5A PR4A PR3A	W	---	7.5YR7/4 Pink	---	5YR7/4 Pink	---	U
10	Jar	7K80	37	291	2	---	5YR7/4 Pink	---	L	6A 5A 4A 3A	AA SRA RB	L	PR5B PR4B	W	---	5YR7/4 Pink	---	5YR7/3 Pink	---	O
11	Jar	7K80	60	277	2	2.5YR6/4 Light Reddish Brown	10YR6/1 Gray	2.5YR6/4 Light Reddish Brown	L	6A 5A 4A	SAA RB	L	PR6A PR5A PR4A	W	---	2.5YR6/4 Light Reddish Brown	---	2.5YR6/4 Light Reddish Brown	---	U
12	Jar	7K80	60	273	3	---	2.5YRN6/ Gray	---	L	5A 4A 3B	AA SAA SRA RB	M	---	W	---	10YR5/2 Grayish Brown	---	10YR5/1 Gray	---	R
13	Jar	7K80	37	297	1	---	5YR7/4 Pink	---	L	5B 4B	SAA SRA RA	L	PR6A PR5A PR4A	W	---	5YR7/6 Reddish Yellow	---	5YR7/6 Reddish Yellow	---	O

Fig. 4.29, *continued.* Field B: Pottery descriptions.

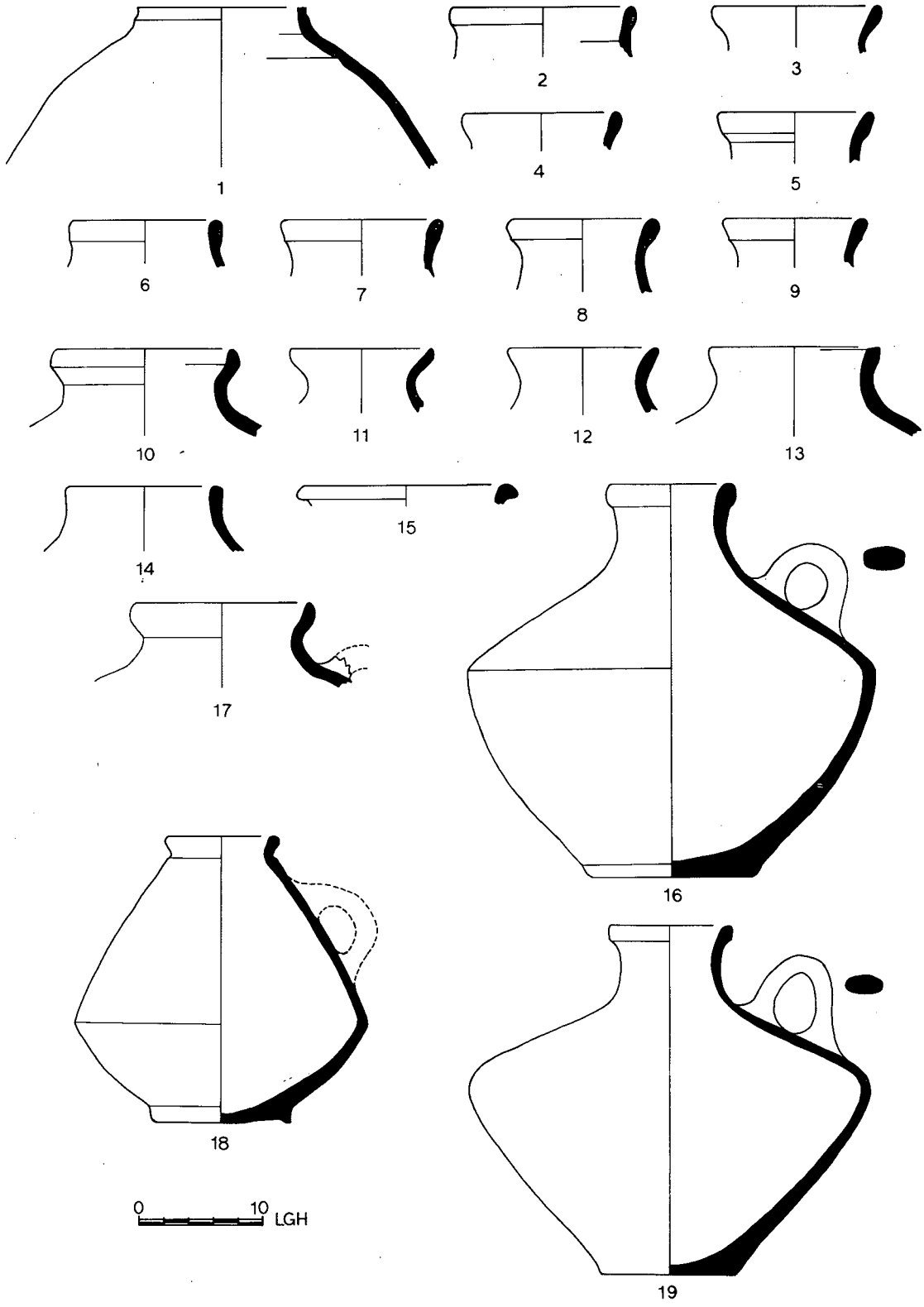


Fig. 4.30. Field B: Phase 11A: Early Iron I ceramics from floors and destruction debris, *continued.*

No.	Vessel Type	Sq	Provenance Locus	Pail	Reg.	Fabric Color Ext	Core	Int	Non-Plastic Type	Size	Shape	Density	Voids	Manu	Ext	Surface Treatment Color	Int	Color	Decor	Fire
1	Jar	7J89	29	216	1	7.5YR6/4 Light Brown	10YR6/1 Gray	7.5YR6/4 Light Brown	L	6A 5A 4A 3A	AA SAA SRA RA	M	PA7+A PA7A PA6A PA5A PA4A PR6A PR5A PR4A PR3A	CW	---	7.5YR6/4 Light Brown	---	7.5YR6/4 Light Brown	---	U
2	Jar/Jug	7K80	60	310	1	7.5YR7/4 Pink	7.5YRN6/ Gray	7.5YR7/4 Pink	L	5A 4A 3B	AA SAA SRA RC	M	FS6A PR7A PR6A PR5A PR4A PR3B	W	---	2.5YR6/4 Light Reddish Brown	---	7.5YR7/4 Pink	---	U
3	Jar/Jug	7K80	60	272	1	5YR7/6 Reddish Yellow	2.5YRN5/ Gray	5YR7/6 Reddish Yellow	L	6A 5A 4A 3A	SAA SRA RA	M	PA5A PA4A PA3A PR5A PR4A PR3A	W	---	7.5YR8/6 Reddish Yellow	---	7.5YR7/2 Pinkish Gray	---	O
4	Jar/Jug	7K80	60	271	2	5YR7/4 Pink	5YR6/1 Gray	5YR7/4 Pink	L	6A 5A 4A 3A	SAA SRA RA	L	PA4A PR5A PR4A PR3A	W	---	5YR7/3 Pink	---	5YR7/3 Pink	---	O
5	Jar/Jug	7K80	37	298	1	---	5YR8/3 Pink	---	L	7A 6A 5A 4A 3A	SAA SRA RA	L	PA5A PA4A PR5A PR4A PR3A	W	---	5YR7/6 Reddish Yellow	---	5YR7/4 Pink	---	O
6	Jar/Jug	7K80	37	288	2	5YR7/3 Pink	5YR7/1 Light Gray	5YR7/4 Pink	L	6A 5A 4A 3A	SRB RB	M	PA5A PA4A PR5A PR4A	W	---	5YR7/6 Reddish Yellow	---	5YR7/4 Pink	---	O
7	Jar/Jug	7K80	37	289	2	7.5YR7/4 Pink	10YR7/2 Light Gray	7.5YR7/4 Pink	L P	6A 5A 4A 3A 6A 5A 4A	SRA RA RA	M	PR5A PR4B	W	---	7.5YR7/4 Pink	---	7.5YR7/4 Pink	---	U
8	Jar/Jug	7K80	37	292	1	5YR7/4 Pink	10YR7/1 Light Gray	5YR7/4 Pink	L	5A 4A 3A	SRB RB	L	PR6B PR5B	W	---	5YR7/6 Reddish Yellow	---	5YR7/4 Pink	---	U
9	Jar/Jug	7K80	37	300	1	5YR7/4 Pink	5YR6/1 Gray	5YR7/4 Pink	L	6A 5A 4B	SAA SRA RB	L	PR5A PR3B	W	---	5YR7/6 Reddish Yellow	---	5YR7/6 Reddish Yellow	---	U
10	Jar/Jug	7K80	60	278	2	5YR7/4 Pink	2.5YRN5/ Gray	5YR7/4 Pink	L	7A 6A 5A 4A 3A 2A	AA SAA SRA RA	M	PR6A PR5A PR4A PR3A	WC	---	7.5YR7/4 Pink	---	5YR7/4 Pink	---	U
11	Jar/Jug	7K80	37	242	1	---	5YR7/4 Pink	---	L	6A 5A 4A 3A	SAA SRA RA	M	FS7A PA4A PA3A PR5A PR4A PR3A	W	SL	5YR8/2 Pinkish White	---	5YR8/3 Pink	---	O
12	Jar/Jug	7J89	Cl.Up	203	1	---	7.5YR6/2 Pinkish Gray	---	L	6A 5A 4A 3A	SAA SRA RA	MH	FS7A FS6A PA5A PA4A PA3A PR5A PR4A PR3A	W	---	7.5YR7/2 Pinkish Gray	---	7.5YR5/2 Brown	---	O
13	Jar/Jug	7K80	60	276	1	2.5YR6/6 Light Red	10YR5/1 Gray	2.5YR6/6 Light Red	L	7A 6A 5A 4A 3A	SRB RB	M	FS7A FS6A PR7A PR6A PR5A PR4A PR3A	W	---	2.5YR6/4 Light Reddish Brown	---	2.5YR5/4 Reddish Brown	---	U
14	Jar/Jug	7K80	37	288	1	---	7.5YR7/2 Pinkish Gray	---	L	6A 5A 4A 3A	SRB RB	M	PR5A PR4A PR3A	W	---	7.5YR7/2 Pinkish Gray	---	7.5YR7/6 Reddish Yellow	---	O
15	Jar/Jug	7J89	29	231	1	---	5YR5/1 Gray	---	L	7A 6A 5A 4A 3A	SRB RB	M	PA4B PA3B	W	---	5YR5/1 Gray	---	5YR5/1 Gray	---	R

Fig. 4.30, *continued.* Field B: Pottery descriptions for nos. 1-15.

No.	Vessel Type	Sq	Provenance Locus	Pail	Reg.	Fabric Color Ext	Core	Int	Non-Plastic Type	Size	Shape	Density	Voids	Manu	Ext	Surface Treatment Color	Int	Color	Decor	Fire
16	Jug	7J89	29	217	1	---	5YR5/1 Gray	---	L	6A 5A 4A 3A	AA SAA SRA RA	L	PR5A PR4A PR3A	W	---	2.5YR6/4 Light Reddish Brown	---	2.5YR6/4 Light Reddish Brown	---	R
17	Jug	7K80	60	276	2	---	10YR5/1 Gray	---	L	6A 5A 4A 3B	AA SAA SRA RA	M	PA5A PA4A PR7A PR6A PR5A PR4A PR3A	CW	---	10YR6/3 Pale Brown	---	10YR6/3 Pale Brown	---	R
18	Jug	7K80	37	284	1	---	7.5YR7/4 Pink	---	L	7A 6A 5A 4A 3A	AA SAA SRA RB	M	PA7A PA6A PA5A PA4A PR7A PR6A PR5A PR4A PR3A	W	---	7.5YR7/4 Pink	---	7.5YR7/4 Pink	---	O
19	Jug	7J89	29	230	1	10R6/6 Light Red	10R4/1 Dark Reddish Gray	10R5/2 Weak Red	L	7A 6A 5A 4A 3A	AA SAA SRA	M	FS6A FS5A PA5A PR5A PR4A	W	---	---	---	---	---	U

Fig. 4.30, *continued.* Field B: Pottery descriptions for nos. 16-19.

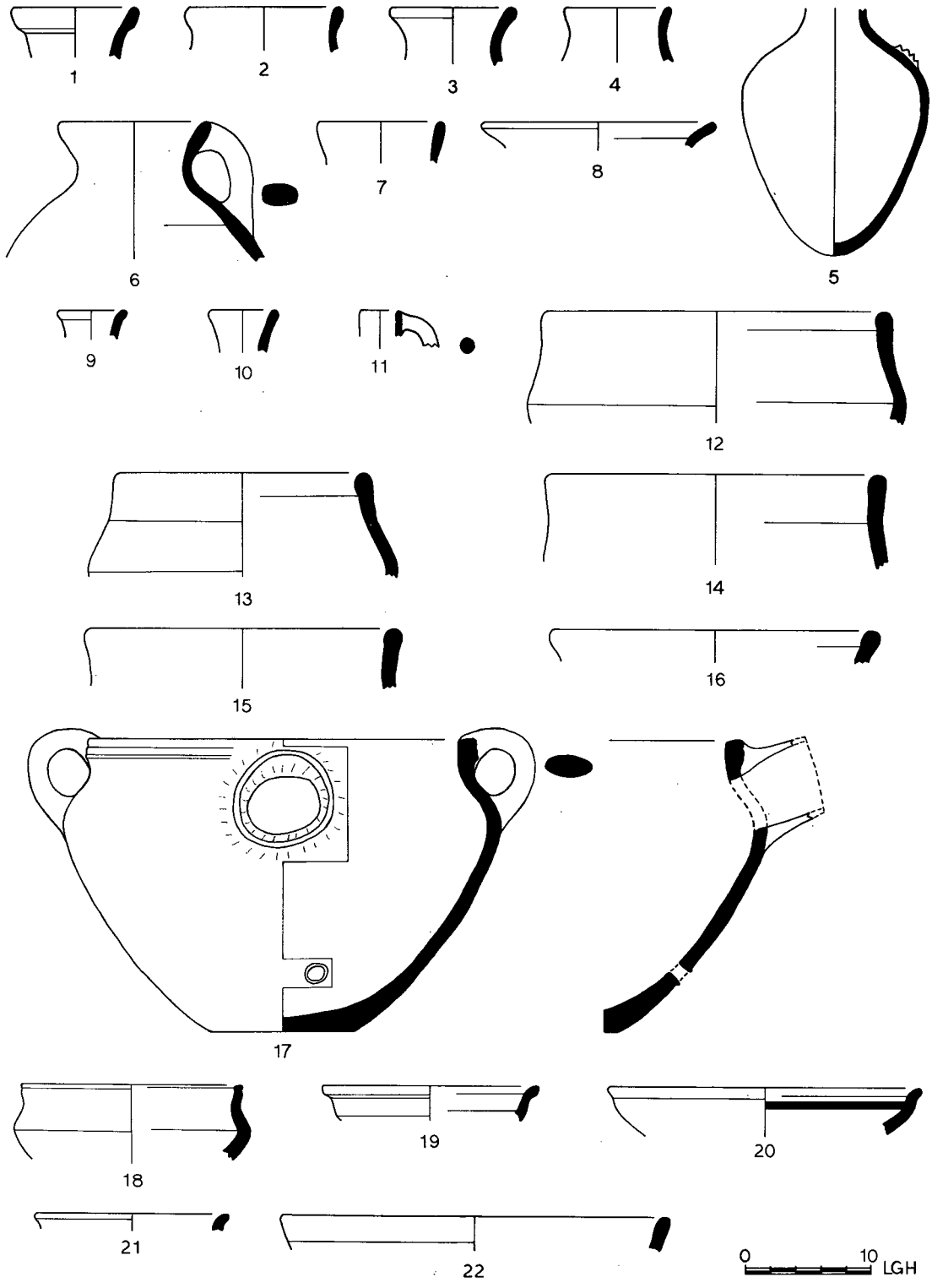


Fig. 4.31. Field B: Phase 11A: Early Iron I ceramics from floors and destruction debris, *continued.*

Vessel		Provenance			Fabric Color			Non-Plastic				Voids	Manu		Surface Treatment			Decor	Fire
No.	Type	Sq	Locus	Pail	Reg.	Ext	Core	Int	Type	Size	Shape	Density			Ext	Color	Int	Color		
1	Jug	7K80	60	282	5	5YR7/6 Reddish Yellow	7.5YRN5/ Gray	5YR7/4 Pink	L	7A 6A 5A 4A 3A	SAA SRA RB	L	PR5A PR4A PR3A	W	---	2.5YR6/4 Light Reddish Brown	---	5YR7/4 Pink	---	U
2	Jug	7K80	37	307	1	---	7.5YR7/4 Pink	7.5YR6/6 Reddish Yellow	L	7A 6A 5A 4A 3A	SAA SRA RA	M	PA4A PA3A PR5A PR4A PR3A	W	SL	7.5YR7/2 Pinkish Gray	SL	7.5YR7/4 Pink	---	O
3	Jug	7K80	60	282	4	7.5YR7/4 Pink	---	7.5YR7/4 Pink	L	6A 5A 4A	SAA SRA RA	M	FS6A PR7A PR6A PR5A PR4A PR3A	W	---	10YR7/3 Very Pale Brown	---	7.5YR7/4 Pink	---	O
4	Jug	7J89	29	229	1	5YR5/8 Yellowish Red	5YR7/1 Light Gray	5YR5/4 Reddish Brown	L	5A 4A 3A	SAA SRA RA	L	FS4A FS3A PA6A PA5A PA4A PA3A PR5A PR4A PR3A	W	---	5YR5/2 Reddish Gray	---	5YR6/2 Pinkish Gray	---	U
5	Jug	7K80	37	290	1	5YR5/1 Gray	---	5YR5/1 Gray	L	6A 5A 4A 3B	SAB SRA RA	M	PA6A PA5A PR5A PR4A	W	SL NBa	7.5YR8/4 Pink	---	---	---	R
6	Jug	7K80	37	239	1	5YR7/3 Pink	10YR6/1 Gray	5YR7/4 Pink	P L	7A 6A 7A 6A 5A 4A *3A	SRA RB	MH	FS7+A FS7A FS6A FS5A PA7A PA6A PA5A PA4A PR7A PR6A PR5A PR4A PR3A JH7+A	W	SH	10YR7/3 Very Pale Brown	---	5YR7/4 Pink	---	O
7	Jug	7K80	60	277	1	5YR7/3 Pink	10YR6/1 Gray	5YR7/3 Pink	L	5A 4A 3A	RD	L	PR6A PR5A PR4A PR3A	W	---	5YR7/3 Pink	---	5YR7/3 Pink	---	U
8	Jug?	7K80	60	271	3	5YR7/4 Pink	5YR6/1 Gray	5YR7/4 Pink	L	6A 5A 4A 3A	SRB RB	L	PR4B PR3B	W	---	5YR7/4 Pink	---	5YR7/3 Pink	---	U
9	Juglet	7J89	Cl.Up	203	3	---	5YR4/1 Dark Gray	---	L	5A 4A 3A	SAA SRA RA	M	FS5A PA5A PA4A PA3A PR5A PR4A PR3A	W	SM	5YR7/3 Pink	SM	5YR7/3 Pink	---	R
10	Juglet	7K80	60	272	2	5YR7/6 Reddish Yellow	2.5YRN6/ Gray	5YR7/6 Reddish Yellow	L	5A 4A 3A	SRB RB	L	PA4A PR4A PR3A	W	---	2.5YR6/6 Light Red	---	2.5YR6/6 Light Red	---	U
11	Juglet	7J89	29	231	2	5YR6/3 Light Reddish Brown	2.5YRN6/ Gray	5YR6/3 Light Reddish Brown	L	6A 5A 4A 3A	SAA SRA RA	M	FS7A PA4A PR6A PR5A PR4A PR3A JH7A	W	---	5YR7/3 Pink	---	5YR5/1 Gray	---	U
12	Krater	7K80	60	280	2	5YR7/4 Pink	5YR5/1 Gray	5YR6/4 Light Reddish Brown	L	6A 5A 4A 3A	SAA SRA RA	M	FS6A PR6A PR5A PR4A PR3A	CW	---	5YR6/3 Light Reddish Brown	---	5YR6/4 Light Reddish Brown	---	U
13	Krater	7K80	60	282	3	5YR7/4 Pink	7.5YRN6/ Gray	5YR7/4 Pink	L	6A 5A 4A 3A	AA SAA SRA RA	M	PA6A PA5A PR6A PR5A PR4A PR3A	W	---	5YR6/4 Light Reddish Brown	---	5YR6/4 Light Reddish Brown	---	U

Fig. 4.31, *continued*. Field B: Pottery descriptions for nos. 1-13.

Vessel		Provenance			Fabric Color			Non-Plastic				Voids	Manu		Surface Treatment				Decor	Fire
No.	Type	Sq	Locus	Pail	Reg.	Ext	Core	Int	Type	Size	Shape	Density			Ext	Color	Int	Color		
14	Krater	7K80	60	280	1	5YR7/4 Pink	5YR4/1 Dark Gray	5YR7/4 Pink	L	7A 6A 5A 4A 3A	SAA SRA RA	M	PA5A PR7A PR6A PR5A PR4A PR3A	CW	---	5YR6/3 Light Reddish Brown	---	5YR6/4 Light Reddish Brown	---	U
15	Krater	7K80	69	311	1	5YR7/4 Pink	7.5YRN6/ Gray	5YR7/4 Pink	L	6A 5A 4A 3A	AA SAA SRA RA	M	PR6A PR5A PR4A PR3B	CW	---	5YR6/4 Light Reddish Brown	---	5YR6/4 Light Reddish Brown	---	U
16	Krater	7K80	60	278	1	5YR7/2 Pinkish Gray	7.5RN5/ Gray	5YR7/2 Pinkish Gray	L	5A 4A 3A	RD	L	PR5A PR4A PR3B	W	---	5YR6/3 Light Reddish Brown	---	5YR6/4 Light Reddish Brown	---	U
17	Krater	7J89	29	212	1	2.5YR5/4 Reddish Brown	2.5YRN5/ Gray	2.5YR5/4 Reddish Brown	L	6A 5A 4A 3B	SAB SRA RA	M	PA5A PA4A PR6A PR5A PR4A	CW	---	---	---	---	---	U
18	Bowl	7K80	60	270	1	7.5YR7/4 Pink	7.5YRN6/ Gray	---	L	7A 6A 5A 4A 3A	SAA SRA RA	M	PA5A PR5A PR4A PR3A	W	---	7.5YR7/2 Pinkish Gray	---	5YR6/6 Reddish Yellow	---	U
19	Bowl	7K80	60	273	2	5YR7/3 Pink	5YR5/1 Gray	5YR7/3 Pink	L	6B 5A 4A	SAA SRA RB	L	PR5A PR4A PR3B	W	---	7.5YR7/4 Pink	---	7.5YR6/4 Light Brown	---	U
20	Bowl	7K80	60	271	4	---	5YR6/6 Reddish Yellow	---	L	6A 5A 4A 3A	SRB RB	L	FS5A PA7+A PA5A PA4A PR5A PR4A	W	SL	5YR7/4 Pink	SL	5YR7/4 Pink	Pa 2.5YR4/4 Reddish Brown	O
21	Bowl?	7K80	60	275	2	---	5YR8/3 Pink	---	L	5A 4A 3A	SRB RB	VL	PA5A PA3A PR6A PR4A PR3A	W	---	5YR8/4 Pink	---	5YR8/4 Pink	---	O
22	Bowl	7K80	60	275	1	5YR6/4 Light Reddish Brown	5YR7/4 Pink	---	L	6A 5A 4A 3A	SRB RB	M	PR4B PR3B	W	---	5YR7/3 Pink	SL WBL	5YR8/2 Pinkish White	---	O

Fig. 4.31, *continued*. Field B: Pottery descriptions for nos. 14-22.

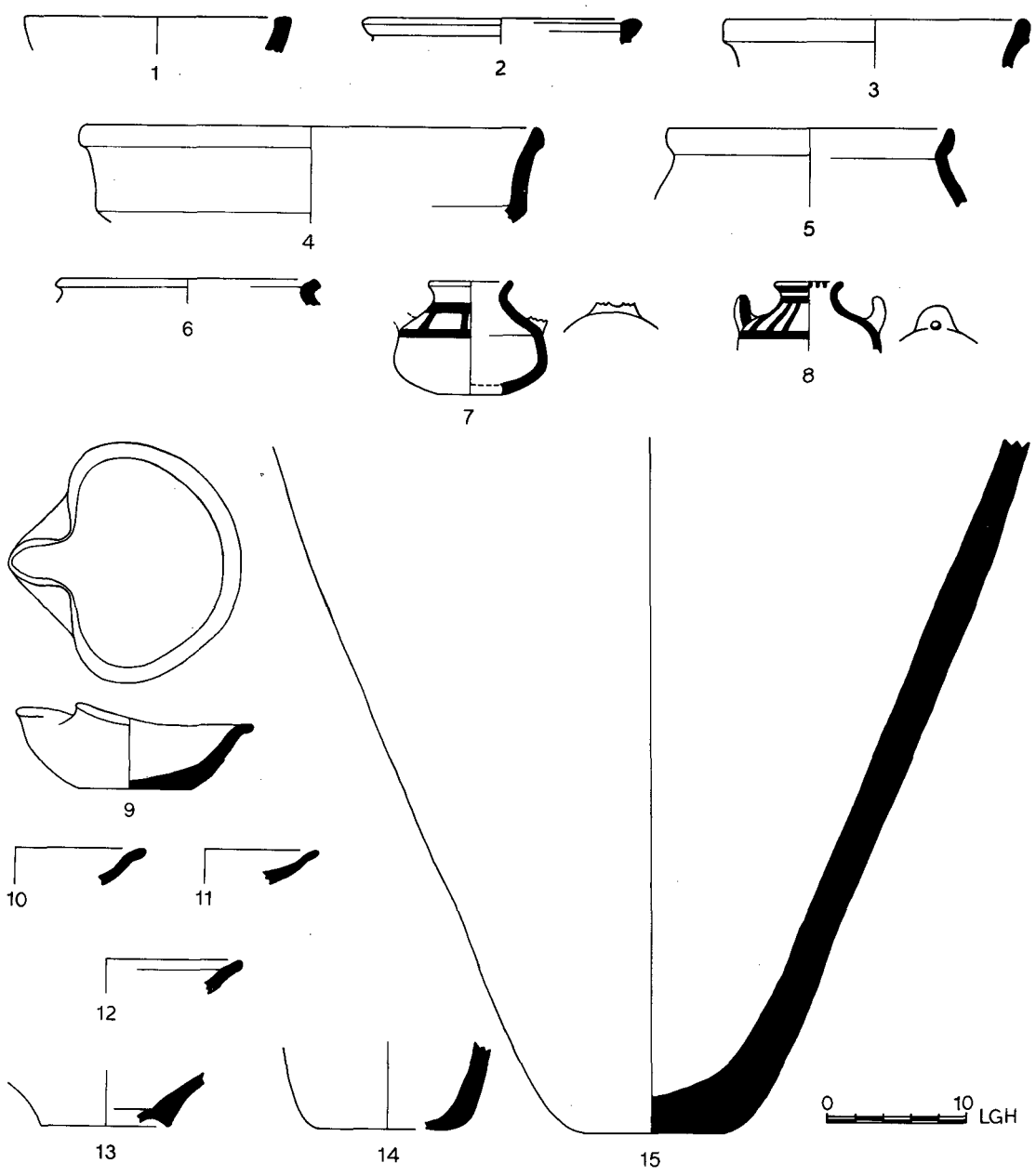


Fig. 4.32. Field B: Phase 11A: Early Iron I ceramics from floors and destruction debris, *continued.*

No.	Vessel Type	Sq	Provenance Locus	Pail	Reg.	Fabric Color Ext	Core	Int	Non-Plastic Type	Size	Shape	Density	Voids	Manu	Ext	Surface Treatment Color	Int	Color	Decor	Fire
1	Bowl	7K80	37	297	2	---	5YR7/4 Pink	---	L	6A 5A 4A	SAA SRB RA	L	PR4D	W	---	5YR7/4 Pink	---	5YR7/4 Pink	---	O
2	Bowl?	7K80	60	273	4	5YR7/4 Pink	2.5YRN4/ Dark Gray	5YR7/4 Pink	L	7A 6A 5A 4A 3B	AA SAA SRA RA	L	PA6A PA5A PR5A PR4A PR3A	W	---	7.5YR7/4 Pink	---	7.5YR7/4 Pink	---	U
3	Cook Pot	7J89	CLUp	203	2	---	5YR5/2 Reddish Gray	---	L	6A 5A 4A 3A	SAA SRA RA	MH	PA5A PA4A PA3A PR6A PR5A PR4A PR3A	W	---	5YR4/2 Dark Reddish Gray	---	5YR5/2 Reddish Gray	---	R
4	Cook Pot	7J89	CLUp	200	2	---	7.5YR7/4 Pink	---	L	7A 5A 4B 3A	SRB RA	L	PR7A PR6A PR5A PR4A PR3A	W	---	5YR6/3 Light Reddish Brown	---	5YR6/4 Light Reddish Brown	---	O
5	Cook Pot	7J89	29	225	1	---	5YR6/3 Light Reddish Brown	---	L	6A 5A 4A 3A	SAA SRA RA	M	PA5A PA4A PR5A PR4A PR3A	W	---	5YR6/3 Light Reddish Brown	---	5YR6/4 Light Reddish Brown	---	O
6	Cook Pot	7K80	37	289	1	---	7.5YR6/4 Light Brown	---	L	5A 4A 3B	AB SAA	M	PR5B PR4B	W	---	10YR8/3 Very Pale Brown	---	7.5YR6/4 Light Brown	---	O
7	Pyxis	7K80	60	281	1	5YR7/3 Pink	10YR6/1 Gray	5YR7/3 Pink	L	6A 5A 4A	AA SAA SRA RA	M	PR4B PR3B	W	---	5YR7/4 Pink	---	5YR7/4 Pink	Pa 5YR5/3 Reddish Brown	U
8	Pyxis	7K80	60	279	3	7.5YR7/4 Pink	10YR7/1 Light Gray	7.5YR7/4 Pink	L	6A 5A 4A	SRA RC	L	PA7+A PA7A PA6A PA5A PA4A	W	---	10YR8/3 Very Pale Brown	---	7.5YR7/4 Pink	Pa 5YR5/3 Reddish Brown	O
9	Lamp	7K80	60	282	1	2.5YR6/4 Light Reddish Brown	2.5YRN5/ Gray	2.5YR6/4 Light Reddish Brown	L	6A 5A 4A 3A	SRA RB	MH	PR5A PR4B PR3A	WP	---	---	---	---	---	U
10	Lamp	7K80	60	270	4	10YR7/2 Light Gray	5YR5/1 Gray	5YR7/6 Reddish Yellow	L	6A 5A 4A 3A	SAA SRA RA	L	PA4A PR4A PR3A	W	---	10YR7/2 Light Gray	---	5YR7/4 Pink	---	U
11	Lamp	7K80	37	291	1	---	5YR7/3 Pink	---	L	6A 5A 4B	SRA RC	L	PA5A PR4B	W	---	5YR6/3 Light Reddish Brown	---	2.5YR6/4 Light Reddish Brown	---	O
12	Lamp	7K80	37	304	1	---	7.5YR7/4 Pink	---	L	6A 5A 4A 3A	AA SAA SRA RB	L	PR5A PR4B	W	---	2.5YR6/6 Light Red	---	2.5YR6/4 Light Reddish Brown	---	O
13	Jug	7K80	60	272	3	5YR8/2 Pinkish White	7.5YRN6/ Gray	5YR7/6 Reddish Yellow	L	6A 5A 4A 3A	SAA SRA RA	M	PA6A PA5A PA4A PR6A PR5A PR4A PR3A JB7+A	W	---	5YR8/2 Pinkish White	---	5YR7/6 Reddish Yellow	---	U
14	Jug	7K80	60	270	3	---	5YR7/3 Pink	2.5YRN4/ Dark Gray	L	7A 6A 5A 4A 3A	AA SAA SRA RA	M	PR4B PR3B	WC	---	2.5YR6/8 Light Red	---	5YR7/3 Pink	---	O
15	Pithos	7J89	29	213	1	7.5YR7/4 Pink	7.5YRN5/ Gray	5YR8/3 Pink	L	6A 5A 4A 3B	SRA RB	M	FS7A FS6A PA5A PR5A PR4A	CW	---	---	---	---	---	U

Fig. 4.32, *continued.* Field B: Pottery descriptions.

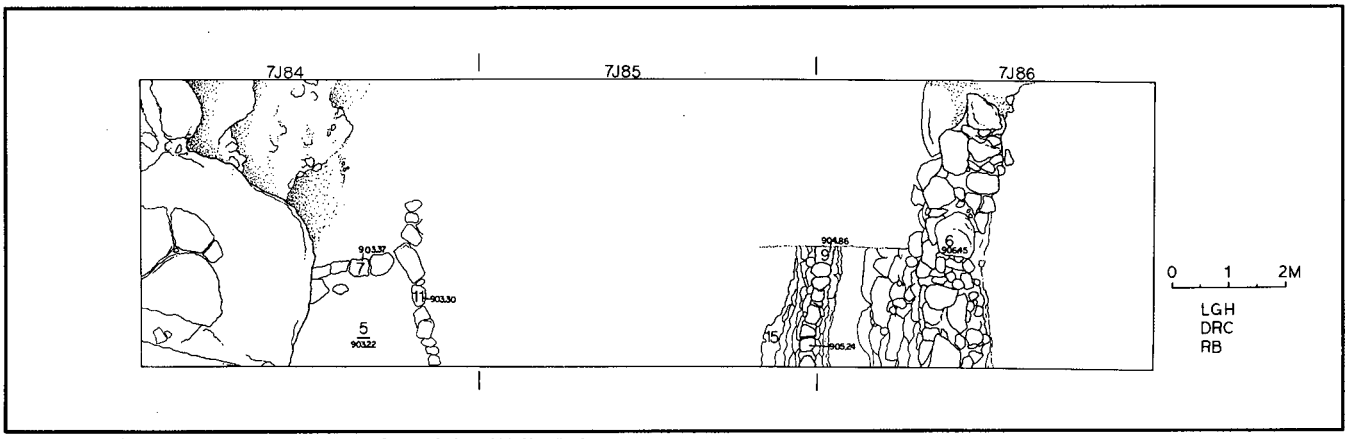


Fig. 4.33. Field B: Late Iron II: Plan of Retaining Wall 7J85:14.

Late Iron II—Outside the Fortifications (fig. 4.33)

Loci:	7J84:10	Earth Layer
	7J85:14	Retaining wall (=7J86:9)
	7J86:7	Fill layer between 7J86:6 and 9
	7J86:8	Fill layer between 7J86:6 and 9
	7J86:9	Retaining wall (=7J85:14)
	7J86:10	Fill layer between 7J86:6 and 9
	7J86:11	Fill layer between 7J86:6 and 9

Fig. 4.34. Field B: Late Iron II addition to the face of Retaining Wall 7J85:14 (the small stone wall in the middle of the picture) forming the eastern portion of the moat at that time; the Phase 12 moat is at the bottom (see also fig. 4.16); the Phase 11A retaining wall and rampart (part of which is cut in steps as it was excavated) is above the late Iron II addition.

Earlier reports have noted the challenge of relating phasing across the casemate wall. As the Phase chart and the stratigraphic sequence chart indicate, we now represent data differently than in the past. For Phases 4/5-10, we have become more cautious in assigning layers of rampart construction or repair to specific phases. Thus, unless excavation demonstrates firm connections, the treatment here will follow periods (late Iron II and late Iron II/Persian) rather than Phases.

As the 1987 report indicated (Clark, *MPP 2*), there is some reason to assume a repair of the defense system following the destruction which demolished the Phase 9 storeroom in 7J89 which lay over the remains of the casemate room (Clark, *MPP 1*). Likewise, at the bottom of the rampart, a significant addition to the retaining wall was built sometime during the late Iron II period. The original, Phase 11 retaining wall may have been deemed too easily accessible due to the 60° slope of its outer face (fig. 4.3). As is clear from viewing the eastern edge of the moat (fig. 4.34), the construction of Wall 7J85:14 (=7J86:9) rested on large boulders, probably the lowest course of the Phase 11 retaining wall [7J86:6]), and provided a steeper defense structure than existed before. It was also extremely flimsy and had slumped somewhat over time. To construct this additional defensive feature, late Iron II defenders laid 12-13 irregular courses of small boulders in a single row, battered against several layers of beaten earth and rubble, which was packed in simultaneously to support the wall. Although it was almost vertical in places, the wall leaned against the beaten earth and rubble at an average 70° slope. It stood 2.75 m high above the Phase 11 founding stones.

The beaten-earth and rubble layers were laid between the Phase 11 retaining wall (7J86:6) and the new wall as the latter was being built (fig. 4.35). The layers varied in composition, thickness, and width (lower layers were nar-

Fig. 4.35. Field B: Phase 11A: Retaining Wall 7J86:6 to the left with late Iron II Retaining Wall 7J85:14 to the right and supporting fill layers between.

rower as the distance between the two walls diminished), but all sloped down steeply toward the outer, and more flimsy, late Iron II wall. The lowest and narrowest observable deposit (excavation is not quite complete between the walls) was Layer 11. It consisted of reddish-brown debris and small pebbles along with evidence of burned rubble and charcoal. It was ca. 0.75 m deep. Above it was Layer 10, consisting mostly of crushed limestone and measuring 0.16-0.20 m thick. Layer 8, brown debris with few stones of any size and 0.18-0.30 m thick, was laid next and was slightly wider. Finally, Layer 7 was laid nearly to the top of Wall 7J85:14. It was 0.25-0.30 m thick and made up of mostly crushed limestone with cobbles and pebbles. All ceramic evidence in the layers discussed above pointed to a late Iron II date of construction.

Layer 7J84:10 is the westerly extension of Layer 7J85:8/9, extending into Square 7J84 at least 1 m from the east balk, measuring slightly over 1 m in depth, and reaching to bedrock. Since Layer 7J85:8/9 (=7J84:10) sealed against the lower three or four courses of the flimsy late Iron II retaining wall on the eastern face of the moat (7J86:9), we must assume that Layer 7J85:8/9 followed the erection of the wall. Ceramic evidence points to late Iron II as the date for the layer (fig. 4.36:1).

Late Iron II/Persian—Outside the Fortifications (fig. 4.33)

Loci:	7J84:4	Earth layer
	7J84:5	Crushed nari surface enclosed by Walls 7J84:7 and 11
	7J84:6	Earth layer (=7J84:8?)
	7J84:7	East-west wall line
	7J84:8	Earth layer beneath surface 7J84:5 (=7J84:6?)
	7J84:9	Earth layer
	7J84:11	North-south wall line

Phase 4 included architecture and related surfaces on the top of the *tall* in Squares 7K80 and 7K81 immediately inside the outer casemate wall on the escarpment of the hill. Remains from outside the outer casemate wall formerly ascribed to this phase are included here. Although reasons for some of this construction have been unclear (see Clark, *MPP 2*), there nevertheless was unmistakable evidence for building activity in the late Iron II/Persian period.

At the very bottom of the defensive slope, fill was deposited on the exposed bedrock that had been part of the western face of the moat (Phases 12 and 11). It was also located partially beneath a bedrock overhang. The yellowish-brown earth fill (7J84:8) contained few artifacts of any kind and only small pebbles. It measured nearly 3.0 × 1.8 m and varied in depth from 0.1 m under the bedrock overhang to 0.7 m, all on bedrock. The stratigraphic relationship of 7J84:8 to Iron II Layer 7J84:10 was unclear, even though they were adjacent to each other. It was the ceramic evidence that separated the two. Although unexcavated, Layer 7J84:6, also yellowish-brown in color and of the same top level as Layer 8 (near 903 m above sea level), likely was part of the same fill. It lay adjacent to Layer 8 on the north and was only separated in the top portion of the layer due to an east-west wall line (Locus 7) which was dug into the fill.

This provided a level place for the construction of a small, domestic room or platform made up of two intersecting wall lines (Walls 7J84:7 [east-west] and 11 [north-south]) and a crushed nari surface (7J84:5). Both wall lines were extremely fragmentary and consisted of stones varying in size from large cobbles to small boulders which formed only one to two courses and one to two rows. The walls measured approximately 2.5 m in length (Wall 7 from the bedrock and Wall 11 from the south balk), intersecting at right angles near the east balk of the square (fig. 4.37). Quite uncharacteristic of Field B walls, these were oriented ca. 15° off the true north-south and east-west axes (255° for Wall 7 and 165° for Wall 11). The function of this structure remains in doubt, but may have formed a room or lean-to built against the bedrock overhang.

Between the two walls there lay a thin and fairly level surface made of crushed nari (7J84:5), measuring 1.6 m by

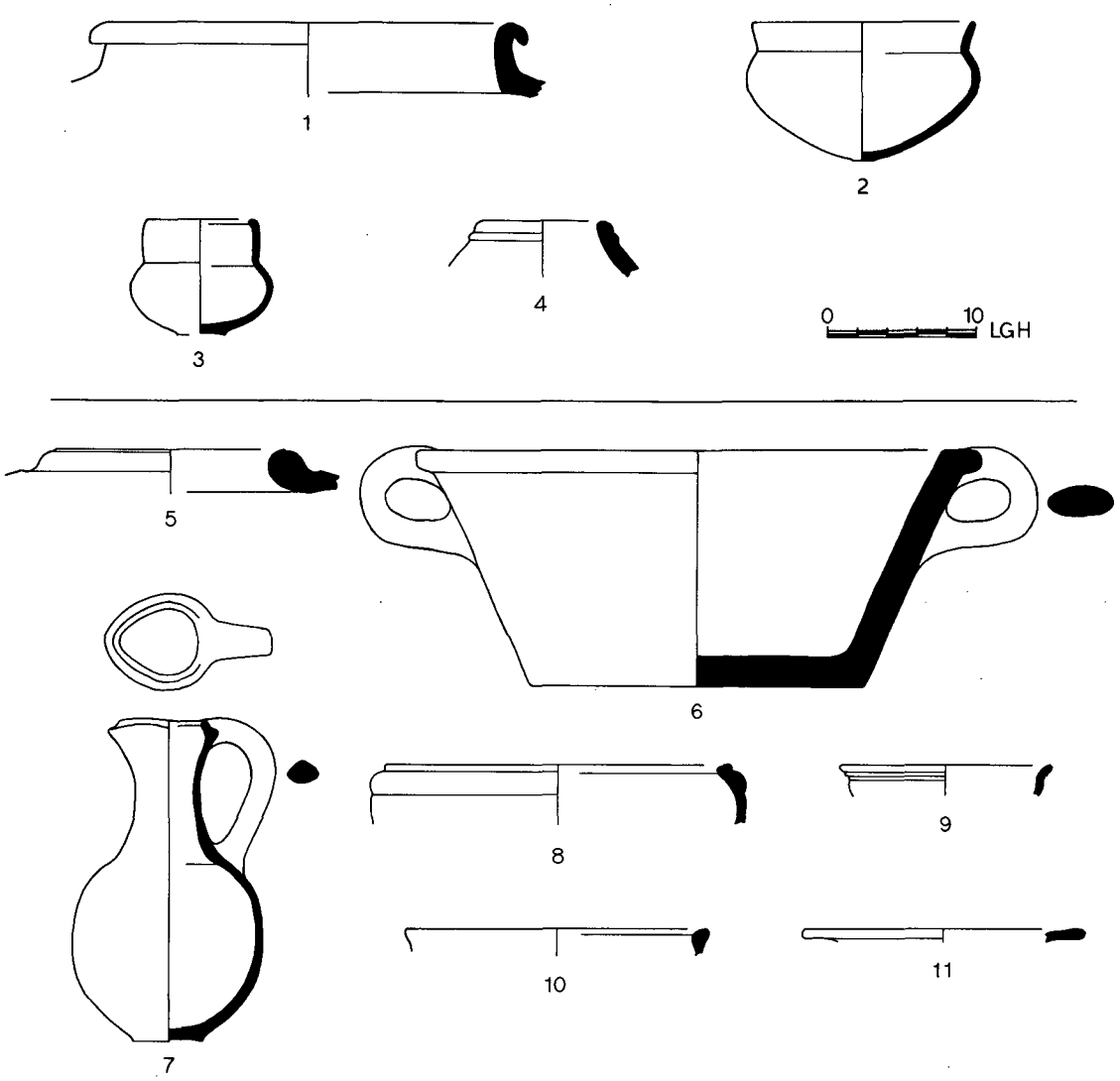


Fig. 4.36. Field B: Late Iron II ceramic example (No. 1); late Iron II/Persian ceramics (Nos. 2-11).

Vessel		Provenance			Fabric Color			Non-Plastic				Voids	Manu	Surface Treatment				Decor	Fire
No.	Type	Sq	Locus	Pail	Reg.	Ext	Core	Int	Type	Size	Shape	Density			Ext	Color	Int	Color		
1	Pithos	7J86	8	85	1	10R6/6 Light Red	5YR7/4 Pink	10R6/6 Light Red	L	7A 6A 5A 4A 3A	SAA SRA RA	M	FS7A PA5A PR6A PR5A PR4A PR3A	CW	---	10R6/8 Light Red	---	10R6/8 Light Red	---	O
2	Bowl	7J84	9	40	1	5YR7/4 Pink	---	5YR7/4 Pink	L	6A 5A 4A 3B	SRA RB	M	PA4A PR5A PR4A	W	SM WBR-Ca	2.5YR5/6 Red	SM WBR-Ca	2.5YR5/6 Red	---	O
3	Mug	7J84	9	40	2	5YR7/3 Pink	5YR5/1 Gray	5YR7/3 Pink	L	6A 5A 4A 3A 2B	SRA RB	M	PR4A PR3A	W	---	---	---	---	---	U
4	Cook Pot	7J84	9	41	1	5YR7/6 Reddish Yellow	5YR7/3 Pink	5YR7/6 Reddish Yellow	L	6A 5A 4A 3A	SAA SRA RA	M	PA4A PA3A PR4A PR3A	W	---	2.5YRN4/ Dark Gray	---	10R6/6 Light Red	---	O
5	Pithos	7J84	8	37	1	7.5YR7/4 Pink	7.5YRN5/ Gray	7.5YR7/4 Pink	L	6A 5A 4A 3A	AA SAA SRA RA	M	PA6A PA5A PR5A PR4A PR3A	CW	---	7.5YR7/4 Pink	---	7.5YR7/4 Pink	---	U
6	Basin	7J84	4	31	1	7.5YR6/6 Reddish Yellow	7.5YRN5/ Gray	5YR6/6 Reddish Yellow	L	7A 6A 5A 4A 3B	SAA SRA RB	MH	PA4A PR5A PR4A	W	SH R-Ba	5YR8/3 Pink	SH R-Ba	5YR8/3 Pink	---	U
7	Jug	7J84	4	30	1	7.5YR6/6 Reddish Yellow	7.5YRN5/ Gray	7.5YR6/6 Reddish Yellow	L S	6A 5A 4A 3B 6A 5A	SAA SRA RB	MH	PR5A PR4A PR3A	W	---	---	---	---	---	U
8	Bowl	7J84	8	37	2	---	7.5YRN5/ Gray	---	L	7A 6A 5A 4A 3A	SAA SRA RA	M	PA6A PR4A PR3B	W	WBH	7.5YRN3/ Very Dark Gray	WBH	7.5YRN3/ Very Dark Gray	BB	R
9	Bowl	7J84	8	37	5	---	5YR7/3 Pink	---	L	6A 5A 4A 3A	SAA SRA RA	VL	PR3D	W	---	5YR7/6 Reddish Yellow	---	5YR6/8 Reddish Yellow	---	O
10	Bowl	7J84	8	37	3	5YR7/4 Pink	5YR5/1 Gray	5YR7/4 Pink	L	6A 5A 4A 3A	SAA SRA RA	M	PR3D	W	WBM	5YR6/6 Reddish Yellow	WBM	5YR6/8 Reddish Yellow	---	U
11	Plate	7J84	8	37	4	---	5YR7/3 Pink	---	L	6A 5A 4A 3A	SAA SRA RA	L	PA5A PA4A PA3A PR5A PR4A PR3A	W	SH WBH	2.5YR5/6 Red	SL WBM	2.5YR6/4 Light Reddish Brown	---	O

Fig. 4.36, *continued*. Field B: Pottery descriptions.

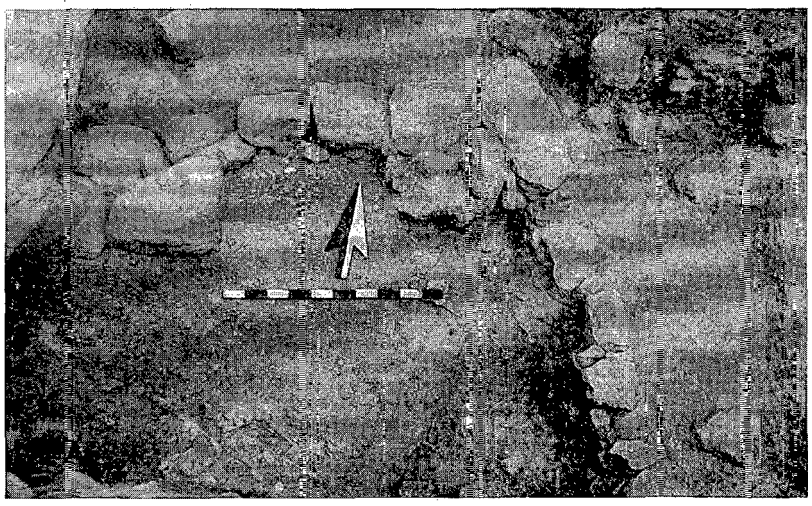


Fig. 4.37. Field B: Late Iron II/Persian: Wall lines 7J84:7 (above the meter stick) and 11 (right of the meter stick) with Surface 5 already removed; the bedrock western edge of the moat is at the far left of the picture.

1.7 m horizontally and from 0.03 m to 0.09 m thick. In places it appeared to extend over the wall lines, supporting the idea of at least a reuse of the walls as a platform for a shack or tent. Perhaps, on the other hand, later erosion and compaction caused the overlap. At any rate, on or near the surface (in the lower portions of Earth Layer 7J84:4 [see below]) were found three nearly complete vessels (a juglet [fig. 4.36:7] and a basin [fig. 4.36:6]) under the bedrock overhang (fig. 4.38), suggesting a domestic use for the room/platform.

To the east of the structure was Earth Layer 7J84:9, which appeared to be the same as Layer 7J85:6 and rested 0.10-0.12 m above the level of Surface 5.

Earth Layer 7J84:4 represents the accumulation of tumble and depositional debris over an extended period of time. It covered virtually the entire square and consisted of strong brown earth with pockets of medium cobbles, a number of ceramic objects (including two zoomorphic figurines), stone implements, and animal bones. All ceramic data point to the late Iron II/Persian period (fig. 4.36:2-11).

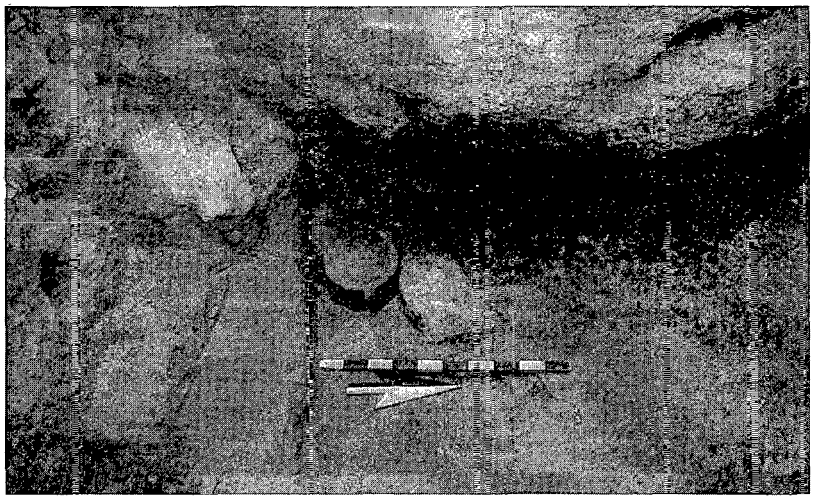


Fig. 4.38. Field B: The western bedrock face of the dry moat (at top) with a late Iron II/Persian basin *in situ* on Surface 7J84:5.

Field Phase 1

Loci:	7J84:1	Remains from previous seasons' sift pile
	7J84:2	Topsoil

As has been the case with all topsoil layers in the field, 7J84:2 represented deposition of sand and loess over the centuries since the *tall* was last occupied. It contained an array of bones, metal and glass objects, and pottery from the Early Bronze to the Ayyubid/Mamluk periods. Locus 7J84:1 was sift debris from a previous season which had been leveled with a back-hoe.

Conclusion

Excavations in 1992 have contributed significantly to our understanding of the construction, utilization, and demise of the western defense systems of ancient 'Umayri. Particularly important are the defenses of the MB IIC and early Iron I settlements, protecting a relatively small site with a rampart and a dry moat. Just as important are the finds in the Phase 11 destruction debris. The nature and intensity of the destruction is clear, but its cause is less apparent, given the virtual absence of ballistica. Evidence for grain in collared pithoi will contribute to the ongoing discussion of these vessels which appear throughout Palestine. In addition, the recovery of a private cultic installation adjacent to a domestic room holds great promise for interpreting the buildings immediately inside the casemate wall.

Future plans involve further horizontal exposure of the early Iron I structures, including the casemate wall and associated buildings inside the wall. We anticipate excavation in the direction of the northwest corner of the *tall* where remains of the outer casemate wall are still visible on the surface. In addition, we will examine further the MB IIC fortifications by clearing a two-meter strip of the defense ramparts to the Middle Bronze level and to bedrock where appropriate.

CHAPTER 5

Field D: The Lower Southern Terrace

Timothy P. Harrison *University of Toronto*

Introduction

Located on a natural terrace on the lower southern slopes of Tall al-'Umayri, Field D has been the scene of excavations during each of the four field seasons carried out by the Madaba Plains Project (fig. 2.1). The Area was originally chosen for excavation after the results of a random surface survey identified significant concentrations of Bronze Age (particularly Early Bronze (EB) and Middle Bronze (MB) material in the vicinity (Herr 1989a: 226). To date, nine squares have been opened.

During the first season in 1984, four squares (5K76, 5K77, 5K86, and 5K87) were laid out along the outer edge of the terrace. The work of this first season resulted in a sequence of five Field Phases (FP) of occupation dating to the Early Bronze Age (EBA) (Mitchel 1989).

In 1987, the second field season, hopes of finding transitional EB IV-MB II deposits led to the opening of four new squares (5K96, 5K97, 6K06, and 6K07) upslope immediately to the north of the 1984 excavation area. Because the 1984 season had produced hints of EB IV occupation, it was hoped that debris accumulation on the slope might have preserved material from this later period of occupation, and thus extend the relative sequence down into the Middle Bronze Age (MBA), and possibly even later. However, while excavations proceeded to uncover extensive EB III remains, no stratified deposits from the EB IV or MB II periods were found. In addition, the EB III structures were all set on or against bedrock, thus revealing the northern limit of settlement on the terrace. As a result of the 1987 season, the phasing sequence established in 1984 was tentatively revised. Eight phases were combined with the five from 1984 and arranged into a ten phase sequence of occupational history (Daviau 1991).

The third season in 1989 saw a return to the four original squares opened in 1984. Besides seeking a better understanding of the stratigraphic relationship between the 1984 and 1987 excavation areas, a second primary objective was to excavate the 1984 squares down to bedrock. By doing so, we hoped to determine the earliest periods of occupation on the *tall*. In addition to the four 1984 squares, a two by five meter probe (5K67), located south of 5K77, was opened to determine the outer extent of the EB settlement, and some work was carried out in 5K97, a square from the 1987 excavations (fig. 5.1).

Although bedrock was not reached, the 1989 season succeeded in verifying the phasing suggested in 1984, and clarified our understanding of the general stratigraphic relationship between the 1984 and 1987 excavation areas. In all, two well-preserved occupational phases (Phases 4 and 5) dating to the EB II-III period were excavated, along with some evidence of earlier activity, tentatively assigned to Phase 6 (Herr et al. 1991: 163; Harrison 1997).

By the end of the 1989 season, the excavations on the

southern terrace had produced the remains of at least four, and possibly five, distinct phases of architectural development spanning the latter part of the EBA. The most intense period of activity occurred during Phase 4, covering the entire area of Field D, when a community lived in a well-planned settlement of dwellings erected on artificial terraces clinging to the side of the hill. This phase dated to late EB III. After a violent destruction, two successive phases of occupation (Phases 3 and 2) were confined to the area of the 1984/1989 excavations, before the EBA occupation in Field D finally came to an end.

Since we did not succeed in clearing Squares 5K76, 5K77, 5K86, and 5K87 to bedrock during the 1989 season, the primary objective of the 1992 season was to finish this task, and thus complete the stratigraphic sequence of EBA occupation in Field D. By season's end, this primary goal had been accomplished. While further work may still be required to elucidate certain stratigraphic details, bedrock was reached in each of the four squares, and the earliest phases in the stratigraphic sequence of Field D were finally established. In addition to completing the excavation of Phase 5, and confirming the existence of Phase 6, a new phase, Phase 7, was identified. Thus, the 1992 season brought to six, the number of distinct architectural phases in the southern, 1984/1989/1992 excavated portion of Field D, all dating to the EBA.

While erosion has made it impossible to draw the appropriate stratigraphic connections between the southern and northern (1987) excavation areas, comparative analysis of the material evidence has provided reasonably secure chronological links between the two areas. Since the ten Phases of 1987 were not based on the appearance of significant new architectural structures (as they were in the southern excavation area), but on new surfaces and architectural adjustments made to a single complex of rooms, these Phases (10 through 6A in Daviau 1991) must be treated as subphases of one architectural phase. Based on a comparison of the material evidence therefore, the northern architectural complex excavated in 1987 should be considered more or less contemporary with the Phase 4 complex uncovered in the southern excavation area. Phases 3 through 1 from 1987 should also be reduced to subphases, as they correspond to the southern Phase 1 (Daviau 1991).

Fig. 5.1. Field D: Aerial view of the squares excavated this season soon after the season started; Phase 5 remains are visible. (Balloon photo by E. and W. Myers)

Phase	Date	5K67	5K76	5K77	5K86	5K87	5K96	5K97	6K06	6K07
FP 7	EB IB	X?	X	X	X	X				
FP 6	EB II	X?	X	X	X	X				
FP 5	EB II(-III)	X	X	X	X	X				
FP 4	EB III	X	X	X	X	X	X	X	X	X
FP 3	L EB III-IV		X?	X?	X	X				
FP 2	L EB III-IV		X?	X?	X	X				
FP 1	Post-EB	X	X	X	X	X	X	X	X	X

Fig. 5.2. Field D stratigraphic phasing chart by Square.

Finally, it should also be noted that many of the earth loci excavated during the 1987 season contained evidence of earlier (mostly EB I) periods of occupation (particularly loci situated immediately above bedrock), just as many of the loci in the southern excavation area did.

In the following report, we describe the 1992 results phase by phase, beginning with the earliest material. Since Phases 4 through 1 have been discussed thoroughly already in previous seasonal reports, and were not the focus of this season's excavations, they will not be described in any detail here. Figure 5.2 is a stratigraphic phasing chart by square while fig. 5.3 is a comparative phasing chart by season. Figure 5.4 is a Harris matrix-type sequence chart. Figure 5.5 illustrates the stratigraphy of the field in a composite section of several squares.

Field Phase 7 (fig. 5.6)

Loci:

5K76:39	E-W wall (=5K86:30)
5K76:49?	N-S wall
5K76:50?	N-S wall
5K76:51	Earth layer
5K76:52	Surface
5K76:53	N-S wall
5K76:54	Bedrock
5K76:55	N-S wall
5K77:33	E-W wall
5K77:41	Earth layer
5K77:42	Earth layer
5K77:43	Bedrock
5K77:44	Earth layer
5K77:45	E-W wall
5K86:30	E-W wall (=5K76:39)
5K86:49?	Stone-lined shaft
5K86:53	Bedrock
5K86:57	N-S wall
5K86:58	Earth layer
5K86:60	Earth layer
5K86:61	E-W wall (=5K87:37)
5K86:62	Earth layer
5K86:64?	N-S wall/step
5K86:65	Earth layer
5K86:66	Earth layer
5K86:67	E-W wall
5K86:68	E-W wall
5K86:69	N-S wall
5K86:72	Pillar base
5K86:73	Shaft-tunnel and subterranean chambers
5K87:33	Bedrock
5K87:37	E-W wall (=5K86:61)
5K87:38	Earth layer
5K87:39	Ledge cut in bedrock
5K87:40	Ledge cut in bedrock

Stratigraphy. The discovery of a stone-lined shaft (5K86:49) at the end of the 1989 season provided clear indication that an earlier phase, or phases, of occupation still awaited excavation in Field D. Since its function and precise stratigraphic relationship were not known, the shaft was tentatively assigned to a new phase, FP 6. Unfortunately, illicit digging between the 1989 and 1992

1984 (*MPP1*)	1987 (*MPP2*)	1989 (*MPP3*)	1992 (*MPP4*)
FP 1	FP 1	FP 1	FP 1
---	FP 2	---	---
---	FP 3	---	---
FP 2	FP 4	FP 2	FP 2
FP 3	FP 5	FP 3	FP 3
FP 4	FP 6A	FP 4	FP 4
---	FP 6B	---	---
---	FP 7	---	---
---	FP 8	---	---
---	FP 9	---	---
---	FP 10	---	---
FP 5	----	FP 5	FP 5
----	----	FP 6	FP 6
----	----	----	FP 7

Fig. 5.3. Field Phase comparison in Field D by season.

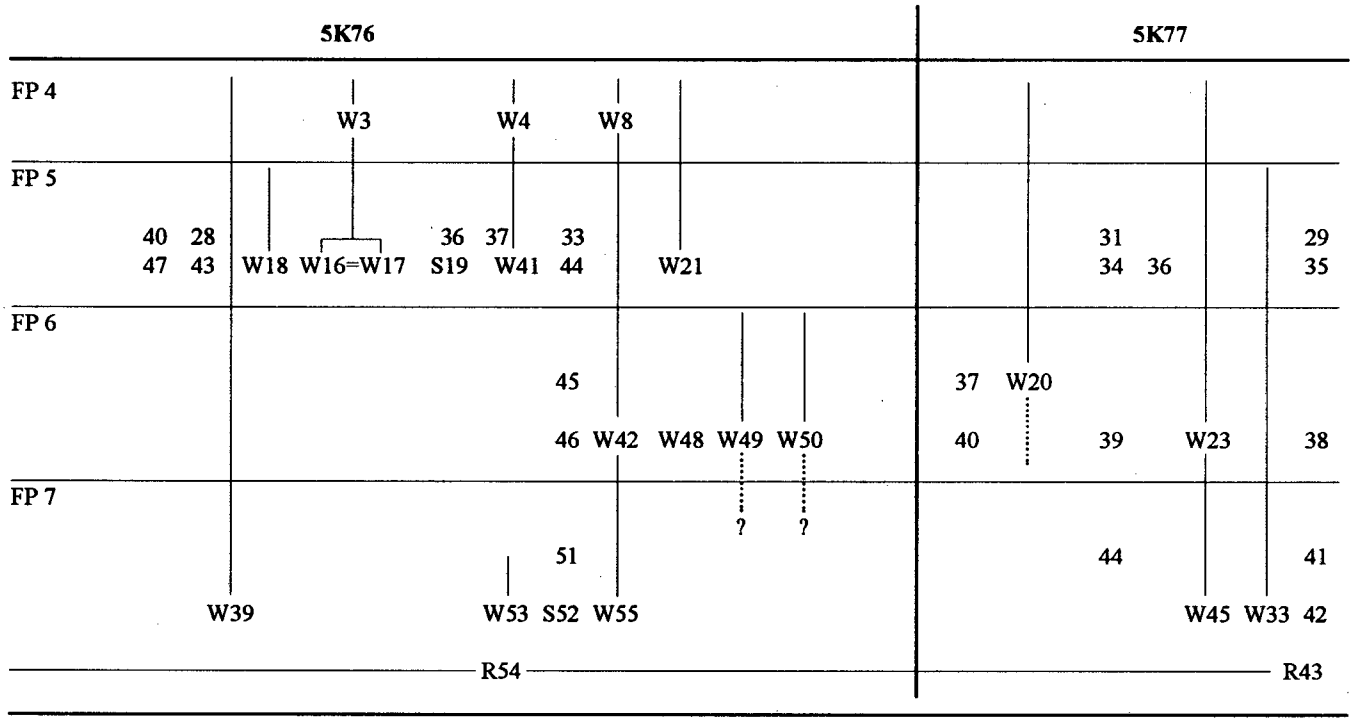


Fig. 5.4. Stratigraphic sequence chart for Field D (Squares 5K76 and 5K77).

seasons completely destroyed and removed any trace of this shaft, and caused considerable damage to the stratigraphic record in Square 5K86. In spite of the damage, however, careful work during the 1992 season succeeded in sorting out much of the stratigraphic sequence, and a reconstruction of the earliest phases of occupation in Field D was possible.

As might be expected, the earliest architectural fea-

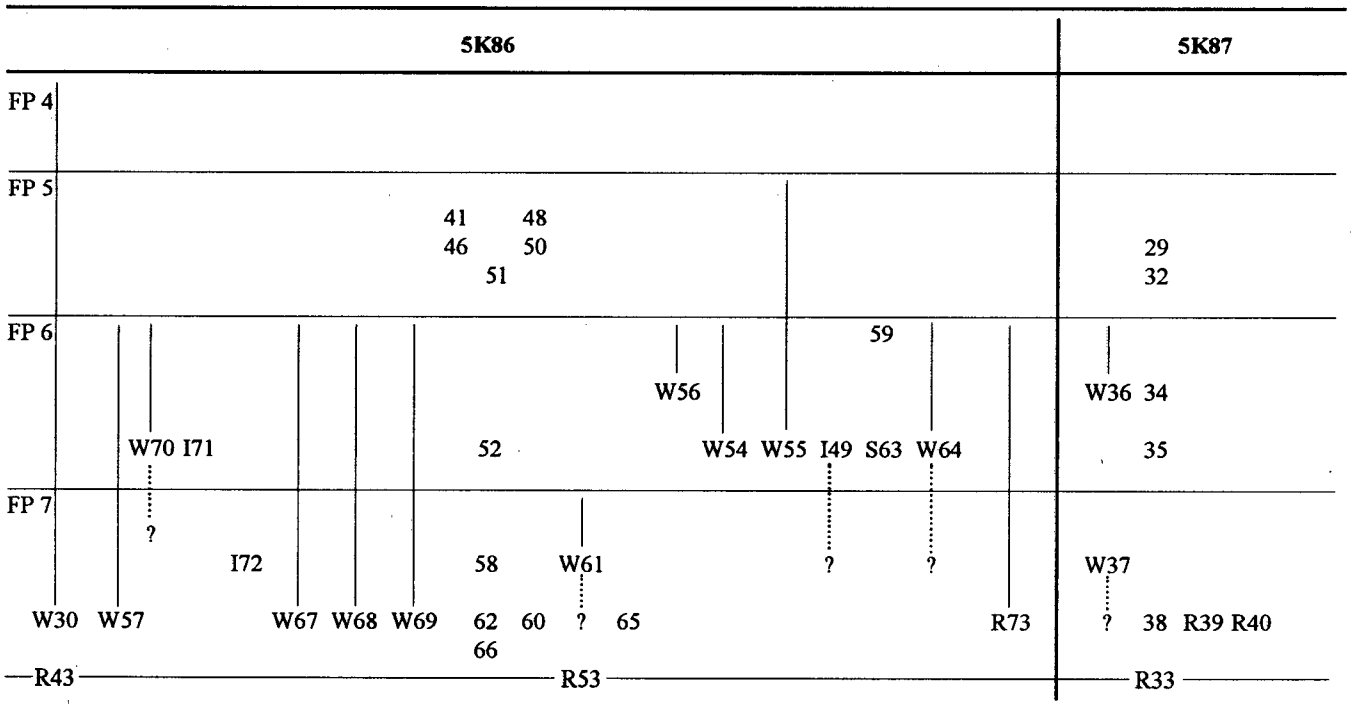


Fig. 5.4, *continued.* Stratigraphic sequence chart for Field D (Squares 5K86 and 5K87).

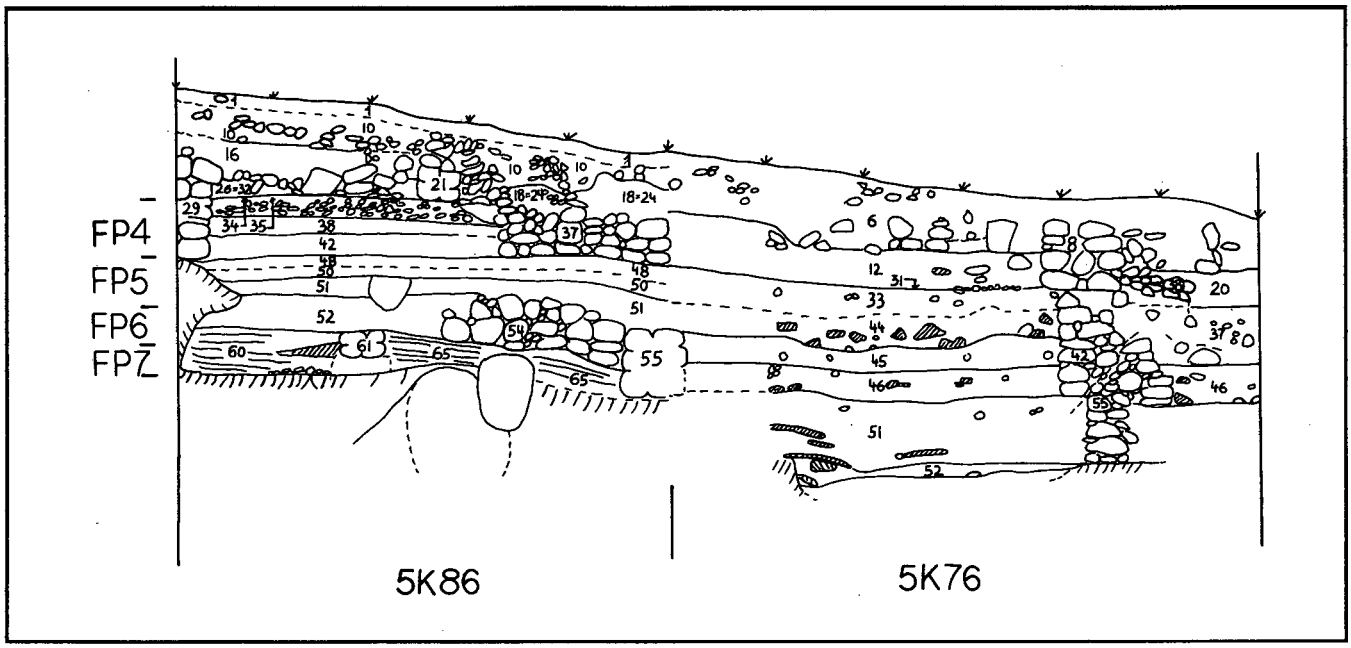


Fig. 5.5. Field D: Section drawings on the north-south axis (looking east).

tures were all founded on bedrock, and together make up Phase 7, representing the earliest occupation in Field D. Although several Phase 7 loci were not excavated due to time constraints at the end of the season, bedrock was reached in each of the four squares (5K76:54, 5K77:43, 5K86:53, and 5K87:33), and an architectural plan of the phase was completed (fig. 5.6). Walls were made mostly of unhewn limestone, and averaged 0.45 to 0.65 m in diameter. The north-south walls were oriented approximately 210° and the east-west walls about 125°. The most striking feature of the Phase 7 architectural design however, was the frequent use of bedrock. Rather than building exclusively on top of bedrock, the builders repeatedly incorporated it into their structures, usually carving it to fit the desired shape (fig. 5.7). In all, Phase 7 consisted of at least one, and possibly two, distinct structures situated around an open central area or courtyard.

The first of these structures, Building A, was located in the northwest portion of the 1992 excavation area, primarily in Square 5K86 (figs. 5.6 and 5.7), and was the

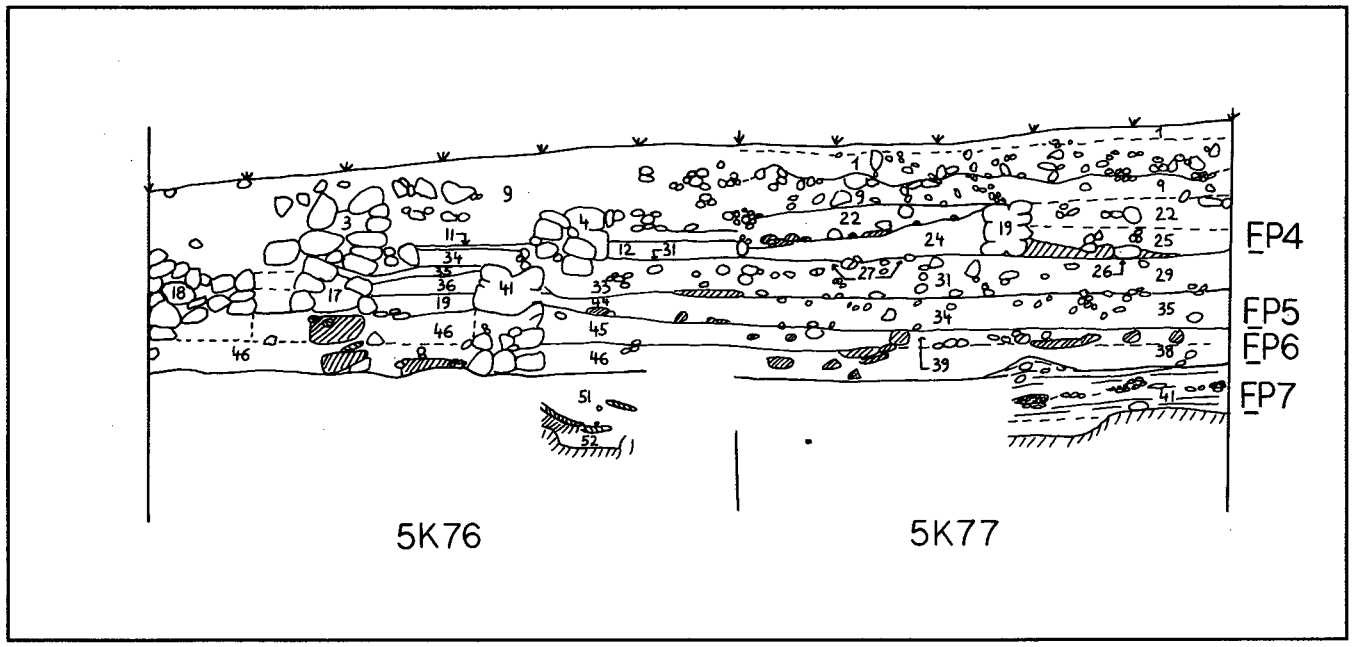


Fig. 5.5, *continued.* Field D: Section drawings on the east-west axis (looking north).

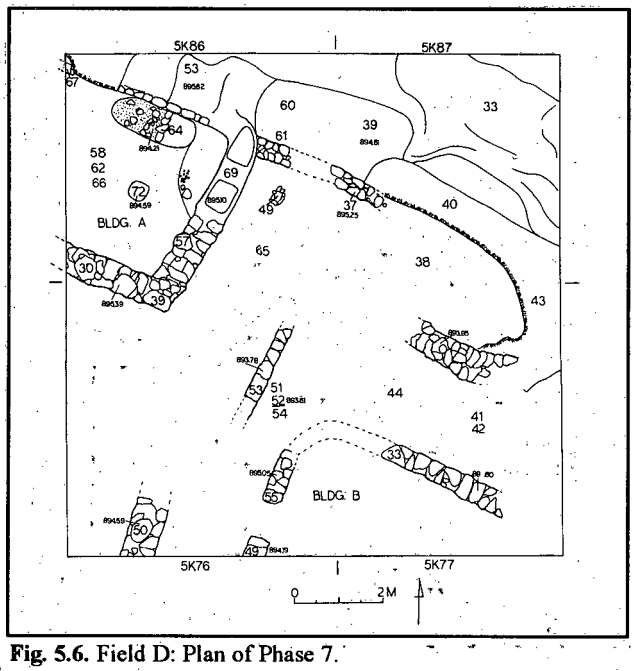


Fig. 5.6. Field D: Plan of Phase 7.

scene of most of the interseason illicit digging activity. Wall 5K86:30 (=5K76:39) bonded with Wall 5K86:57 to form the southeastern corner of the building. Wall 30, which originally must have been the front of the structure, ran in a northwesterly direction for 2.75 m before exiting the excavation area, while Wall 57 extended northwest 1.6 m until it joined with a smoothed outcrop of bedrock, Wall 5K86: 69. Wall 30 was preserved to a height of 1.35 m, with nine to ten intact courses (it was reused in subsequent phases), while Wall 57 consisted of only two intact courses, standing to a height of approximately 0.30 m. Both walls averaged 0.65-0.70 m in width. Wall 69 measured 2.25 m in length, averaging 0.40 m in width and 0.30 m in height. Thus, Walls 57 and 69 together reached an extent of almost 4 m, forming the eastern wall line of Building A.

Bedrock was also skillfully used in the construction of the northern, or rear, wall of the building (fig. 5.7). The northeastern corner was carved directly out of the rock, as were large portions of the north wall. Where the bedrock dipped or fell away, the builders preserved the line of the wall by filling in the gaps with small buttressing walls (5K86:67 and 68). Both Walls 67 and 68 were constructed predominantly with small cobble-sized stones arranged in one row. Wall 67 was 0.40 m long, 0.45-0.50 m wide, and 1.15-1.20 m high, with five to six courses intact. Wall 68 extended for 1.40 m, and was 0.25-0.30 m wide and 0.30-0.35 m high, with three to four courses preserved. The northern wall-line of Building A also continued out of the excavation area, thus leaving the entire western wall (if there indeed was one) and portions of the building's interior unexcavated. The northern wall line ran approximately 4.50 m before exiting the excavation area.

The interior of Building A contained a number of important architectural features. A large flat stone (5K86:72) was uncovered slightly east of the center of the building, and apparently served as a pillar base for a roof (fig. 5.7). Since the stone was not in the center of the room, it is likely that a second matching stone, or pillar base, existed to the west, just outside the excavation area. If so, this would suggest that Building A was rectangular in shape, perhaps 6 m long and 4 m wide, and was entered from the south through Wall 5K86:30 (=5K76:39), the broad side of the building.

In the northeast corner of Building A, a ledge cut into bedrock contained numerous "cupholes", varying from 0.04 to 0.25 m in diameter (fig. 5.7). Another cuphole, approximately 0.30 m in diameter, was found carved into the bedrock in the northwest corner of the excavated portion of the building.

The Phase 7 stratified deposits within Building A consisted of two successive earth layers (5K86:58 and 62) which were completely excavated. A third earth layer (5K86:66), located in the southeast corner of the building, had to remain unexcavated due to time constraints. No readily distinguishable surfaces were identified. Nevertheless, the depositional remains excavated contained considerable quantities of occupational debris,

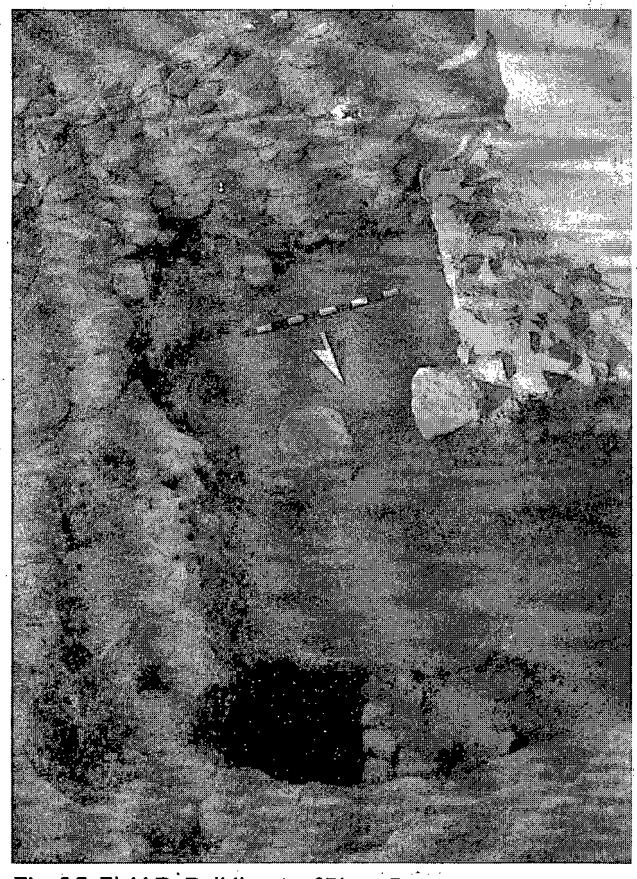


Fig. 5.7. Field D: Building A of Phase 7.

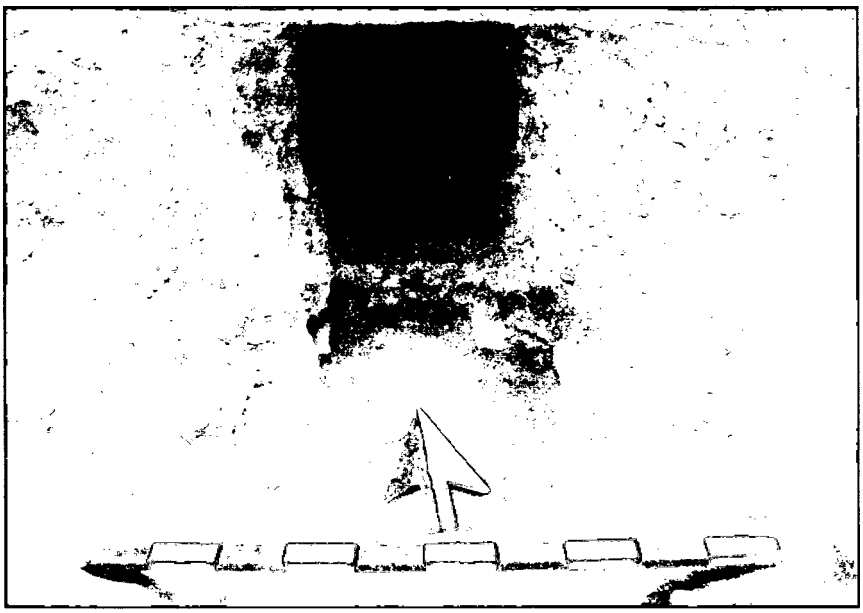


Fig. 5.8. Field D: East subterranean chamber and door of Phases 7-6 (view is to the west).

including carbonized flora and fauna, and apparently were the result of formation processes that involved the rapid accumulation, or aggradation, of such debris, a process that prevented the creation of firm (and therefore more easily recognizable) surfaces. This process was a recurring one. Consequently, those debris loci, or "earth layers", which exhibit similar characteristics will also be referred to as "occupational layers" throughout this report. Earth Layers 5K86:58 and 62 both produced considerable evidence of food preparation activity, including fragments of five mortars, several fragments of basalt grinders, and a Canaanean flint blade. A spindle whorl fragment testified to other types of domestic activity. The range of ceramic forms was also consistent with the domestic character of Building A (a more thorough discussion of the Phase 7 pottery will be given below). Faunal analysis identified significant quantities of sheep and goat bones, a number of large mammals, probably cattle, as well as the presence of canine and fowl.

Beneath Building A, a series of subterranean chambers linked together and accessed by a shaft-tunnel (5K86:73) was found carved out of the bedrock (figs. 5.8-10). Unfortunately, much of what was found had been disturbed by the illicit diggers. In their search, they broke through the ceiling of the central chamber, and also tried to dig their way down through the entrance of the shaft-tunnel. In the process, of course, considerable damage was done, and much of the stratigraphic evidence destroyed.

Nevertheless, the shaft-tunnel and chambers themselves escaped largely unscathed, and it was possible to reconstruct much of what had once existed (figs. 5.10 and 5.11). Access to the underground complex was achieved through a vertical shaft (fig. 5.7), approximately 0.70 m

Fig. 5.9. Field D: Central subterranean chamber and door from northern chamber (view is to the south).

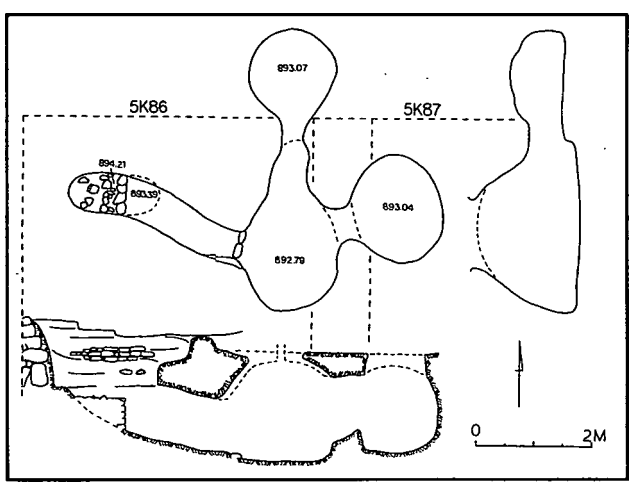


Fig. 5.10. Field D: Plan of the shaft and subterranean chambers of Phases 7-6.

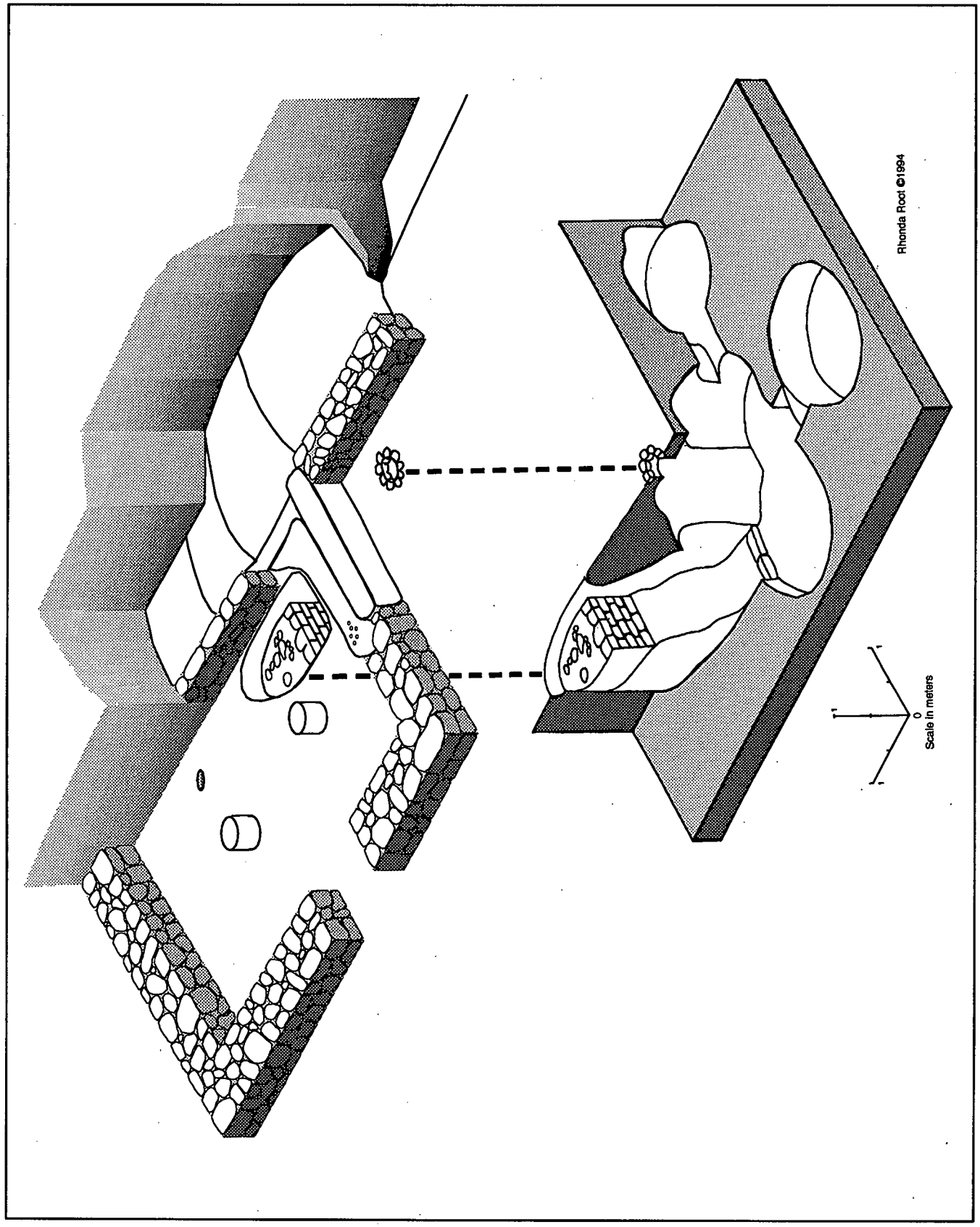


Fig. 5.11. Field D: Isometric drawing of the semi-subterranean dwelling (drawing by Rhonda Root).

Fig. 5.12. Field D: Building B of Phase 7; one of the wall fragments is visible in the east balk immediately below and aligned with a Phase 6 wall above.

wide and 0.75 m high, which connected to a sloping tunnel that descended for 2.50 m before opening into the largest of the three chambers, here referred to as the central chamber. The central chamber was oval in shape, 3.00 m long, 1.80 m wide, and at least 1.50 m high. Two circular side chambers opened off this central room, one to the north and the second to the east. Both were about 1.50 m in diameter. At some point, a small retaining wall, or step (5K86:64), was placed in the mouth of the entrance to the shaft-tunnel, presumably to ease the descent into the underground chambers (fig. 5.7). In addition, an air vent, the stone-lined shaft (5K86:49) discovered in 1989, apparently was installed by cutting a hole in the ceiling of the central chamber.

Determining the stratigraphic relationship of the subterranean complex with the aboveground remains proved to be more difficult, as very little depositional material had escaped the attention of the illicit diggers. Virtually all of the deposition removed from the subterranean complex consisted of rubble and collapse left in the wake of their activity. It is possible that the shaft and chambers predate the construction of Building A, perhaps having first been used as a tomb. However, no evidence was found to substantiate this possibility, and it seemed more likely that they were carved out of the bedrock at the same time as the building was constructed, i.e. during Phase 7. This likelihood was reinforced by the fact that the mouth of the access shaft fit cleanly into the internal arrangement of the building (fig. 5.6). However, whether the small step inside the shaft (5K86:64), or the stone-lined air vent (5K86:49), were also installed around this same time could not be determined, although they may have been installed later, during Phase 6 (see below).

Segments of two separate walls (5K76:55 and 5K77:33), and possibly a third (5K76:49) were all that remained of what may have been a second Phase 7 structure, Building B (figs. 5.6 and 5.12). Walls 33 and 55 were both founded on bedrock, but had been modified substantially to suit the architectural needs of inhabitants during later phases. Consequently, very little of the original construction survived intact, and it was far from certain that the two walls actually belonged to the same structure. Nevertheless, they both exhibited similar construction technique, and were approximately 0.45 to 0.50 m in width. Together, they would have formed the northwest corner of the building. In addition, Wall 33 had a distinctively southward curve, suggesting that the structure was at least partially oval in shape.

Time constraints prevented a full investigation of Wall 49 and its phasing history. The wall clearly existed in Phase 6, although this may have been only the reuse of a Phase 7 wall. If so, Wall 49 would then have continued the western wall-line of Building B to the south, with the space between it and Wall 55 serving as the entrance to the building. Wall 5K76:50, located to the west of Wall 49, may also have belonged to Phase 7, although again time constraints precluded a full investigation.

A meter wide probe against the northern face of Wall 5K76:55 uncovered a 1.60 m length of yet another wall (5K76:53) set into, and partially incorporating, bedrock (fig. 5.6). The wall varied between 0.20 and 0.40 m in width, and bore a 208° orientation. However, the limited exposure permitted by the probe was insufficient to determine the function of the wall.

The probe also produced the only clear surface (5K76:52) of Phase 7, a red clay-like beaten earth "floor" immediately above bedrock. Occupational debris (5K76:51) above Surface 52 contained a double-sided mortar fragment, a fragment of a spindle whorl, a stone bead, pottery, and faunal remains. The faunal data, not surprisingly, indicated the strong presence of sheep and goat, along with cattle (large mammals), but also produced some evidence of gazelle and pig.

The area to the east of Building A, and north of Building B, appears to have served as a central "courtyard" primarily used for sheltering animals (fig. 5.6). In this context, Walls 5K86:61 (=5K87:37) and 5K77:45 (which was later reused and incorporated into structures from subse-

quent phases) may have functioned as enclosure walls for containing animals (a family herd?) inside the courtyard, and sheltering them from the elements. In order to create a level living surface, at least two ledges (5K87:39 and 40) were cut into the bedrock along the back of the courtyard, forming a step-like arrangement. The upper ledge (5K87:39), situated immediately to the north of Wall 5K86:61 (=5K87:37), measured 2.00 m in length (northwest to southeast) and 1.20 m in width (northeast to southwest), with approximately 0.90 m of vertical rock face carved into a smooth wall along the back, or north side, of the installation. The lower ledge (5K87:40) cut into the southeastern end of Ledge 5K86:61 (=5K87:37) for almost 4.50 m, maintaining a width of 0.50 m and a depth of 0.25 m.

The earth layers associated with this central area (5K77:41, 42 and 44, 5K86:60 and 65, and 5K87:38) were rich in faunal remains, including not only large quantities of sheep/goat and cattle (or large mammal) bones, but also evidence of gazelle, pig (one bone), dog, cat, and fowl (one bone). In contrast, non-meat food preparation items, such as mortars and grinders, were almost entirely absent. Only two small mortar fragments were recovered from the combined earth layers associated with the courtyard. Clearly, the courtyard area was reserved for animal-related activity, whether husbandry or butchery.

Altogether, the evidence from Phase 7 points to a sedentary community engaged almost exclusively in basic subsistence related activity. One (Building A), and possibly two (Building B), distinct structures stood around a central courtyard. The principal structure, Building A, was rectangular in shape, and resembled the typical EBA "broadroom" house, with access achieved from the south through the broad wall of the building. The three subterranean chambers probably were used for storage, creating a multi-room semi-subterranean dwelling. Evidence of food preparation, including a number of cupholes cut into a ledge in the bedrock, further emphasized the domestic character of the building. The central courtyard, likely used as a place of shelter for animals, completes the picture of a single social (or family) unit actively engaged in meeting its own economic needs (fig. 5.12).

At first glance, this Phase 7 semi-subterranean complex prompts comparison with the well-known Beersheba Culture of the Chalcolithic period. However, closer parallels dating to the EBA do exist, most notably Macalister's so called "Troglodyte Culture" at Gezer (Macalister 1912, vol. I: 70ff and vol. III: pls. I and XIII-XVI). Subsequent research, including the excavation of an undisturbed cave in the vicinity of Macalister's investigations, have dated this important early phase of occupation at Gezer to the latter part of the EB I period, or more specifically EB IB (Seger 1988:11-13; see also Wright 1937).

Phase 7 was devoid of any clear evidence for sudden or violent destruction. Rather, its depositional history indicated long-term continuous occupation, as evidenced by the apparently constant aggradation of cultural debris. Subtle architectural adjustments to certain structures, such as Building A, accompanied this gradual change. However, there was no decisive "break" in the stratigraphic sequence to mark the transition to a new phase. Only with the appearance of a number of new structures to the southeast of Building A, over the central courtyard and Building B, was there any indication that a transition had occurred. That this development was more architectural then cultural in nature emphasizes the cultural continuity between Phase 7 and the new Phase 6.

Pottery (figs. 5.13-15). As the earliest architecturally distinguished stratigraphic phase in Field D, Phase 7 represents not only the earliest phase of occupation, but also the beginning of the relative ceramic sequence established for the field. Nevertheless, the pottery recovered closely parallels that of the succeeding phases both in ware and form. It is clear, at least ceramically, that the combined Phases 7 through 4 share a common cultural tradition, and together reflect a continuous sequence of cultural development dating to the EB III period. In keeping with the analytical format that appears in previous reports, the pottery has been organized beginning with closed forms and ending with open forms. Within each principal category of vessel type, form variation has been further subdivided according to rim profile.

Holemouth Jars. The rim profiles of the Phase 7 holemouth jars, a common and ubiquitous EB vessel type throughout the Field D ceramic sequence, varied little from those of succeeding phases:

Rim Forms	Figures	Parallels at 'Umayri
Simple; round	5.13:3	*MPP 4*: figs. 5.19:1-2; 5.25:2 *MPP 3*: fig. 5.8:2-3, 5, 9
Simple; round, with lug handles	5.13:9	*MPP 4*: fig. 5.19:24-25
Square	5.13:1-2	*MPP 4*: figs. 5.19:3, 28; 5.25:8-9 *MPP 3*: fig. 5.8:1, 8, 12
Interior thickened; round	5.13:4-6	*MPP 4*: figs. 5.19:4-7, 19; 5.25:1, 5 *MPP 3*: fig. 5.8:6-7, 10
Interior thickened; ridged	5.13:8	*MPP 4*: figs. 5.19:12-18; 5.25:7, 10-11 *MPP 3*: fig. 5.8:14-19, 21-22, 25-26
Interior thickened; grooved	5.13:7	*MPP 3*: fig. 5.8:23-24
Exterior thickened; everted	5.13:10	

Every rim profile identified here, with the exception of the unique "exterior thickened, everted" rim vessel (fig. 5.13:10), closely parallels well-represented examples from subsequent phases, and strengthens the link with these later EB III phases. The "exterior thickened, everted" rim holemouth displayed special surface treatment, with reddish-brown bands painted against a white slip on the body of the vessel, and may have been imported to the site, or manufactured to fulfill a specialized function. Examples of similarly formed vessels at Ai (Callaway 1980: Figs. 65:18-19; 88:12) date to the late EB I and EB II, and may suggest an early date for this particular vessel.

High Necked Jars with Flaring Rim. Distinguished by their long neck and flaring everted rim, these large storage jars (pithoi) can be further subdivided according to a distinct range of rim profile variations:

Rim Forms	Figures	Parallels at 'Umayri
Round	5.14:1-4, 8	*MPP 4*: figs. 5.20:16-25, 27; 5.21:1, 9; 5.25:24-25; 22:5 *MPP 3*: fig. 5.9:2-4
Triangular	5.14:5-7	*MPP 4*: figs. 5.21:5-6; 5.25:26-28; 5.26:1-2 *MPP 3*: fig. 5.9:1
Flanged	5.14:11, 13-14	*MPP 4*: figs. 5.21:2-3, 13-15; 5.26:4, 9-10 *MPP 3*: fig. 5.9:6
Ridged	5.14:9-10, 12	*MPP 4*: figs. 5.21:4, 7-8, 10-12; 5.26:6-8 *MPP 3*: fig. 5.9:5

The high necked storage jar type, commonly found in the subsequent Phases 6 through 4, has elsewhere been placed securely within an EB III context (Harrison 1997).

Necked Jars. This rather loose designation covers all simple, closed-mouth and low-necked jar forms, of which the following were represented in Phase 7:

Rim Forms	Figures	Parallels at 'Umayri
Simple; wide mouth	5.13:11-13, 20-21, 23-24	*MPP 4*: figs. 5.19:27; 5.20:1-2, 4; 5.25:12, 17, 19-20 *MPP 3*: fig. 5.9:7-8, 14
Simple; narrow mouth	5.13:15-19, 22	*MPP 4*: figs. 5.20:5-12; 5.25:13-16, 18 *MPP 3*: fig. 5.9:10-12

The relatively undistinguished features of these vessels accentuate their basic utilitarian function. Nevertheless, a number deserve specific mention. The surface treatment on fig. 5.13:18, a reddish-brown paint applied solidly to the rim and neck with radiating bands descending to the body, sets this vessel apart from the others of its type. Figures 5.13:20-21 and 24, while technically of the "necked jar" vessel type, resemble the everted (or "outsplayed") rim vessels more typical of the Chalcolithic/EB I transition (Betts 1992: 55-57, Figs. 175-176; 62, Figs. 198-200; Leonard 1992: 14-15, Pls. 3:1-7). An additional vessel, fig. 5.13:17, possibly also dates to this early period.

Channeled-rim Jar (fig. 5.13:14). This vessel type, with its unique "ledge-like" channeled rim, slip, and pattern burnishing, belongs to a distinct and widely distributed category of EB II storage jars. Parallels occur at Beth Yerah (Esse 1982: Pl. 4:39-42), Arqub edh-Dhahr (Parr 1956: Fig. 16:184), Jericho (Kenyon and Holland 1982: Fig. 62:34-35; Kenyon and Holland 1983: Figs. 18:15; 149:1), Ai (Callaway 1964: Pl. 17:145ii), and at Yarmouth (Miroschedji 1988: Pls. 24:12-13; 26:1). The vessel type anticipates a larger form that appears later in EB III (cf. fig. 5.20:15 from Phase 6).

Jug Base (fig. 5.15:14). the form represented here is in keeping with the general pattern of EB II-III flat-based jugs, although it resembles the well-known "Abydos Jug" of the EB II, and thus favors the earlier part of the period.

Amphoriskos (fig. 5.15:16). In spite of its diminutive size, this vessel fragment probably belonged to a small bottle amphoriskos, part of a ceramic tradition with roots in EB I.

Deep Bowls. A variety of rim profiles have been classified under this vessel type, of which three were present in the Phase 7 assemblage:

Rim Forms	Figures	Parallels at 'Umayri
Simple	5.14:22, 24	*MPP 4*: figs. 5.21:22, 26, 28; 5.26:20-22, 25 *MPP 3*: Fig. 5.9:24-27
Inverted; simple	5.15:5, 7, 9	*MPP 4*: figs. 5.22:9-10; 5.23:2, 4-5, 7-8, 10; 5.27:6-9, 12, 15-16 *MPP 3*: fig. 5.9:28-29
Hammer	5.15:11	*MPP 4*: figs. 5.23:6, 9; 5.27:10-11, 13-14 *MPP 3*: fig. 5.9:31

Shallow Bowls (figs. 5.15:1, 3). These two shallow bowls, and the deep bowls profiled above, fall broadly within an EB II-III framework, but also closely parallel the comparable forms that appear in the succeeding Phase 6. The two simple deep bowls (fig. 5.14:22, 24) had a special surface treatment: reddish-brown slip and burnish in the case of the first, and a reddish-brown painted grid pattern on the second.

Small Bowls

Rim Forms	Figures	Parallels
Simple	5.14:15-21, 23, 26	*MPP 4*: figs. 5.21:16-21, 23-25, 27, 30-31; 5.26:11-17, 19, 23-24 *MPP 3*: fig. 5.9:15-23

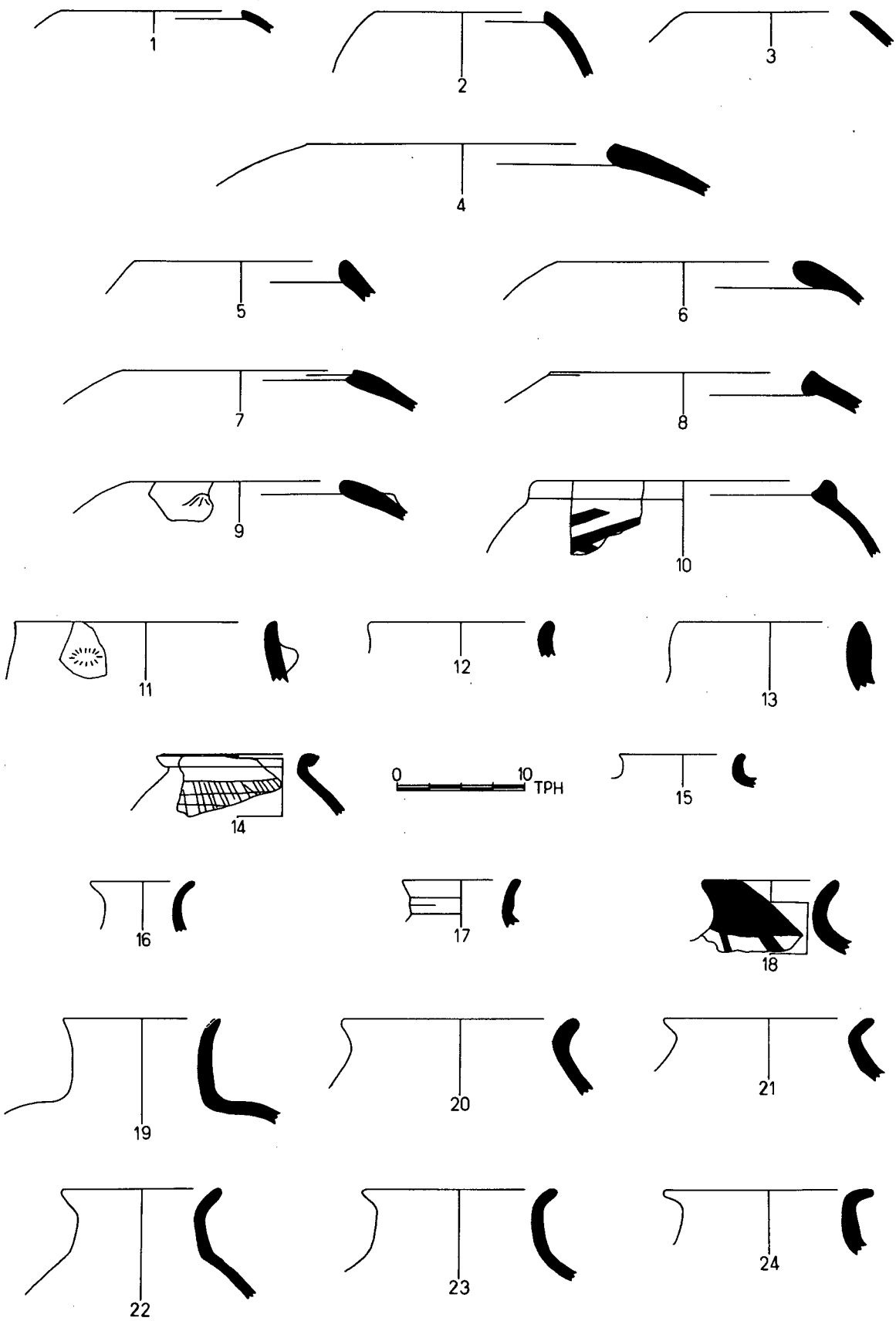


Fig. 5.13. Field D: Pottery from Phase 7.

No.	Vessel Type	Provenance Sq	Locus	Pail	Reg.	Fabric Color Ext	Core	Int	Non-Plastic Type	Size	Shape	Density	Voids	Manu	Surface Treatment Ext	Color	Int	Color	Decor	Fire
1	Hole-mouth Jar	5K77	41	155	1	5YR7/6 Reddish Yellow	5YR6/1 Light Gray	5YR7/6 Reddish Brown	L	5A 4B 3A 2A	RA SRB SAA	MH	PR4A PR3A FS4A FS5A	H	S-HB-RBo+	5YR4/4 Reddish Brown	---	---	---	U
2	Hole-mouth Jar	5K77	42	157	2	5YR7/6 Reddish Yellow	5YR7/6 Reddish Yellow	5YR7/6 Reddish Yellow	L	6A 5A 4B 3A 2A	RA SRB SAA AA	H	PR4A PR3A FS4A FS5A FS6A FC7A	H	---	---	---	---	---	O
3	Hole-mouth Jar	5K86	62	158	2	2.5YR6/4 Light Reddish Brown	7.5YR6/4 Pinkish Gray	2.5YR6/4 Light Reddish Brown	L	6A 5A 4A 3A	SRA SAB AB	H	PR4A FS5A FC6A	H	---	---	---	---	---	U
4	Hole-mouth Jar	5K87	38	118	6	5YR7/4 Pink	2.5YR5/0 Gray	5YR7/4 Pink	L	6A 5B 4A 3A	SRA SAA AB	H	PA5A PR4B PR3A PA5A FS5A FS6A	H	---	---	---	---	---	U
5	Hole-mouth Jar	5K87	38	117	2	2.5YR7/4 Pink	2.5YR7/4 Pink	2.5YR6/6 Light Red	L	6A 5A 4A 3A	SRA SAA AB	H	PR4B PR3A FS4A FS5A	H	---	---	---	---	---	O
6	Hole-mouth Jar	5K77	41	148	2	7.5YR5/2 Brown	7.5YR6/0 Gray	7.5YR5/2 Brown	L	6A 5B 4A 3A	RA SRA SAA AA	H	PR4A PR3A FS4A FS5B FS6A	H	---	---	---	---	---	U
7	Hole-mouth Jar	5K77	41	147	2	5YR6/4 Light Reddish Brown	5YR6/4 Light Reddish Brown	5YR6/4 Light Reddish Brown	L	6A 5A 4A 3A	RA SRA SAB AA	H	PR4A FS4A FS5A FS6A FC7A	H	---	---	---	---	---	O
8	Hole-mouth Jar	5K77	42	158	1	5YR7/4 Pink	5YR7/4 Pink	5YR7/4 Pink	L	6A 5A 4A 3A	SRB SAB AA	H	PR4A PR5A FS5A FS6A FC7A	H	---	---	---	---	---	O
9	Hole-mouth Jar	5K87	38	118	8	5YR7/4 Pink	2.5YR6/0 Gray	5YR7/4 Pink	L	6A 5A 4A 3A	SRA SRA SAB AB	H	PR5A PR4A PR3A FS5A FS6A FC7A PA5A	H	---	---	---	---	---	U
10	Hole-mouth Jar	5K76	51	145	1	2.5YR5/4 Reddish Brown	2.5YR5/0 Gray	2.5YR5/4 Reddish Brown	L	6A 5A 4A 3A	RA SRA SAA AA	H	PR4A FS5A FS6A FC7A	H	S-M RBo+	10YR8/2 White	---	---	Pa-Bo 5YR3/2 Dark Reddish Brown	U
11	Jar	5K86	62	158	3	5YR7/4 Pink	5YR5/1 Gray	5YR7/4 Pink	L	6A 5A 4A 3A	SRA SAA AB	H	PR4B PR3A PA5A FS5A JH7A	H	---	---	---	---	---	U
12	Necked Jar	5J87	38	113	1	7.5YR8/4 Pink	7.5YR8/4 Pink	7.5YR8/4 Pink	L	5A 4A 3A 2A	RA SRA SAA AA	M	PR4A PR3A FS4A FS5A	H	S-H RBo+	10R4/6 Red	S-H R	10R4/6 Red	---	O
13	Necked Jar	5K77	41	148	1	7.5YR6/2 Pinkish Gray	7.5YR6/0 Gray	7.5YR6/2 Pinkish Gray	L	7A 6A 5A 4A	SRA SAB AA	H	PR4A FS4A FS5A FS6A FS7A	H	---	---	---	---	---	U
14	Necked Jar	5K86	58	150	4	7.5YR7/4 Pink	7.5YR6/0 Gray	7.5YR7/4 Pink	L	6A 5A 4B 3B 2A	RA SRA SAA AA	M	PR4A PR3A PA5A	H	SVB-H NBo+	2.5YR4/6 Red	SVB-H RN	2.5YR4/6 Red	---	U
15	Necked Jar	5K87	38	116	2	5YR7/4 Pink	2.5YR6/0 Gray	5YR7/4 Pink	L	6A 5A 4A 3A	RA SRA SAA AA	MH	PR5A PR4A PR3A FS5A FS6A	H	S-H RBo+	10R4/6 Red	S-H RN	10R4/6 Red	---	U

Fig. 5.13, *continued.* Field D: Pottery descriptions for nos. 1-15.

Vessel		Provenance				Fabric Color			Non-Plastic				Voids	Manu	Surface Treatment				Decor	Fire
No.	Type	Sq	Locus	Pail	Reg.	Ext	Core	Int	Type	Size	Shape	Density			Ext	Color	Int	Color		
16	Jar	5K76	92	143	1	2.5YR6/0 Gray	2.5YR6/0 Gray	2.5YR6/6 Light Red	L	5A 4A 3B 2A	RA SRA SAA AA	M	PR4A PR3A PA5A FS4A	H	---	---	---	---	---	U
17	Necked Jar	5K86	62	160	1	5YR7/6 Reddish Yellow	5YR7/6 Reddish Yellow	5YR7/6 Reddish Yellow	L	6A 5A 4A 3A	RA SRA SAA AA	H	PR3A FS4A FS5A FS6A	H	S-M RBo+	10R4/6 Red	---	---	---	O
18	Necked Jar	5K77	41	148	3	7.5YR7/6 Reddish Yellow	7.5YR5/0 Gray	7.5YR7/6 Reddish Yellow	L	6A 5B 4A 3A	RA SRA SAA AA	MH	PR4A PR3A FS4A FS5A FS6A	H	SmR	10R4/6 Red	SmRN	10R4/6 Red	---	U
19	Necked Jar	5K77	41	147	3	7.5YR7/6 Reddish Yellow	7.5YR7/6 Reddish Yellow	2.5YR5/8 Red	L	6A 5B 4B 3A	RA SRB SAB AA	H	PR4AA FS4A FS5A FS6A	H	---	---	---	---	---	O
20	Necked Jar	5K87	38	118	2	7.5YR8/4 Pink	7.5YR8/4 Pink	7.5YR8/4 Pink	L	7A 6A 5A 4A 3A	SRA SAA AB	H	PR5A PR4A FS5A FS6A FC7A	H	---	---	---	---	---	O
21	Low Necked Jar	5K77	42	157	1	7.5YR8/4 Pink	7.5YR6/0 Gray	7.5YR8/4 Pink	L	6A 5B 4B 3A	RA SRA SAA AA	MH	PR4A PR3A FS4A FS5A FS6A	H	---	---	---	---	---	U
22	Low Necked Jar	5K77	41	152	1	5YR7/6 Reddish Yellow	5YR5/1 Gray	5YR5/1 Gray	L	6A 5A 4A 3A	RA SRA SAA AA	H	PR4A FS5A FS6A FC7A	H	---	---	---	---	---	U
23	Low Necked Jar	5K86	58	150	2	2.5YR6/8 Light Red	2.5YR5/0 Gray	2.5YR5/0 Gray	L	6A 5A 4A 3A	RA SRA SAB AB	MH	PR4A FS5A FS6A FC7A	H	VB-M RN+	10R3/1 Dark Reddish Gray	---	---	---	U
24	High Necked Jar	5K77	42	157	3	5YR7/6 Reddish Yellow	7.5YR6/0 Gray	5YR7/6 Reddish Yellow	L	6A 5A 4A 3A	SRA SAB AA	H	PR4A FS4A FS5A FS6A FC7A	H	---	---	---	---	---	U

Fig. 5.13, *continued.* Field D: Pottery descriptions for nos. 16-24.

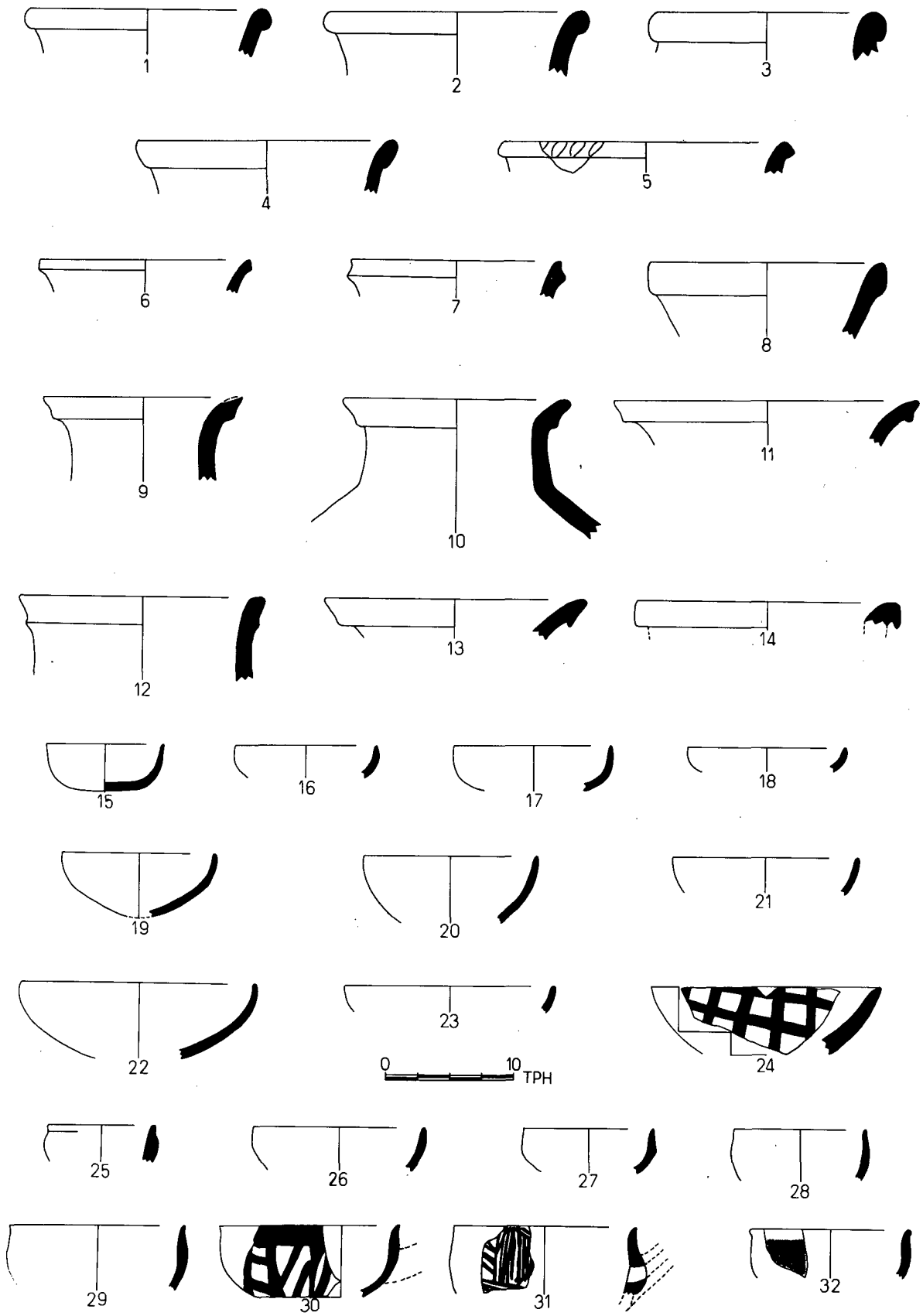


Fig. 5.14. Field D: Pottery from Phase 7, *continued.*

Vessel		Provenance				Fabric Color			Non-Plastic				Voids	Manu	Surface Treatment				Decor	Fire
No.	Type	Sq	Locus	Pail	Reg.	Ext	Core	Int	Type	Size	Shape	Density			Ext	Color	Int	Color		
1	High Necked Jar	5K86	62	158	1	5YR8/4 Pink	5YR5/1 Gray	5YR8/4 Pink	L	5A 4A 3A	RA SRA SAA AA	M	PR4A PR3B FS5A	H	---	---	---	---	---	U
2	High Necked Jar	5K87	38	115	1	2.5YR6/6 Light Red	2.5YR6/0 Gray	2.5YR6/6 Light Red	L P	6A 5A 4A 3A 6A	RA SRA SAA AA	MH	PR4A PR3A FS5A FS6A FS7A	H	---	---	---	---	---	U
3	High Necked Jar	5K77	42	159	2	7.5YR8/4 Pink	7.5YR5/0 Gray	7.5YR8/4 Pink	L	6A 5B 4B 3A	RA SRA SAA AA	H	PR4A FS4A FS5A FS6A	H	---	---	---	---	---	U
4	High Necked Jar	5K87	38	117	3	2.5YR6/6 Light Red	2.5YR6/0 Gray	2.5YR6/6 Light Red	L P	6A 5A 4A 3A 6A 5A 4A	RB SRA SAA AA	MH	PR4A PR3A FS4A FS5A FS6A	H	---	---	---	---	---	U
5	Jar	5K87	38	114	1	2.5YR6/0 Gray	2.5YR6/0 Gray	2.5YR6/0 Gray	L	7A 6A 5A 4A 3A	RA SRA SAA AA	MH	PR4A PR3A FS5A FS6A FC7A	H	S-L Bo+	5YR8/2 Pinkish White	---	---	---	R
6	Low Necked Jar	5K86	60	147	3	7.5YR8/4 Pink	7.5YR8/4 Pink	7.5YR8/4 Pink	L	6A 5A 4A 3A 2A	RA SRA SAA AA	M	PR4A PR3A PA4A FS5A	H	---	---	---	---	---	O
7	High Necked Jar	5K87	38	115	2	2.5YR6/6 Light Red	2.5YR6/0 Gray	2.5YR6/6 Light Red	L	6A 5A 4A 3A	RA SRA SAA AA	MH	PR4A PR3A PA5A FS5A	H	---	---	---	---	---	U
8	High Necked Jar	5K76	51	146	1	2.5YR6/6 Light Red	2.5YR6/0 Gray	2.5YR6/6 Light Red	L	6A 5A 4A 3A	SRA SAA AA	MH	PR4A PR3B FS5A FS6A FC7A	H	---	---	---	---	---	U
9	High Necked Jar	5K77	41	150	2	5YR7/6 Reddish Yellow	5YR5/1 Gray	5YR7/6 Reddish Yellow	L	6A 5A 4A 3A	RA SRA SAB AA	H	PR4A FS4A FS5A FS6A FC6A	H	---	---	---	---	---	U
10	High Necked Jar	5K77	41	147	4	7.5YR7/2 Pinkish Gray	7.5YR6/0 Gray	7.5YR7/2 Pinkish Gray	L	6A 5B 4B 3A	RA SRB SAB AA	H	PR4A FS4A FS5A FS6A FC6A FC7A	H	---	---	---	---	---	U
11	High Necked Jar	5K76	51	143	2	2.5YR6/8 Light Red	2.5YR6/0 Gray	2.5YR6/8 Light Red	L	6A 5A 4A 3A	RA SRA SAA AA	MH	PR4A PR3A FS5A FS6A FC6A	H	---	---	---	---	---	U
12	High Necked Jar	5K87	38	117	1	7.5YR8/4 Pink	7.5YR5/0 Gray	7.5YR8/4 Pink	L	6A 5A 4A 3A	RA SRA SAA AA	MH	PR4A PR3A FS5A FS6A	H	---	---	S-M RN	2.5YR4/2 Weak Red	---	U
13	High Necked Jar	5K87	38	112	3	10YR7/1 Light Gray	10YR7/1 Light Gray	10YR7/1 Light Gray	L	5A 4A 3A	RA SRA SAA AA	MH	PR4A FS4A FS5A FS6A FS7A FC7A	H	---	---	---	---	---	O
14	Necked Jar	5K87	38	115	5	2.5YR6/6 Light Red	2.5YR6/0 Gray	2.5YR6/6 Light Red	L	6A 5A 4A 3A	SRA SAA AA	M	PR4A PR3A FS5A FS6A FC7A	H	S-H RBo+	10R4/6 Red	S-H R+	10R4/6 Red	---	U
15	Bowl	5K87	38	112	5	2.5YR6/6 Light Red	2.5YR5/0 Gray	2.5YR6/6 Light Red	L	5A 4A 3A 2A	RA SRA SAA AA	M	PR4B PR3B FS4A	H	S-M RBo+	2.5YR5/6 Red	---	---	---	U

Fig. 5.14, *continued*. Field D: Pottery descriptions for nos. 1-15.

Vessel		Provenance				Fabric Color			Non-Plastic				Voids	Manu	Surface Treatment				Decor	Fire
No.	Type	Sq	Locus	Pail	Reg.	Ext	Core	Int	Type	Size	Shape	Density			Ext	Color	Int	Color		
16	Bowl	5K87	38	119	4	5YR7/6 Reddish Yellow	5YR7/6 Reddish Yellow	5YR7/6 Reddish Yellow	L	4A 3A 2A	RA SRA SAA AA	M	PR5A PR4B PR3B	H	SHB-RBo+	10R4/6 Red	---	---	---	O
17	Bowl	5K87	38	120	1	2.5YR6/6 Light Red	5YR7/4 Gray	2.5YR6/6 Light Red	L	5A 4A 3A	RA SRA SAA AA	M	PR4A PR3B FS4A FS5A FS6A	H	S-M RBo+	2.5YR4/8 Red	---	---	---	O
18	Bowl	5K87	38	115	4	2.5YR5/0 Gray	2.5YR5/0 Gray	2.5YR5/0 Gray	L	5A 4A 3A 2A	RA SRA SAA AA	M	PR4A PR3B	H	SHB-RBo+	2.5YR4/6 Red	SHB-RBo+	2.5YR4/6 Red	---	R
19	Bowl/ Lamp	5K77	41	150	1	5YR8/4 Pink	5YR8/4 Pink	5YR8/4 Pink	L	5A 4B 3B 2A	RA SRB SAA AA	M	PR4A PR3A FS4A	H	HBL-	---	---	HBL-Bo+	---	O
20	Bowl	5K77	41	156	2	10R5/8 Red	7.5YR Dark Gray	10R5/8 Red	L	6A 5B 4B 3A	RA SRB SAB AA	MH	PR4A PR3A FS4A FS5A	H	HBL	---	---	---	---	U
21	Bowl	5K86	58	151	2	7.5YR8/4 Pink	7.5YR8/4 Pink	7.5YR8/4 Pink	L	4A 3A 2A	RB SRA SAA AA	L	PR4A PR3B	H	---	---	---	---	---	O
22	Lamp	5K77	42	159	1	5YR6/8 Reddish Yellow	5YR6/1 Gray	5YR6/8 Reddish Yellow	L	5A 4B 3A 2A	RA SRA SAA AA	MH	PR4A FS4A FS5A	H	SHB-Bo+	2.5YR4/8 Red	SHB-Bo+	2.5YR4/8 Red	---	U
23	Bowl	5K86	58	151	1	2.5YR6/8 Light Red	2.5YR5/0 Gray	2.5YR6/8 Light Red	L	6A 5A 4B 3B 2A	RA SRA SAA AA	M	PR4A PR3A FS5A	H	S-M RBo+ HB-L Bo+	10R5/8 Red	S-M RBo+	10R5/8 Red	---	U
24	Bowl	5K86	58	150	1	7.5YR6/0 Gray	7.5YR6/0 Gray	7.5YR7/4 Pink	L	5A 4B 3A	RA SRA SAB AB	MH	PR4A PR3A FS5A FS6A FC7A	H	---	---	---	---	Pa-10R4/6 Red	U
25	Bowl/ Lamp	5K86	58	156	2	5YR7/4 Pink	5YR6/1 Gray	5YR7/4 Pink	L	5A 4A 3A	RA SRA SAA AA	M	PR4A PR3A FS5A FS6A	H	---	---	---	---	---	U
26	Bowl	5K87	38	119	1	2.5YR6/6 Light Red	5YR7/4 Pink	5YR7/4 Pink	L	5A 4A 3A	RA SRA SA AA	MH	PR4A PR3B FS4A	H	S-M RBo+	10R4/8 Red	S-M RBo+	10R4/8 Red	---	O
27	Bowl	5K87	38	115	3	7.5YR8/4 Pink	7.5YR8/4 Pink	7.5YR8/4 Pink	L P	5A 4A 3A 2A 3A	RB SRA SAA AA	M	PR3B FS4A	H	S-M RBo+	2.5YR4/6 Red	S-M R	2.5YR4/6 Red	---	O
28	Bowl	5K87	38	118	7	7.5YR8/4 Pink	7.5YR8/4 Pink	7.5YR8/4 Pink	L	5A 4A 3A 2A	RA SRA SAA AA	L	PR4B PR3A FS4A FS5A	H	---	---	---	---	---	O
29	Bowl	5K87	38	119	2	7.5YR6/0 Gray	7.5YR7/4 Pink	7.5YR7/4 Pink	L	6A 5A 4A 3A	RA SRA SAA AA	M	PR4A PR3A PA5A FS5A	H	---	---	---	---	---	U
30	Spouted Bowl	5K87	38	118	10	5YR7/6 Reddish Yellow	2.5YR6/0 Gray	5YR7/6 Reddish Yellow	L	5A 4B 3A 2A	RA SRA SAA AA	M	PR4A PR3A PA5A PA6A FS5A FC6A	H	---	---	---	---	Pa-10R4/8 Red	U
31	Spouted Bowl	5K87	38	118	3	7.5YR7/4 Pink	7.5YR7/4 Pink	7.5YR7/4 Pink	L	6A 5A 4A 3A	SRA SAA AB	MH	PR4A PR3A PA5A FS5A FS6A	H	---	---	---	---	Pa-10R4/6 Red	O
32	Bowl	5K77	41	150	3	2.5YR2.5/0 Black	2.5YR2.5/0 Black	2.5YR6/6 Light Red	L	5A 4B 3B 2A	RA SRB SAA AA	M	PR4A PR3A FS4A FS5A	H	SHB-Bo+	H2.5YR2.5/0 Black	SHB-Bo+	H2.5YR4/8 Red	---	R

Fig. 5.14, *continued.* Field D: Pottery descriptions for nos. 16-32.

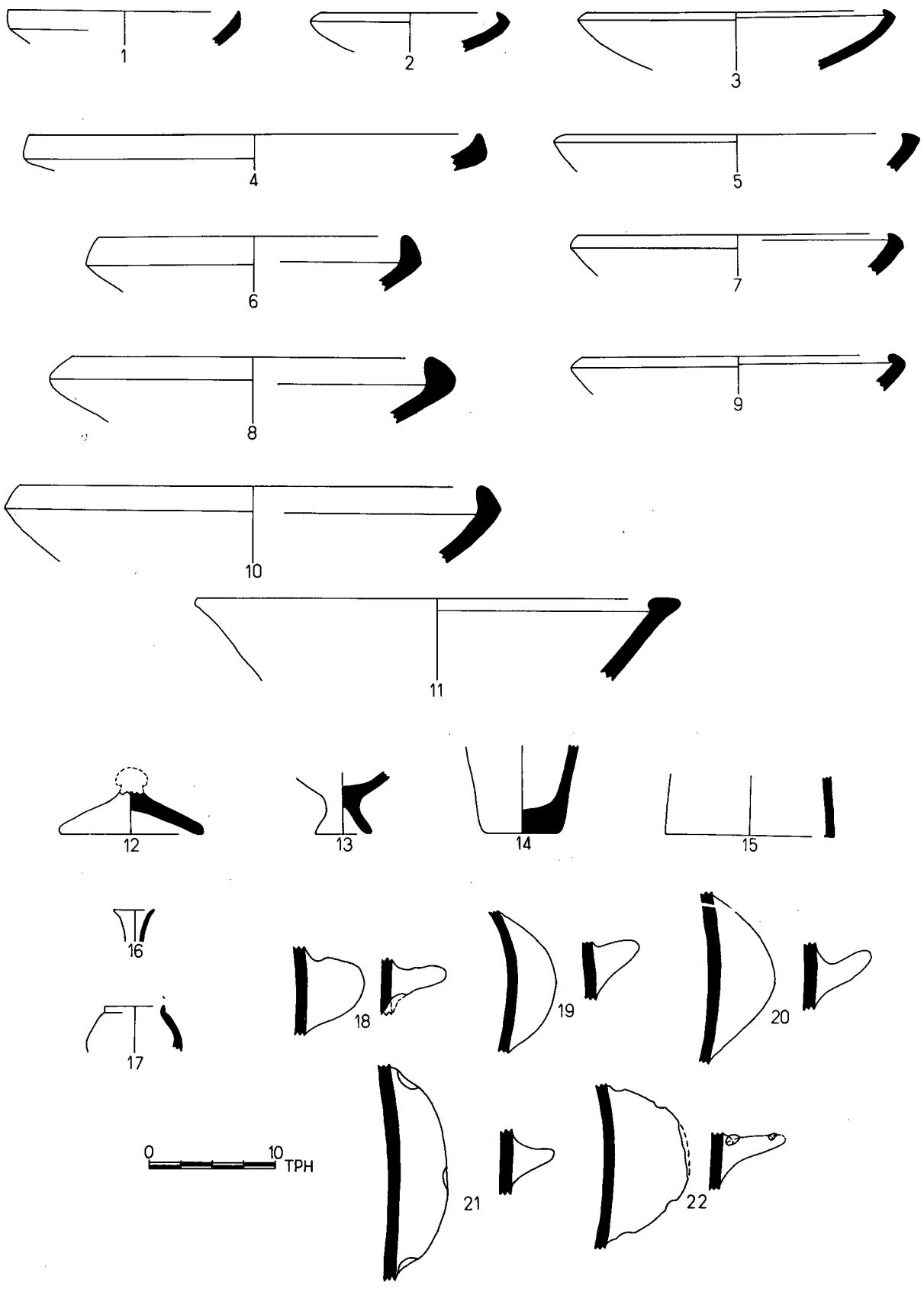


Fig. 5.15. Field D: Pottery from Phase 7, *continued.*

Vessel		Provenance			Fabric Color			Non-Plastic				Voids	Manu	Surface Treatment				Decor	Fire
No.	Type	Sq	Locus	Pail	Reg.	Ext	Core	Int	Type	Size	Shape	Density			Ext	Color	Int	Color		
1	Bowl	5K87	38	112	4	2.5Y6/6 Light Red	7.5YR8/4 Pink	2.5YR6/6 Light Red	L	4A 3A 2A	SRA SAA AB	M	PR4A PR3A FS4A	H	S-M RBo+	10R4/6 Red	S-M R+	10R4/6 Red	---	O
2	Bowl	5K87	58	156	1	5YR7/6 Reddish Yellow	2.5YR5/0 Gray	5YR7/6 Reddish Yellow	L P	5A 4A 3A 5B 4B	SRA SAB AB	MH	PR4A PR3A FS5A FS6A	H	---	---	---	---	---	U
3	Platter Bowl	5K87	38	112	2	2.5YR6/6 Light Red	7.5YR8/4 Pink	2.5YR6/6 Light Red	L	5A 4B 3B	RB SRB SAA AA	MH	PR4A PR3B PA5A FS4A	H	SHB- RBo+	10R4/6 Red	---	---	---	O
4	Deep Bowl	5K86	58	150	3	5YR7/6 Reddish Yellow	7.5YR5/0 Gray	5YR7/6 Reddish Yellow	L	6A 5A 4A 3A	SRA SAA AA	MH	PR4A PR3A FS5A FC6A FC7A	H	SHB- R	2.5YR4/8 Red	SHB- RBo+	2.5YR4/8 Red	---	U
5	Platter Bowl	5K87	38	113	2	7.5YR8/4 Pink	7.5YR8/4 Pink	7.5YR8/4 Pink	L P	5A 4A 3A 5A 4A	RA SRA SAA AA	MH	PR4A PR3A FS4A FS5A FS6A	H	S-M RBo+	10R4/6 Red	---	---	---	O
6	Platter Bowl	5K76	51	146	2	2.5YR6/0 Gray	2.5YR6/0 Gray	2.5YR6/6 Light Red	L	4B 3B 2A	RA SRA SAA AA	M	PR4A PR3B PA5A FS5A FS6A FC7A	H	S-M RBo+ HB-M R	10R3/6 Dark Red	SHB- RBo+	10R3/6 Dark Red	---	R
7	Platter Bowl	5K87	38	120	2	5YR7/4 Pink	5YR7/4 Pink	5YR7/4 Pink	L	6A 5A 4A 3A	RA SRA SAA AA	MH	PR4A PR3A FS4A FS5A FS6A	H	S-L R+	2.5YR3/6 Dark Red	S-L RBo+	2.5YR3/6 Dark Red	---	O
8	Deep Bowl	5K86	58	157	1	5YR7/6 Reddish Yellow	2.5YR5/0 Gray	5YR7/6 Reddish Yellow	L	6A 5B 4B 3A	RA SRA SAA AA	MH	PR5A PR4A PR3A FS5B FS6A FC7A	H	SHB-H RBo+	2.5YR3/2 Dusky Red	SHB-H RBo+	2.5YR3/2 Dusky Red	---	U
9	Platter Bowl	5K87	38	118	4	7.5YR6/2 Pinkish Gray	7.5YR6/2 Pinkish Gray	7.5YR6/2 Pinkish Gray	L	5A 4A 3A	RA SRA SAA AA	M	PR4A PR3A FS5A FS6A FC7A	H	---	---	---	---	---	O
10	Platter Bowl	5K76	51	145	2	2.5YR6/6 Light Red	2.5YR6/0 Gray	2.5YR6/6 Light Red	L	6A 5A 4A 3A 2A	RA SRA SAA AA	MH	PR4A PR3A PR2A PA5A FS5A FS6A FS7A	H	S-H RBo+ HB-M R	10R4/6 Red	SHB-H RBo+	10R4/6 Red	---	U
11	Platter Bowl	5K87	38	112	1	7.5YR8/4 Pink	7.5YR5/0 Gray	7.5YR8/4 Pink	L	6A 5A 4A 3A	RA SRA SAA AA	MH	PR4B PR3A FS5B FS6A FC6A	H	S-M Bo+	10R4/6 Red	SHB-H RBo+	10R4/6 Red	---	U
12	Lid	5K87	38	119	3	2.5YR2.5/0 Black	2.5YR2.5/0 Black	2.5YR2.5/0 Black	L	5A 4A 3A 2A	RA SRA SAA AA	M	PR4A PR3A FS5A	H	SHB-H Bo+	5YR2.5/1 Black	SHB-H Bo+	5YR2.5/1 Black	---	R
13	Chalice	5K87	38	118	1	7.5YR8/4 Pink	7.5YR8/4 Pink	7.5YR8/4 Pink	L	6A 5A 4A 3A	RA SRA SAA AA	M	PR4A PR3A FS5A FS6A FC7A JB7A	H	S-M Bo+	10R4/4 Red	---	---	---	O
14	Base	5K77	41	156	3	10R5/8 Red	10R4/1 Dark Reddish Gray	10R4/1 Dark Reddish Gray	L P	6A 5B 4A 3A 6A 5A	RA SRA SAB AA	H	PR4A FS5A FS6A FC7A	H	S-HB- Bo+	10R5/8 Red	---	---	---	U
15	Pot stand	5K76	51	145	3	5YR4/2 Dark Reddish Gray	5YR4/2 Dark Reddish Gray	5YR4/2 Dark Reddish Gray	L	6A 5A 4A 3A	SRA SAB AB	MH	PR4A FS5A FS6A	H	---	---	---	---	---	O

Fig. 5.15, *continued.* Field D: Pottery descriptions for nos. 1-15.

Vessel No.	Type	Provenance Sq	Locus	Pail	Reg.	Fabric Color Ext	Core	Int	Non-Plastic Type	Size	Shape	Density	Voids	Manu	Surface Treatment Ext	Color	Int	Color	Decor	Fire
16	Jug	5K86	60	147	2	2.5YR6/8 Light Red	7.5YR7/4 Pink	2.5YR6/8 Light Red	L	5A 4A 3A 2A	RA SRA SAA AA	M	PR4A PR3A FS5A	H	S-M RBo+	10R4/6 Red	S-M R	10R4/6 Red	---	O
17	Jar	5K87	38	118	9	2.5YR6/0 Gray	2.5YR6/0 Gray	2.5YR6/0 Gray	L	6A 5A 4A 3A	RA SRA SAA AA	MH	PR4A PR3A FS4A	H	---	---	---	---	---	R
18	Ledge Handle	5K87	38	116	1	5YR7/3 Pink	5YR6/0 Gray	5YR7/3 Pink	L	6A 5A 4A 3A	SRA SAA AB	H	PR4A PR3A FS5A FS6A FC7A JH7A	H	---	---	---	---	---	U
19	Ledge Handle	5K86	60	147	1	7.5YR8/4 Pink	7.5YR6/0 Gray	7.5YR8/4 Pink	L	6A 5A 4A 3A	SRA SAB AB	MH	PR4A PR3A PA4A FS5A FS6A FC7A JH7A	H	---	---	---	---	---	U
20	Ledge Handle	5K77	41	151	1	5YR7/6 Reddish Yellow	5YR7/6 Reddish Yellow	5YR7/6 Reddish Yellow	L	7A 6A 5A 4A 3A	RA SRA SAB AA	H	PR4A PR3A FS5A FS6A FC7A	H	---	---	---	---	---	O
21	Ledge Handle	5K77	41	156	1	10R5/8 Red	10R4/1 Dark Reddish Gray	10R5/8 Red	L	6A 5A 4A 3A	RA SRA SAA AA	H	PR4A FS4A FS5A FS6A	H	SM-	10R4/6 Red	---	---	---	U
22	Ledge Handle	5K77	41	147	1	7.5YR5/0 Gray	7.5YR5/0 Gray	7.5YR5/0 Gray	L	6A 5A 4A 3A	SRA SAB AA	MH	PR4A FS4A FS5A FS6A FC7A	H	---	---	---	---	---	U

Fig. 5.15, *continued.* Field D: Pottery descriptions for nos. 16-22.

Carinated	5.14:27	*MPP 4*: figs. 5.22:1-2, 5; 5.26:26-28, 31? *MPP 3*: fig. 5.24:23; 5.28:1, 16?
Inverted	5.15:2	*MPP 4*: figs. 5.22:7; 5.23:1; 5.26:29-30, 32 *MPP 3*: fig. 5.28:18, 20
Everted	5.14:25, 28-29, 32	*MPP 4*: figs. 5.22:3-4, 6; 5.26:18

Usually plain and undecorated, a majority of the Phase 7 simple bowls were slipped and burnished (figs. 5.14:16-20 and 26). A Khirbet Kerak Ware (KKW) bowl fragment (fig. 5.14:32) has been included under the everted rim category. As part of a widely distributed and highly diagnostic ware tradition (cf. Esse 1991: 64-67), this KKW bowl fragment, together with two other vessel fragments also found in this phase (see below), provides the firmest evidence for dating the phase to EB III.

Spouted Bowls (figs. 5.14:30-31). These two bowl fragments belong to the "Line-Group Painted Ware" (LGPW), or so called "B" tradition dated by most to the late EB I (or EB IB) (cf. Schaub 1982). Fragments of other LGPW vessels have been uncovered elsewhere in Field D, including the base of an apparent amphoriskos bottle during the 1987 season (Daviau 1991: Fig. 6.22:26), and a second amphoriskos base in 1989 (Harrison 1997, Fig. 5.32:22).

Platters (figs. 5.15:4, 6, 8, 10). The four simple platters uncovered in Phase 7 belong to a vessel type that first appears in EB II and continues through EB III. Although generally closer in form to EB II types, and missing the radial or pattern burnishing and concavity below the rim characteristic of most EB III variations, the Phase 7 platters nevertheless closely parallel examples from subsequent phases.

Chalice Base (fig. 5.15:13). The chalice rarely occurs as an EBA vessel form. Interestingly enough however, Field D has produced two examples, the second from Phase 6 (see fig. 5.23:12 below).

Ledge Handles (figs. 5.15:18-22). The ledge handles represented here are almost exclusively of the plain, "duckbill" variety usually associated with the EB I period. Noticeably absent are the types more commonly found during the EB II-III periods.

Pot Stand (fig. 5.15:15). The domestic context of Field D favors interpreting this vessel as a pot stand utilized in food preparation, as has been argued for two Phase 4 examples uncovered in 1989 (Harrison 1997: Fig. 5.30:27-28).

Lid (fig. 5.15:12). In addition to the bowl fragment of KKW, Phase 7 also produced the remains of a KKW lid,

and a nondescript body sherd of the distinctive EB III ware (with a Munsell Chart reading of 2.5YR 5/0, gray).

Taken together, the Phase 7 ceramic assemblage reflects considerable heterogeneity. The sizable number of early forms, particularly the late EB I LGPW spouted bowls, attest to the presence of earlier—as yet undiscovered—phases of occupation at the site. Since Phase 7 was founded on bedrock, stratified deposits of these earlier periods of occupation presumably exist further upslope toward the center of the settlement (unless they have been completely removed by the leveling action of the EB III builders). This early material preserved in Field D thus either eroded down slope, or arrived in the fill used to level the surface for the foundations of the Phase 7 architectural structures. In any case, the presence of the three sherds of KKW, together with the other solidly EB III material described above, assign a firm EB III date to the phase. Furthermore, the strong similarities with the succeeding Phase 6 ceramic assemblage indicate the beginning of a gradual, incremental development that continued over the course of the EB III period, eventually culminating in the highly urban Phase 4.

Field Phase 6 (fig. 5.16).

Loci:	5K67:13	Earth layer
	5K67:14	Earth layer
	5K67:15	E-W wall
	5K76:39	E-W wall (=5K86:30) (cont. from FP 7)
	5K76:42	N-S wall (=5K77:20)
	5K76:45	Earth layer
	5K76:46	Earth layer
	5K76:48	E-W wall
	5K76:49	N-S wall (cont. from FP 7?)
	5K76:50	N-S wall (cont. from FP 7?)
	5K77:20	E-W wall (=5K76:42)
	5K77:23	N-S wall
	5K77:33	E-W wall (cont. from FP 7)
	5K77:37	Earth layer
	5K77:38	Earth layer
	5K77:39	Earth layer
	5K77:40	Earth layer
	5K86:30	E-W wall (=5K76:39) (cont. from FP 7)
	5K86:49	Stone-lined shaft (cont. from FP 7?)
	5K86:52	Earth layer
	5K86:54	N-S wall
	5K86:55	N-S wall
	5K86:56	E-W wall (=5K87:36)
	5K86:57	N-S wall (cont. from FP 7)
	5K86:59	Earth layer
	5K86:63	Surface
	5K86:64	Wall/Step (cont. from FP 7?)
	5K86:67	E-W wall (cont. from FP 7)
	5K86:68	E-W wall (cont. from FP 7)
	5K86:69	N-S wall (cont. from FP 7)
	5K86:70	N-S wall
	5K86:71	Pillar base
	5K86:73	Shaft and subterranean chambers
	5K87:34	Ash pit/hearth
	5K87:35	Earth layer
	5K87:36	E-W wall (=5K86:56)

Stratigraphy. The existence of Phase 6 was first identified during the 1989 season when a number of isolated loci were tentatively assigned to the new phase (Harrison 1997). Excavation this season not only verified its existence, but succeeded in fully excavating what remained in each of the four squares. However, separating the phase from the preceding Phase 7 and subsequent Phase 5 proved to be difficult. Although there were significant cultural and architectural developments linked to the appearance of each new phase, these developments apparently were part of gradual indigenous transformation. There were no clear cultural "breaks," but rather a depositional buildup that reflected continuous human activity, a buildup which culminated in the urban configuration of Phase 4, and then collapsed with the decisive destruction of that phase. This indigenous cultural progression was evident in the constant aggradation of occupational debris, where living surfaces rarely remained "fixed" long enough to leave permanent traces of their existence. Individual architectural structures occasionally underwent minor modifications, presumably adjustments to meet the changing needs of their occupants, but rarely were there any major changes which could be linked with new developments elsewhere on the site to signify broader, community-wide transformations.

Periodically, however, a sufficient number of changes did occur to warrant assigning a new phase. Such was the case with Phase 6. The construction of a number of new structures to the southeast of Building A (fig. 5.16), over Building B and the central courtyard of Phase 7, clearly indicates a burst of building activity, and probably reflects at least some measure of change in existing socio-economic, or political, realities. Unfortunately, as in the case of the previous Phase 7 structures, many of the walls belonging to these buildings apparently were removed during subsequent periods, making it difficult to reconstruct their original layout. Nevertheless, in addition to Building A, which continued from Phase 7, at least two new structures, Buildings B and C, were erected during Phase 6. The wall lines of these structures followed the same basic orientation as those of the buildings in the preceding phase.

A new wall (5K77:23), approximately 3.00 m long and 0.50 m wide, was constructed between and over Walls 5K77:33 and 45 of Phase 7, forming the eastern wall line

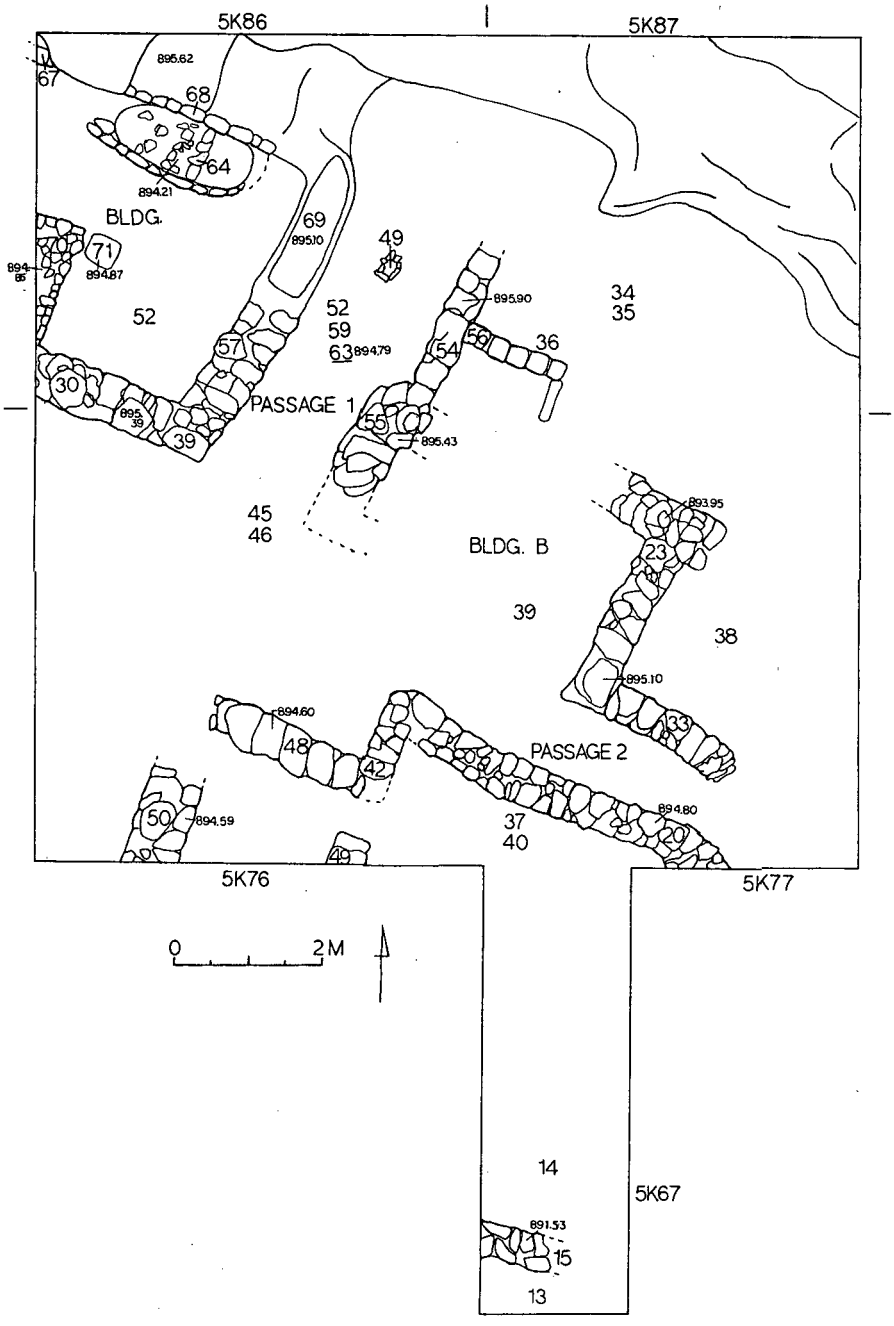


Fig. 5.16. Field D: Plan of Phase 6.

of Building B (fig. 5.17). Part of a second wall line was preserved 3.50 m to the northwest in the form of Wall 5K86:55, which was 1.80 m long and 0.75 m wide. However, excavations were unable to determine whether Wall 55 continued southward toward Wall 5K77:50 of Phase 7, or joined with a missing wall to form the southwest corner of the building, preventing any clear understanding of its overall architectural plan. Noticeable inward turns in the northern ends of Walls 5K86:55 and 5K77:23 indicated that the northern side of Building B may have been at least partially enclosed. A secondary structure (Walls 5K86:54 and 56 [=5K87:36]) attached to Wall 55 likely functioned as a "lean-to" against the building. A large ash-filled pit lined with pot sherds (5K87:34) and set against the north face of Wall 56 was probably a hearth used in food preparation.

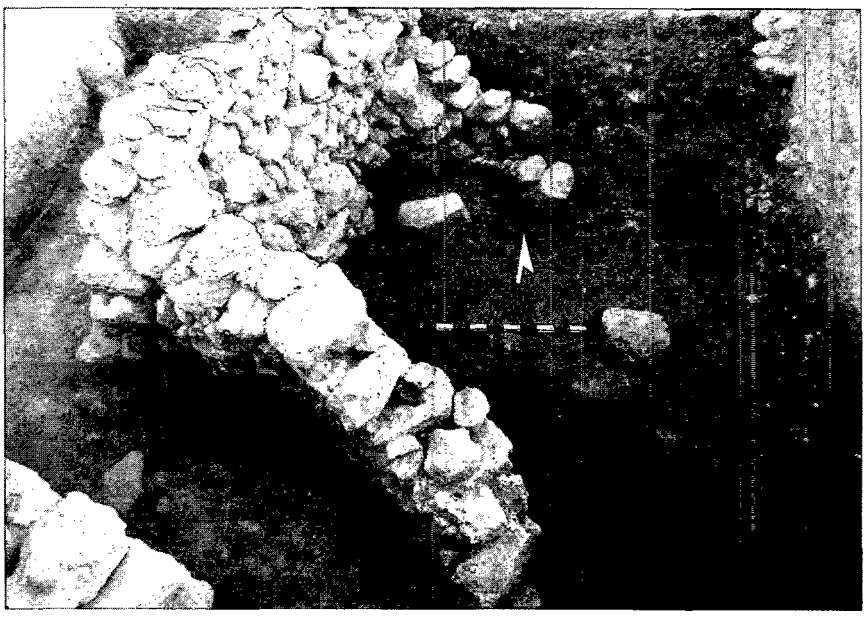


Fig. 5.17. Field D: Buildings of Phase 6 in Square 5K77; Wall 33 is in the foreground with Wall 23 behind.

However, occupational debris associated with Building B (Earth Layers 5K76:45, 5K77:38 and 39, and 5K87:35) suggests that food preparation was not the primary focus of activity in and around the building. Instead, eight spindle whorls point to the production of textiles, while four burnishing tools and five potential potter's marks hint at the possibility of nearby ceramic production. At the same time, not a single mortar, grinder, or pounder was recovered from these occupational layers, all items usually found in connection with food preparation. These same occupational layers did however produce the faunal remains of sheep/goat, cattle (large mammal), donkey, gazelle, dog, cat, fowl, and a rodent, as well as fragments of three Canaanean-style flint blades.

To the south of Building B, and separated by an apparent passageway (Passageway 2), Walls 5K76:42 (=5K77:20) and 49 formed the northern half of the other new Phase 6 structure, Building C (fig. 5.18). While most of the building lay to the south, outside the excavation area, enough was excavated to indicate that it was probably rectangular in shape, approximately 5.00 m long, and about 3.50 to 4.00 m wide. The walls averaged 0.55 to 0.60 m in width. A gap between Walls 42 and 49, 0.80 m wide, must have been the entrance into the building, meaning that access was through the short side of the building, rather than the broad side. A secondary wall (5K76:48) attached to the front of Building C may have served a similar function to the "lean-to" attached to Building B. If so, a large flat stone just to the north of Wall 48 may have helped support a roof held up by the wall.

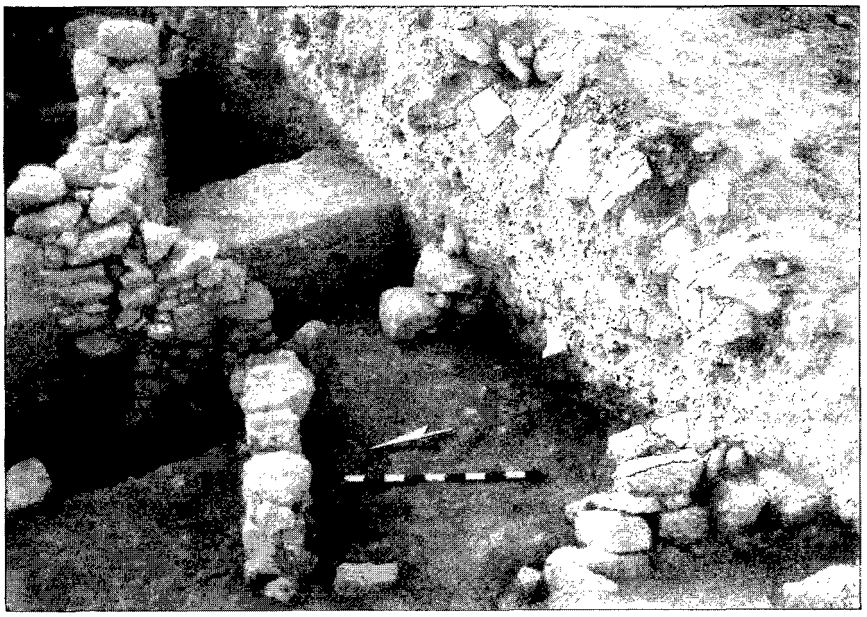


Fig. 5.18. Field D: Buildings of Phase 6 in Square 5K76 (foreground) and Square 5K77 (upper left); Wall 5K76:48 is in the immediate foreground with Crosswall 42 connecting to Wall 5K77:20.

The "longroom" architectural style of Building C does not prompt ready parallels. A number of the buildings excavat-

ed at Numeira, most notably Room 1 (which the excavators think was an open courtyard), may bear some similarities (Rast and Schaub 1980: 40-44; see also Rast 1989; and Coogan 1984). The settlement at Numeira dates to the EB III period. Two longrooms (Rooms 1 and 4) were also excavated in Field D during the 1987 season (Daviau 1991: 91-105). However, they clearly belong to the later Phase 4 (her Phases 10-7).

Further excavations to the south of Squares 5K76 and 5K77 should help clarify some of the architectural ambiguities which still surround Building C, including the position of its southern wall line, and relationship with Wall 5K76:50. Such an effort may also succeed in determining whether Earth Layers 5K67:13 and 14, and Wall 5K67:15, originally assigned to Phase 6 during the 1989 season, do in fact belong to the phase.

Excavations within Building C identified two successive earth layers (5K77:37 and 40), which produced one spindle whorl fragment and a scattering of primarily sheep/goat and cattle (large mammal) bones.

An open area between Buildings A and C may have been a commonly shared activity area (fig. 5.16). The primary earth locus (Layer 5K76:46) here produced a wide range of artifacts and occupational debris, including spindle whorls (one made of stone), a loom weight, fragments of mortars, a grinder, a tabular flint scraper, a Canaanean-style blade, burnishing tools, potter's marks, and a bone awl. This occupational layer also produced a small fragment of finely worked bone (or ivory?), and the near end of a bovine-like zoomorphic figurine, the first figurine so far found at EB 'Umayri. The wealth of finds suggests that the area served as a general multi-purpose activity area.

As in Phase 7, Building A was again the best preserved structure, retaining the same basic outline as the original building (fig. 5.16). Wall 5K86:30 (=5K76:39) continued as the south wall line, cornering with Wall 5K86:57, which still joined the bedrock outcrop (Wall 5K86:69) to form the structure's eastern extent. Bedrock, along with Walls 5K86:67 and 68, continued to define the building's northern boundary. A passageway (Passageway 1) separated Building A from the adjacent Building B.

In spite of retaining its basic outline, a number of structural changes were introduced to the interior of the Phase 7 Building A during Phase 6. Changing living conditions caused by rising floor levels may have necessitated these alterations. Most notable among these was the construction of Wall 5K86:70, which abutted Wall 30, running perpendicular from it toward the center of the building. Constructed of cobble-sized stones, the wall was 1.70 m long and at least 0.40 m wide, although the west balk of Square 5K86 may have concealed a good portion of the structure, preventing an accurate indication of its width. A thin layer of crushed white chalky material (nari) found over both Wall 70 and a gap in Wall 30, at the point where the two walls joined, indicates the probable location of the entranceway into the building. Wall 70 seems to have served as a sort of elevated platform, or step, just inside the entrance to the building. A large stone (5K86:71) to the east of Wall 70, similar to the one (5K86:72) found in Phase 7, was probably a pillar base used to support the building's roof. As in Phase 7, a matching base may exist to the west, outside the excavation area.

The other internal modifications to Building A concern the subterranean complex (5K86:73), which clearly remained in use during Phase 6. A concentration of cobble-sized stones arranged around the entrance to the underground shaft-tunnel (fig. 5.16), although disturbed considerably by the illicit diggers, originally may have been a stone lining placed around the mouth of the shaft to keep occupational debris from spilling over into the chambers below. As the level of the living surface inside Building A rose, the need for a small retaining wall to contain the encroaching debris would have become increasingly more critical. A higher living surface inside the building would also have made passage down into the subterranean complex more difficult. This is the principal reason for suggesting that Wall 5K86:64 (the step-like retaining wall in the mouth of the shaft-tunnel) was constructed during Phase 6, and not during Phase 7, when the subterranean complex was first carved out of the bedrock. A number of large stones perched on the western lip of the shaft-tunnel entrance just above Wall/Step 64 may also have served as steps. Together with Wall/Step 64, they created a series of steps leading down from the primary Phase 6 living surface in Building A through the shaft-tunnel and into the subterranean complex.

Additional evidence that the subterranean complex continued in use during Phase 6 was provided by the stratigraphic relationship between the stone-lined shaft, or air vent (5K86:49), and the earth layers associated with it. Although all trace of the shaft had disappeared by the 1992 season, it was clear nevertheless that the final use of the shaft must have occurred toward the end of Phase 6, and possibly even later, as it obviously cut through Earth Layer 5K86:52, the primary occupational layer associated with the Phase 6 use of Building A. The shaft probably went out of use toward the very end of Phase 6, or early in Phase 5, as the capstone that sealed its mouth was found just below Earth Layer 5K86:48 and 50, both of which belong to Phase 5.

Within the subterranean complex, traces of a surface (5K86:63) littered with cattle, sheep/goat, and gazelle bones, along with some pottery (including the intact base of a large storage jar), were found buried under a mound of fine, loosely packed debris (5K86:59) which had fortunately escaped the attention of the illicit diggers. The mound was situated directly below the spot where the stone-lined shaft (5K86:49) would have opened into the

central chamber, and may very well represent the final abandonment of the complex. Having ceased to be used, no effort would have been made to clear debris from the central chamber, resulting in the formation of a mound of fallen debris below the hole of the stone-lined shaft.

Once again, as in Phase 7, the occupation layer (Earth Layer 5K86:52) associated with the Phase 6 use of Building A produced a wealth of items related to food preparation, including fragments of eight basalt grinders, six mortar fragments, a pestle, and a Canaanean style flint blade. Faunal analysis identified the remains of sheep/goat, cattle (large mammal), donkey, dog, fowl, and a possible rodent. A spindle whorl fragment, two shell necklace pieces, and a typical range of domestic ceramic forms (more will be said about the Phase 6 pottery below) complete the record of material remains in and around the complex.

The evidence recovered thus points to the continued use of Building A during Phase 6, although with a number of structural modifications to its interior. These changes apparently were designed to accommodate the changing living conditions and needs of the building's inhabitants. Nevertheless, the basic "broadroom" architectural style was preserved, with access achieved through the broad southern wall of the building. The fact that Building A was reused in Phase 6 not only emphasizes the continuity between Phases 7 and 6, but also suggests that descendants of the same kinship group actually may have occupied the building throughout its long history of use. If so, the presence of Building A, with its typical EBA "broadroom" style, represents the long-term activity of a basic self-sustaining social (or family) unit, and creates the possibility of studying the social and economic changes experienced over time by this group. Together with the rest of the Phase-6 remains, the evidence from Building A continues the pattern set in Phase 7 of a sedentary community engaged almost exclusively in basic subsistence related activity, but with little or no obvious indication of increasing socio-economic complexity.

As in Phase 7, there was no evidence that Phase 6 ended in sudden or violent destruction. The depositional history of the phase indicated continuous activity marked by the constant aggradation of human occupational debris. The phase only came to an end with the appearance of a number of new structures built directly over, and in some cases actually reusing, the pre-existing Phase 6 buildings.

Pottery (figs. 5.19-23). The few diagnostic sherds recovered when Phase 6 was first uncovered in 1989 provided little help in dating it. The 1992 season however, which succeeded in completely excavating the phase, produced a more extensive and representative ceramic assemblage, which closely resembles the material of both the preceding and succeeding phases, continuing developments begun in Phase 7, and anticipating forms that appear in Phase 5. The Phase 6 pottery clearly dates to EB III, and reinforces the close cultural continuity between the successive phases.

Holemouth Jars. The rim profiles largely follow those of the preceding Phase 7:

Rim Forms	Figures	Parallels at 'Umayri
Simple; round	5.19:1-2	*MPP 4*: figs. 5.13:3; 25:2 *MPP 3*: fig. 5.8:2-3, 5, 9
Simple; round with lug handles	5.19:24-25	*MPP 4*: fig. 5.13:9
Simple; squared top, round bottom	5.19:8, 26	*MPP 4*: fig. 5.25:3 *MPP 3*: figs. 5.8:11; 5.15:3
Square	5.19:3, 28	*MPP 4*: figs. 5.13:1-2; 5.25:8-9 *MPP 3*: fig. 5.8:1, 8, 12
Grooved; exterior	5.19:20-23	*MPP 3*: fig. 5.8:27
Interior thickened; round	5.19:4-7, 19	*MPP 4*: figs. 5.13:4-6; 5.25:1, 5 *MPP 3*: fig. 5.8:6-7, 10
Interior thickened; ridged	5.19:12-18	*MPP 4*: figs. 5.13:8; 5.25:7, 10-11 *MPP 3*: fig. 5.8:14-19, 21-22, 25-26
Interior thickened square	5.19:10-11	*MPP 3*: figs. 5.8:14; 5.15:4, 6-8, 10
Interior thickened; external groove	5.19:9	*MPP 3*: fig. 5.17:7

The vessels in fig. 5.19:18-19 are noteworthy for the incisions that mark their shoulders, a decorative element usually (but not necessarily) associated with EB I or earlier (Betts 1992:47-50). The lug handled vessels (fig. 5.19:24-26) also recall EB I forms.

High Necked Jars with Flaring Rim. The rim profiles of this vessel type continue those of the preceding phase, with the addition of a "squared" variation:

Rim Forms	Figures	Parallels at 'Umayri
Round	5.20:16-25, 27; 5.21:1, 9	*MPP 4*: figs. 5.14:1-4, 8; 5.25:24-25; 5.26:5 *MPP 3*: fig. 5.9:2-4
Triangular	5.21:5-6	*MPP 4*: figs. 5.14:5-7; 5.25:26-28; 5.26:1-2 *MPP 3*: Fig. 5.9:1
Square	5.20:26	*MPP 4*: fig. 5.26:3 *MPP 3*: figs. 5.20:1; 5.25:10
Flanged	5.21:2-3, 13-15	*MPP 4*: figs. 5.14:11, 13-14; 5.26:4, 9-10 *MPP 3*: fig. 5.9:6
Ridged	5.21:4, 7-8, 10-12	*MPP* 4: figs. 5.14:9-10, 12; 5.26:6-8 *MPP 3*: 5.9:5

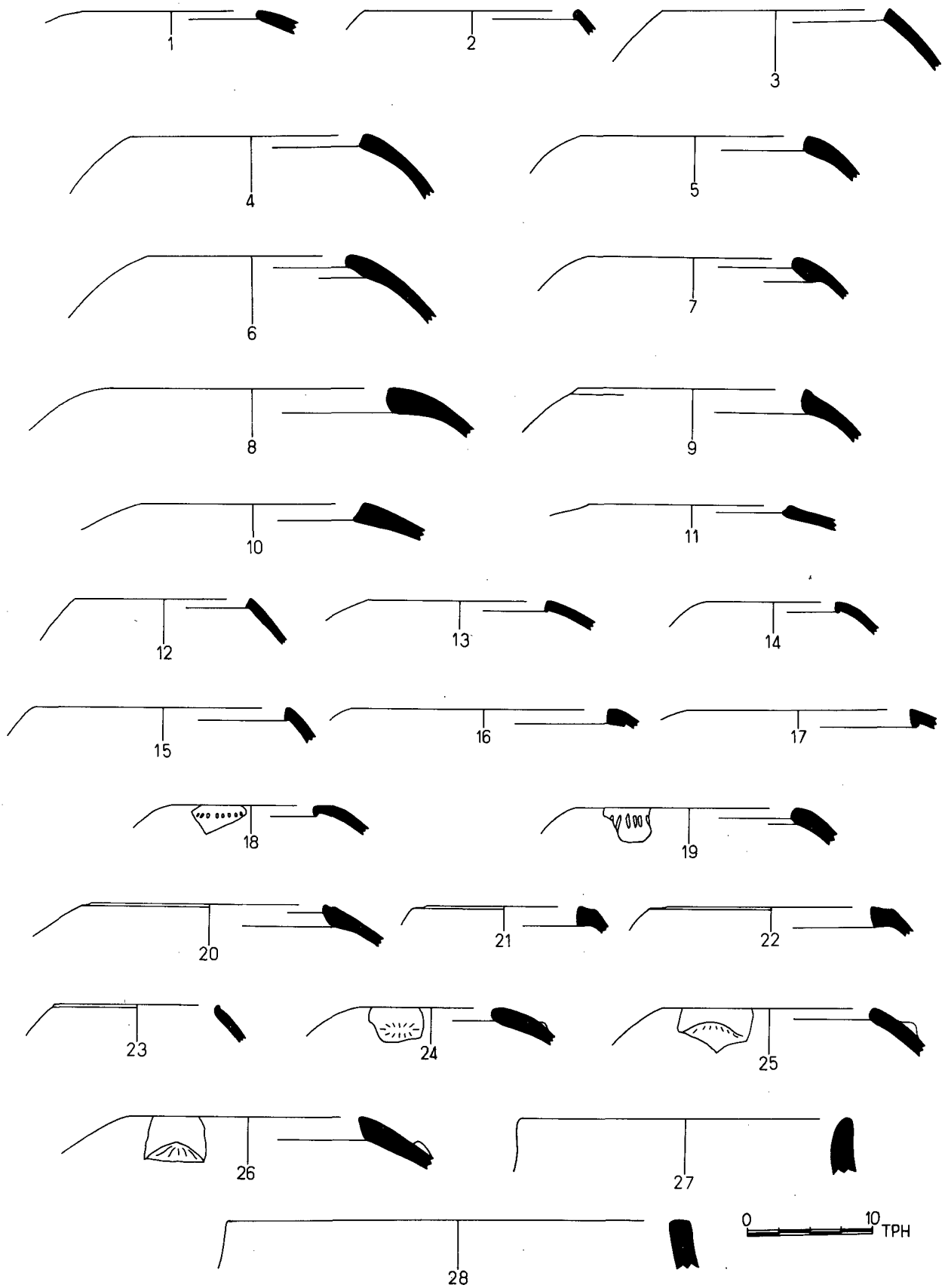


Fig. 5.19. Field D: Pottery from Phase 6.

No.	Vessel Type	Provenance Sq	Locus	Pail	Reg.	Fabric Color Ext	Core	Int	Non-Plastic Type	Size	Shape	Density	Voids	Manu	Surface Treatment Ext	Color	Int	Color	Decor	Fire
1	Hole-mouth Jar	5K87	35	81	1	5YR7/4 Pink	2.5YR6/0 Gray	5YR7/4 Pink	L	5A 4A 3A	RA SRA SAA AA	M	PR5A PR4A PR3A PA5A FS5A	M	—	—	—	—	—	U
2	Hole-mouth Jar	5K77	39	136	1	7.5YR8/4 Pink	7.5YR8/4 Pink	7.5YR8/4 Pink	L	6A 5A 4A 3A	RA SRB SAB	M	PR4A PR3A FS5A	H	SHB-H R-Bo+	10R4/6 Red	—	—	—	O
3	Hole-mouth Jar	5K76	45	109	3	5YR6/2 Pinkish Gray	5YR6/2 Pinkish Gray	5YR6/2 Pinkish Gray	L P	6A 5A 4A 3A 5A	SRA SAB AB	MH	PR4A FS5A FS6A FC6A	H	—	—	—	—	—	O
4	Hole-mouth Jar	5K76	45	109	2	5YR8/4 Pink	5YR8/4 Pink	5YR8/4 Pink	L	6A 5A 4B 3B	RA SRA SAA AA	MH	PR4A PR3A PA4A FS5A FS6A	H	—	—	—	—	—	O
5	Hole-mouth Jar	5K87	35	110	2	2.5YR6/6 Light Red	2.5YR6/0 Gray	2.5YR6/6 Light Red	L	6A 5A 4A 3A	RA SRA SAB AA	H	PR4A PR3A PA5A FS5A FS6A	H	—	—	—	—	—	U
6	Hole-mouth Jar	5K77	40	145	3	2.5YR3/0 Very Dark Gray	2.5YR3/0 Very Dark Gray	2.5YR4/6 Red	L	6A 5A 4A 3A	SRA SAB AB	H	PR4A FS4A FS5A FS6A	H	—	—	—	—	—	U
7	Hole-mouth Jar	5K87	34	91	2	2.5YR6/4 Light Reddish Brown	2.5YR6/2 Pale Red	2.5YR6/2 Pale Red	L	6A 5A 4A 3A	SRA SAA AB	H	PR4A PR3A FS5A FS6A	H	—	—	—	—	—	O
8	Hole-mouth Jar	5K87	34	79	3	7.5YR7/4 Pink	7.5YR7/4 Pink	7.5YR6/0 Gray	L	7A 6A 5A 4A 3A	RA SRA SAA AB	H	PR4A PR3A PA7A FS5A FS6A FC6A	H	—	—	—	—	—	U
9	Hole-mouth Jar	5K77	38	123	1	2.5YR6/8 Light Red	2.5YR6/8 Light Red	2.5YR6/8 Light Red	L	6A 5B 4B 3A	SRA SAA AA	MH	PR4A PR5A PR6A	H	—	—	—	—	—	O
10	Hole-mouth Jar	5K77	38	122	3	5YR7/4 Pink	5YR7/4 Pink	5YR7/4 Pink	L	6A 5A 4A 3A	RA SRA SAA AA	MH	PR4A FS5A	H	—	—	—	—	—	O
11	Hole-mouth Jar	5K76	46	126	2	5YR6/4 Light Reddish Brown	5YR6/4 Light Reddish Brown	5YR6/4 Light Reddish Brown	L	6A 5A 4A 3A	SAB AB	H	PR4A PR3A FS4A FS5A	H	—	—	—	—	—	O
12	Hole-mouth Jar	5K76	45	109	5	5YR7/4 Pink	5YR6/0 Gray	5YR7/4 Pink	L	5A 4A 3B 2A	RA SRA SAA AA	MH	PR4A PR3A PR2A FS5A	H	—	—	—	—	—	U
13	Hole-mouth Jar	5K77	38	121	4	7.5YR8/4 Pink	7.5YR8/4 Pink	7.5YR8/4 Pink	L	6A 5A 4A 3A	SRA SAB AB	MH	PR4A FS4A FS5A FC6A	H	—	—	—	—	—	O
14	Hole-mouth Jar	5K87	34	79	1	5YR5/1 Gray	5YR5/1 Gray	5YR5/1 Gray	L 6A 5A 4A 3A		RA SRA SAA AA	H	PR4A PR3A FS5A FS6A FS7A	H	—	—	—	—	—	U
15	Hole-mouth Jar	5K77	38	125	1	10YR8/4 Very Pale Brown	10YR8/4 Very Pale Brown	10YR8/4 Very Pale Brown	L	4A 3A 2A	RA SRA SAA	L	PR4A PR3A FS5A	H	—	—	—	—	—	O
16	Hole-mouth Jar	5K87	35	81	2	5YR7/6 Reddish Yellow	5YR8/4 Pink	5YR7/6 Reddish Yellow	L	5A 4B 3B	RB SRA SAA AA	MH	PR4A PR3A FS5A	H	—	—	—	—	—	O
17	Hole-mouth Jar	5K77	38	123	3	5YR6/4 Light Reddish Brown	5YR6/4 Light Reddish Brown	5YR6/4 Light Reddish Brown	L	6A 5A 4A 3A	SRA SAB AB	MH	PR4A FS5A FS6A	H	—	—	—	—	—	O

Fig. 5.19, *continued*. Field D: Pottery descriptions for nos. 1-17.

No.	Vessel Type	Provenance Sq	Locus	Pail	Reg.	Fabric Color Ext	Core	Int	Non-Plastic Type	Size	Shape	Density	Voids	Manu	Surface Treatment Ext	Color	Int	Color	Decor	Fire
18	Hole-mouth Jar	5K86	52	132	1	7.5YR6/2 Pinkish Gray	7.5YR6/2 Pinkish Gray	7.5YR6/2 Pinkish Gray	L	5A 4A 3A	RA SRA SAA AA	M	PR5A PR4A FS4A	H	---	---	---	---	In-N	R
19	Hole-mouth Jar	5K87	35	108	3	5YR7/3 Pink	5YR7/3 Pink	5YR7/3 Pink	L	7A 6A 5A 4A 3A	RA SRA SAA AA	MH	PR3A PA6A FS4A FS5A	H	---	---	---	---	In-N	O
20	Hole-mouth Jar	5K87	35	110	1	2.5YR6/6 Light Red	2.5YR6/0 Gray	2.5YR6/6 Light Red	L	6A 5A 4A 3A	SRA SAA AB	H	PR4B PR3B PA5A FS4A FS5A FS6A	H	---	---	---	---	---	U
21	Hole-mouth Jar	5K86	59	153	1	7.5YR8/4 Pink	7.5YR8/4 Pink	7.5YR8/4 Pink	L P	6A 5A 4A 3A 6A 5A	SRA SAB AB	H	PR4A PR3A FS5A FS6A FC7A	H	---	---	---	---	---	O
22	Hole-mouth Jar	5K76	46	116	1	7.5YR8/4 Pink	7.5YR8/4 Pink	7.5YR8/4 Pink	L P	6A 5A 4A 3A 6A 5A	RA SRA SAA AA	H	PR4A PR3A FS5A FS6A	H	---	---	---	---	---	O
23	Necked Jar	5K77	39	136	2	7.5YR8/2 Pinkish White	7.5YR7/0 Light Gray	7.5YR8/2 Pinkish White	L	5A 4B 3B 2A	RA SRB SAB	M	PR4A PR3A FS5A	H	---	---	---	---	---	U
24	Hole-mouth Jar	5K86	52	133	2	5YR7/4 Pink	5YR5/1 Gray	5YR7/4 Pink	L	6A 5A 4A 3A	SRA SAB AB	MH	PR4A FS5A PA5A	H	---	---	---	---	---	U
25	Hole-mouth Jar	5K77	40	145	4	2.5YR6/4 Light Reddish Brown	2.5YR6/4 Light Reddish Brown	2.5YR6/4 Light Reddish Brown	L	6A 5B 4B 3A	SRA SAB AB	H	PR4A FS4A FS5A FS6A	H	---	---	---	---	---	O
26	Hole-mouth Jar	5K87	92	108	1	5YR7/4 Pink	5YR7/4 Pink	5YR7/4 Pink	L	7A 6A 5A 4A 3A 2A	SRA SAA AB	H	PR5A PR4A PR3A FS5A FS6A FC7A	H	---	---	---	---	---	O
27	Necked Jar	5K87	35	110	3	10YR5/2 Grayish Brown	10YR5/2 Grayish Brown	10YR5/2 Grayish Brown	L	6A 5A 4A 3A	SRA SAA AB	H	PR4A PR3A FS5A FS6A FC7A	H	---	---	---	---	---	R
28	Jar	5K76	46	123	1	7.5YR7/4 Pink	7.5YR5/0 Gray	7.5YR7/4 Pink	L	6A 5A 4A 3A	SRA SAB AB	MH	PR4A PR3A PA5A FS5A FS6A FS7A	H	---	---	---	---	---	U

Fig. 5.19, *continued.* Field D: Pottery descriptions for nos. 18-28.

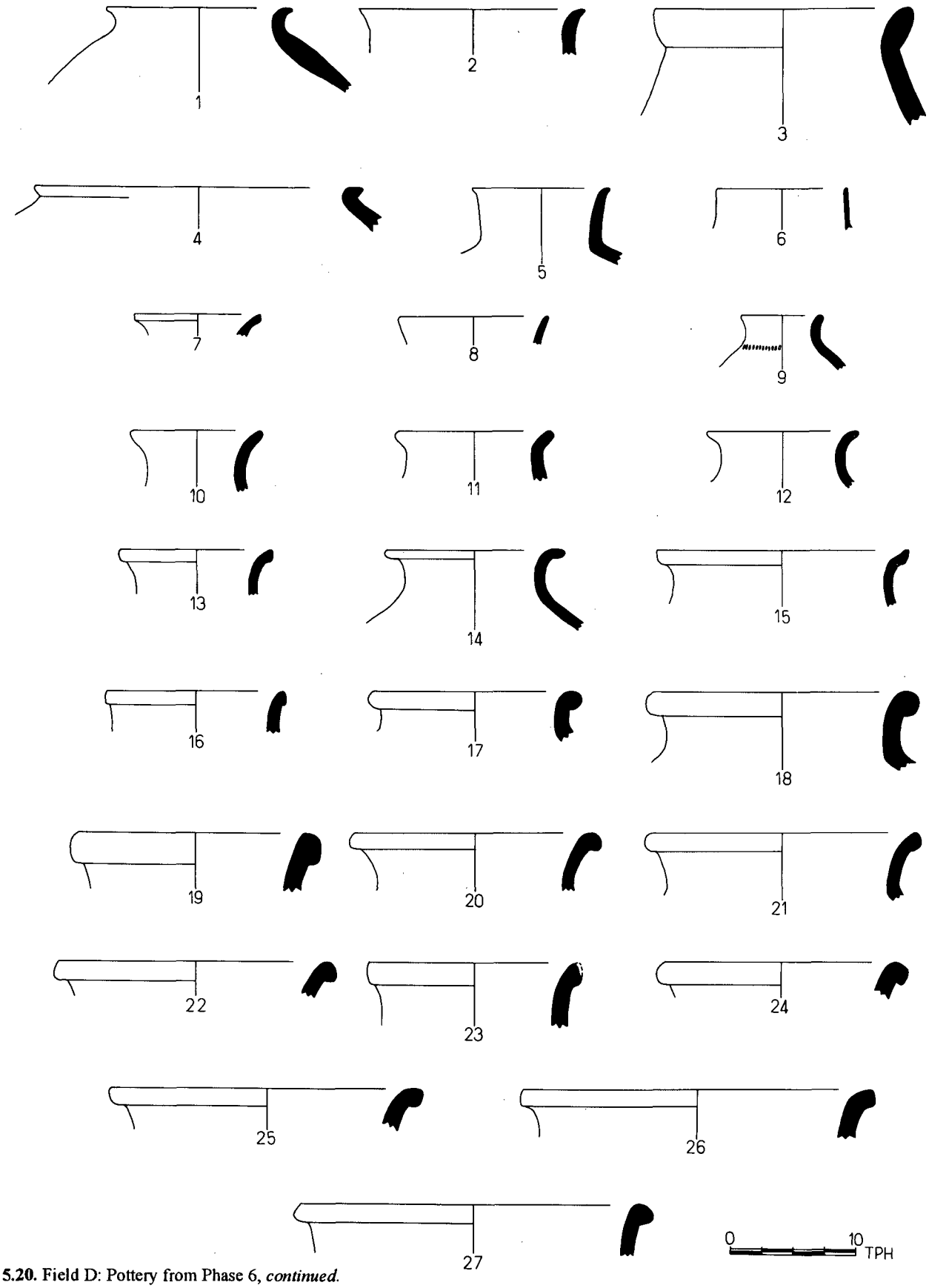


Fig. 5.20. Field D: Pottery from Phase 6, *continued.*

	Vessel		Provenance			Fabric Color			Non-Plastic				Voids	Manu	Surface Treatment				Decor	Fire
No.	Type	Sq	Locus	Pail	Reg.	Ext	Core	Int	Type	Size	Shape	Density			Ext	Color	Int	Color		
1	Low Necked Jar	5K76	46	135	1	2.5YR6/6 Light Red	2.5YR6/0 Gray	2.5YR6/6 Light Red	L	6A 5A 4A 3A 2A	RA SRA SAA AA	H	PR4A PR3A FS5A	H	---	---	---	---	---	U
2	Necked Jar	5K87	35	109	1	5YR7/4 Pink	5YR7/4 Pink	5YR7/4 Pink	L	7A 6A 5A 4A 3A	RA SRA SAA AA	MH	PR4A PR3A FS5A	H	---	---	---	---	---	O
3	Necked Jar	5K87	34	79	2	7.5YR8/4 Pink	7.5YR6/0 Gray	7.5YR8/4 Pink	L	6A 5A 4A 3A	RA SRA SAA AA	MH	PR4A PR3A FS5A FS6A FC7A	H	---	---	---	---	---	U
									P	7A										
4	Low Necked Jar	5K86	52	146	2	5YR7/3 Pink	5YR7/3 Pink	5YR7/3 Pink	L	4A 3B 2A	RB SRB SAA AA	M	PR4A PR3A	H	---	---	---	---	---	O
5	Low Necked Jar	5K76	46	130	1	2.5YR6/0 Gray	2.5YR6/0 Gray	2.5YR6/0 Gray	L	5B 4B 3A	SRA SAB AB	H	PR4A PR3A FS4B FS5B FC6A	H	SVB-RBo+	7.5R3/2 Dusky Red	SMB-RN	7.5YR3/2 Dusky Red	---	R
6	Bowl	5K77	38	123	2	2.5YR6/6 Light Red	2.5YR6/6 Light Red	2.5YR6/6 Light Red	L	5A 4A 3B 2B	RB SRB SAA AA	M	PR4A PR3A	H	SHB-RBo+	5YR2.5/2 Dark Reddish Brown	SHB-RBo+	5YR2.5/2 Dark Reddish Brown	---	O
7	Low Necked Jar	5K77	39	143	1	2.5YR6/6 Light Red	2.5YR6/0 Gray	2.5YR6/6 Light Red	L	5A 4A 3A	RA SRB SAA	M	PR3A FS4AA FS5A	H	---	---	SH RBo+	2.5YR3/2 Dusky Red	---	U
									P	6A										
8	Bowl	5K87	35	102	6	5YR7/4 Pink	2.5YR6/0 Gray	5YR7/4 Pink	L	5A 4A 3A 2A	RA SRA SAA AA	M	PR4A PR3B FS4A	H	SHB-RBo+	2.5YR4/6 Red	---	---	---	U
9	Low Necked Jar	5K77	40	145	1	10R5/8 Red	10R5/8 Red	10R5/8 Red	L	6A 5B 4A 3A	SRA SAB AA	H	PR4A FS4A FS5A FS6A FC6A	H	---	---	---	---	In-N	O
10	Low Necked Jar	5K76	46	130	2	5YR8/4 Pink	5YR8/4 Pink	5YR8/4 Pink	L	5A 4A 3B 2A	RA SRB SAA AA	M	PR4A PR3A FS5A	H	VB-MN+	---	---	---	---	O
									P	5A										
11	Low Necked Jar	5K77	39	137	3	7.5YR8/2 Pinkish White	7.5YR8/2 Pinkish White	7.5YR8/2 Pinkish White	L	7A 6A 5A 4A 3A 2A	RA SRA SAA AA	M	PR4A PR3A PR2A FS5A FS6A	H	HB-LNBo+	---	---	---	---	O
12	Low Necked Jar	5K87	35	102	3	5YR7/3 Pink	5YR7/3 Pink	5YR7/3 Pink	L	6A 5A 4A 3A	SRA SAB AB	MH	PR4A PR3A FS4A FS5A	H	---	---	---	---	---	O
13	Low Necked Jar	5K87	34	92	1	2.5YR6/4 Light Reddish Brown	2.5YR6/0 Gray	2.5YR6/4 Light Reddish Brown	L	6A 5A 4A 3A	RA SRA SAA AA	MH	PR4A PR3A FS5A FS6A FS7A	H	---	---	---	---	---	U
14	Low Necked Jar	5K76	45	109	1	2.5YR6/8 Light Red	2.5YR6/0 Gray	2.5YR6/0 Gray	L	6A 5A 4A 3A	RA SRA SAA AA	H	PR4A PR3A FS5B FS6A FC7A	H	S-MRBo+	5YR8/1 White	---	---	---	U
15	Jar	5K86	52	140	3	2.5YR6/2 Pale Red	2.5YR6/0 Gray	2.5YR6/2 Pale Red	L	5A 4B 3A 2A	RA SRA SAA AA	MH	PR4A PR3A FS4A FS5A FS6A	H	---	---	---	---	---	R
16	High Necked Jar	5K77	40	145	5	7.5YR7/4 Pink	7.5YR6/0 Gray	7.5YR7/4 Pink	L	6A 5B 4B 3A	RA SRA SAA AA	MH	PR4B PR3A FS4A FS5A FS6A	H	---	---	---	---	---	O

Fig. 5.20, *continued.* Field D: Pottery descriptions for nos. 1-16.

No.	Vessel Type	Provenance Sq	Locus	Pail	Reg.	Fabric Color Ext	Core	Int	Non-Plastic Type	Size	Shape	Density	Voids	Manu	Surface Treatment Ext	Color	Int	Color	Decor	Fire
17	High Necked Jar	5K77	40	145	2	7.5YR8/4 Pink	7.5YR8/4 Pink	7.5YR8/4 Pink	L	6A 5B 4B 3A	SRA SAB AA	MH	PR4A FS4A FS5A FS6A FC6A FC7A	H	---	---	---	---	---	O
18	Low Necked Jar	5K76	46	133	1	2.5YR6/6 Light Red	5YR4/2 Dark Reddish Gray	2.5YR6/6 Light Red	L	6A 5A 4A 3A 2A	RA SRA SAA AA	MH	PR4A PR3A FS4A FS5A FS6A	H	---	---	---	---	---	U
19	High Necked Jar	5K87	35	109	2	5YR7/6 Reddish Yellow	2.5YR5/0 Gray	5YR7/6 Reddish Yellow	L P	6A 5A 4A 3A 6A	RA SRA SAA AA	MH	PR4A PR3A FS5A FS6A FC7A	H	S-M RBo+	2.5YR5/8 Red	---	---	---	U
20	High Necked Jar	5K87	34	95	1	7.5YR7/4 Pink	7.5YR6/0 Gray	7.5YR7/4 Pink	L	6A 5A 4A 3A	RA SRA SAA AA	MH	PR5A PR4A PA6A FS5A FS6A	H	---	---	---	---	---	U
21	Necked Jar	5K86	59	142	1	5YR7/6 Reddish Yellow	5YR7/6 Reddish Yellow	5YR7/6 Reddish Yellow	L	6A 5A 4B 3A	RA SRA SAA AA	M	PR4A PR3A FS5A FS6A FC7A	H	---	---	---	---	---	O
22	High Necked Jar	5K76	46	132	2	5YR7/4 Pink	5YR7/4 Pink	5YR7/4 Pink	L	6A 5A 4A 3A	RA SRA SAA AA	M	PR4A PR3A FS5A	H	---	---	---	---	---	O
23	High Necked Jar	5K87	35	104	2	2.5YR6/6 Light Red	2.5YR6/0 Gray	2.5YR6/6 Light Red	L P	6A 5A 4A 3A 6A	RA SRA SAA AA	MH	PR4A PR3A FS5A FS6A FC7A	H	---	---	---	---	---	U
24	High Necked Jar	5K87	35	109	3	2.5YR5/0 Gray	2.5YR5/0 Gray	2.5YR5/0 Gray	L	6A 5A 4B 3A	RA SRA SAA AA	MH	PR4B PR3B FS4A FS5A FS6A	H	---	---	---	---	---	R
25	High Necked Jar	5K87	35	107	2	2.5YR6/6 Light Red	2.5YR5/0 Gray	2.5YR6/6 Light Red	L	6A 5A 4A 3A	RA SRA SAA AA	MH	PR4A PR3A FS5A FS6A FC7A	H	---	---	---	---	---	U
26	Low Necked Jar	5K77	38	125	3	7.5YR8/4 Pink	7.5YR5/0 Gray	7.5YR8/4 Pink	L	6A 5A 4A 3A 2A	RA SRA SAA	M	PR4A PR3A FS6A FS5A	H	---	---	---	---	---	U
27	Low Necked Jar	5K76	46	125	1	5YR7/6 Reddish Yellow	5YR6/0 Gray	5YR7/6 Reddish Yellow	L	6A 5A 4A 3A	RA SRA SAA AA	MH	PR4A PR3A FS5A FC6A	H	---	---	---	---	---	U

Fig. 5.20, *continued.* Field D: Pottery descriptions for nos. 17-27.

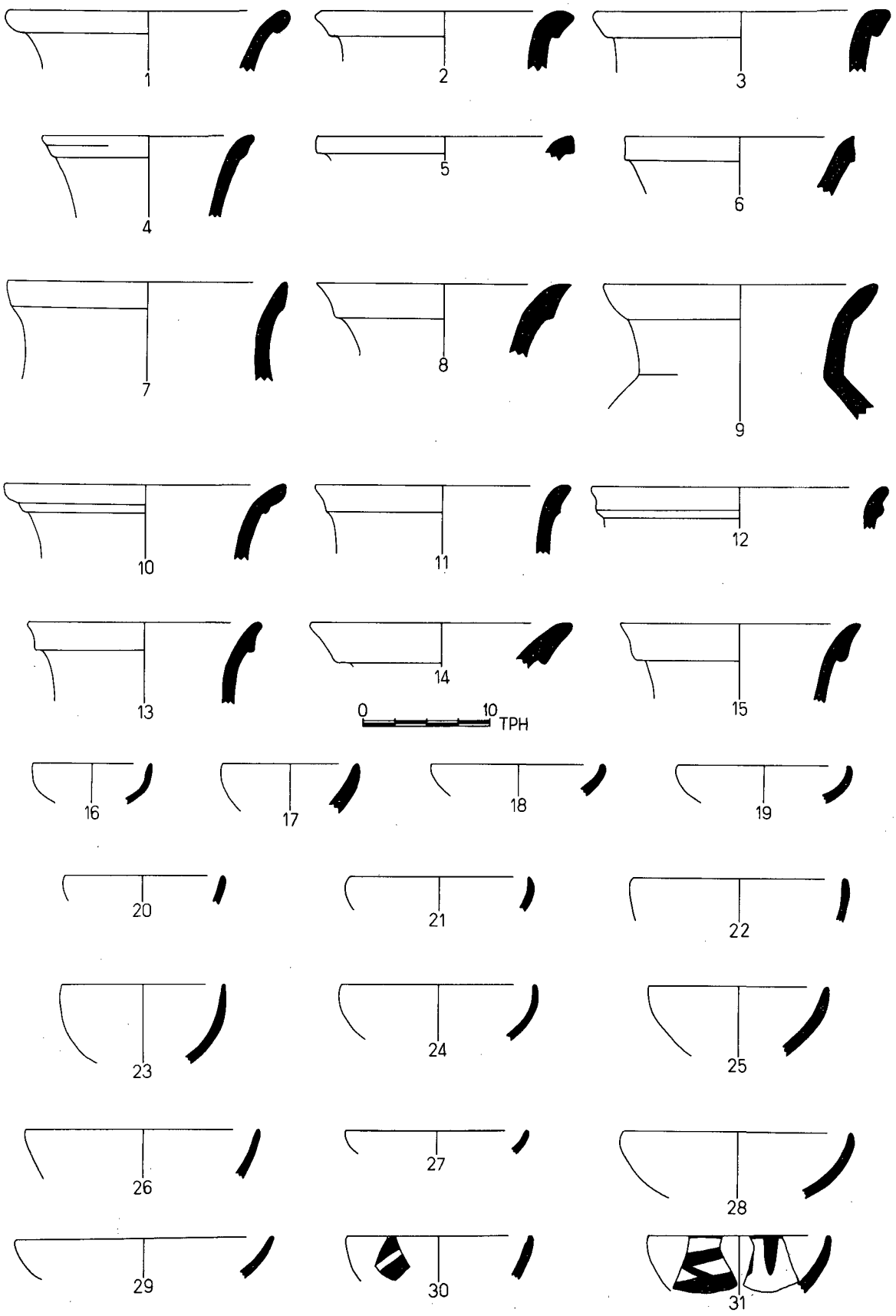


Fig. 5.21. Field D: Pottery from Phase 6, *continued.*

No.	Vessel Type	Sq	Provenance Locus	Pail	Reg.	Fabric Color Ext	Core	Int	Non-Plastic Type	Size	Shape	Density	Voids	Manu	Surface Treatment Ext	Color	Int	Color	Decor	Fire
1	High Necked Jar	5K87	35	102	4	7.5YR8/4 Pink	7.5YR5/0 Gray	7.5YR8/4 Pink	L	6A 5A 4A 3A	RA SRA SAA AA	MH	PR4A FS4A FS5A FS6A FC7A	H	---	---	---	---	---	U
2	High Necked Jar	5K76	46	126	1	5YR7/6 Reddish Yellow	5YR6/1 Gray	5YR7/6 Reddish Yellow	L	6A 5A 4A 3A	RA SRA SAA AA	MH	PR4A PR3A FS5A FS6A FC6A FC7A	H	S-H RBo+	10R4/6 Red	S-H R	10R4/6 Red	---	U
3	High Necked Jar	5K76	46	126	3	5YR7/4 Pink	2.5YR5/0 Gray	5YR7/4 Pink	L	6A 5A 4A 3B 2A	RA SRA SAA AA	MH	PR4A PR3A FS5A FS6A FC7A	H	S-M R	10R4/6 Red	---	---	---	U
4	High Necked Jar	5K87	35	103	2	7.5YR8/4 Pink	7.5YR5/0 Gray	7.5YR8/4 Pink	L	7A 6A 5A 4B 3B	RB SRA SAA AA	MH	PR4B PR3A FS5A FS6A FC6A	H	---	---	S-M RN	2.5YR3/4 Dark Reddish Brown	---	U
5	High Necked Jar	5K87	34	79	4	7.5YR8/4 Pink	7.5YR6/0 Gray	7.5YR8/4 Pink	L P	5A 4A 3A 7A	RA SRA SAA AB	M	PR4A FS4A FS5A FS6A FC6A	H	---	---	---	---	---	U
6	High Necked Jar	5K77	39	142	1	7.5YR6/0 Gray	7.5YR6/0 Gray	7.5YR6/0 Gray	L	6A 5B 4A 3A	RA SRB SAB AA	MH	PR4A PR3A FS5A FS6A	H	---	---	---	---	---	O
7	High Necked Jar	5K76	46	126	4	5YR7/6 Reddish Yellow	2.5YR5/0 Gray	5YR7/6 Reddish Yellow	L	6A 5A 4B 3B 2A	RA SRA SAA AA	MH	PR3A PA4A PA5A FS5A FS6A FC6B FC7A	H	---	---	---	---	---	U
8	High Necked Jar	5K76	46	134	2	2.5YR5/0 Gray	2.5YR5/0 Gray	2.5YR5/0 Gray	L	6A 5A 4A 3B 2A	RA SRA SAA AA	M	PR4A PR3A FS5A FS6A FC7A	H	---	---	---	---	---	R
9	Jar	5K86	52	136	1	10YR6/8 Brownish Yellow	10YR6/1 Gray	10YR6/8 Brownish Yellow	L	7A 6A 5A 4A 3A	SRA SAA AB	H	PR4A FS5A FS6A FC7A	H	---	---	---	---	---	U
10	High Necked Jar	5K87	35	81	3	2.5YR6/0 Gray	2.5YR6/0 Gray	2.5YR6/0 Gray	L	6A 5A 4A 3A	RA SRA SAA AA	MH	PR5A PR4A PR3A FS5A	H	---	---	---	---	---	R
11	High Necked Jar	5K87	35	107	1	7.5YR8/4 Pink	7.5YR6/0 Gray	7.5YR8/4 Pink	L	6A 5A 4A 3A	RA SRA SAA AA	MH	PR4A PR3A FS4A FS5A FS6A FC7A	H	---	---	S-M R	5YR3/4 Dark Reddish Brown	---	U
12	High Necked Jar	5K86	52	146	1	7.5YR6/0 Gray	7.5YR6/0 Gray	7.5YR6/0 Gray	L	6A 5A 4A 3A	RA SRA SAA AA	M	PR4A PR3A PA5A	H	---	---	---	---	---	R
13	High Necked Jar	5K76	46	116	2	2.5YR6/8 Light Red	2.5YR5/0 Gray	2.5YR6/8 Light Red	L	6A 5A 4A 3A	RA SRA SAA AA	MH	PR4A FS5A FS6A FS7B	H	---	---	---	---	---	U
14	High Necked Jar	5K76	45	109	4	7.5YR7/4 Pink	7.5YR7/0 Gray	7.5YR7/0 Gray	L	6A 5A 4B 3A	SRA SAB AB	H	PR4A PR3A FS5A FS6A FC7A	H	---	---	---	---	---	U

Fig. 5.21, *continued.* Field D: Pottery descriptions for 1-14.

No.	Vessel Type	Provenance Sq	Locus	Pail	Reg.	Fabric Color Ext	Core	Int	Non-Plastic Type	Size	Shape	Density	Voids	Manu	Surface Treatment Ext	Color	Int	Color	Decor	Fire
15	High Necked Jar	5K76	46	119	1	5YR6/3 Light Reddish Brown	2.5YR5/0 Gray	5YR6/3 Light Reddish Brown	L	6A 5A 4A 3A	RA SRB SAA	MH	PR4A PR3A FS5A FS6A FS7A FC7A	H	---	---	---	---	---	U
16	Bowl	5K86	52	140	2	2.5YR5/0 Gray	2.5YR5/0 Gray	2.5YR5/0 Gray	L	5A 4B 3A	RA SRA SAA AA	MH	PR4B PR3B PA5A	H	SHB-RBo+	H2.5YR4/6 Red	---	---	---	R
17	Bowl	5K86	52	133	1	2.5YR6/6 Light Red	5YR8/4 Pink	2.5YR6/6 Light Red	L	6A 5A 4B 3A	RA SRA SAA AA	M	PR4A FS5A FC6A FC7A	H	SHB-RBo+	H10R4/8 Red	SHB-RBo+	H10R4/8 Red	---	O
18	Bowl	5K77	38	121	2	5YR8/4 Pink	5YR6/1 Gray	5YR8/4 Pink	L	5A 4A 3A 2A	RA SRA SAA AA	M	PR4A PR3A FS5A	H	SHB-M RBo+	10R4/8 Red	SHB-M RBo+	10R4/8 Red	---	U
19	Bowl	5K77	38	128	2	5YR7/6 Reddish Yellow	5YR6/1 Gray	5YR7/6 Reddish Yellow	L	5A 4B 3A 2A	RA SRA SAB AA	L	PR4A PR3A FS5A FS6A	H	SLR	10R4/6 Red	SLR	10R4/6 Red	---	U
20	Bowl	5K77	45	109	7	5YR7/4 Pink	2.5YR5/0 Gray	5YR7/4 Pink	L	5A 4A 3A 2A	RA SRA SAA AA	M	PR3A PA6A	H	---	---	---	---	---	U
21	Bowl	5K76	46	119	2	2.5YR6/8 Light Red	2.5YR6/0 Gray	2.5YR6/8 Light Red	L	5A 4A 3A 2A	RA SRA SAA AA	M	PR3A FS5A FS6A	H	S-H RBo+	10R4/6 Red	S-H RBo+	10R4/6 Red	---	U
22	Bowl	5K76	46	116	3	2.5YR6/8 Light Red	5YR8/4 Pink	2.5YR6/8 Light Red	L	5A 4A 3A 2A	RA SRA SAA AA	M	PR3A FS4A FS5A FC6A	H	---	---	---	---	---	O
23	Bowl/ Lamp	5K87	35	108	4	7.5YR8/4 Pink	7.5YR8/4 Pink	7.5YR8/4 Pink	L	5A 4A 3A	RB SRA SAA AA	M	PR4A PR3A PA5A FS5A	H	---	---	---	---	---	O
24	Bowl	5K77	39	142	3	7.5YR8/2 Pinkish white	7.5YR8/2 Pinkish white	7.5YR8/2 Pinkish white	L	4A 3A 2A	RA SRA SAA AA	M	PR4A PR3A FS5A	H	---	---	---	---	---	O
25	Bowl	5K77	38	128	1	2.5YR6/6 Light Red	5YR7/6 Reddish Yellow	2.5YR6/6 Light Red	L	6A 5B 4A 3A	RA SRA SAA AA	M	PR4A PR3A FS5A FC6A FC7A	H	SLR	2.5YR4/8 Red	SLBo	2.5YR4/8 Red	---	O
26	Bowl	5K87	34	92	2	2.5YR6/6 Light Red	2.5YR8/0 Gray	2.5YR6/6 Light Red	L	5A 4A 3A 2A	RA SRA SAA AA	M	PR4A PR3A FS4A FS3A	H	S-M R-Bo+	10R4/6 Red	---	---	---	U
27	Bowl	5K77	38	121	3	2.5YR6/6 Light Red	2.5YR4/0 Dark Gray	2.5YR6/6 Light Red	L	5A 4A 3A 2A	RA SRA SAA AA	MH	PR4A PR3A	H	SHBM RBo+	10R4/6 Red	SHBM RBo+	10R4/6 Red	---	U
28	Bowl	5K87	34	98	1	5YR8/4 Pink	5YR8/4 Pink	5YR8/4 Pink	L P	5A 4A 3B 2A 5A 4A 3A	RB SRB SAA AA	MH	PR4B PR3B FS5A	H	---	---	---	---	---	O
29	Bowl	5K76	46	123	2	2.5Y8/2 White	2.5Y8/2 White	2.5Y8/2 White	L	5A 4A 3A 2A	RB SRB SAA AA	L	PR4A PR3A	H	---	---	---	---	---	O

Fig. 5.21, *continued*. Field D: Pottery descriptions for nos. 15-29.

Vessel		Provenance				Fabric Color			Non-Plastic				Voids	Manu	Surface Treatment				Decor	Fire
No.	Type	Sq	Locus	Pail	Reg.	Ext	Core	Int	Type	Size	Shape	Density			Ext	Color	Int	Color		
30	Bowl	5K77	38	128	3	7.5YR8/4 Pink	7.5YR8/4 Pink	7.5YR8/4 Pink	L	5A 4A 3A	RA SRB SAB	M	PR4A PR3A FS5A	H	---	---	---	---	PaRBo 2.5YR4/4 Reddish Brown	O
31	Bowl	5K77	38	125	2	5YR7/6 Reddish Yellow	5YR7/1 Light Gray	5YR7/6 Reddish Yellow	L	5A 4A 3A 2A	RA SRA SAA	L	PR4A PR3A FS5A	H	---	---	---	---	Pa-Bo 2.5YR4/4 Reddish Brown	U

Fig. 5.21, *continued.* Field D: Pottery descriptions for nos. 30-31.

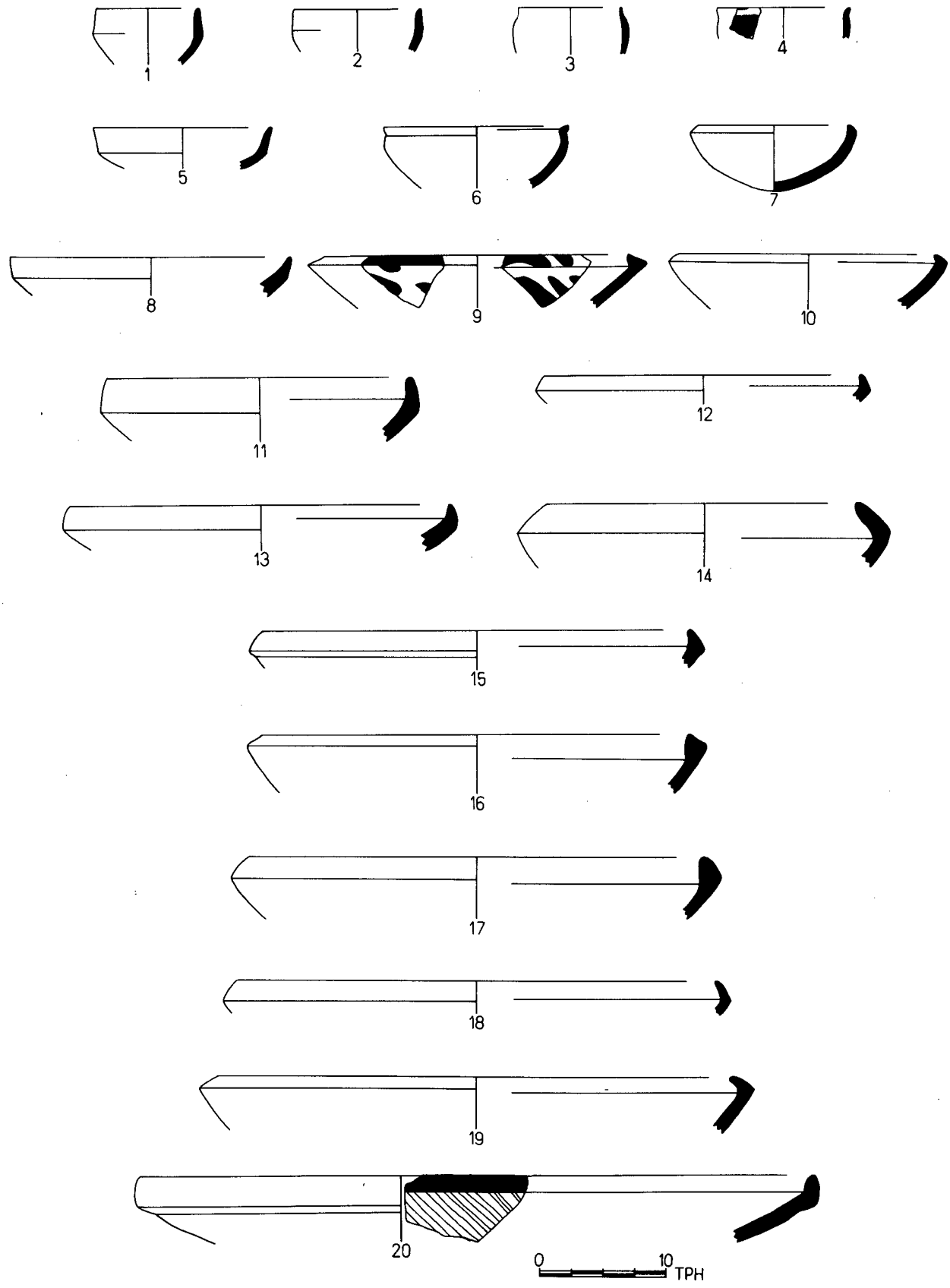


Fig. 5.22. Field D: Pottery from Phase 6, *continued.*

No.	Vessel Type	Provenance Sq	Locus	Pail	Reg.	Fabric Color Ext	Core	Int	Non-Plastic Type	Size	Shape	Density	Voids	Manu	Surface Treatment Ext	Color	Int	Color	Decor	Fire
1	Bowl	5K76	46	134	1	7.5YR8/4 Pink	7.5YR8/4 Pink	7.5YR8/4 Pink	L	5A 4A 3A 2A	RA SRA SAA AA	M	PR4A PR3A PR2A FS6A	H	S-M R	10R4/6 Red	---	---	---	O
2	Bowl	5K87	35	110	4	7.5YR8/4 Pink	7.5YR8/4 Pink	7.5YR8/4 Pink	L	6A 5A 4A 3A 2A	RA SRA SAA AA	L	PR4A PR3B FS4A FS5A	H	S-L RBo+	2.5YR5/8 Red	S-L R	2.5YR5/8 Red	---	O
3	Bowl	5K87	34	94	1	2.5YR6/6 Light Red	2.5YR6/0 Gray	2.5YR6/6 Light Red	L	5A 4A 3A	RA SRA SAA AA	M	PR4A PR3A FS4A FS5A	H	---	---	---	---	---	U
4	Khirbet Kerak Ware Bowl	5K87	35	104	3	2.5YR2.5/0 Black	2.5YR2.5/0 Black	2.5YR6/0 Light Red	L	5A 4A 3A 2A	RA SRA SAA AA	M	PR4A PR3A FS4A FS5A	H	SHB-H Bo+	2.5YR2.5/0 Black	SHB-H Bo+	2.5YR4/8 Red	---	R
5	Bowl	5K87	35	106	2	2.5YR6/6 Light Red	2.5YR5/0 Gray	2.5YR6/6 Light Red	L	5A 4A 3A 2A	RB SRA SAA AA	MH	PR4B PR3A FS4A FS5A	H	SHB-H RBo+	10R4/6 Red	---	---	---	U
6	Bowl	5K76	46	141	3	10R6/6 Light Red	10R6/6 Light Red	10R6/6 Light Red	L	6A 5A 4A 3B 2A	RA SRA SAA AA	MH	PR4A PR3A FS4A	H	SHB-H RBo+	10R6/8 Light Red	SHB-H RBo+	10R6/8 Light Red	---	O
7	Bowl	5K76	46	132	3	5YR8/4 Pink	2.5YR5/0 Gray	5YR8/4 Pink	L	5A 4A 3A 2A	RA SRA SAA AA	M	PR4B PR3A FS5A	H	S-H RBo+	10R4/6 Red	S-H RBo+	10R4/6 Red	---	U
8	Bowl	5K77	38	122	4	2.5YR4/0 Dark Gray	2.5YR4/0 Dark Gray	5YR7/3 Pink	L	5A 4A 3A	SRA SAB AB	MH	PR4A FS5A FS6A	H	---	---	S-M RBo+	---	---	U
9	Bowl	5K77	38	124	1	7.5YR6/0 Gray	7.5YR6/0 Gray	7.5YR6/0 Gray	L	6A 5A 4A 3A	RA SRA SAA AA	M	PR4A FS5A FS6A FC6A FC7A	H	S-M RBo+	10YR8/2 White	S-M RBo+	10YR8/2 White	Pa-RBo+R Int.& 10R4/6 Red	
10	Bowl Inverted Rim	5K77	39	140	1	7.5YR8/4 Pink	7.5YR7/0 Light Gray	7.5YR8/4 Pink	L	5A 4A 3A 2A	RA SRB SAA	M	PR5A PR4A PR3A FS5A	H	---	---	SM R-Bo+	5YR5/8 Yellowish Red	---	U
11	Bowl	5K76	46	132	4	2.5YR6/0 Gray	2.5YR6/0 Gray	2.5YR6/0 Gray	L	5A 4B 3A 2A	RA SRA SAA AA	M	PR3A FS4B FS5A	H	SHB- RBo+	10R5/8 Red	S-M RBo+	10R5/8 Red	---	R
12	Platter Bowl	5K87	35	107	3	5YR7/3 Pink	5YR7/3 Pink	5YR7/3 Pink	L	6A 5A 4A 3A	RA SRA SAA AA	M	PR4A FS5A FC6A	H	S-M RBo+	10R4/6 Red	S-M RBo+	10R4/6 Red	---	O
13	Platter Bowl	5K87	35	102	1	2.5YR6/6 Light Red	2.5YR6/0 Gray	2.5YR6/6 Light Red	L	6A 5A 4A 3A	RA SRA SAA AA	MH	PR4A PR3A FS5A FS6A FC7A	H	SHB- RBo+	10R4/6 Red	S-M RBo+	10R4/6 Red	---	U
14	Platter Bowl	5K76	46	141	4	2.5YR5/4 Reddish Brown	2.5YR5/4 Reddish Brown	2.5YR5/4 Reddish Brown	L	5A 4A 3A 2A	RA SRA SAA AA	MH	PR4A PR3B PA6A FS5A FC7A	H	SHB- RBo+	2.5YR4/6 Red	SHB- RBo+	2.5YR4/6 Red	---	O
15	Platter Bowl	5K76	46	139	1	7.5YR8/4 Pink	2.5YR5/0 Gray	2.5YR6/8 Light Red	L	5A 4A 3A 2A	RA SRA SAA AA	M	PR3B FS4A	H	S-M R	2.5YR4/4 Reddish Brown	S-M RBo+	2.5YR4/4 Reddish Brown	---	U
16	Platter Bowl	5K76	46	138	1	2.5YR6/6 Light Red	7.5YR8/4 Pink	2.5YR6/6 Light Red	L	5A 4A 3A 2A	RB SRB SAA AA	M	PR4A PR3A FS4A FS5A FC6A	H	HB-L R	---	HB-L Bo	---	---	O
17	Platter Bowl	5K76	46	136	1	2.5YR6/6 Light Red	2.5YR5/0 Gray	2.5YR6/6 Light Red	L	5A 4A 3A 2A	SRA SAA AB	M	PR3A PA5A FS4A	H	S-H RBo+ HB-H R	10R4/6 Red	SHB-H RBo+	10R4/6 Red	---	U

Fig. 5.22, *continued*. Field D: Pottery descriptions for nos. 1-17.

	Vessel		Provenance			Fabric Color			Non-Plastic				Voids	Manu	Surface Treatment				Decor	Fire
No.	Type	Sq	Locus	Pail	Reg.	Ext	Core	Int	Type	Size	Shape	Density			Ext	Color	Int	Color		
18	Platter Bowl	5K76	46	130	3	10R5/6 Red	10R5/6 Red	10R5/6 Red	L	4B 3B 2A	RB SRB SAA AA	MH	PR4A PR3B FS4A	H	SHB-H RBo+	10R4/8 Red	SHB-H RBo+	10R4/8 Red	---	O
19	Platter Bowl	5K76	46	129	1	2.5YR6/0 Gray	2.5YR6/0 Gray	2.5YR6/0 Gray	L	5A 4B 3B 2A	RA SRA SAA AA	L	PR3A FS4A FS5A FC6A	H	S-H RBo+	2.5YR2.5/4 Dark Reddish Brown	S-H RBo+	2.5YR2.5/4 Dark Reddish Brown	---	R
20	Platter Rim Bowl	5K86	52	132	2	7.5YR7/4 Pink	7.5YR6/0 Gray	7.5YR7/4 Pink	L	6A 5A 4B 3B 2A	RA SRA SAA AA	M	PR5A PR4A PR3A PA5A	H	SHB- H R	10R4/6 Red	SDB- H RBo+	10R4/6 Red	---	U

Fig. 5.22, *continued*. Field D: Pottery descriptions for nos. 18-20.

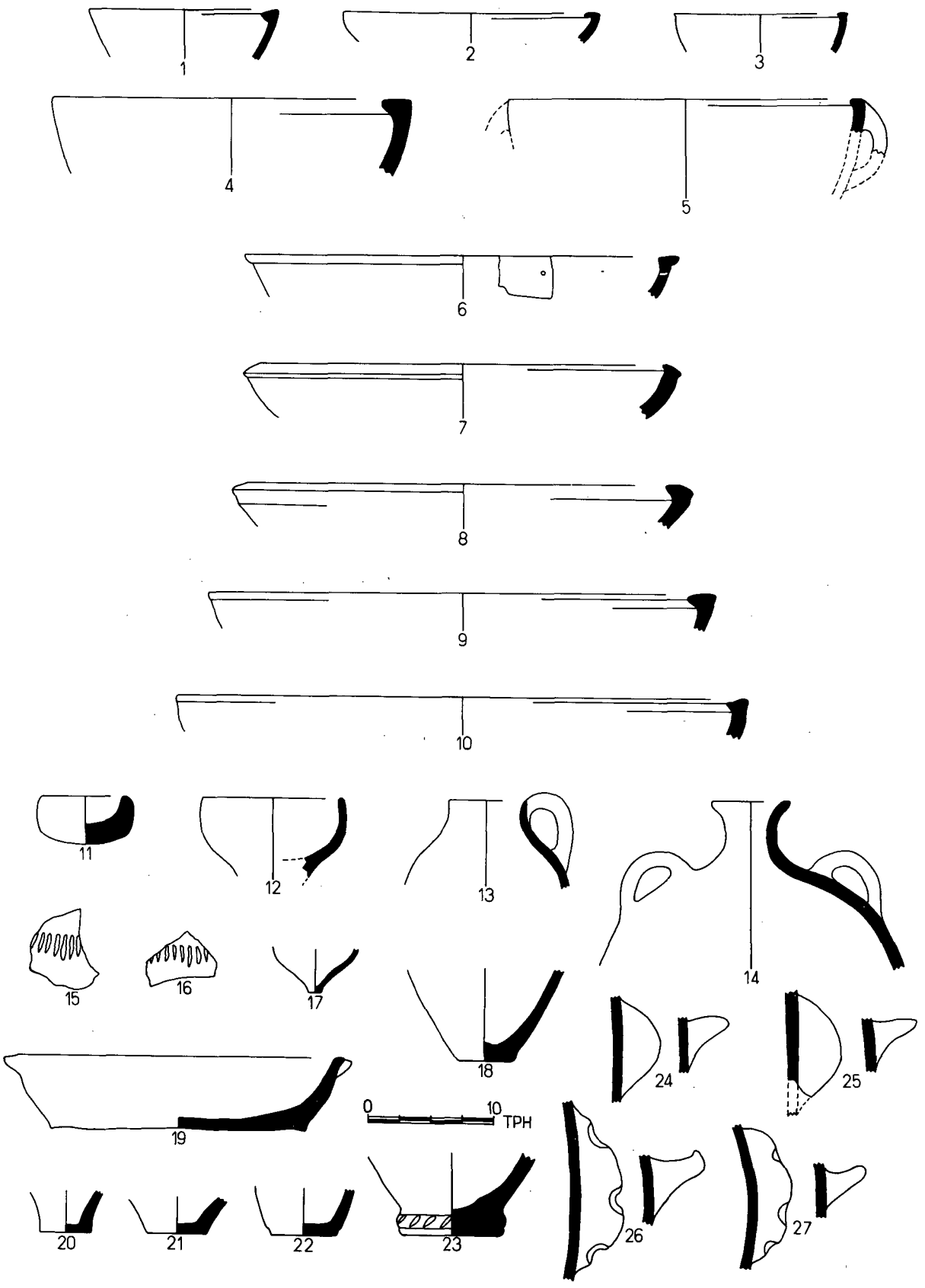


Fig. 5.23. Field D: Pottery from Phase 6, *continued.*

No.	Vessel Type	Sq	Provenance Locus	Pail	Reg.	Fabric Color Ext	Core	Int	Non-Plastic Type	Size	Shape	Density	Voids	Manu	Surface Treatment Ext	Color	Int	Color	Decor	Fire
1	Bowl	5K76	46	118	1	2.5YR5/0 Gray	2.5YR5/0 Gray	2.5YR5/0 Gray	L	6A 5A 4A 3A	SRA SAA AA	M	PR4A PR3A PA5A FS5A FS6A FC7A	H	S-H RBo+	10R4/6 Red	S-H RBo+	10R4/6 Red	---	R
2	Platter Bowl	5K86	52	134	1	5YR7/4 Pink	5YR7/4 Pink	5YR7/4 Pink	L	5A 4B 3B	RA SRA SAA AA	L	PR3A FS5A	H	S-M R	10R4/8 Red	S-M RBo+	10R4/8 Red	---	O
3	Bowl	5K76	46	116	4	2.4YR6/4 Light Reddish Brown	2.5YR5/0 Gray	2.5YR6/4 Light Reddish Brown	L P	6A 5A 4A 3A 4A	RA SRA SAA AA	M	PR4A PR3B	H	---	---	---	---	---	U
4	Platter Bowl	5K87	35	102	5	2.5YR5/0 Gray	2.5YR5/0 Gray	2.5YR6/6 Light Red	L	5A 4A 3A	RA SRA SAA AA	M	PR4A PR3A FS5A FS6A FC6A FC7A	H	S-M R+	2.5YR6/6 Light Red	S-M RBo+	2.5YR6/6 Light Red	---	U
5	Deep Bowl	5K86	59	153	2	2.5YR5/0 Gray	2.5YR5/0 Gray	2.5YR6/6 Light Red	L	7A 6A 5A 4A 3A	RA SRA SAA AA	MH	PR4A PR3A FS4A FS5A FS6A FC7A JH7A	H	---	---	---	---	---	U
6	Bowl	5K77	38	122	1	5YR7/4 Pink	7.5YR4/0 Dark Gray	5YR7/4 Pink	L	6A 5A 4A 3A	RA SRA SAA AA	MH	PR5A PR4A FS5A FS6A FC6A	H	S-H RBo+	2.5YR2.5/4 Dark Reddish Brown	S-H RBo+	2.5YR2.5/4 Dark Reddish Brown	---	U
7	Deep Bowl	5K87	35	103	1	7.5YR7/6 Reddish Yellow	7.5YR6/0 Gray	7.5YR7/6 Reddish Yellow	L	6A 5A 4A 3A	RA SRA SAA AA	MH	PR4A PR3A FS5A FS6A	H	---	---	---	---	---	U
8	Platter Bowl	5K87	35	104	1	7.5YR8/4 Pink	7.5YR6/0 Gray	7.5YR8/4 Pink	L P	6A 5A 4A 3A 6A 5A	RA SRB SAB AA	MH	PR4A PR3A FS5A FS6A FC6A	H	SHB-RBo+	2.5YR4/6 Red	SHB-RBo+	2.5YR4/6 Red	---	U
9	Deep Bowl	5K77	38	122	2	5YR7/6 Reddish Yellow	5YR5/1 Gray	5YR7/6 Reddish Yellow	L	6A 5A 4A 3A	RA SRA SAA AA	MH	PR5A PR4A PR3A FS5A FS6A	H	HB-L R	---	---	---	---	U
10	Platter Bowl	5K76	45	109	6	2.5YR6/4 Light Reddish Brown	2.5YR5/0 Gray	2.5YR6/4 Light Reddish Brown	L	6A 5A 4A 3A	SRA SAA AA	MH	PR4A PR3A PA5A FS5A FS6A	H	---	---	---	---	---	U
11	Bowl	5K87	35	102	2	2.5YR4/0 Dark Gray	2.5YR4/0 Dark Gray	2.5YR4/0 Dark Gray	L	5A 4A 3A	RA SRA SAA AA	M	PR4A PR3A PS5A FS6A FS7A	H	---	---	---	---	---	R
12	Cup/ Chalice	5K77	39	137	2	7.5YR8/4 Pink	7.5YR6/0 Gray	7.5YR8/4 Pink	L	5A 4B 3A 2A	RA SRB SAA	M	PR5A PR4A PR3A FS5A	H	---	---	---	---	---	U
13	Jug	5K86	52	131	1	7.5YR7/4 Pink	7.5YR7/4 Pink	7.5YR7/4 Pink	L	5B 4B 3A	RA SRA SAA AA	M	PR4A PR3A FS5A FS6A FC7A JH7A	H	---	---	---	---	---	O
14	Amphori-skos	5K77	40	146	1	7.5YR7/6 Reddish Yellow	7.5YR7/0 Light Gray	7.5YR7/0 Light Gray	L	6A 5B 4B 3A	RA SRA SAA AA	MH	PR4A PR3A FS4A FS5A	H	---	---	---	---	Pa-Bo 10R4/6 Red	U
15	Body Sherd	5K77	39	139	1	7.5YR7/0 Light Gray	7.5YR7/0 Light Gray	7.5YR7/0 Light Gray	L P	6A 5B 4A 3A 5A 4A	RA SRA SAB AA	H	PR4A PR3A FS5A FS6A FC6A	H	---	---	---	---	In N+	O

Fig. 5.23, *continued.* Field D: Pottery descriptions for nos. 1-15.

No.	Vessel Type	Provenance Sq	Locus	Pail	Reg.	Fabric Color Ext	Core	Int	Non-Plastic Type	Size	Shape	Density	Voids	Manu	Surface Treatment Ext	Color	Int	Color	Decor	Fire
16	Body Sherd	5K77	39	140	2	5YR7/1 Light Gray	5YR7/1 Light Gray	5YR7/1 Light Gray	L	6A 5A 4A 3A	RA SRA SAB AA	MH	PR4A PR3A FS5A FS6A FC7A	H	S-M Bo+	10R6/6 Light Red	---	---	In Bo+ Neck?	O
17	Base	5K76	46	141	1	5YR7/6 Reddish Yellow	5YR7/6 Reddish Yellow	5YR7/6 Reddish Yellow	L	4B 3B 2A	RB SRB SAA	M	PR4A PR3A FS4A	H	---	---	---	---	---	O
18	Base	5K77	40	146	2	10R4/3 Weak Red	10R4/3 Weak Red	10R4/3 Weak Red	L	6A 5A 4A 3A	SRA SAB AB	MH	PR4A FS4A FS5A FS6A	H	S-HB-Bo+	10R4/6 Red	---	---	---	O
19	Bowl	5K76	46	141	2	2.5YR4/0 Dark Gray	5YR7/6 Reddish Yellow	5YR7/6 Reddish Yellow	L	7A 6A 5A 4A 3A 2A	SRA SAA AB	MH	PR4A PR3A FS5A FS6A FC6A FC7A	H	---	---	---	---	---	U
20	Base	5K77	39	137	1	5YR7/6 Reddish Yellow	5YR7/6 Reddish Yellow	5YR7/6 Reddish Yellow	L P	5A 4A 3A 5A	RB SRB SAA	M	PR5A PR4A PR3A FS5A	H	SHB-Bo+	10R3/4 Dusky Red	---	---	---	O
21	Base	5K87	34	91	1	7.5YR8/4 Pink	7.5YR8/4 Pink	7.5YR8/4 Pink	L	5A 4A 3B 2A	RB SRB SAA AA	M	PR4B PR3B PA5A	H	SHB-Bo+	2.5YR3/6 Dark Red	---	---	---	O
22	Base	5K86	52	140	1	7.5YR6/4 Light Brown	7.5YR6/0 Gray	7.5YR2/0 Black	L	4A 3A 2A	RA SRB SAA AA	M	PR4A PR3B FS5A	H	---	---	---	---	---	U
23	Base	5K87	35	110	5	2.5YR6/6 Light Red	2.5YR5/0 Gray	2.5YR6/6 Light Red	L	6A 5A 4A 3A	RA SRA SAA AA	MH	PR4A PR3A PA5A FS5A FS6A FC7A TB7A	H	S-M	10R5/6 Red	---	---	Ap-Ba	U
24	Ledge Handle	5K77	39	142	2	7.5YR8/4 Pink	7.5YR8/4 Pink	7.5YR8/4 Pink	L	6B 5B 4A	SRA SAB AB	MH	PR4A FS5A FS6A FC6A	H	---	---	---	---	---	O
25	Ledge Handle	5K87	35	108	2	7.5YR8/4 Pink	7.5YR8/4 Pink	7.5YR8/4 Pink	L	5A 4B 3B 2A	RA SRA SAA AA	M	PR4A PR3B FS4A FS5A JH7A	H	S-H Bo+	10R4/6 Red	---	---	---	O
26	Ledge Handle	5K77	38	121	1	5YR7/6 Reddish Yellow	5YR6/2 Pinkish Gray	5YR7/6 Reddish Yellow	L P	6A 5A 4A 3A 6A 5A	SRA SAA AA	MH	PR4A PR3A FS5A	H	---	---	---	---	---	U
27	Ledge Handle	5K87	34	98	2	7.5YR6/0 Gray	7.5YR6/0 Gray	7.5YR8/4 Pink	L	6A 5A 4A 3A	SRA SAB AB	H	PR4A PR3A PA5A FS5A FS6A FS7A FC7A JH7A	H	---	---	---	---	---	U

Fig. 5.23, ***continued.*** Field D: Pottery descriptions for nos. 16-27.

Necked Jars. The rim profiles of this vessel type exhibited slightly wider variations than those of the prior phase, with the addition of more pronounced "rounded" rims:

Rim Forms	Figures	Parallels at 'Umayri
Simple; wide mouth	5.19:27; 5.20:1-2, 4	*MPP 4*: figs. 5.13:11-13, 20-21, 23-24; 5.25:1:12, 17, 19-20 *MPP 3*: fig. 5.9:7-8, 14
Simple; narrow mouth	5.20:5-12	*MPP 4*: figs. 5.13:15-19, 22; 5.25:13-16, 18 *MPP 3*: fig. 5.9:10-12
Rounded; wide mouth	5.20:3, 14	*MPP 3*: fig. 5.24:16-19, 21
Rounded; narrow mouth	5.20:13	*MPP 4*: 5.25:21-22 *MPP 3*: figs. 5.9:9; 5.24:1-15; 5.26: 2-3, 5, 7; 5.27:1-2; 5.31:8

A number of probable early forms were included in this category. The examples in fig. 5.20:1 and 4 are better placed within an EB I context (Betts 1992:62, Figs. 198-200), while fig. 5.20:9, with the incised decoration around the vessel neck, incorporates a typical Chalcolithic/EB I tradition.

Channeled-Rim Jar (fig. 5.20:15). This vessel preserves a rim profile that first appears in EB II on small storage jars, but then develops into a large pithos during EB III. The profile on the Phase 6 vessel has become less "ledge-like" than earlier example in Phase 7 (fig. 5.13:14), but has not yet developed the pronounced "flare" or "droop" that characterizes the examples in the succeeding Phase 5 (fig. 5.25:23) and Phase 4 (Harrison 1997: Fig. 5.23:1).

Jar Base with Rope Design (fig. 5.23:23). This uniquely decorated jar base is without parallel in the Field D EBA ceramic corpus.

Jug (fig. 5.23:13). This vessel falls within the standard range of EB II-III jugs, and closely parallels the examples recovered in Phase 5 (figs. 5.28:3-5) and Phase 4 (Harrison 1997: Figs. 5.30:8-10).

Jug Bases (figs. 5.23:18, 20-22). These profiles represent the range of EB II-III jug bases uncovered in the phase, with fig. 5.23:18 matching well with the vessel described above.

Juglet Base (fig. 5.23:17). This small base likely belonged to a typical EBA dipper juglet.

Amphoriskos (fig. 5.23:14). This large amphoriskos anticipates very similar vessels uncovered in Phase 4 (Harrison 1997: Fig. 5.31:5) and Phase 3 (Herr 1989b: Fig. 19.2:13). The distinctive typology of the vessel and its relatively wide distribution during EB III suggest something of its functional importance as a trade item (or container) during this period (Dever and Richard 1977:7).

Deep Bowls. The Phase 6 material maintained, virtually unchanged, the same rim profiles as the preceding Phase 7:

Rim Forms	Figures	Parallels at 'Umayri
Simple	5.21:22, 26, 28	*MPP 4*: figs. 5.14:22, 24; 5.26:20-22, 25 *MPP 3*: fig. 5.9:24-27
Inverted, simple	5.22:9-10; 5.23:2, 4-5, 7-8, 10	*MPP 4*: figs. 5.15:5, 7, 9; 5.27:6-9, 12, 15-16 *MPP 3*: fig. 5.9:28-29
Hammer	5.23:6, 9	*MPP 4*: figs. 5.15:11; 5.27: 10-11, 13-14 *MPP 3*: fig. 5.9:31

Figure 5.22:9 was uniquely treated with a randomly painted red design applied against a white slip. Also, fig. 5.23:6 contained a small, drilled hole, which served either as a drain, or more likely a vessel repair hole.

Shallow Bowls. The three shallow bowls exhibited the following rim profile distinctions:

Rim Forms	Figures	Parallels at 'Umayri
Simple	5.21:29	*MPP 3*: Fig. 5.24:26
Inverted	5.22:8	*MPP 4*: fig. 5.15:1, 3 *MPP 3*: Fig. 5.24:25
Everted; with lug handles	5.23:19	

The crude manufacture of fig. 5.23:19 prompts the suggestion that this vessel may have originated from an earlier phase of the site, although the considerable extent of its preservation weakens this assumption.

Small Bowls. The Phase 6 small bowls continued the rim profiles of the preceding phase, with only a few minor changes:

Rim Forms	Figure	Parallels at 'Umayri
Simple	5.21:16-21, 23-25, 27, 30-31	*MPP 4*: figs. 5.14:15-21, 23, 26; 5.26:11-17, 19, 23-24 *MPP 3*: fig. 5.9:15-23
Carinated	5.22:1-2, 5	*MPP 4*: figs. 5.14:27; 5.26:26-28, 31? *MPP 3*: figs. 5.24:23; 5.28:1, 16?
Inverted	5.22:7; 5.23:1	*MPP 4*: figs. 5.15:2; 5.26: 29-30, 32 *MPP 3*: fig. 5.28:18, 20
Everted	5.22:3-4, 6	*MPP 4*: figs. 5.14:25, 28-32; 5.26:18
Hammer	5.23:3	*MPP 3*: fig. 5.29:5

Generally, the use of reddish-brown slip and hand burnishing remained widespread, although possibly not with quite the same intensity as the prior phase. Some bowls were painted (fig. 5.21:30-31), rather than slipped and burnished. Significantly, Phase 6 produced a second example of a small, everted rim KKW bowl (fig. 5.22:4), bringing the total number of KKW vessel fragments found in Field D to four.

Cup (fig. 5.23:11). Phase 6 also produced a small, crudely-shaped cup with burn marks along the rim, probably a result of its use as a simple lamp.

Platters. The Phase 6 platters were undifferentiated from the preceding phase, with one notable exception:

Rim Forms	Figures	Parallels at 'Umayri
Simple	5.22:11-19	*MPP 4*: figs. 5.15:4, 6, 8, 10; 5.27:1-5
Simple; concave below rim exterior	5.22:20	*MPP 3*: fig. 5.28:19, 21-24

Figure 5.22:20 exhibits the two characteristics absent from the Phase 7 simple platters: namely the pronounced concavity below the rim exterior, and the distinctive radial burnishing usually found on EB III platters. The presence of this particular vessel bridges the gap between the first appearance of the vessel type in Phase 7, and its development in subsequent phases.

Chalice (fig. 5.23:12). Phase 6 produced a second, equally unusual, EBA chalice, the first (fig. 5.15:13) uncovered in Phase 7.

Ledge handles (figs. 5.23:24-27). The ledge handles represented here include not only the "duckbill" variety of the preceding Phase 7, but also the indented (or "impressed") type more characteristic of EB II-III.

Body Sherds (figs. 5.23:15-16).The two incised body sherds depicted in fig. 5.23:15-16 parallel the incised decorations found on the holemouth jars in fig. 5.19:18-19, and likely belonged to very similar vessels.

In summary, the ceramic material produced by the 1992 season not only expanded the limited Phase 6 assemblage gathered in 1989, but also placed the phase securely within the relative sequence emerging for the field. The presence of KKW, while reinforcing the EB III dating of the phase, also favors an early EB III date; right where its position in the relative sequence suggests Phase 6 should be. The relatively homogenous nature of the assemblage emphasizes the close ties with the adjoining stratigraphic phases, and reiterates the cultural continuity that occurred as human activity progressed from phase to phase.

Field Phase 5 (figs. 5.1 and 5.24)

Loci:	5K67:8	Earth layer
	5K67:9	E-W wall
	5K67:10	Earth layer
	5K67:11	Surface
	5K67:12	N-S wall
	5K76:16	N-S wall (=5K76:17)
	5K76:17	N-S wall (=5K76:16)
	5K76:18	E-W wall
	5K76:19	Surface
	5K76:21	E-W wall
	5K76:28	Earth layer
	5K76:33	Earth layer (=5K77:31)
	5K76:36	Earth layer
	5K76:37	Earth layer
	5K76:39	E-W wall (=5K86:30) (cont. from FP 6)
	5K76:40	Earth layer
	5K76:41	N-S wall (=5K86:55)
	5K76:42	E-W wall (=5K77:20) (cont. from FP 6)
	5K76:43	Earth layer
	5K76:44	Earth layer (=5K77:34)
	5K76:47	Earth layer
	5K77:20	E-W wall (=5K76:42) (cont. from FP 6)
	5K77:23	N-S wall (cont. from FP 6)
	5K77:29	Earth layer (=5K87:29)
	5K77:31	Earth layer (=5K76:33)
	5K77:33	E-W wall (cont. from FP 6)
	5K77:34	Earth layer (=5K76:44)
	5K77:35	Earth layer (=5K87:32)
	5K77:36	Earth layer
	5K86:30	E-W wall (=5K76:36) (cont. from FP 6)
	5K86:41	Earth layer
	5K86:46	Earth layer
	5K86:48	Earth layer
	5K86:50	Earth layer
	5K86:51	Earth layer
	5K86:55	N-S wall (=5K76:41) (cont. from FP 6)
	5K87:29	Earth layer (=5K77:29)
	5K87:32	Earth layer (=5K77:35)

Stratigraphy. Phase 5 was first identified during the 1984 season when the upper courses of two walls (5K76:16 [=5K76:17] and 18) were uncovered in the process of clearing an erosion channel from a later period. A surface (5K76:19) was also found in association with the walls (Mitchel 1989: 282).

The 1989 season verified the existence of Phase 5, and succeeded in excavating most of what remained, making it possible to reconstruct much of the phase. In addition to the 1984 walls, several other walls (5K67:9, 12, 5K76:21, 39 [=5K86:30], 41, 42 [=5K77:20], 5K77:23, and 33) were

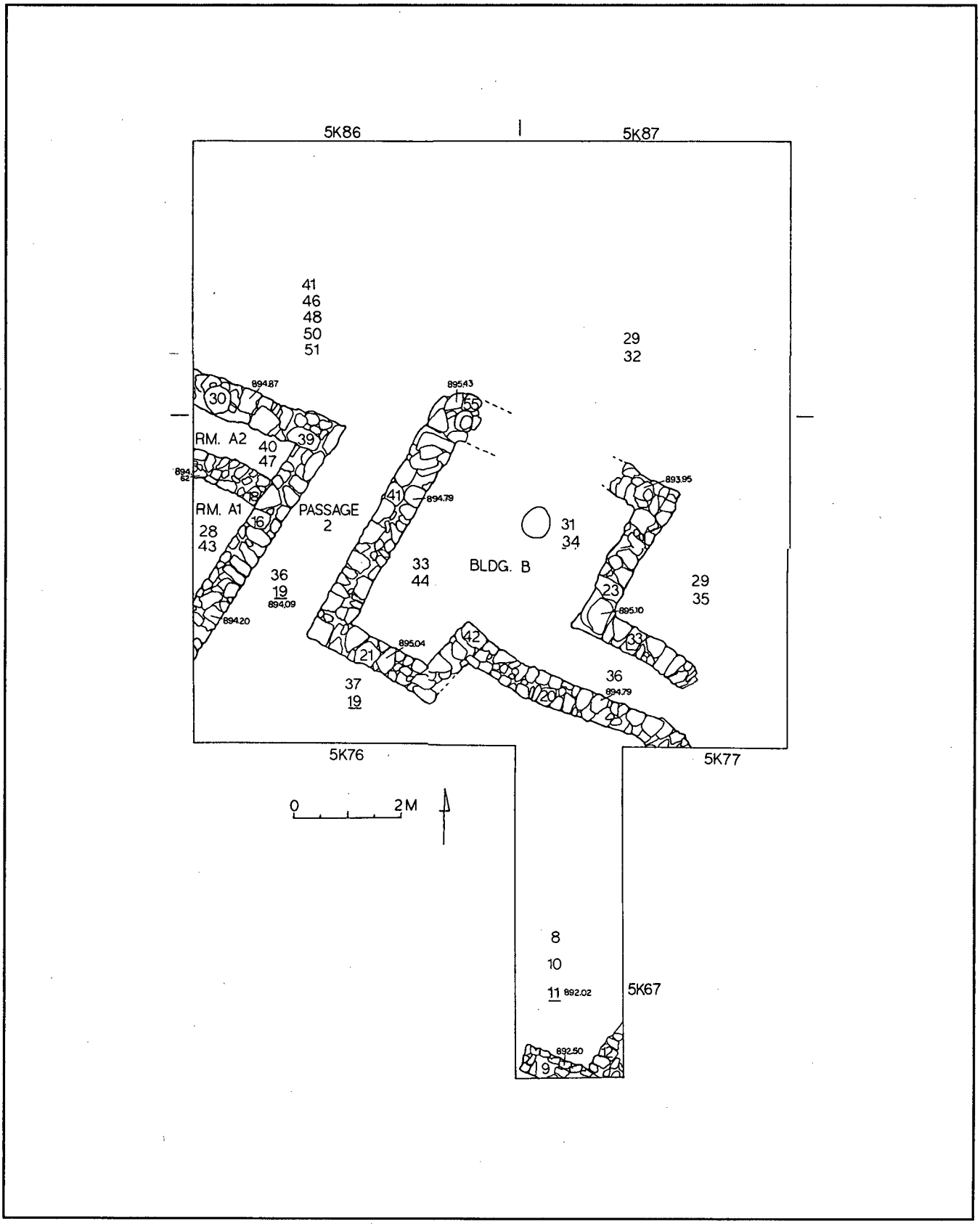


Fig. 5.24. Field D: Plan of Phase 5.

uncovered, and an architectural plan made of the phase (Harrison 1997). Although the 1992 season introduced a few alterations, the basic architectural layout uncovered in 1989 did not change. Since the architectural remains of Phase 5 have already been described thoroughly in the 1989 report, only a brief review will be necessary here.

The 1989 excavations uncovered portions of two distinct structures (Rooms 1 and 2) separated by a passageway (Passageway 2) (Harrison 1997:103). A second passageway (Passageway 1) was found to run the north of Room 1, between Walls 5K76:18 and 39 (=5K86:30) (reused from Phase 6). However, further investigations in 1992 revealed that Wall 5K76:18 did not form a corner with Wall 5K76:16 (=5K76:17), as was originally believed, but rather abutted it, and that the northeast corner of the structure was formed by a join between Walls 5K76:16 (=17) and 5K76:39 (=5K86:30) (fig. 5.24). Thus, Passageway 1 in fact was a second room which, together with Room 1, formed the northeast corner of a larger structure, Building A, located for the most part outside the excavation area to the west. We have thus labeled it Room A2. Earth Layers 5K76:28, 40, 43, and 47, recovered from within Room A2, produced very little occupational debris.

Building B, the former Room 2, a peculiarly shaped building which seems to have been approached from the southeast, was excavated almost entirely in 1989 (Harrison 1997: Fig. 5.6). Continued work in 1992 revealed that, as in previous phases, large sections of pre-existing walls were reused and incorporated directly into the Phase 5 structure. Such was the case with Walls 5K76:42 (=5K77:20), 5K77:23, and 33, and explains the unique shape of the building. The Phase 5 builders simply preserved what remained of pre-existing walls and added a number of their own (including 5K76:21 and 41) to form the oddly shaped structure. The 1992 excavations also uncovered the northwest corner of the building (Wall 5K86:55), although no trace of the northern wall line was found. Apparently, it was removed during subsequent building activity.

A large flat stone uncovered in the northern portion of Building B may have been a pillar base used to support a roof over at least part of the building (fig. 5.24). It is unlikely that the entire structure was roofed, however, given the size of the building and the fact that no trace of roofing material was recovered from occupational debris inside the building.

The occupational layers (Earth Layers 5K76:33 [=5K77:31] and 44 [=5K77:34]) inside Building B contained a wealth of faunal remains, but very few artifacts. The entire deposit produced only one spindle whorl fragment, four Canaanean-style blades, and a tabular flint scraper. At the same time, faunal analysis identified large quantities of sheep/goat and cattle (large mammal) bones, as well as some evidence of gazelle, donkey, dog, and fowl. Taken as a whole, this occupational debris suggests that the structure may in fact have functioned as an enclosure, or pen, for animals. Its size and layout also favor such an interpretation. The occupational debris from the surrounding earth loci (5K76:36, 37, 5K77:29 [=5K87:29], 35 [5K87:32], 36, 5K86:46, and 51, as well as 5K86:41, 48, and 50 which originally were all assigned to Phase 4 but belong in Phase 5) also support the notion of an animal shelter, although they supplied evidence of food preparation and other types of domestic activity as well.

In addition to Buildings A and B, the 1989 excavations uncovered two small walls (5K67:9 and 12), two associated earth layers (5K67:8 and 10), and a surface (5K67:11) in the deep probe of Square 5K67 which were all assigned to Phase 5. Since no further work was carried out in the probe during the 1992 season, our understanding of the function and stratigraphic relationship between this material and Phase 5 remains the same.

The pattern set during each of the preceding phases of constant depositional build-up followed by the appearance of a new settlement plan utilizing pre-existing structures characterized the end of Phase 5 and the transition to Phase 4. Although the nature of some of the earth loci uncovered in 1989 prompted suggestions of abandonment, it is more likely that occupation was continuous, with impetus for the construction of the Phase 4 settlement resulting from the need to adjust to the changing demands of increasing socio-economic complexity (Harrison 1997).

Pottery (figs. 5.25-5.28). Although the 1989 season produced a reasonably representative sample of Phase 5 pottery, the added material gathered in 1992 affords an improved focus of the ceramic assemblage for this phase. As before, the range of forms reflects little dramatic change from the previous Phase 6, with only gradual changes and the occasional introduction of a new rim profile within specific vessel type categories. The Phase 5 ceramic assemblage clearly belongs within an EB III context and sits well within the relative cultural sequence established from the stratigraphic profile in Field D, anticipating many of the developments that subsequently manifest themselves in Phase 4.

Holemouth Jars. The holemouth jar rim profiles excavated in 1992 repeated all of the variations identified in the 1989 material, and virtually all of the forms present in both the Phase 6 and Phase 4 material:

Rim Forms	Figures	Parallels at 'Umayri
Simple; round	5.25:2	*MPP 4*: figs. 5.13:3; 5.19:1-2 *MPP 3*: Fig. 5.8:2-3, 5, 9
Simple; round top, square bottom	5.25:6	*MPP 3*: figs. 5.8:4; 5.14:8, 11; 5.15:5
Simple; square top, round bottom	5.25:3	*MPP 4*: fig. 5.19:8, 26 *MPP 3*: figs. 5.8:11; 5.15:3

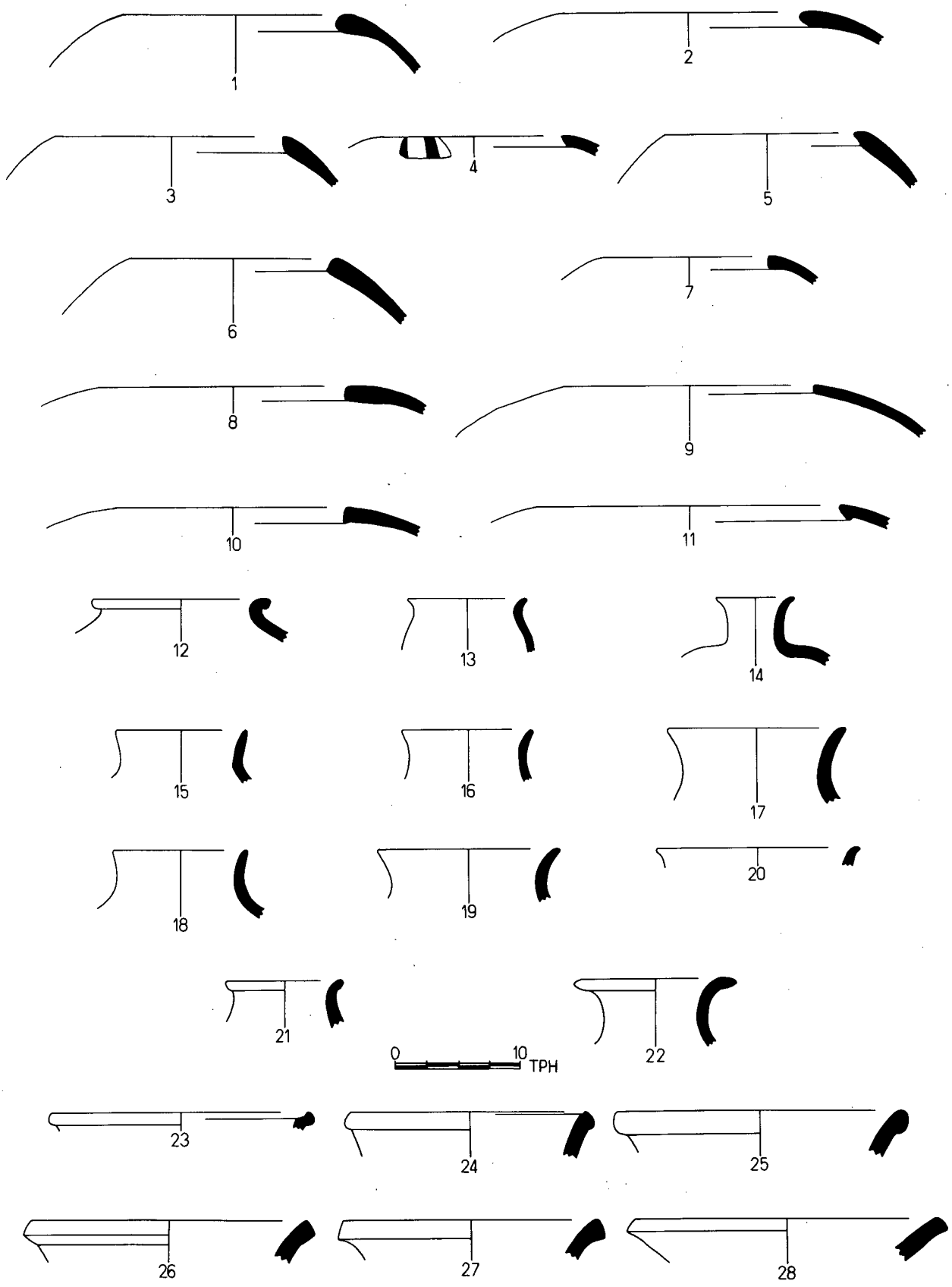


Fig. 5.25. Field D: Pottery from Phase 5.

No.	Vessel Type	Provenance Sq	Locus	Pail	Reg.	Fabric Color Ext	Core	Int	Non-Plastic Type	Size	Shape	Density	Voids	Manu	Surface Treatment Ext	Color	Int	Color	Decor	Fire
1	Hole-mouth Jar	5K87	32	89	2	10YR6/3 Pale Brown	7.5YR6/0 Gray	10YR6/3 Pale Brown	L	7A 6A 5A 4A 3A	SRA SAA AB	H	PR4A PR3A PA5A FS5A FS6A	H	---	---	---	---	---	U
2	Hole-mouth	5K86	51	125	1	5YR6/1 Light Gray	5YR6/1 Light Gray	2.5YR6/6 Light Red	L	7A 6A 5A 4A 3A	SRA SAB AB	MH	PR4A PR3A FS5A FS6A	H	---	---	---	---	---	O
3	Hole-mouth	5K77	34	118	1	5YR6/2 Pinkish Gray	5YR6/2 Pinkish Gray	5YR6/2 Pinkish Gray	L	6A 5A 4A 3A	RA SRA SAB AA	H	PR4A PR3A FS5A FS6A FC6A	H	---	---	---	---	---	O
4	Hole-mouth	5K86	50	120	3	2.5YR6/6 Light Red	2.5YR6/0 Gray	2.5YR6/6 Light Red	L	6A 5A 4A 3A	RA SRA SAA AA	MH	PR4A PA5A FS5A	H	---	---	---	---	Pa-RBo+U 10YR4/6 Red	
5	Hole-mouth	5K77	35	109	1	5YR7/4 Pink	5YR7/4 Pink	2.5YR6/6 Light Red	L	6A 5A 4A 3A	RA SRA SAA AA	H	PR4A FS4A FS5A PA6A	H	---	---	---	---	---	O
6	Hole-mouth	5K77	35	109	2	5YR7/4 Pink	5YR7/4 Pink	5YR7/4 Pink	L	6A 5A 4A 3A	RA SRA SAA AA	MH	PR4A PR3A FS5A FS6A	H	---	---	---	---	---	O
7	Hole-mouth Jar	5K87	32	83	3	5YR7/4 Pink	5YR7/4 Pink	5YR7/4 Pink	L	6A 5A 4A 3A	SRA SAA AA	MH	PR4A FS4A FS5A	H	---	---	---	---	---	O
8	Hole-mouth	5K86	51	126	1	7.5YR6/0 Gray	7.5YR6/0 Gray	7.5YR6/0 Gray	L	6A 5A 4A 3A	RA SRA SAB AA	MH	PR4A PR3A PA5A FS5A FS6A	H	---	---	---	---	---	R
9	Hole-mouth	5K86	51	122	1	5YR7/6 Reddish Yellow	5YR7/6 Reddish Yellow	5YR7/6 Reddish Yellow	L	6A 5A 4A 3A	RA SRA SAA AA	MH	PR4A PR3A PA5A FS5A	H	---	---	---	---	---	O
10	Hole-mouth	5K86	51	125	2	7.5YR7/2 Pinkish Gray	7.5YR7/2 Pinkish Gray	7.5YR7/2 Pinkish Gray	L	6A 5A 4A 3A	RA SRA SAA AA	MH	PR4A PR3A PA5A PA6A	H	---	---	---	---	---	O
11	Hole-mouth Jar	5K87	32	83	2	7.5YR7/2 Pinkish Gray	7.5YR7/2 Pinkish Gray	7.5YR7/2 Pinkish Gray	L	6A 5A 4A 3A	RB SRA SAA AA	H	PR4A PR3A FS4A FS5A	H	---	---	---	---	---	O
12	Jar	5K77	35	108	2	2.5YR6/8 Light Red	2.5YR6/8 Light Red	5YR7/6 Reddish Yellow	L	6A 5A 4A 3A	RA SRA SAA AA	MH	PR4A PR3A FS4A FS5A FC6A FC7A	H	SVB-H RBo+	2.5YR3/6 Dark Red	S-H RN	10R5/8 Red	---	U
13	Low Necked Jar	5K87	32	76	1	7.5YR6/2 Pinkish Gray	7.5YR6/0 Gray	7.5YR6/2 Pinkish Gray	L	6A 5A 4A 3A	RB SRA SAA AA	MH	PR4A PR3A FS5A FS6A	H	S-M RBo+	2.5YR4/6 Red	S-M RBo+	2.5YR4/6 Red	---	U
14	Jar	5K77	35	105	1	10YR8/6 Yellow	10YR8/1 White	10YR8/6 Yellow	L	6A 5B 4B 3A	RA SRB SAA	MH	PR5A PR4A PR3A FS5A FS6A FC7A	H	---	---	---	---	---	U
15	Jar	5K77	34	118	5	7.5YR7/4 Pink	10YR8/3 Very Pale Brown	7.5YR7/4 Pink	L	6A 5A 4B 3A	RA SRA SAB AA	MH	PR4A PR3A FS5A FS6A	H	---	---	---	---	---	Q
16	Necked Jar	5K87	32	85	2	2.5YR6/6 Light Red	2.5YR6/6 Light Red	2.5YR6/0 Gray	L	5A 4A 3A	SRA SAA AB	MH	PR4A PR3B FS4A FS5A	H	---	---	---	---	---	O
17	Low Necked Jar	5K87	32	88	1	5YR6/3 Light Reddish Brown	7.5YR7/0 Light Gray	5YR6/3 Light Reddish Brown	L	6A 5A 4A 3A	RA SRA SAA AA	H	PR4A PR3A FS5A FS6A FC7A	H	---	---	---	---	---	U

Fig. 5.25, *continued.* Field D: Pottery descriptions for nos. 1-17.

No.	Vessel Type	Sq	Provenance Locus	Pail	Reg.	Fabric Color Ext	Core	Int	Non-Plastic Type	Size	Shape	Density	Voids	Manu	Surface Treatment Ext	Color	Int	Color	Decor	Fire
18	Jar	5K77	34	118	2	5YR7/6 Reddish Yellow	5YR5/1 Gray	5YR7/6 Reddish Yellow	L	6A 5A 4A 3A	SRA SAA AA	H	PR4A FS5A FS6A FC6A FC7A	H	---	---	---	---	---	U
19	Jar	5K77	34	118	4	10YR8/2 White	10YR8/2 White	10YR8/2 White	L	6A 5A 4A 3A	RA SRA SAA AA	H	PR4A FS5A FS6A FC6A	H	---	---	---	---	---	O
20	Jar	5K86	50	116	1	7.5YR8/4 Pink	7.5YR8/4 Pink	7.5YR8/4 Pink	L	5A 4A 3A 2A	RA SRA SAA AA	M	PR4A PR3A FS5A	H	S-M RBo+	10R4/6 Red	S-M R	10R4/6 Red	---	O
21	Low Necked Jar	5K87	32	84	3	5YR6/4 Light Reddish Brown	5YR6/4 Light Reddish Brown	5YR6/4 Light Reddish Brown	L	6A 5A 4A 3A	SRA SAA AB	M	PR4A PR3A PA5A FS5A	H	---	---	---	---	---	O
22	Jar	5K86	51	126	3	2.5YR6/8 Light Red	2.5YR5/0 Gray	2.5YR6/8 Light Red	L	6A 5A 4A 3A	RA SRA SAA AA	MH	PR5A PR4A FS5A FC5A	H	---	---	---	---	---	U
									P	6A 5A			FC6A							
23	Channel Rim Jar	5K77	34	112	2	7.5YR6/0 Gray	7.5YR6/0 Gray	7.5YR6/0 Gray	L	5A 4A 3A 2A	RA SRA SAA AA	MH	PR4A PR3A FS4A	H	---	---	---	---	---	R
24	High Necked Jar	5K87	32	82	2	2.5YR6/6 Light Red	2.5YR6/0 Gray	2.5YR6/6 Light Red	L	6A 5A 4A 3A	RA SRA SAA AA	MH	PR4A PR3A FS5A FS6A	H	---	---	---	---	---	U
25	Low Necked Jar	5K87	32	88	3	2.5YR6/6 Light Red	2.5YR6/0 Gray	2.5YR6/6 Light Red	L	6A 5A 4A 3A	RA SRA SAA AA	MH	PR4A PR3A FS5A FS6A	H	---	---	---	---	---	U
26	Jar	5K77	34	118	3	7.5YR8/4 Pink	7.5YR8/4 Pink	7.5YR8/4 Pink	L	6A 5B 4B 3A	SRA SAA AA	MH	PR4A FS5A FS6A FC6A	H	---	---	---	---	---	O
27	High Necked Jar	5K87	32	82	1	2.5YR6/4 Light Reddish Brown	7.5YR7/0 Light Gray	2.5YR6/4 Light Reddish Brown	L	5A 4A 3A	RA SRA SAA AA	M	PR4A PR3A FS5A FS6A	H	---	---	---	---	---	U
28	High Necked Jar	5K87	32	88	2	2.5YR6/6 Light Red	2.5YR6/0 Gray	2.5YR6/6 Light Red	L	6A 5A 4A 3A	RA SRA SAA AA	H	PR4A FS5A FS6A	H	---	---	---	---	---	U

Fig. 5.25, *continued.* Field D: Pottery descriptions for nos. 18-28.

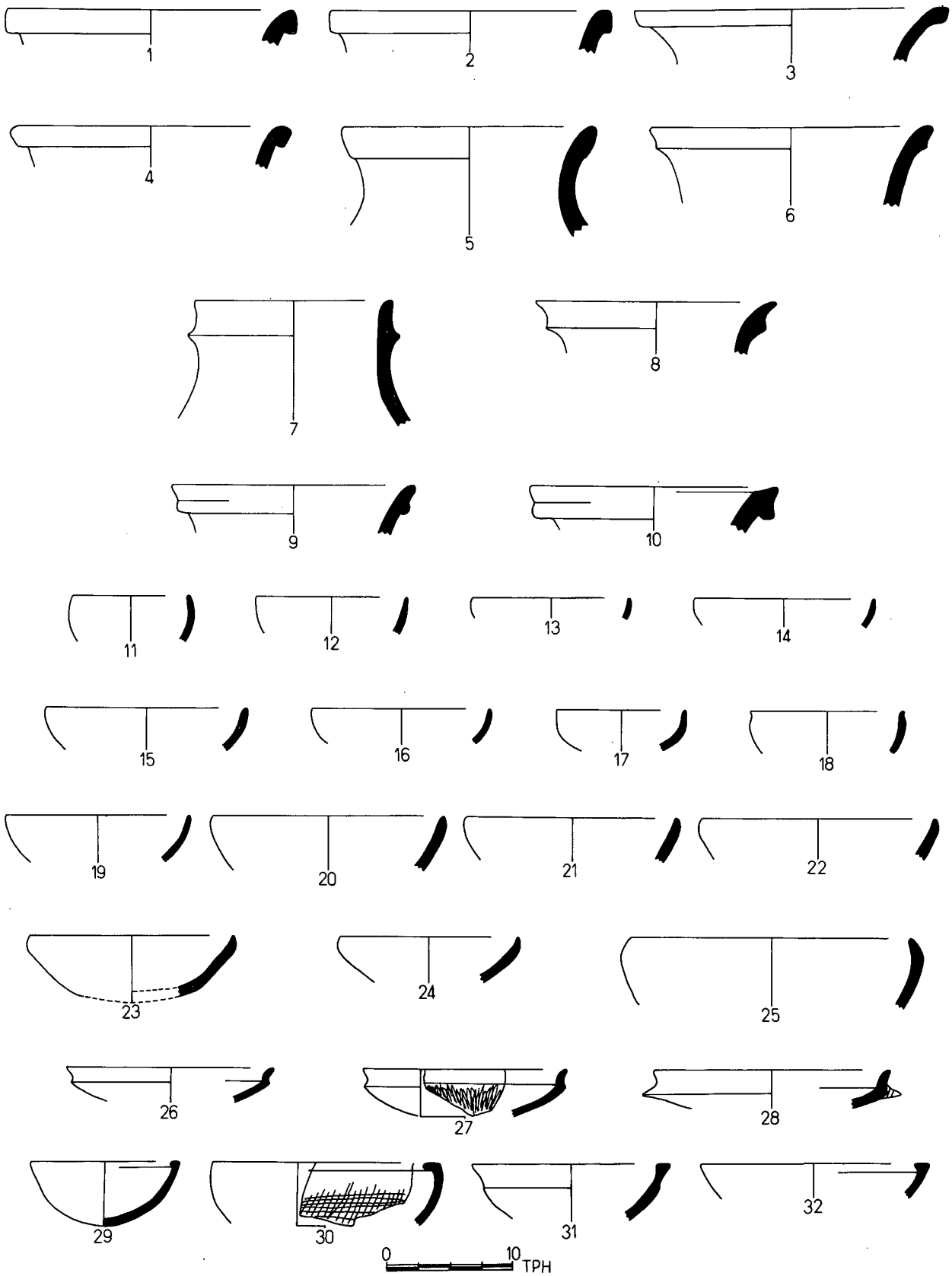


Fig. 5.26. Field D: Pottery from Phase 5, *continued.*

No.	Vessel Type	Sq	Provenance Locus	Pail	Reg.	Fabric Color Ext	Core	Int	Non-Plastic Type	Size	Shape	Density	Voids	Manu	Surface Treatment Ext	Color	Int	Color	Decor	Fire
1	High Necked Jar	5K77	35	115	1	5YR7/4 Pink	5YR5/1 Gray	5YR7/4 Pink	L	6A 5A 4A 3A 2A	SRA SAA AA	H	PR4A FS5A FS6A FC7A	H	---	---	---	---	---	U
2	High Necked Jar	5K87	32	83	1	7.5YR7/6 Reddish Yellow	2.5YR5/0 Gray	7.5YR7/6 Reddish Yellow	L	6A 5A 4A 3A	RA SRA SAA AA	MH	PR4A PR3A PA5A FS5A	H	---	---	---	---	---	U
3	High Necked Jar	5K87	32	86	2	2.5YR6/8 Light Red	2.5YR6/0 Gray	7.5YR8/4 Pink	L P	5A 4B 3A 5A 4A	RA SRA SAA AA	MH	PR4A FS5B FS6A FC7A	H	---	---	---	---	---	U
4	High Necked Jar	5K87	Cln Up B	73	2	7.5YR7/4 Pink	7.5YR6/0 Gray	7.5YR7/4 Pink	L	7A 6A 5A 4A 3A	RA SRA SAA AA	MH	PR4A PR3A FS5A FS6A	H	---	---	---	---	---	U
5	High Necked Jar	5K87	32	84	1	5YR7/6 Reddish Yellow	2.5YR6/0 Gray	5YR7/6 Reddish Yellow	L	7A 6A 5A 4A 3A	RA SRA SAA AA	MH	PR4A PR3A FS5A FS6A FC7A	H	S-H RBo+	10R4/6 Red	S-H R	10R4/6 Red	---	U
6	High Necked Jar	5K87	32	85	1	2.5YR6/6 Light Red	2.5YR5/0 Gray	2.5YR6/6 Light Red	L	6A 5A 4A 3A	RA SRA SAA AA	M	PR4A PR3A FS5A FS6A	H	---	---	---	---	---	U
7	High Necked Jar	5K76	44	115	1	5YR7/6 Reddish Yellow	5YR6/1 Gray	5YR7/6 Reddish Yellow	L	6A 5A 4A 3A	RB SRA SAA AA	MH	PR4A PR3A PA5A FS5A FS6A FC7A	H	---	---	---	---	---	U
8	High Necked Jar	5K77	34	119	2	5YR7/4 Pink	5YR7/4 Pink	5YR7/4 Pink	L	6A 5A 4A 3A	SRA SAB AA	MH	PR4A FS5A FS6A FC6A FC7A	H	---	---	---	---	---	O
9	High Necked Jar	5K77	34	112	3	5YR7/4 Pink	2.5YR5/0 Gray	5YR7/4 Pink	L	6A 5A 4A 3A	SRA SAA AA	MH	PR5A PR4A FS5A FS6A FC6A	H	---	---	---	---	---	U
10	High Necked Jar	5K87	Cln Up B	72	4	7.5YR8/4 Pink	7.5YR6/0 Gray	7.5YR8/4 Pink	L	6A 5A 4A 3A	SRA SAA AA	MH	PR4A PR3A PA5A FS5A FS6A FS7A FC6A	H	---	---	---	---	---	U
11	Bowl	5K77	35	109	4	5YR7/3 Pink	5YR7/3 Pink	5YR7/3 Pink	L	6A 5A 4B 3A	RA SRA SAA AA	MH	PR4A PR3A FS4A FS5A	H	S-HB-H RBo+	5YR3/4 Dark Reddish Brown	---	---	---	O
12	Bowl	5K86	50	119	1	2.5YR6/6 Light Red	2.5YR6/6 Light Red	2.5YR6/6 Light Red	L P	5A 4A 3A 2A 5A 4A	RA SRA SAA AA	M	PR4A PR3B	H	S-M RBo+	10R4/8 Red	S-M RBo+	10R4/8 Red	---	O
13	Bowl	5K76	44	110	4	2.5YR6/6 Light Red	2.5YR7/4 Pink	2.5YR6/6 Light Red	L	4A 3A 2A	SAA SRA RA	M	PR4A PR3A FS4A FS3A	H	---	---	---	---	---	O
14	Bowl	5K76	44	110	3	2.5YR6/6 Light Red	2.5YR7/4 Pink	2.5YR6/6 Light Red	L	4A 3A 2A	RB SRB SAA	L	PR4A PR3A	H	---	---	---	---	---	O
15	Bowl	5K86	50	119	2	5YR6/2 Pinkish Gray	5YR6/2 Pinkish Gray	5YR6/2 Pinkish Gray	L	7A 6A 5A 4A 3A 2A	RA SRA SAA AA	H	PR4A PR3A PA6A FS5A	H	---	---	---	---	---	R
16	Bowl	5K87	32	85	3	7.5YR8/4 Pink	7.5YR8/4 Pink	7.5YR8/4 Pink	L	5A 4A 3A	RA SRA SAA AA	M	PR4A PR3A FS5A	H	---	---	---	---	---	O

Fig. 5.26, *continued.* Field D: Pottery descriptions for nos. 1-16.

	Vessel		Provenance			Fabric Color			Non-Plastic				Voids	Manu	Surface Treatment				Decor	Fire
No.	Type	Sq	Locus	Pail	Reg.	Ext	Core	Int	Type	Size	Shape	Density			Ext	Color	Int	Color		
17	Bowl	5K77	36	114	2	5YR6/1 Gray	5YR6/1 Gray	5YR6/1 Gray	L	5A 4A 3A 2A	RA SRA SAA AA	M	PR4A PR3A FS4A PA5A	H	---	---	---	---	---	R
18	Bowl	5K87	32	86	1	5YR7/6 Reddish Yellow	5YR7/6 Reddish Yellow	5YR7/6 Reddish Yellow	L	6A 5A 4A 3A 2A	RA SRA SAA AA	M	PR4B PR3A FS4A FS5A	H	---	---	---	---	---	O
19	Bowl	5K77	36	114	1	2.5YR6/4 Light Reddish Brown	2.5YR6/4 Light Reddish Brown	2.5YR6/4 Light Reddish Brown	L	5A 4A 3A	RA SRB SAA	M	PR4A PR3A FS4A	H	---	---	---	---	---	O
20	Bowl	5K86	51	125	3	7.5YR8/4 Pink	7.5YR8/4 Pink	7.5YR8/4 Pink	L	6A 5A 4A 3A	RA SRA SAA AA	MH	PR4A PR3A PA5A FS5A FS6A	H	---	---	---	---	---	O
21	Bowl	5K76	44	110	2	2.5YR6/6 Light Red	2.5YR5/0 Gray	2.5YR6/6 Light Red	L	6A 5A 4A 3A	RA SRA SAA AA	MH	PR4A PR3A PA5A FS5A	H	---	---	---	---	---	U
22	Bowl/ Lamp	5K86	51	125	4	5YR7/3 Pink	5YR7/3 Pink	5YR7/3 Pink	L	5A 4B 3B 2A	RA SRA SAA AA	M	PR4A PR3A FS5A	H	S-M RBo+	10R4/6 Red	SHBM RBo+	10R4/6 Red	---	O
23	Bowl	5K77	35	115	3	2.5YR6/6 Light Red	2.5YR6/6 Light Red	2.5YR6/6 Light Red	L	5A 4A 3A 2A	RA SRA SAA AA	MH	PR4A PR3A FS4A FS5A	H	S-M R	7.5R4/6 Red	S-M RBo+	7.5R4/6 Red	---	O
24	Lamp	5K77	35	109	5	5YR7/4 Pink	5YR7/4 Pink	5YR7/4 Pink	L	5A 4A 3A	RA SAA AA	MH	PR4A PR3A FS4A FS5A FS6A	H	S-M RBo+	10R4/6 Red	S-M RBo+	10R4/6 Red	Pa-Bo 7.5R2.5/0 Black	O
25	Bowl	5K76	44	110	1	2.5YR6/8 Light Red	2.5YR5/0 Gray	2.5YR6/8 Light Red	L	6A 5A 4A 3A	RA SRA SAA	MH	PR4A PR3A FS5A FS6A FC7A	H	---	---	---	---	---	U
26	Carinated Bowl	5K87	32	86	3	5YR5/1 Gray	5YR5/1 Gray	5YR5/1 Gray	L P	5A 4A 3B 2A AA 6A 5A	RB SRB SAA AA	MH	PR5A PR4A PR3A FS4A	H	---	---	HB-M Bo+	---	---	R
27	Carinated Bowl	5K87	32	89	1	5YR7/4 Pink	5YR7/4 Pink	5YR7/4 Pink	L	6A 5A 4A 3A 2A	RB SRA SAA AA	MH	PR4A PR3A PA5A FS4A FS5A	H	---	---	VB-M Bo+	---	---	O
28	Carinated Bowl	5K87	Cln Up B	72	1	2.5YR6/6 Light Red	2.5YR6/0 Gray	2.5YR6/6 Light Red	L	6A 5A 4A 3A	RA SRA SAA AA	M	PR4A PR3A FS5A FS6A	H	SHBM RBo+	2.5YR6/6 Light Red	SHBM RBo+	2.5YR6/6 Light Red	---	U
29	Bowl	5K86	50	121	1	2.5YR6/8 Light Red	5YR7/1 Light Gray	2.5YR6/8 Light Red	L P	6A 5A 4A 3A 5A 4A	RA SRA SAA AA	MH	PR5A PR4A PR3A FS5A	H	---	---	SHB-H RBo+	2.5YR4/4 Reddish Brown	---	U
30	Bowl	5K77	35	104	1	10YR5/2 Grayish Brown	10YR5/2 Grayish Brown	10YR5/2 Grayish Brown	L	5A 4B 3B 2A	RA SRB SAA	L	PR5A PR4A PR3A	H	---	---	SHBM RBo+	10R5/8 Red	---	U

Fig. 5.26, *continued.* Field D: Pottery descriptions for nos. 17-30.

	Vessel		Provenance			Fabric Color			Non-Plastic				Voids	Manu	Surface Treatment				Decor	Fire
No.	Type	Sq	Locus	Pail	Reg.	Ext	Core	Int	Type	Size	Shape	Density			Ext	Color	Int	Color		
31	Bowl	5K76	44	115	2	2.5YR5/0 Gray	2.5YR5/0 Gray	2.5YR6/4 Light Reddish Brown	L	5A 4A 3A 2A	RA SRA SAA AA	M	PR4A PR3A FS5A FS6B FS7A	H	---	---	---	---	---	R
32	Deep Bowl	5K86	50	120	4	2.5YR2.5/0 Black	2.5YR2.5/0 Black	2.5YR5/4 Reddish Brown	L	6A 5A 4A 3A	RA SRA SAA AA	MH	PR4A PR3A FS5A	H	SHBM RBo+	2.5YR4/6 Red	SHBM RBo+	2.5YR4/6 Red	---	U

Fig. 5.26, ***continued.*** Field D: Pottery descriptions for nos. 31-32.

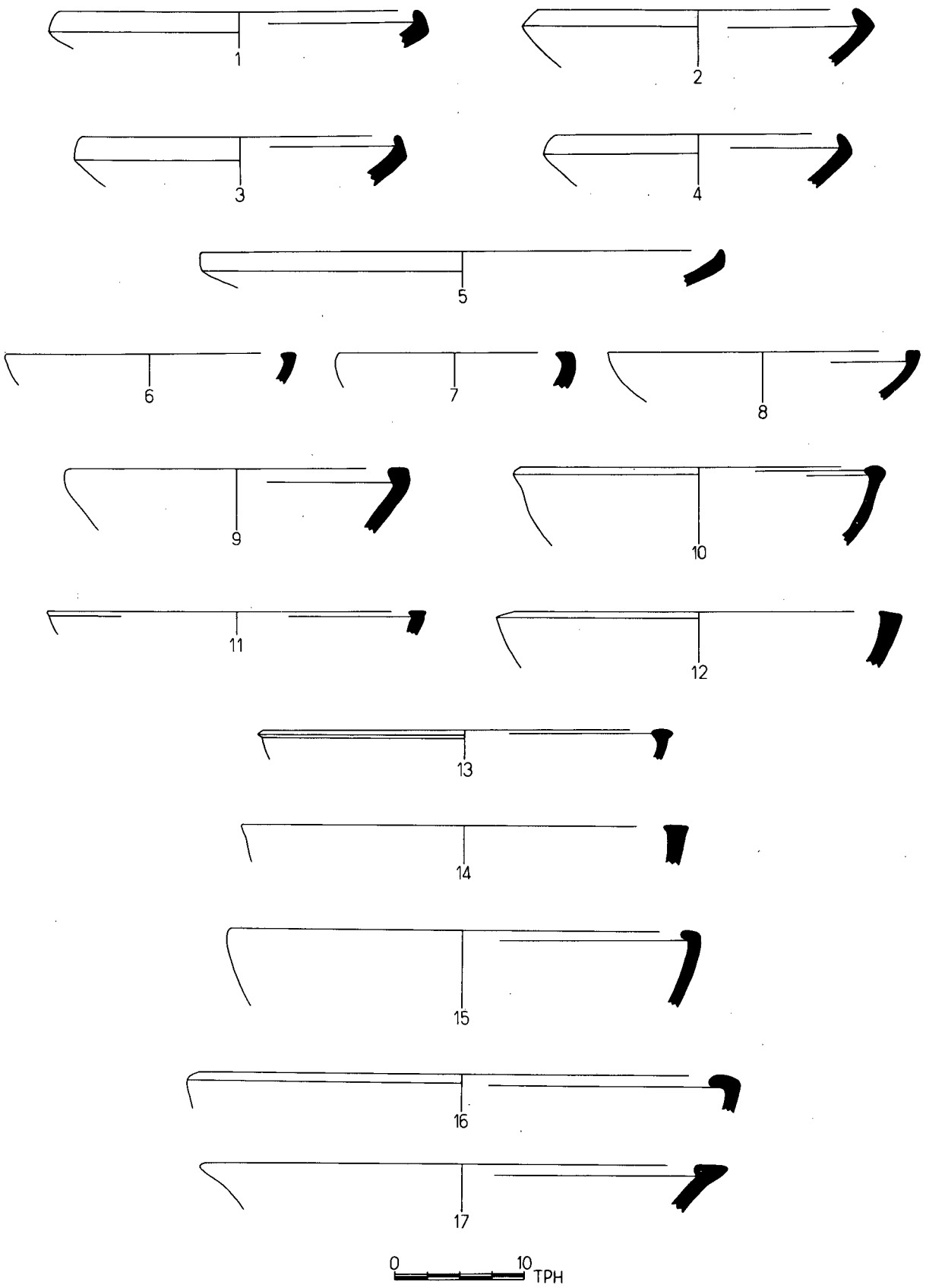


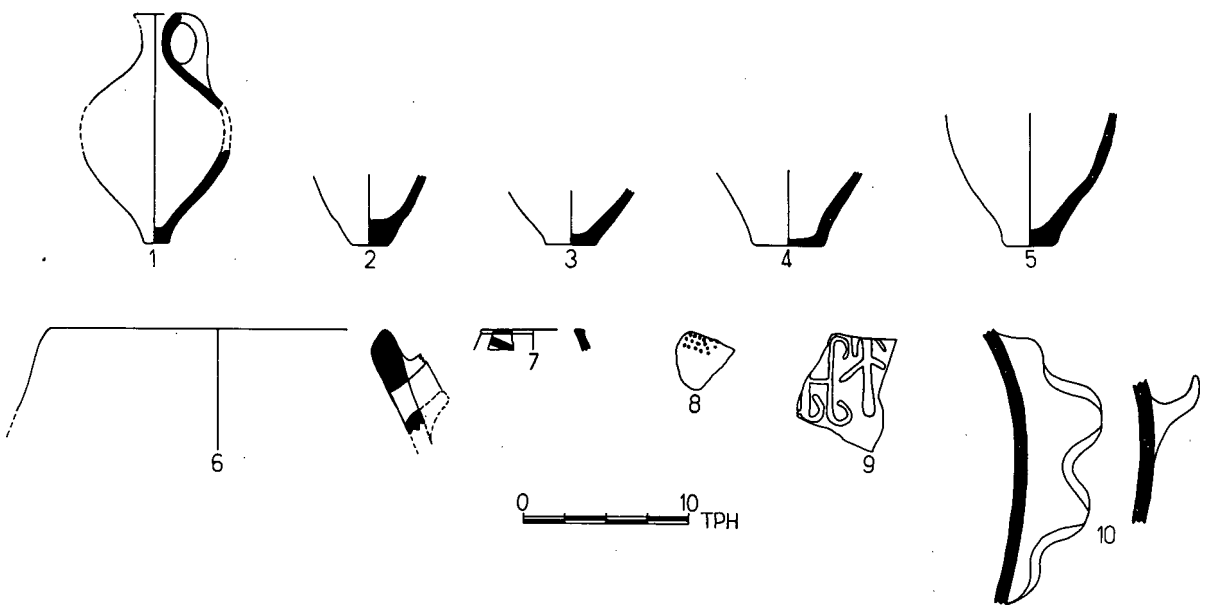
Fig. 5.27. Field D: Pottery from Phase 5, *continued.*

Vessel		Provenance			Fabric Color			Non-Plastic				Voids	Manu	Surface Treatment				Decor	Fire
No.	Type	Sq	Locus	Pail	Reg.	Ext	Core	Int	Type	Size	Shape	Density				Ext	Color	Int	Color		
1	Platter Bowl	5K87	Cln Up B	73	3	2.5YR7/6 Reddish Yellow	5YR6/0 Gray	2.5YR7/6 Reddish Yellow	L	7A 6A 5A 4A 3A	RA SRA SAA AA	MH	PR4A PR3A FS5A FS6A FC7A	H	SHBM RBo+	10R4/6 Red	SHBM RBo+	10R4/6 Red	---	U
									P	6A										
2	Platter Bowl	5K87	51	129	1	10R6/6 Light Red	10R6/6 Light Red	10R6/6 Light Red	L	6A 5A 4B 3A	RA SRA SAA AA	MH	PR4A PR3A FS5B FS6A FC6A	H	SHBM R	2.5YR4/4 Reddish Brown	SHBM RBo+	2.5YR4/4 Reddish Brown	---	O
3	Platter Bowl	5K86	51	125	5	2.5YR6/2 Pale Red	2.5YR5/0 Gray	2.5YR6/2 Pale Red	L	5A 4A 3A 2A	RB SRA SAA AA	M	PR4A PR3A FS4A FS5B FS6A	H	S-M RBo+	2.5YR4/6 Red	SHBM RBo+	10R4/6 Red	---	U
4	Platter	5K87	Cln Up B	72	3	2.5YR5/0 Gray	2.5YR5/0 Gray	2.5YR5/0 Gray	L	5A 4A 3A	RA SRA SAA AA	M	PR4A PR3A FS5A FS6A FS7A	H	SHB-H RBo+	10R4/6 Red	SHB-H RBo+	10R4/6 Red	---	R
5	Platter	5K77	35	110	1	2.5YR5/4 Reddish Brown	2.5YR5/4 Reddish Brown	2.5YR5/4 Reddish Brown	L	7A 6A 5A 4A 3A	RA SRA SAB AA	MH	PR4A PR3A FS4A FS5A	H	S-H RBo+	2.5YR3/6 Dark Red	S-H R	2.5YR3/6 Dark Red	---	O
6	Bowl	5K77	34	119	1	5YR7/4 Pink	2.5YR6/0 Gray	5YR7/4 Pink	L	5A 4B 3B 2A	RA SRB SAA AA	MH	PR4A PR3A PA5A	H	---	---	SHBM RBo+	10R4/8 Red	---	O
7	Bowl	5K86	50	119	3	7.5YR6/0 Gray	7.5YR6/0 Gray	5YR7/4 Pink	L	6A 5A 4A 3A	RA SRA SAA AA	MH	PR4A PR3A FS4A FS5A FS6A FC7A	H	S-M R	2.5YR3/2 Dusky Red	S-M RBo+	2.5YR3/2 Dusky Red	---	U
									P	5A 4A										
8	Bowl	5K87	32	86	4	7.5YR7/4 Pink	7.5YR7/4 Pink	7.5YR7/4 Pink	L	5A 4A 3A	RA SRA SAA AA	M	PR4A PR3B PA5A PA6A FS5A FS6A	H	---	---	---	---	---	O
9	Deep Bowl	5K86	50	119	4	7.5YR8/4 Pink	7.5YR6/0 Gray	7.5YR8/4 Pink	L	6A 5A 4A 3A	RA SRA SAA AA	MH	PR4A PR3A FS5A FS6A FS7A	H	---	---	---	---	---	U
10	Platter Bowl	5K86	51	126	2	5YR7/4 Pink	2.5YR6/0 Gray	5YR7/6 Pink	L	5A 4B 3B 2A	RA SRA SAA AA	MH	PR4A PR3A FS5A FS6A FC6A	H	---	---	SHBM RBo+	10R4/8 Red	---	U
11	Deep Bowl	5K77	35	109	3	2.5YR6/4 Light Reddish Brown	2.5YR6/4 Light Reddish Brown	2.5YR6/4 Light Reddish Brown	L	5A 4A 3A	RA SRB SAB AA	MH	PR4A PR3A FS4A	H	---	---	SHB-H RBo+	2.5YR3/4 Dark Reddish Brown	---	O
									P	4A 3A										
12	Platter Bowl	5K87	32	76	2	5YR7/4 Pink	2.5YR6/0 Gray	5YR7/4 Pink	L	6A 5A 4A 3A	RA SRA SAA AA	M	PR4A PA6A FS5A FS6A	H	---	---	---	---	---	U
13	Deep Bowl	5K77	35	108	1	10R6/8 Light Red	5YR7/6 Reddish Yellow	10R6/8 Light Red	L	6A 5A 4A 3A	RA SRA SAA AA	H	PR4A PR3A FS4A FS5A FS6A FC7A	H	S-H RBo+	7.5R3/6 Dark Red	S-H RBo+	7.5R3/6 Dark Red	---	U

Fig. 5.27, *continued.* Field D: Pottery descriptions for nos. 1-13.

	Vessel		Provenance			Fabric Color			Non-Plastic				Voids	Manu	Surface Treatment				Decor	Fire
No.	Type	Sq	Locus	Pail	Reg.	Ext	Core	Int	Type	Size	Shape	Density			Ext	Color	Int	Color		
14	Deep Bowl	5K77	35	117	1	2.5YR6/6 Light Red	2.5YR5/0 Gray	2.5YR6/6 Light Red	L	6A 5A 4A 3A	SRA SAA AA	MH	PR4A PR3A FS4A FS5A FS6A	H	S-M RBo+ HB-L R	2.5YR4/6 Red	S-M RBo+	2.5YR4/6 Red	---	U
15	Deep Bowl	5K77	35	107	1	7.5YR6/4 Light Brown	2.5YR6/0 Gray	2.5YR6/0 Gray	L	7A 6A 5A 4A	SRA SAB AB	H	PR5A PR4A FS5A FS6A FC7A	H	SHBM RBo+	7.5YR6/4 Light Brown	---	---	---	U
16	Deep Bowl	5K77	35	109	7	5YR7/4 Pink	5YR5/1 Gray	5YR7/4 Pink	L	5A 4A 3A 2A	RA SRA SAA AA	MH	PR4A PR3A PA5A	H	S-M RBo+	2.5YR4/6 Red	---	---	---	U
17	Platter Bowl	5K87	32	84	2	5YR7/4 Pink	2.5YR6/0 Gray	5YR7/4 Pink	L P	6A 5A 4A 3A 5A	RA SRA SAA AA	M	PR5A PR4A PR3A FS5A FC6A	H	SHB- H R	2.5YR4/6 Red	SHB- H RBo+	2.5YR4/6 Red	---	U

Fig. 5.27, *continued.* Field D: Pottery descriptions for nos. 14-17.



Vessel No.	Type	Sq	Provenance Locus	Pail	Reg.	Fabric Color Ext	Core	Int	Non-Plastic Type	Size	Shape	Density	Voids	Manu	Surface Treatment Ext	Color	Int	Color	Decor	Fire
1	Juglet	5K87	Cln Up B	72	5	2.5YR6/6 Light Red	2.5YR6/6 Light Red	2.5YR6/6 Light Red	L	6A 5A 4A 3A	RA SRA SAA AA	M	PR4A PR3A FS4A FS3A	H	SHBM RBo+	10R4/6 Red	---	---	---	O
2	Base	5K77	35	115	2	2.5YR6/6 Light Red	2.5YR5/0 Gray	2.5YR6/6 Light Red	L	6A 5A 4A 3A	RA SRA SAA AA	H	PR4A PR3A FS4A FS5A FS6A FC7A	H	---	---	---	---	---	U
3	Base	5K86	50	120	2	7.5YR7/2 Pinkish Gray	7.5YR7/2 Pinkish Gray	7.5YR7/2 Pinkish Gray	L	5A 4A 3A 2A	RB SRB SAA AA	M	PR5A PR4A PR3A PA5A	H	VB-M BaBo+	---	---	---	---	U
4	Base	5K77	35	109	6	2.5YR6/4 Light Reddish Brown	2.5YR6/4 Light Reddish Brown	2.5YR6/4 Light Reddish Brown	L	5A 4A 3A 2A	RA SRB SAA AA	L	PR4A PR3A PR2A	H	VB-M BaBo+	2.5YR4/2 Weak Red	---	---	---	O
5	Base	5K87	Cln Up B	73	1	7.5YR6/4 Light Brown	7.5YR6/0 Gray	7.5YR6/4 Light Brown	L	7A 6A 5A 4A 3A	RA SRA SAA AA	MH	PR4A PR3A FS5A FS6A FC7A JB7A	H	HB-L Bo+	---	---	---	---	U
6	Spouted Jar	5K87	32	89	3	7.5YR6/2 Pinkish Gray	7.5YR6/0 Gray	7.5YR6/2 Pinkish Gray	L	6A 5A 4A 3A	RA SRA SAA AA	MH	PR4A PR3A FS5A FS6A	H	---	---	---	---	---	U
7	Jar	5K86	50	121	2	10R6/8 Light Red	2.5YR5/0 Gray	10R6/8 Light Red	L	5A 4A 3A 2A	RA SRA SAA AA	M	PR4A PR3A FS5A	H	S-H RBo+	5YR8/1 White	---	---	Pa-RBo+ 10R4/6 Red	U
8	Body Sherd	5K86	50	120	1	7.5YR8/4 Pink	7.5YR8/4 Pink	7.5YR8/4 Pink	L	6A 5A 4A 3A	SRA SAB AB	MH	PR5A PR4A PR3A PA5A FS5A	H	---	---	---	---	Pu-Bo	O

Fig. 5.28. Field D: Pottery from Phase 5 and pottery descriptions for nos. 1-8.

Vessel No.	Type	Sq	Provenance Locus	Pail	Reg.	Fabric Color Ext	Core	Int	Non-Plastic Type	Size	Shape	Density	Voids	Manu	Surface Treatment Ext	Color	Int	Color	Decor	Fire
9	Seal Impression	5K87	32	76	3	2.5YR6/6 Light Red	2.5YR6/0 Gray	2.5YR6/6 Light Red	L	6A 5A 4A 3A	RA SRA SAA AA	MH	PR4A PR3A FS5A FS6A	H	S-H Bo+	2.5YR4/6 Red	---	---	---	U
10	Ledge Handle	5K77	34	112	1	10R5/8 Red	2.5YR5/0 Gray	10R5/8 Red	L	6A 5A 4A 3A	SRA SAB AB	H	PR4A FS4A FS5A FS6A FC7A JH7A	H	S-H Bo+	5YR8/1 White	---	---	---	U

Fig. 5.28, *continued.* Field D: Pottery descriptions for nos. 9-10.

Square	5.25:8-9	*MPP 4*: figs. 5.13:1-2; 5.19:3, 28 *MPP 3*: fig. 15.8:1, 8, 12
Interior thickened; round	5.25:1, 5	*MPP 4*: figs. 5.13:4-6; 5.19:4-7, 19 *MPP 3*: fig. 5.8:6-7, 10
Interior thickened; triangular	5.25:4	*MPP 3*: fig. 5.8:13
Interior thickened; ridged	5.25:7, 10-11	*MPP 4*: figs. 5.13:8; 5.19: 12-18 *MPP 3*: fig. 5.8:14-19, 21-22, 25-26

High Necked Jars with Flaring Rim. The same observation applies to this vessel type as well, with the exception that none of the Phase 5 storage jars could be said to have been decorated with the rope design found around the neck of some Phase 4 vessels:

Rim Forms	Figures	Parallels at 'Umayri
Round	5.25:24-25; 5.26:5	*MPP 4*: figs. 5.14:1-4, 8; 5.20:16-25, 27; 5.21:1, 9 *MPP 3*: fig. 5.9:2-4
Triangular	5.25:26-28; 5.26:1-2	*MPP 4*: figs. 5.14:5-7; 5.21: 5-6 *MPP 3*: fig. 5.9:1
Square	5.26:3	*MPP 4*: fig. 5.20:26 *MPP 3*: figs. 5.20:1; 5.25:10
Flanged	5.26:4, 9-10	*MPP 4*: figs. 5.14:11, 13-14; 5.21:2-3, 13-15 *MPP 3*: fig. 5.9:6
Ridged	5.26:6-8	*MPP* 4: figs. 5.14:9-10, 12; 5.21:4, 7-8, 10-12 *MPP 3*: Fig. 5.9:5

Necked Jars. The rim profiles of the Phase 5 necked jars vary little from previous phases:

Rim Forms	Figures	Parallels at 'Umayri
Simple; wide mouth	5.25:12, 17, 19-20	*MPP 4*: figs. 5.13:11-13, 20-21, 23-24; 5.19:27; 5.20:1-2, 4 *MPP 3*: fig. 5.9:7-8, 14
Simple; narrow mouth	5.25:13-16, 18	*MPP 4*: figs. 5.13:15-19, 22; 5.20:5-12 *MPP 3*: fig. 5.9:10-12
Rounded; narrow mouth	5.25:21-22	*MPP 4*: fig. 5.20:13 *MPP 3*: figs. 5.9:9; 5.24:1-15; 5.26:2-3, 5, 7; 5.27:1-2; 5.31:8

An additional necked jar, a small band painted vessel (fig. 5.28:7), appears to be an early, intruding form. Closely resembling a jar found in a Phase 4 deposit excavated in 1989 (Harrison 1997: Fig. 5.30:25), the vessel parallels material dating to the late Chalcolithic period (Hanbury-Tenison 1986: Fig. 25:3-5).

Channeled-rim Jar (fig. 5.25:23). The rim profile on this vessel, with its pronounced "droop", more closely resembles that of the Phase 4 channeled-rim storage jar (Harrison 1997: Fig. 5.23:1), than that of the Phase 6 example described above (fig. 5.20:15).

Spouted Jar (fig. 5.28:6). This is the second spouted vessel found in Phase 5. The first was recovered in 1989 (Harrison 1997: Fig. 5.10:1). Together, the two may indicate that the principal Phase 5 structure uncovered in Field D (Building B) may have been involved in processing some type of liquid substance.

Jug Bases (fig. 5.28:2-5). These profiles are a representative sample, and follow the common flat base tradition of EB II-III jugs.

Juglet (fig. 5.28:1). This almost intact vessel belongs to a well-represented EBA tradition of dipper juglets. Its base resembles the pointed juglet base recovered in Phase 6 (fig. 5.23:17), and a similar vessel found during the 1987 season (Daviau 1991: Fig. 6.32:34). Parallels from Jericho place it securely within an EB III context (Kenyon and Holland 1982: Figs. 87:3-7).

Deep Bowls. A variety of rim profiles were classified under this vessel type:

Rim Forms	Figures	Parallels at 'Umayri
Simple	5.26:20-22, 25	*MPP 4*: fig. 5.14:22, 24; 5.21:22, 26, 28

		MPP 3: fig. 5.9:24-27
Inverted rim; simple	5.27:6-9, 12, 15-16	*MPP 4*: figs. 5.15:5, 7, 9; 5.22:9-10; 5.23:2, 4-5, 7-8, 10 *MPP 3*: fig. 5.9:28-29
Inverted rim; grooved	5.27:17	*MPP 3*: fig. 5.29:21-23
Hammer	5.27:10-11, 13-14	*MPP 4*: figs. 5.15:11; 5.23:6, 9 *MPP 3*: fig. 5.9:31

While the Phase 5 simple deep bowls continue the range of forms found in the preceding Phase 6, the appearance of a new form, the "inverted, grooved" rim (fig. 5.27:17), marks a significant shift. Considered a hallmark of the late EB III (Harrison 1997), the presence of this vessel in Phase 5 places the phase in the latter part of the period, and links it with developments in Phase 4, where the vessel type also appears.

Small Bowls. Phase 5 small bowls grouped according to the same rim profile categories as preceding phases:

Rim Forms	Figures	Parallels at 'Umayri
Simple	5.26:11-17, 19, 25-24	*MPP 4*: figs. 5.14:15-21, 23, 26; 5.21:16-21, 23-25, 27, 30-31 *MPP 3*: fig. 5.9:15-23
Carinated	5.26:26-28, 31?	*MPP 4*: figs. 5.14:27; 5.22:1-2, 5 *MPP 3*: figs. 5.24:23; 5.28:1, 16?
Inverted	5.26:29-30, 32	*MPP 4*: figs. 5.15:2; 5.22:7; 5.23:1 *MPP 3*: fig. 5.28:18, 20
Everted	5.26:18	*MPP 4*: figs. 5.14:25, 28-32; 5.22:3-4, 6

While reddish-brown (and occasionally a light orange) slip remained a common decorative element on Phase 5 small bowls, the use of hand burnishing was noticeably less frequent than in previous phases. One inverted rim bowl (fig. 5.26:30) was a notable exception however, having been treated with a pattern burnish. Figure 5.26:13 had burn marks along the rim, and is better described as a simple lamp. The fabric of the carinated bowls in fig. 5.26:26-28 is very distinctive (highly fired, resembling a metallic ware), indicating a shared ware tradition. The vessels strongly resemble a family of such bowls held to be diagnostic of the EB II period (Beck 1988), although it is difficult to assign a similar date to the examples described here. EB III parallels exist at Ai (Callaway 1980: Fig. 125:25) and Jericho (Kenyon and Holland 1982: Fig. 51:9-10), suggesting that the production of this distinctive tradition continues into the later period.

Platters (fig. 5.27:1-5). The Phase 5 platters uncovered during the 1992 season continued the simple platter type of the preceding phases. Interestingly enough, none of the examples exhibited the concavity below the rim exterior, nor the pattern burnishing typical of many EB III platters. A Phase 5 platter recovered in 1989 (Harrison 1997 fig. 5.9:30) had pattern burnishing, however, indicating that the phase was not entirely without this distinctive vessel type.

Ledge Handle (fig. 5.28:10). The single ledge handle depicted here is representative of the heavily indented (or "pushed up") type common during the later part of EB III.

Body Sherd (fig. 5.28:8). The body sherd included here is distinctive for its punctured decorative surface treatment.

Seal Impression (fig. 5.28:9). Phase 5 produced a body sherd with a fragmentary impression left by a cylinder seal, the second such discovery in Field D. The first seal impression was found in 1987 (Daviau 1991: Fig. 6.24:17; see also Lapp 1991), and belongs in Phase 4. The vessel on which the Phase 5 seal impression was applied had been treated with a reddish-brown slip. The iconography of the seal as left by the impression, while poorly preserved, seems to consist of two stick-like figures aligned in a single register. The significance of the iconography, however, is not readily apparent. The figure on the right may resemble the "horned" animals depicted in Fig. 8:50-51 (and Pl. 8:50-51) of Ben Tor's corpus of EBA seal impressions (1978: 28-29, see also 52-54 and Fig. 14), while the figure on the left may represent a type of shrub or vegetation. The discovery of a second seal impression in Field D adds to the ever growing corpus of EBA seal impressions, and also sheds light on the bureaucratic apparatus that organized the social and economic life of the EBA residents of Tall al-'Umayri.

When taken as a whole, the Phase 5 pottery recovered in 1989 and 1992 presents an extensive and reasonably complete ceramic assemblage for the phase. The material clearly belongs within an EB III, and more specifically late EB III, context. A majority of the vessel types maintain profiles begun in earlier phases, while also adding occasional new forms that anticipate developments in the succeeding Phase 4. The Phase 5 ceramic assemblage unambiguously reinforces the cultural continuity that has typified the relative sequence since it began in Phase 7.

Conclusion

Altogether, the excavations on the southern terrace of Tall al-'Umayri have produced the remains of six distinct phases of architectural development spanning the latter part of the EBA. Although there were significant cultural and architectural developments linked to the appearance of

each new phase, these developments apparently were part of a gradual indigenous transformation. This indigenous cultural progression was reflected in the continuous aggradation of occupational debris, where living surfaces rarely remained "fixed" long enough to leave permanent traces of their existence. Individual architectural structures occasionally underwent minor modifications, presumably adjustments to meet the changing needs of their occupants, but rarely any major changes which could be linked with new developments elsewhere on the site to signify broader, community-wide transformations. Phases 7 and 6 witnessed an early stage, although probably not the beginning (which may well be represented elsewhere at Tall al-'Umayri), of this cultural progression, dating to the early part of the EB III period. This gradual intensification of socioeconomic activity continued through Phase 5 and the later part of the EB III, before culminating in the urban configuration of late EB III Phase 4, when a community lived in a well-planned settlement of dwellings erected on artificial terraces clinging to the side of the hill. The complex socioeconomic life of the community finally collapsed with the decisive destruction of the settlement at the end of the phase. Two "squatter" groups (Phases 3 and 2) then settled in the ruins of the southern Phase 4 compound during the subsequent EB IV/MB II transition, before the history of occupation in Field D finally came to en end.

Acknowledgments

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CHAPTER 6

Field F: The Eastern Shelf

Russanne D. Low *University of Minnesota*

Introduction

Field F is located on the descent to a broad shelf east of the acropolis of Tall al-'Umayri (fig. 2.1). Its parameters are defined by a gradual topographic rise to the west, a sharp downward incline to the north and east, and a topographic rise to a wall line outcropping at the southeastern extent of the site. This shelf provides an unobstructed vantage of the valley below to the east and south and may have served as the siting of defensive structures in the past. In addition, survey and testing of the site in 1984 provided a balanced pottery assemblage spanning the early Bronze Age to the late Iron II period (with a small representation of Byzantine pottery) (Herr 1989), an indication that Field F had the potential to provide a representative diachronic cultural sequence of human adaptation and settlement activities throughout these periods.

Excavation in the 1987 season focused on understanding human occupation during the late Iron II period. A single late Iron II architectural unit consisting of a north-south wall with three perpendicular wall stubs (fig. 6.1) on the eastern side was tentatively suggested to be a gate annex on the basis of small finds indicating defensive activities, the lack of associated domestic horizons, and the characteristic Iron Age pier construction seen on gates from archaeological sites (cf. Lamon and Shipton 1939). However, the significant erosion of the late Iron II horizons in the eastern squares suggested that a confident interpretation of the structure would only be possible through defining other structures belonging to the same stratigraphic phase to the south and west and analyzing the relationship of the architectural unit within the broader context.

The 1989 excavation strategy was directed at further clarifying the function of this structure by bringing the western squares into phase and opening the two adjacent eastern squares (fig. 6.1). Stratigraphic analysis of the depositional history at Field F suggested that this phase, Phase 5, might be better preserved upslope to the west, where stratigraphic truncations and erosional disconformities seen in the eastern squares were not observed. Results of the 1989 field season corresponded well to the predictions based on the reconstructed depositional history of the field (Low 1997). To the east, the scanty traces of late Iron II and later occupations were in secondary context, and provided no insight into the Phase 5 architecture. On the basis of ceramic chronology, the latest intact architecture in the eastern portion of the field dated to Iron I, when the slope was at last stabilized by a north-south retaining wall, that ran perpendicular to the slope (7M00:5=6M90:5) and extended along the entire eastern edge of the field (fig. 6.1).

To the west, the late Iron II deposits were quite thick but nonetheless exhibited great disturbance and horizontal

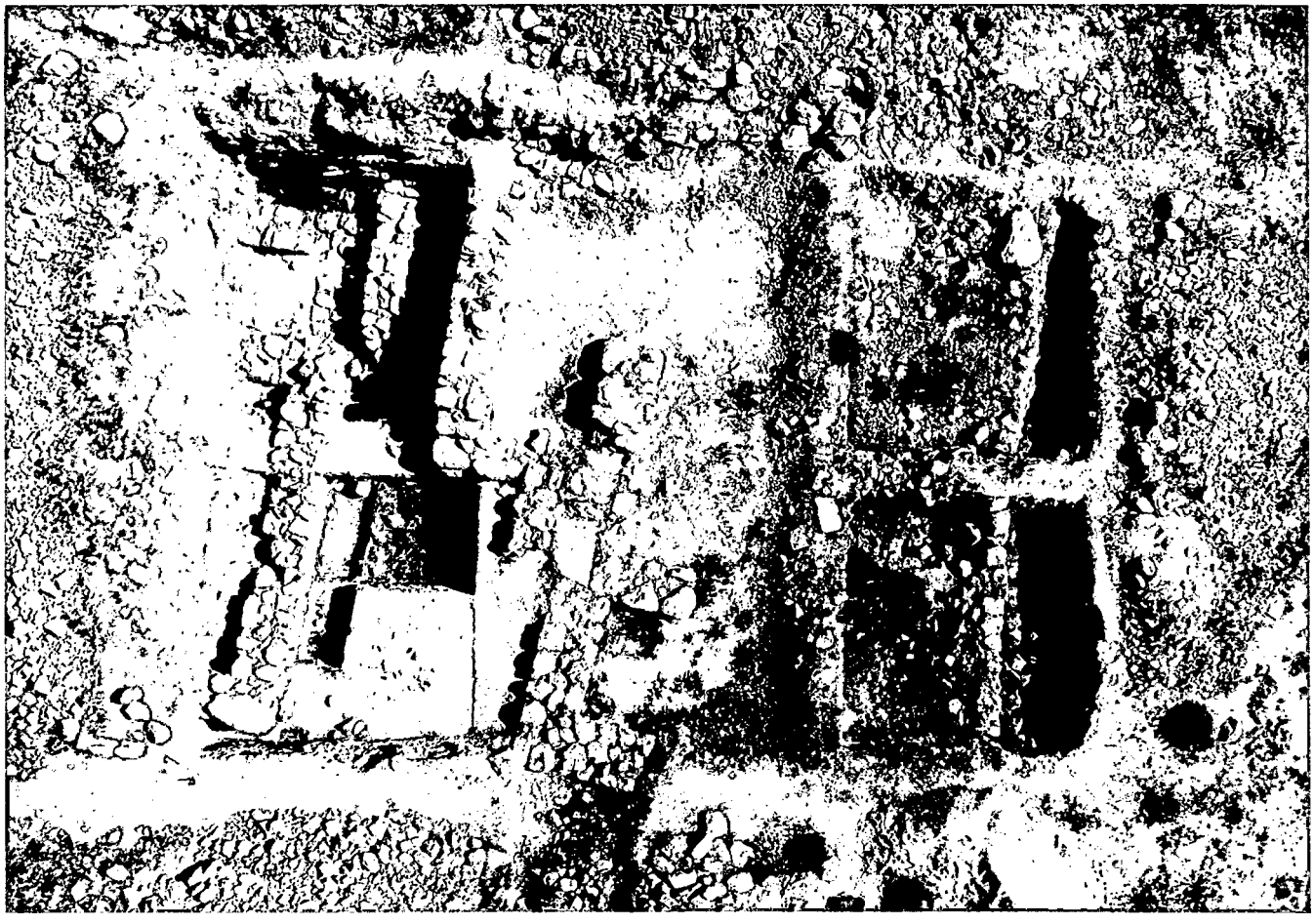


Fig. 6.1. Field F: Aerial view (north is at top). Excavation this season was limited to the two westernmost squares. The Phase 6 building is at the far left; the Phase 9 wall is just to its right at the top. The entrance structure uncovered in earlier seasons is at center; another wall stub extended to the east near the top of the structure. The early Iron I terrace wall, excavated in 1989, is at the far right. (Balloon photograph by E. and W. Myers)

dislocation. The partial structures unearthed in 1989 raised more questions than provided answers.

The objective of the 1992 season was to continue to determine the function and chronology of architectural loci identified in the previous field season and to bring Field F into phase with excavation in Fields A and B to the west.

The pattern of partial architecture revealed in the past three field seasons indicates that there have been significant changes in the morphology of the eastern slope over time: erosion is most pronounced to the north and northeast. Iron Age deposits are most deeply buried and best preserved in the south and west of the field. Soundings from the 1989 field season suggested that intact Iron I loci would be represented only in the western part of the field. Downslope erosion from the *tall* summit buried the Iron I deposits deeply under rubble and sediment. Thus, efforts were concentrated in removing of the deep acultural fill layers and bringing the western squares into phase with Fields A and B.

Stratigraphic associations have been problematic in Field F largely because of (1) the erosional attenuation of the eastern part of the field, (2) the field's peripheral position in later phases of occupation at the site, and (3) secondary modification of earlier structures and the presence of pits dating to the Persian and later periods.

Excavations in 1992 clarified a number of stratigraphic questions posed in previous field seasons:

(1) They revealed that 6L98:62 and 6L98:63, previously assigned in 1989 as the foundation trench and foundation trench fill for Wall 6L98:44=7L08:61, did not continue to the foundation level, but were instead pits dug against the east face of the wall. The locus designation for 6L98:62 has been redefined as "pit line", 6L98:63 as "pit fill", and they have been reassigned from Phase 6 to Phase 5.

(2) Excavation this season clarified the stratigraphic relationship between Wall 7L08:45 and Wall 7L08:61. In 1989, the walls appeared to be contemporaneous and were

assigned to Phase 6. The discovery of a foundation trench for Wall 61 suggested that it belonged to an earlier Phase than Wall 45.

(3) Ash Lenses 7L08:52 and 58 were assigned to Phase 9 in 1989, but excavation this season demonstrated that they were stratigraphically above the Iron I Ash Lens 7L08:87 (=6M90:15). Ash Lens 7L08:52 was thus associated with a later destruction during or after late Iron II. Ash Lens 7L08:52 was not encountered in the strata associated with the late Iron II architecture of Wall 44; however, Wall 45 was founded on Ash Lens 58. These observations necessitated the rephasing of Wall 45 to Phase 5. The destruction of Phase 6 has not yet been identified in Field F; it would be stratigraphically consistent should Ash Lens 7L08:52 represent the phase destruction event.

On the basis of this season's excavation, one additional Field Phase was identified, totaling 12 identified Phases in Field F. The additional phase is located chronologically between Phase 9 and Phase 10, as assigned in 1989. As a result, Phase 10 of 1989 has been reassigned to Phase 11 and Phase 11 to Phase 12. Figure 6.2 is a list representing the phases from the 1992 field season.

Because our finds this season altered the phasing established after 1987, a comparative chart is presented in fig. 6.3.

This season's excavation activities were devoted exclusively to Iron Age deposits, so the discussion begins with Phase 10, the earliest encountered phase this season. (For Phase 12, see *MPP 3*: 191 [FP 11]; for Phase 11, see *MPP 3*: 191-195 [FP 10]). A chart of the sequence of loci appears in fig. 6.4.

Field Phase 10 (fig. 6.5)

Loci: 6L98:87 Wall

Except for the walls in Phase 12 (a small wall fragment of unknown function and a terrace wall), the earliest architectural structure unearthed to date in Field F was 6L98:87, a partially excavated two-row, boulder-and-chink wall of unhewn stones. It was oriented east-west at 101°. The exposed upper course ran a length of 2.0 m, ending abruptly with an unfinished edge. The western terminus of the wall has not been located. Wall 87 continued beneath a later wall (6L98:44) on the west. The uppermost preserved course of Wall 87 appears to be incorporated into a cobble surface (6L98:84) of a subsequent phase. Preliminary indications are that Phase 10 dates to the LB IIB/Iron I transitional period, but too little is known to be certain. In Fields A, B, and H, two phases from the LB IIB/Iron I transitional period have been found. This may be the case in Field F as well, because the following Phase 9 was also from this period.

Field Phase 9 (fig. 6.6)

Loci:	6L98:73	Earth layer (=6L98:74, 75)
	6L98:74	Earth layer (=6L98:73, 75)
	6L98:75	Earth layer (=6L98:73, 74)
	6L98:76	Earth layer
	6L98:79	Plaster and Stone Grinding Installation
	6L98:87	Wall (cont. from FP 10)
	6L98:89	Ash layer (=7L08:87)
	6L98:90	Beaten earth surface (=7L08:86)
	6L98:91	Wall
	7L08:67	Wall (boulder scatter in 1989)
	7L08:79	Earth Layer
	7L08:86	Beaten earth surface
	7L08:87	Ash layer (=6L98:89)
	7L08:88	Earth layer
	7L08:94	Rubble layer

The building stage of Phase 9 is represented by the construction of Wall 7L08:67, a three-row, boulder-and-

Phase	Date	6L98	7L08
FP 10	Iron I?	X	
FP 9	Iron I	X	X
FP 8	Iron I-Early Iron II	X	X
FP 7	Early-Late Iron II	---	X
FP 6	Late Iron II	X	X
FP 5	Late Iron II	X	X
FP 3	Late Iron II/ Early Persian	X	X

Fig. 6.2. Field F stratigraphic phasing chart by Square.

1987 (*MPP2*)	1989 (*MPP3*)	1992 (*MPP4*)
---	FP 11	FP 12
---	FP 10	FP 11
---	---	FP 10
FP 7	FP 9	FP 9
---	FP 8	FP 8
FP 6	FP 7	FP 7
FP 5	FP 6	FP 6
FP 4	FP 5	FP 5
---	FP 4	--
FP 3	FP 3	FP 3
FP 2	FP 2	---
FP 1	FP 1	---

Fig. 6.3. Field Phase comparison in Field F by season.

	6L98	7L08
FP 3	77-82	77 70 76 74 72 W59
FP 5	62 63 50	W45
FP 6	81 83 84=86=87 88 W44 71=72=74=78 FT80	78 80 73 52 82 83 81 89 90 93 W75 W64 W61 91 FT65=92
FP 7		69 71
FP 8	70	85 84
FP 9	89 76 73=74=75 90 I79 =W91	55 87 79 88 94 86 W67
FP 10	W87	

Fig. 6.4. Stratigraphic sequence chart for Field F.

chink wall, predominantly composed of unhewn small boulders (fig. 6.7). Boulder tumble from the collapse of the upper courses of Wall 67 was identified as a separate locus in 1989 (Rubble Layer 7L08:67); excavation this season provided unequivocal evidence of the wall line associated with the rubble. The foundation of the north section of the wall was a rubble layer, 7L08:94 (unexcavated). The wall ran 4.71 m at an orientation of 10° into the north balk. Its width varied from 0.78 to 0.82 m. Five courses have been exposed at the northern end.

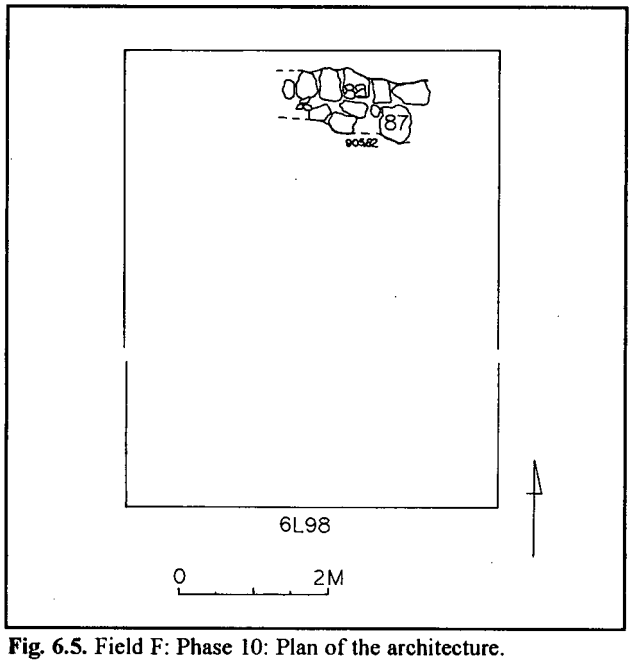


Fig. 6.5. Field F: Phase 10: Plan of the architecture.

The south end of Wall 67 was founded on the exposed course of Wall 6L98:87, demonstrating reuse of this Phase 10 wall. We were able to determine that Wall 67 was constructed in a different phase than wall 87 on the basis of three observations: the two walls demonstrated different construction techniques (three row vs. two rows) and masonry (semihewn and unhewn vs. unhewn small boulders) and the unlikely construction arrangement of the smaller wall (Wall 87) bisected by a more massive wall (Wall 67).

Earth Layer 7L08:88 sealed against the west side of Wall 67, and contained no cultural material other than small bone fragments and ceramic sherds dating to Iron I. Earth Layer 7L08:79 was arbitrarily separated from the underlying Earth Layer 88 and was similar in color and

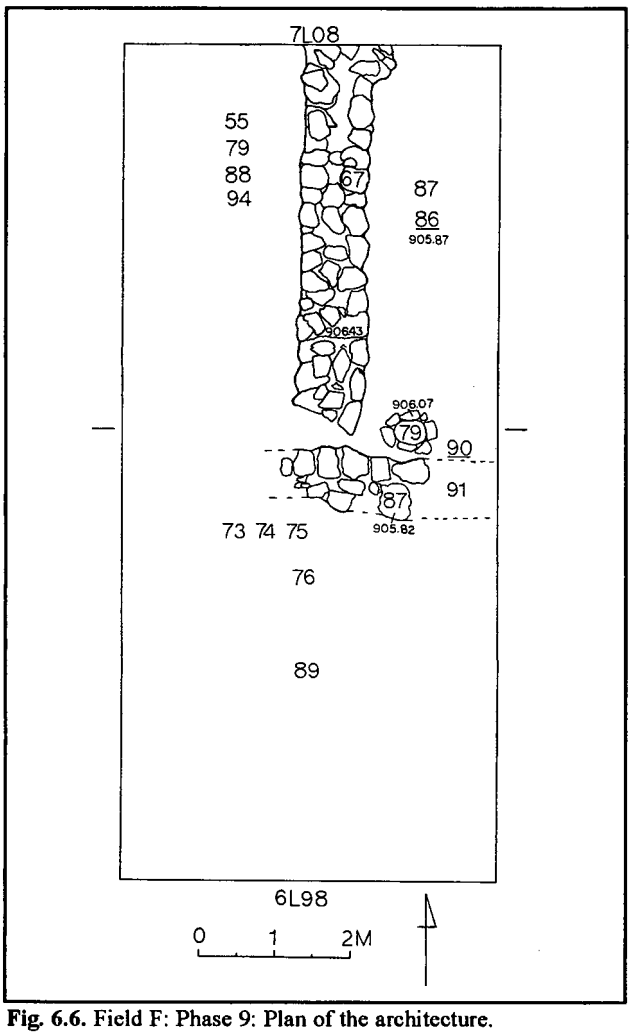


Fig. 6.6. Field F: Phase 9: Plan of the architecture.

consistence, but contained a crude seal of a type often dated to Iron I (Object No. 3098).

Several stones, in alignment but discontinuous with Wall 6L98:87, were founded upon Layer 6L98:76, the lowest deposit of this phase. These may represent a Phase 9 east extension of Phase 10 Wall 6L98:87. Founded on these few flat stones was an apparent wall of mudbrick, Wall 6L98:91, the structure of which was visible as a regular alignment of mudbrick presented in cross section in the eastern balk of 6L98 (fig. 6.23B).

Wall 7L08:67, the stones founding Wall 6L98:91 and Installation 6L98:79, was sealed by Beaten Earth Surface 7L08:86 (=6L98:90), containing Iron I pottery. Surface 7L08:86 was clearly demarcated to the east of Wall 67 and north of Wall 87 and represented the interior living surface of an apparent domestic structure represented by Wall 67. The surface contained two worked ceramic bottle stoppers, a ballistic missile, small fragments of bone, and Iron I ceramics (fig. 6.8).

Plaster Installation 6L98:79 represents a reuse and modification of Wall 6L98:87 (fig. 6.9). One of the stones within the uppermost preserved course of the wall line was used as a quern. The sides of the quern were stabilized by upended flat-lying stones (one in fact a reused quern itself). The installation was plastered, fragments of which were still apparent.

Earth Layer 6L98:76 sealed against the south side of Wall 67 and Installation 79. It was less compacted than Surface 7L08:86 but may represent a contemporaneous unit within the dwelling associated with Wall 67. Domestic debris found within Layer 76 included a spindle whorl, two bottle stoppers, a quern fragment and a seal fragment. The ceramic sherds within the layer dated to Iron I and included a potter's mark.

The subsequent Earth Layer 6L98:75 was deposited over Layer 76. It contained significant amounts of cultural debris, including three spindle whorls, a poorly preserved copper artifact of indeterminable function, a grinding stone, and several quern fragments. Faunal material recovered from this locus included bones of sheep and/or goat, cattle, pig, and turtle bones. The following Earth Layer 6L98:73 (=6L98:74), also dated to Iron I, contained a pottery fragment with a potter's mark and two bottle stoppers.

The occupation interval of Phase 9 ended with a destructive fire. Remains of the fire are evident in the com-

Fig. 6.7. Field F: Phases 9 and 6: Phase 9 is Wall 7L08:67 extending up from the bottom on the left; also visible is Installation 7L08:79 left, below the meter stick. Phase 6 is the partial building at the right, preserved lower than the Phase 9 wall because of robbing by a Phase 3 wall.

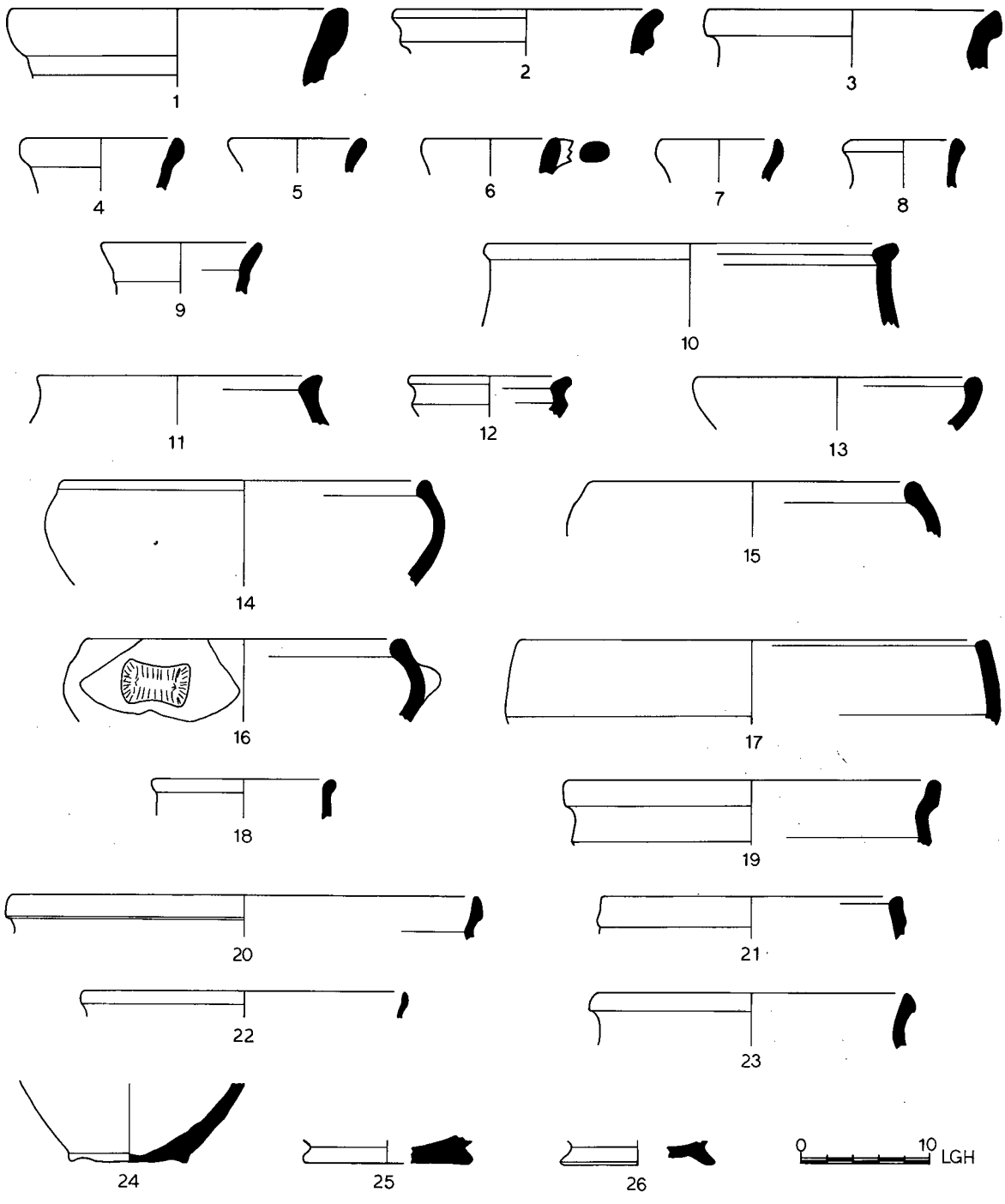


Fig. 6.8. Field F: Phase 9: Early Iron I ceramics from destruction debris.

Vessel		Provenance			Fabric Color			Non-Plastic				Voids	Manu		Surface Treatment			Decor	Fire
No.	Type	Sq	Locus	Pail	Reg.	Ext	Core	Int	Type	Size	Shape	Density			Ext	Color	Int	Color		
1	Pithos	7L08	86	413	2	10YR7/3 Very Pale Brown	7.5YRN5/ Gray	10YR7/3Very Pale Brown	L	6A 5A 4A 3A	AA SAA SRA RA	M	FS7+A PA6A PA5A PA4A PR6A PR5A PR4A PR3A	CW	---	7.5YR7/4 Pink	---	10YR7/3 Very Pale Brown	---	U
2	Pithos	6L98	75	311	2	7.5YR7/2 Pinkish Gray	10YR6/1 Gray	7.5YR7/2 Pinkish Gray	L	7A 6A 5A 4A 3A	AA SAA SRA RB	L	PR6A PR5A PR4A	CW	---	7.5YR7/4 Pink	---	7.5YR7/4 Pink	---	U
3	Pithos	7L08	88	403	2	5YR6/4 Light Reddish Brown	5YR7/1 Light Gray	5YR6/4 Light Reddish Brown	L	7A 6A 5A 4A 3A	AA SAA SRA RA	L	FS7A PR7A PR6A PR5A PR4A	CW	SL	5YR7/4 Pink	SL	5YR7/4 Pink	---	U
4	Jar	6L98	75	311	3	5YR7/3 Pink	10YR6/1 Gray	---	L	7A 6A 5A 4A 3A	AA SAA SRA RA	M	PA7D	W	---	2.5YR6/4 Light Reddish Brown	---	5YR7/4 Pink	---	U
5	Jug	6L98	75	333	3	---	7.5YR7/4 Pink	---	L	6A 5A 4A 3A	SAA SRA RA	L	PR6A PR5A PR4A PR3A	W	SM	7.5YR8/4 Pink	SM	7.5YR8/4 Pink	---	O
6	Jug	6L98	75	333	4	7.5YR7/4 Pink	7.5YRN5/ Gray	7.5YR7/4 Pink	L	7A 6A 5A 4A 3A 2A	SRA RC	L	FS7A FS6A FS5A PR6A PR5A PR4A PR3A	W	---	7.5YR7/4 Pink	---	7.5YR7/4 Pink	---	U
7	Jug	6L98	75	324	1	---	7.5YRN5/ Gray	---	L	5A 4A 3A	SAA SRA RB	L	FS7A PR5A PR4A PR3A	W	---	7.5YR7/4 Pink	---	7.5YR7/2 Pinkish Gray	---	R
8	Jug	7L08	84	398	1	2.5YR6/4 Light Reddish Brown	2.5YRN6/ Gray	5YR7/4 Pink	L	7A 6A 5A 4A 3A 2A	AA SAA SRA RA	M	PA5A PR6A PR5A PR4A PR3A	W	---	2.5YR6/4 Light Reddish Brown	---	2.5YR6/4 Light Reddish Brown	---	U
9	Jug	7L08	69	363	1	7.5YR7/4 Pink	10YR7/1 Light Gray	7.5YR7/4 Pink	L	7A 6A 5A 4A 3A	AA SAA SRA RB	MH	FS7A FS6A PA6A PA5A PR6A PR5A PR4A PR3A	W	---	10YR8/4 Very Pale Brown	---	10YR8/4 Very Pale Brown	---	U
10	Krater	7L08	55	407	1	5YR7/4 Pink	7.5YRN5/ Gray	5YR7/4 Pink	L	5A 4A 3A 2A	AA SAA SRA RA	L	PR5A PR4A PR3A	CW	---	5YR7/4 Pink	---	5YR7/4 Pink	---	U
11	Krater	7L08	55	407	5	5YR7/4 Pink	7.5YRN6/ Gray	5YR7/4 Pink	L	6A 5A 4A 3A	AA SAA SRA RA	M	PR3D	CW	---	5YR7/4 Pink	---	5YR7/4 Pink	---	U
12	Bowl	7L08	69	365	2	10YR6/2 Light Brownish Gray	10YR6/1 Gray	10YR6/2 Light Brownish Gray	L	7A 6A 5A 4A	SRA RA	M	PR7A PR6A PR5A PR4A	W	---	10YR7/3 Very Pale Brown	---	10YR6/2 Light Brownish Gray	---	U
13	Bowl	7L08	55	407	4	7.5YR6/2 Pinkish Gray	10YR6/1 Gray	7.5YR6/2 Pinkish Gray	L	7A 6A 5A 4A 3B	AA SAA SRA RB	M	PR3D	W	---	2.5YR5/4 Reddish Brown	---	2.5YR5/4 Reddish Brown	---	U
14	Bowl	7L08	69	409	1	---	7.5YR7/2 Pinkish Gray	---	L	6A 5A 4A 3A	SRB RB	L	PA6A PA5A PR6A PR5A PR4A PR3A	W	---	5YR7/3 Pink	---	7.5YR7/4 Pink	---	O
15	Bowl	6L98	70	328	1	---	7.5YR7/4 Pink	---	L	7A 6A 5A 4A 3A	AB SAA SRA	M	PA6A PA5A PA4A PR7A PR6A PR5A PR4A PR3A	CW	---	7.5YR7/4 Pink	---	7.5YR7/6 Reddish Yellow	---	O

Fig. 6.8, *continued.* Field F: Pottery descriptions for nos. 1-15.

Vessel			Provenance			Fabric Color			Non-Plastic				Voids	Manu		Surface Treatment			Decor	Fire
No.	Type	Sq	Locus	Pail	Reg.	Ext	Core	Int	Type	Size	Shape	Density			Ext	Color	Int	Color		
16	Bowl	6L98	75	333	1	7.5YR7/4 Pink	10YR6/2 Light Grayish Brown	7.5YR7/4 Pink	L	6A 5A 4A	SRB RB	L	FS7A FS6A PR6A PR5A PR4A PR3A PA6A PA5A	W	---	10YR8/3 Very Pale Brown	---	7.5YR7/4 Pink	---	U
17	Bowl	7L08	69	365	1	---	7.5YRN5/ Gray	---	L	6A 5A 4A 3A	AB SAA SRA RA	M	PR6A PR5A PR4A PR3A	CW	SM	7.5YR7/6 Reddish Yellow	---	7.5YR7/4 Pink	---	U
18	Bowl	7L08	55	407	3	5YR7/6 Reddish Yellow	5YR6/1 Gray	5YR7/6 Reddish Yellow	L	6A 5A 4A 3A	AA SAA SRA RB	L	PR3D	W	---	5YR7/6 Reddish Yellow	---	5YR7/6 Reddish Yellow	---	U
19	Cook Pot	7L08	55	407	2	7.5YR6/2 Pinkish Gray	7.5YRN5/ Gray	7.5YR6/2 Pinkish Gray	L	5A 4A 3B	AA SAA SRA RA	L	PR5A PR4A PR3B	W	---	2.5YR5/4 Reddish Brown	---	2.5YR5/4 Reddish Brown	---	U
20	Cook Pot	7L08	86	413	1	5YR5/2 Reddish Gray	5YR5/1 Gray	5YR5/2 Reddish Gray	L	5A 4A 3A 2A	AB SAA SRA RA	M	PR5A PR4A PR3B	W	---	2.5YR4/4 Reddish Brown	---	2.5YR4/2 Weak Red	---	R
21	Cook Pot	6L98	75	311	1	5YR7/4 Pink	7.5YRN7/ Gray	5YR7/4 Pink	L	6A 5A 4A 3B	AA SAA SRA RB	L	PR5D	W	---	7.5YR6/2 Pinkish Gray	---	7.5YR6/2 Pinkish Gray	---	U
22	Cook Pot	7L08	69	409	2	---	2.5YR4/8 Red	---	L	6A 5A 4A	AA SAA SRA RA	L	PR5A PR4A PR3A	W	---	2.5YR5/4 Reddish Brown	---	2.5YR5/4 Reddish Brown	---	R
23	Cook Pot	6L98	75	333	2	5YR5/3 Reddish Brown	5YR5/1 Gray	5YR5/2 Reddish Gray	L	5A 4A 3A 2A	AB SAA SRA RA	M	PR6A PR5A PR4A PR3A	W	---	5YR5/3 Reddish Brown	---	5YR5/2 Reddish Gray	---	U
24	Jug	7L08	69	409	3	---	7.5YRN5/ Gray	---	L	7A 6A 5A 4A 3A 2A	AA SAA SRA RC	M	FS7+A FS7A FS6A FS5A PR7A PR6A PR5A PR4A PR3A PR2A	W	---	10YR7/3 Very Pale Brown	---	7.5YR6/2 Pinkish Gray	---	R
25	Bowl?	7L08	88	403	3	5YR6/4 Light Reddish Brown	10YR5/1 Gray	---	L	6A 5A 4A 3A	AA SAA SRA RA	L	PA7A PA6A PR7A PR5A PR4A PR3A	W	---	10YR6/3 Pale Brown	---	---	---	U
26	Bowl	7L08	88	403	1	---	7.5YR7/4 Pink	---	L	7A 6A 5A 4A 3A	SRA RB	L	PR6A PR5A PR4A PR3A	W	---	7.5YR7/4 Pink	---	7.5YR7/2 Pinkish Gray	---	O

Fig. 6.8, *continued*. Field F: Pottery descriptions for nos. 16-26.

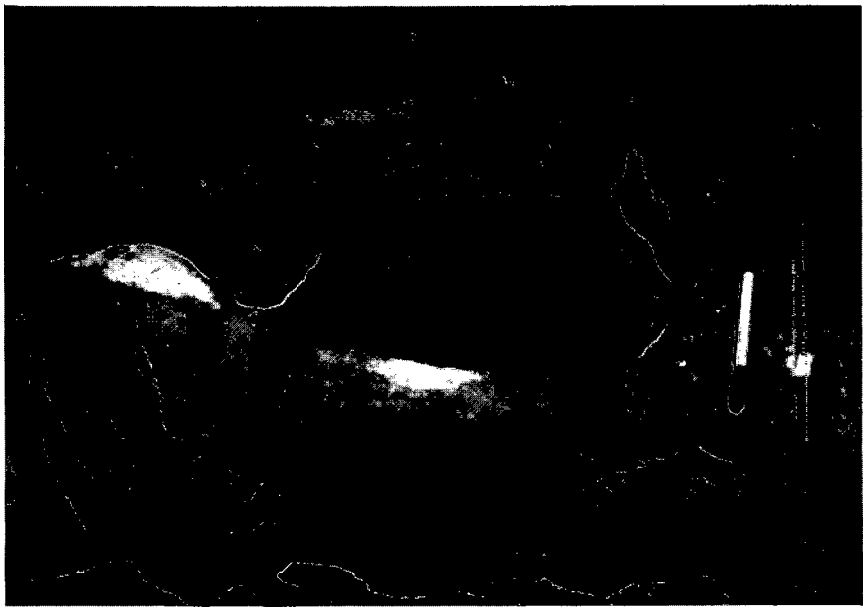


Fig. 6.9. Field F: Phase 9: Stone Installation 7L08:79.

pacted, burned soil of Beaten Earth Surface 7L08:86, as well as the ash and charcoal Layer designated by 7L08:87 (=6L98:89) (fig. 6.10). The charcoal and ash layer was observed elsewhere in the field in 1989 (6M90:15); lensing of charcoal and ash fragments in the uppermost Iron I units in the eastern squares suggest that the fire was extensive.

A finely worked bronze axe, well-polished stone spindle whorl, and quern with grinding stone were found resting on Surface 7L08:86 in proximity of Installation 79, and within the ashy deposit of Layer 87. The implements were finely formed and in an excellent state of preservation; their position within the Ash Layer suggests that they were unintentionally left behind and that the fire occurred while the dwelling was occupied. The ash layer contained a second ballistic missile. The presence of two such missiles within the ash and on the living surface suggests that Phase 9 ended as the result of a militaristic attack by antagonists.

The pottery from the earth layers suggests a date in the LB IIB/Iron I transition or very early Iron I (fig. 6.8).

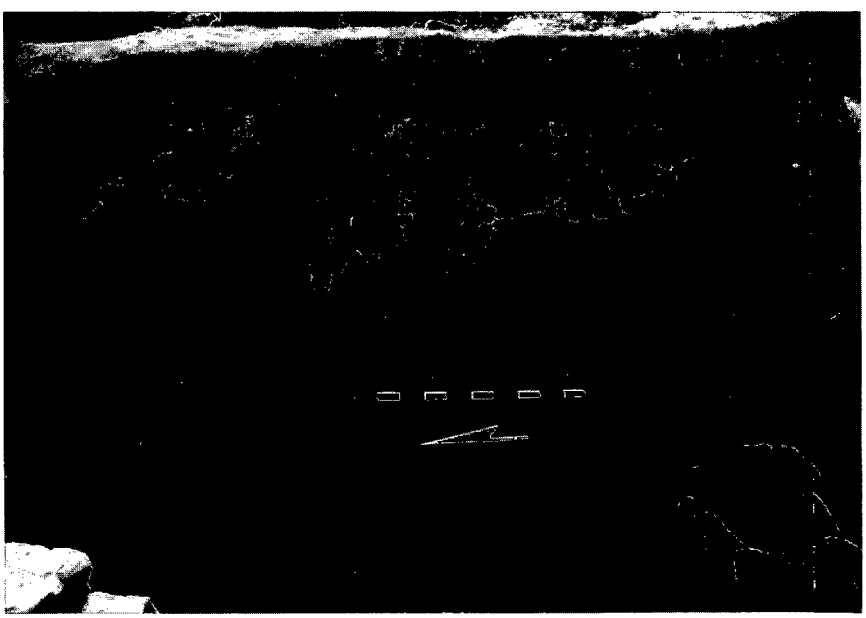


Fig. 6.10. Field F: Phase 9: Brick destruction in Square 7L08 with charcoal at very bottom and bricks above.

Field Phase 8 (fig. 6.11)

Loci:	6L98:70	Earth layer
	7L08:67	Wall (cont. from FP 9)
	7L08:84	Earth layer
	7L08:85	Earth layer

Phase 8 represents a period of abandonment following the destruction of the settlement in Phase 9. Earth Layer 7L08:84 was deposited over Ash Layer 87 and contained a ballistic missile as well as sparse and fragmentary cultural debris (primarily ceramic sherds and fragments of grinding stones). Earth Layer 6L98:70 was deposited during the abandonment interval on the exterior surface outside the structure associated with Wall 67. Pottery sherds and small grinding stone fragments represent the sparse cultural remains associated with this locus.

The next event was the partial dismantling of Wall 7L08:67, which left only the foundation course standing at the southern end. Earth Layer 7L08:85 was subsequently deposited over the foundation of this wall at the southern end and contained Iron I ceramics. Infrequent cultural remains suggest that the structure represented by Wall 7L08:67 was not in use at this time. Pottery sherds found within all deposits attributed to Phase 8 date to Iron I although the abandonment extended into early Iron II.

Field Phase 7 (fig. 6.12)

Loci:	7L08:69	Earth layer (=7L08:56 of 1989)
	7L08:71	Earth layer

Phase 7, excavated primarily in 1987 and 1989, is associated with the construction of Wall 6L98:64. This season we

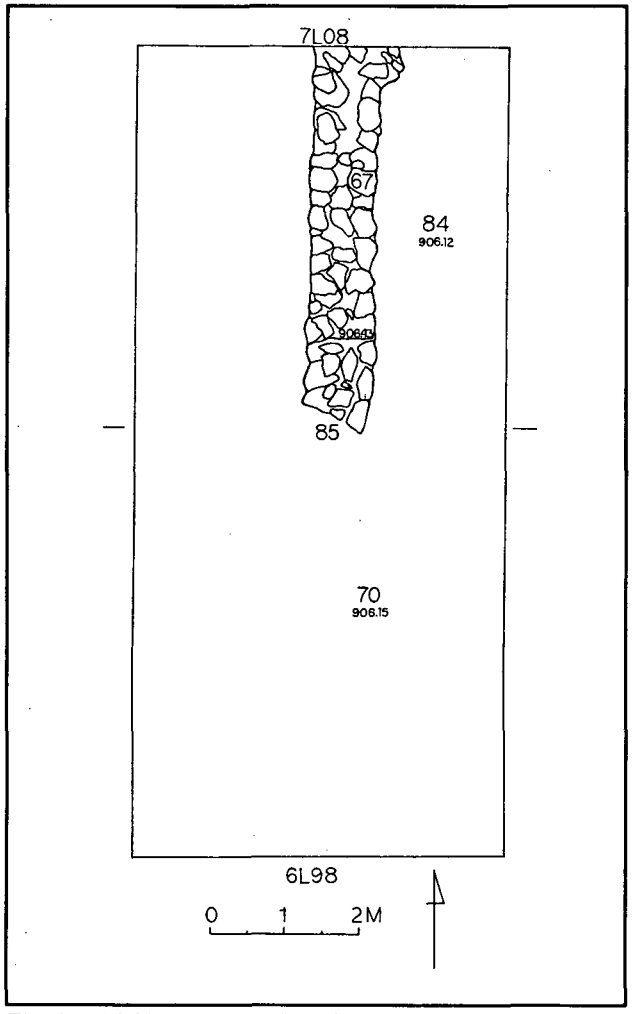


Fig. 6.11. Field F: Phase 8: Plan of the architecture and earth layers.

encountered loci best attributed to the abandonment of Phase 7. The matrix of Earth Layer 7L08:69 contained nari

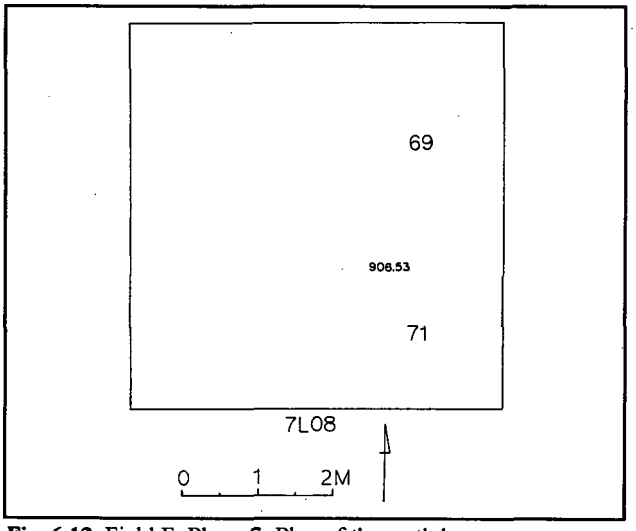


Fig. 6.12. Field F: Phase 7: Plan of the earth layers.

and brick fragments, ostensibly from the collapse of adjoining abandoned structures. The source of debris is yet to be identified. A crude ash tuff seal adorned with two human figures (Object No. 3025) characterized the sparse cultural remains associated with Earth Layer 69. Rubble Layer 7L08:71 was composed of large boulders and chink stones that appear to have originated from the collapse of the upper courses of Wall 7L08:67 of Phase 9. Rubble Layer 71 was contiguous to, and appears to have been contemporaneous with Earth Layer 69. A small blue glass bead and a broken fibula were found within the earth matrix between the stones.

Field Phase 6 (fig. 6.13)

Loci:	6L98:44a	Wall (south section of Wall 44 of 1989)
	6L98:44b	Wall (north section of Wall 44 of 1989)
	6L98:71	Foundation trench fill
	6L98:72	Foundation trench fill
	6L98:74	Foundation trench fill
	6L98:78	Foundation trench fill
	6L98:80	Foundation trench
	6L98:81	Rubble layer
	6L98:83	Earth layer
	6L98:84	Cobblestone surface (=7L08:90)
	6L98:86	Cobblestone surface
	6L98:87	Wall (from FP 10), reused as cobble surface
	6L98:88	Exposure surface
	7L08:52	Ash lens (identified in 1989)
	7L08:61	Wall
	7L08:64	Wall
	7L08:65	Foundation trench
	7L08:73	Earth layer
	7L08:75	Wall
	7L08:78	Earth layer
	7L08:80	Earth layer
	7L08:81	Earth layer
	7L08:82	Earth layer
	7L08:83	Earth layer
	7L08:89	Cobblestone surface
	7L08:90	Cobblestone surface (=6L98:84)
	7L08:91	Foundation trench fill (=7L08:68 of 1989)
	7L08:92	Foundation trench (=7L08:65 of 1989)
	7L08:93	Exposure surface (=6L98:88)

The initial building activity of Phase 6 was the excavation of Foundation Trench 7L08:92 (=6L98:80). It cut through Phase 9 Earth Layer 6L98:75, and Phase 8 Earth Layers 7L08:84 and 6L98:70. The trench was poorly

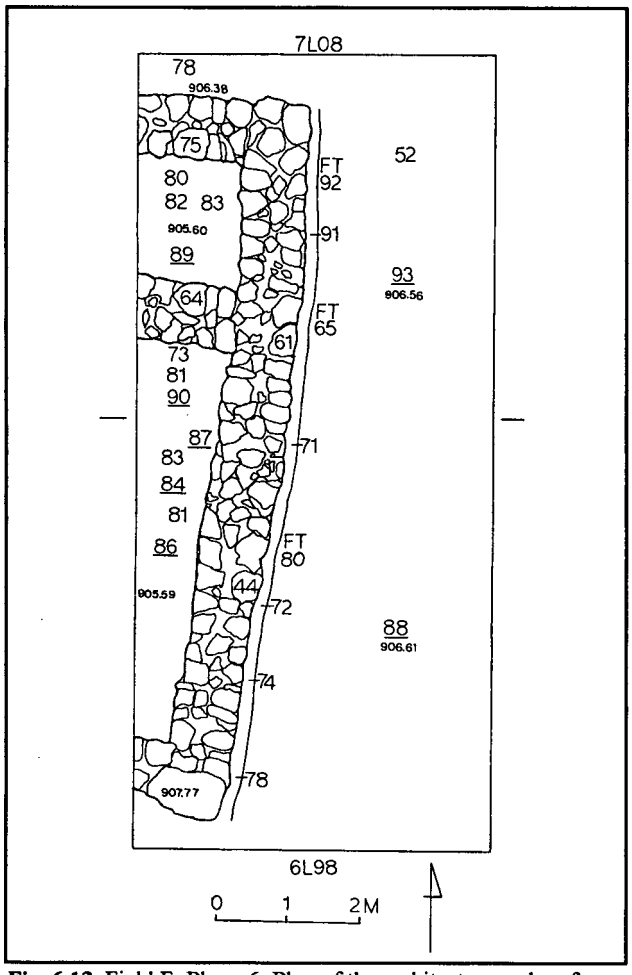


Fig. 6.13. Field F: Phase 6: Plan of the architecture and surfaces.

demarcated for most of its length, as it was bordered on the east side by the Phase 9 Wall 7L08:67, and was initially evidenced only by the presence of Late Iron II pottery within the fill. The foundation trench was more apparent in the north balk of 6L98, where ash lenses within Phase 9 Earth Layer 6L98:75 and Phase 8 6L98:70 were truncated (fig. 6.23A). The trench could be followed for a total of 6.0 m, where it had dimensions of 0.10-0.30 m wide and a maximum depth of 0.50 m.

The trench served to found Wall 7L08:61=6L98:44b. Wall 6L98:44 was identified as a Phase 6 wall in 1989 (figs. 6.7 and 6.14). Excavation this season demonstrated that the wall was built in two separate segments: Wall 44b was one course deeper than 44a, and on inspection it was observed that this northern section (44b) abutted but did not bond with the southern section (44a) at the point where the wall's foundation level changed (fig. 6.14).

There was no evidence for Foundation Trench 92 alongside Wall 61. The foundation courses of Phase 10 Wall 67 may have been intentionally reused to support Wall 44b: the eastern edge of Wall 61 nearly abuts the western edge of Wall 67 (fig. 6.13). It appears that the north section of the wall was placed in a trench dug to the west of Wall 67 of Phase 9 and Wall 61 was fitted up against Wall 67's foundation. Isolated occurrences of late Iron II sherds in 7L08:76 (Phase 9) represented those pottery sherds which filtered into the narrow crevice between Walls 67 and 61 that served as a foundation trench. Foundation Trench Fill 7L08:91 provides support for the southernmost wall segment of Wall 61. Three courses of Wall 61 were preserved at the north end and 5 courses at the south end. Wall 61 trended 10° for 7.2 m.

At the north end, Wall 61 was bonded to Wall 7L08:75 which was oriented roughly at a right angle (100°) to Wall 61 and trended 1.55 m into the west balk (fig. 6.15). Five courses remained of this wall which was 2-3 rows (0.87 m) wide. The construction materials and techniques associated with Wall 61 and Wall 75 were identical.

Wall 7L08:64 (continued from 1989) abutted Wall 7L08:61 at a 90° angle 3 m from the northern end of Wall 61, forming a room 2 m wide bounded by Wall 75 on the north, Wall 61 on the east, and Wall 64 on the south (fig. 6.15). Both Walls 61 and 64 were built without foundation trenches.

Wall 6L98:44a was the south segment of Wall 6L98:44b (=7L08:61). The wall cornered at a right angle at the south end and ran into the west balk (fig. 6.7). The dimensions of this wall were undeterminable because only

Fig. 6.14. Field F: Phase 6: Elevation of Wall 6L98:44.

0.20 m appeared between Wall 44 and the west balk. Wall 6L98:44a was constructed of medium and large semi-hewn boulders and chink stones and was 0.85-0.95 m wide; seven courses were preserved at the south end. The wall trended 3.6 m at an orientation of 12°, a slightly different orientation than the north wall segment Wall 44b (10°).

Foundation Trench Fill 7L08:91 (=6L98:71, 72, 74, 78) contained late Iron II pottery. The fill was not noticeably different in color or texture, and was initially apparent through consistently younger pottery readings from loci immediately east of Wall 44. An indurate Exposure Surface 7L08:93=6L98:88 capped the foundation trench fill and sealed against Wall 44 on the east side.

Fig. 6.15. Field F: Phases 6 and 9: Walls making up the northeast corner of the Phase 6 building; the cobbled floor is clearly visible. Phase 9 Wall 7L08 67 is under the meter stick.

The walls west of Wall 44 represented interior architecture of the structure bounded on the east by Wall 44 (figs. 6.7 and 6.13). Wall 64 separated the interior of the structure into two rooms. The north room, bordered by Walls 7L08:75, 61, and 64 on three sides, was paved with cobblestones (Surface 7L08:89). This surface, as exposed during excavation, measured 1.75 m along the north-south axis of Wall 61; the width measured 1.25 m before running into the balk. Surface 89 was largely level, but in the southwest corner the surface was sharply imbricated at a 30° slope to the southwest.

A middle room, bordered by Wall 7L08:64 to the north and Wall 6L98:44b to the east, was paved by Surface 7L08:90 (=6L98:84). The Cobbled Surface was set into the foundation at the same level as the uppermost courses of Phase 10 Wall 87. The surface of the uppermost remaining courses of Wall 87 were thus reused *in situ* as flagstones within Surface 90.

The south edge of the cobblestone pavement corresponded with the south edge of Wall 44b. Surface 90 measured 2.90 m along the north-south axis, but the balk precluded complete east-west exposure of the room: the exposed surface measured 0.78 m at the widest point. Surface 90 was laid horizontally and provided a level floor.

The presence of a third room within the structure was strongly suggested by some ephemeral features found within a boulder-and-cobble rubble layer within the south part of the structure bounded to the east by Wall 44a. A three course stack of medium boulders perpendicular to Wall 44a, Rubble Layer 6L98:81, may be the remains of a collapsed third interior wall. South of Rubble Layer 81, Cobblestone Surface 6L98:86 was evidenced and sealed against Wall 44a. As with Surface 90, it appears that the large "flagstones" set within Cobbled Surface 86 are actually the upper surfaces of the top course of a reused wall (unexcavated and undesignated) from an earlier phase.

The function of the structure associated with Wall 44 was not clarified by an analysis of the cultural debris within the fill layers. There was very little in the way of material culture, with the exception of broken grinding stones and pottery sherds. The paucity of domestic refuse and artifacts, as well as the sloping cobble surface in the north room, argue against the structure serving as a domicile.

There are several lines of evidence to suggest that the structure associated with Wall 44 was built in sections. First, Wall 44 was itself built in two parts (44a and 44b), but contemporaneously. The foundations were dug to different depths; Wall 44a had two rows of medium and large boulders; Wall 44b had 2 or 3 rows of small to medium-sized boulders; the orientation of the two abutting walls was offset slightly (ca. 5°); the sloping floor of Surface 89 suggested a drainage or storage feature, not a living floor. The fact that the wall appeared to have been built in sections by different builders indicates that the structure may have been defensive and was built as a community project. Further excavation to the west in a subsequent season may provide the necessary evidence to ascertain that Wall 44 was part of a casemate structure.

Casemate walls were often used as storage facilities in peacetime. The fill immediately over Surface 7L08:89 contained several large storage jar fragments, including at least one nearly complete mendable specimen, and provided ancillary evidence to support the suggestion of a casemate wall.

Exposure Surface 6L98:88 sealed against Wall 44a

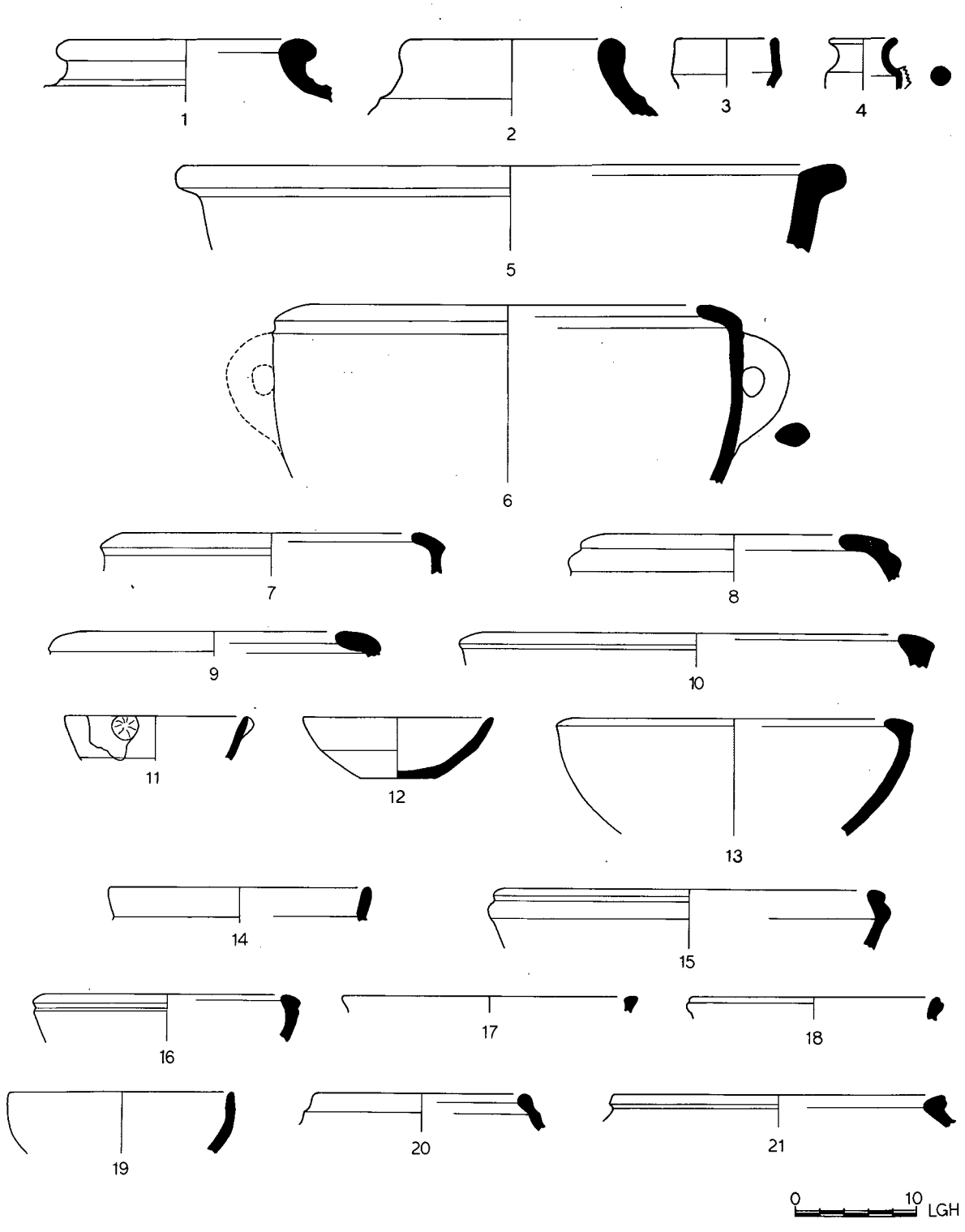


Fig. 6.16. Field F: Phase 6: Late Iron II ceramics from debris layers and floors.

Vessel		Provenance				Fabric Color			Non-Plastic				Voids	Manu	Surface Treatment				Decor	Fire
No.	Type	Sq	Locus	Pail	Reg.	Ext	Core	Int	Type	Size	Shape	Density			Ext	Color	Int	Color		
1	Pithos	6L98	83	348	1	7.5YR7/2 Pinkish Gray	10YR6/1 Gray	7.5YR7/2 Pinkish Gray	L	6A 5A 4A 3B	AA SAA SRA RB	M	FS6A PR6A PR5A PR4A PR3B	CW	---	10YR7/4 Very Pale Brown	---	7.5YR7/2 Pinkish Gray	---	U
2	Pithos	6L98	83	348	2	5YR7/4 Pink	7.5YRN5/ Gray	---	L	6A 5A 4A 3B	SAA SRA RB	L	FS6A PR6A PR5A PR4A PR3A	CW	---	7.5YR7/4 Pink	---	5YR7/4 Pink	---	U
3	Jug	7L08	83	395	1	---	5YR7/3 Pink	---	L	6A 5A 4A 3B	SAA SRA RA	L	PR7A PR6A PR4B	W	SHSm	2.5YR6/6 Light Red	SM	2.5YR6/4 Light Reddish Brown	---	O
4	Juglet	6L98	77	317	1	2.5YR6/4 Light Reddish Brown	5YR6/1 Gray	2.5YR6/4 Light Reddish Brown	L P	6A 5A 4A 3B 6A 5A	SRA RB	M	PR6A PR5A PR3B	W	---	2.5YR6/4 Light Reddish Brown	---	2.5YR6/4 Light Reddish Brown	---	O
5	Basin	6L98	77	317	2	7.5YR7/4 Pink	7.5YRN5/ Gray	7.5YR7/4 Pink	L	7A 6A 5A 4A 3A 2A	AA SAA SRA RA	L	PA7A PA6A PA5A PR7A PR6A PR5A PR4A PR3A	CW	SH	7.5YR8/4 Pink	SH	7.5YR8/4 Pink	---	U
6	Krater	7L08	82	394	8	5YR7/3 Pink	2.5YRN5/ Gray	---	L P	6A 5A 4A 3A 2A 6A 5A	AA SAA SRA RB RA	M	FS6A FS5A PR6A PR5A PR4A JH7+A	CW	---	2.5YR6/4 Light Reddish Brown	---	2.5YRN4/ Dark Gray	---	U
7	Krater	7L08	82	394	4	7.5YR7/6 Reddish Yellow	---	10YR5/1 Gray	L	6A 5A 4A 3A 2A	SRA RB	L	PR5A PR4B	CW	WB-HR	7.5YR7/6 Reddish Yellow	---	7.5YR7/4 Pink	---	U
8	Krater	7L08	82	394	2	---	10YR5/1 Gray	---	L	7A 6A 5A 4A 3A 2A	SAA SRA RC	M	PR7A PR6A PR5A PR4A PR3A	CW	---	7.5YR7/4 Pink	---	10YR5/1 Gray	---	R
9	Krater	6L98	77	317	4	5YR7/3 Pink	10YR5/1 Gray	---	L	6A 5A 4A 3A	AA SAA SRA RA	L	FS7+A FS6A FS5A PR7A PR6A PR5A PR4A PR3A	CW	---	5YR7/3 Pink	---	10YR6/2 Light Brownish Gray	---	U
10	Krater	6L98	77	317	7	5YR7/4 Pink	5YR5/1 Gray	5YR7/4 Pink	L	7A 6A 5A 4A 3A	AA SAA SRA RA	M	PA6A PA5A PA4A PR5A PR4A PR3B	CW	---	2.5YR6/4 Light Reddish Brown	---	2.5YR6/4 Light Reddish Brown	---	U
11	Bowl	7L08	82	394	6	---	5YR7/3 Pink	---	L	5A 4A 3A	RD	M	PR4D	W	SH WBH	2.5YR5/6 Red	SH WBH	2.5YR5/6 Red	---	O
12	Bowl	7L08	82	394	7	2.5YR6/4 Light Reddish Brown	5YR5/1 Gray	2.5YR6/4 Light Reddish Brown	L	6A 5A 4A 3B	SAA SRB RA	M	PA5A PA4A PR5A PR4A	W	---	---	---	---	---	U
13	Bowl	7L08	82	394	1	---	10YR6/1 Gray	---	L	6A 5A 4B	SAA SRA RB	L	PR7A PR6A PR5A PR4B	W	WBL	2.5YR6/4 Light Reddish Brown	---	5YR5/3 Reddish Brown	---	R
14	Bowl	7L08	82	394	5	---	5YR7/3 Pink	---	L	5A 4A 3B	SRA RB	M	PR6A PR5A PR4B	W	WBM	5YR6/6 Reddish Yellow	WBM	5YR6/6 Reddish Yellow	---	O
15	Bowl	6L98	77	317	3	---	5YR7/3 Pink	---	L	7A 6A 5A 4B	SRA RB	L	PR5A PR4A PR3A	W	WBM	5YR6/4 Light Reddish Brown	WBM	5YR6/4 Light Reddish Brown	---	O
16	Bowl	6L98	77	317	6	2.5YR6/4 Light Reddish Brown	2.5YRN5/ Gray	---	L	5A 4A 3A	SRA RB	L	PR5A PR4A PR3B PR2A	W	---	2.5YR6/4 Light Reddish Brown	WBM	5YR6/2 Pinkish Gray	---	U

Fig. 6.16, *continued.* Field F: Pottery descriptions 1-16.

No.	Vessel Type	Sq	Provenance Locus	Pail	Reg.	Fabric Color Ext	Core	Int	Non-Plastic Type	Size	Shape	Density	Voids	Manu	Surface Treatment Ext	Color	Int	Color	Decor	Fire
17	Bowl	6L98	83	348	4	---	5YR7/4 Pink	---	L	6A 5A 4A 3B	AA RB	L	PR4D	W	SM WBL	2.5YR6/6 Light Red	SM WBM	2.5YR6/6 Light Red	---	O
18	Bowl	6L98	77	317	5	---	7.5YRN5/ Gray	---	L	6A 5A 4A 3B 2A	SRA RB	L	PR5A PR4A PR3B	W	WBM	7.5YRN4/ Dark Gray	WBM	7.5YRN4/ Dark Gray	BB	R
19	Bowl	6L98	83	348	5	5YR7/4 Pink	5YR6/1 Gray	5YR7/4 Pink	L P	7A 6A 5A 4A 3A 7A 6A 5A 4A	AA SAA SRB RB	MH	PR4C PR3A	W	---	5YR7/3 Pink	---	2.5YR6/4 Light Reddish Brown	---	U
20	Cooking Pot	7L08	82	394	3	---	7.5YR6/4 Light Brown	---	L	5A 4A 3B	AA SAB SRA RA	L	PR6A PR4B	W	---	2.5YR5/4 Reddish Brown	---	2.5YR5/4 Reddish Brown	---	O
21	Cooking Pot	6L98	83	348	3	---	7.5YR7/4 Pink	---	L	5B 4B	AA SAA SRA RA	L	PR5D	W	---	7.5YR7/2 Pinkish Gray	---	10YR7/3 Very Pale Brown	---	O

Fig. 6.16, *continued.* Field F: Pottery descriptions 17-21.

and was an indurate, hard material found in the south part of the square. The matrix evidently changed consistency to the north and was not recognized in the north part of the square. Surface 88 remained unexcavated. Exposure Surface 6L98:69 was deposited subsequently to Surface 88. It dipped sharply to the south at a 45° angle and provided a measure of how strongly the topography of Field F has changed since the late Iron Age. The color and consistence of exposure surfaces were very similar and the dramatic angle of deposition of Surface 6L98:69 was not recognized until it was weathered out of the eastern balk. Earth Layers 76, 74, and 70 have been discussed in earlier phases and have been demonstrated stratigraphically to be Iron I deposits; however each of these included few late Iron II diagnostic sherds. The late season identification and recognition of the sharply dipping Earth Layer 69 greatly clarified the stratigraphic interpretation of this season's excavations.

Exposure Surface 6L98:69 contained significant amounts of fragmentary faunal remains, a tuff seal, an animal figurine, several spindle whorls, grinding stone fragments, and bottle stoppers. The diagnostic ceramics dated the deposit to late Iron II.

To the north, Earth Locus 7L08:78 was deposited on the exterior surface and sealed Wall 75. The few ceramic sherds found within this locus date to Iron II.

Within the structure associated with Wall 6L98:44 a number of fill layers were excavated. The bottom of the depression formed by the sloping Cobbled Surface 7L08:89 and covered by Earth Layer 7L08:83 was devoid of cultural material aside from Iron II pottery. Earth Layer 7L08:83 was covered by Earth Layer 7L08:82 and contained a mendable storage jar dating to late Iron II. The next sequential fill layer, 7L08:80, contained frequent late Iron II pottery, including large storage jar fragments and several grinding stones.

Cobbled Surfaces 7L08:90 (=6L98:84) and 6L98:86 were blanketed by Earth Layer 7L08:81 (=6L98:83) and contained infrequent cultural material. One gaming piece, part of a grinder, and a few fragments of sheep/goat bone were found in the matrix.

To date, there have been no destruction or abandonment loci stratigraphically associated with Phase 6 architecture. This season's excavation demonstrated that there was most likely a destruction layer: Ash Lens 7L08:52 (identified in 1989), upon which Phase 6 construction took place. The pottery of Phase 6 dates to the late Iron II period (fig. 6.16).

Field Phase 5 (fig. 6.17)

Loci:	6L98:44	Wall (Cont. from FP 6)
	6L98:50	Earth layer (identified in 1989)
	6L98:62	Pit line (labeled Foundation Trench in *MPP 3*)
	6L98:63	Pit fill (labeled Foundation Trench Fill in *MPP 3*)
	7L08:45	Wall (identified in 1989)
	7L08:61	Wall (continued from FP 6)

Foundation Trench 6L98:62 was identified in 1989 on the basis of a clear vertical cut line in the balk and interpreted as the initial Phase 6 building event associated with the structure which included Wall 6L98:44. Excavation this season demonstrated that the relationship of the vertical cut line to the east edge of the wall was not related to a building stage but was instead the trace of a pit dug next to the Iron II wall. The pit was excavated prior to the deposi-

tion of Earth Locus 6L98: 50 (identified in 1989) placing the pit construction in Phase 5.

Excavation this season clarified the stratigraphic relationship between Wall 7L08:45 (identified in 1989) and Wall 7L08:61. In 1989, the walls appeared to be contemporaneous and were assigned to Phase 6. The discovery of the foundation trench for Wall 61 demonstrated that it represented an earlier Phase than Wall 45.

Ash Layer 7L08:52 was assigned to Phase 9 in 1989, but excavation this season demonstrated that this ash layer is stratigraphically above the Iron I Ash Layer 7L08:87 (=6M90:15). Ash Layer 7L08:52 was thus associated with a late Iron II destruction. The ash was not encountered in association with the late Iron II Wall 6L98:44, an indication that Wall 44 was in use prior to the deposition of 7L08:52. Wall 45 was founded on Ash Lens 52, however, which indicates that Wall 45 must have been built subsequent to Phase 6. These observations necessitate the rephasing of Wall 45 from Phase 6 to Phase 5.

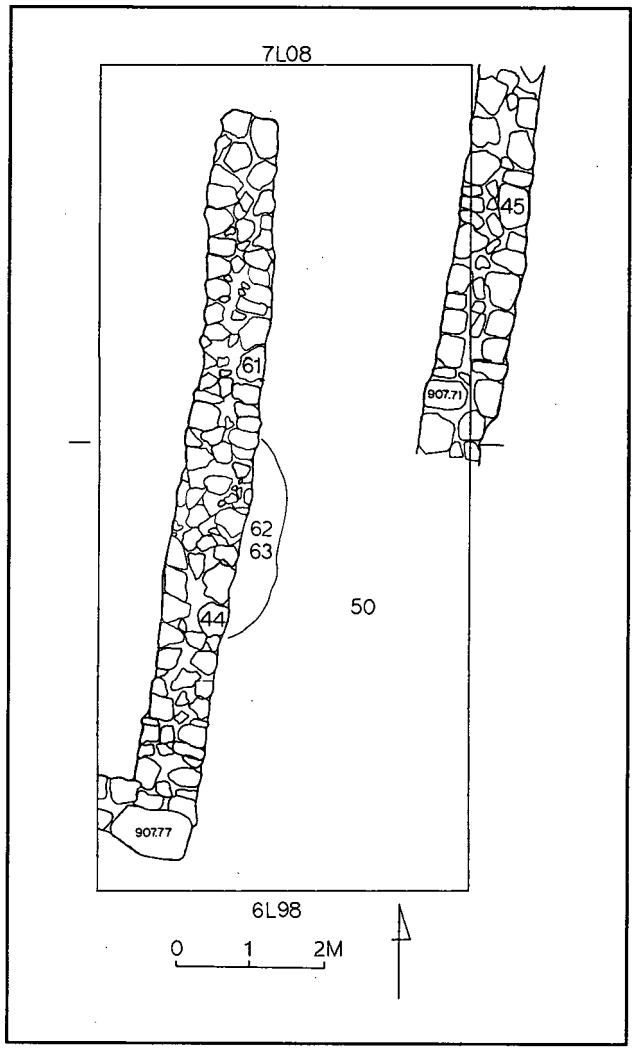


Fig. 6.17. Field F: Phase 5: Plan of architecture and debris layers.

The building which used Wall 6L98:44 for its eastern wall in Phase 6 seems to have not been reused. No new surfaces were present. The pottery of Phase 5 is best dated to the late Iron II or early Persian periods.

Field Phase 3 (fig. 6.18)

Loci:	6L98:77	Earth layer (=6L98:82)
	6L98:82	Earth layer (=6L98:77)
	7L08:59	Wall (identified in 1989)
	7L08:70	Earth layer
	7L08:72	Earth layer
	7L08:74	Earth layer
	7L08:76	Earth layer
	7L08:77	Earth and mudbrick layer

Wall 7L08:59 was attributed to the building stage of Phase 9 in 1989. Excavations this season revealed that the wall was founded on Phase 6 Wall 7L08:61 and must belong to a later phase (compare fig. 6.19 with Wall 59 present and fig 6.20 with the wall removed). Part of Wall

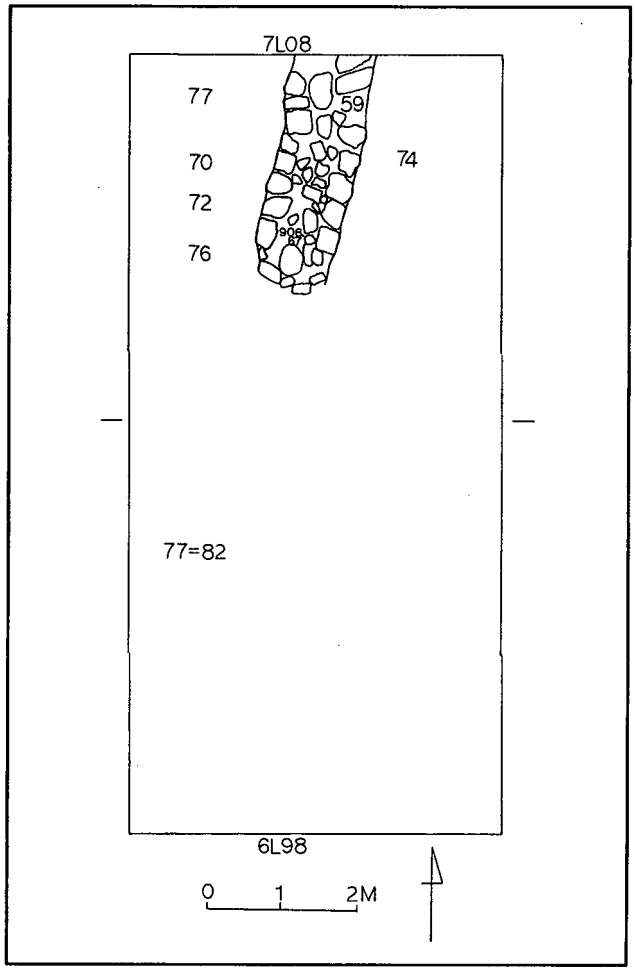


Fig. 6.18. Field F: Phase 3: Plan of architecture and debris layers.

Fig. 6.19. Field F: Phase 3: Wall 7L08:59 (under the meter stick) lies over the northeast corner of the Phase 6 building and next to Wall 7L08:67 of Phase 9 (to the left).

59 was founded on 7L08:74, an earth layer blanketing the preserved upper course of Wall 61. Cultural debris associated with this locus included a burnishing tool, bottle stopper, metal fragments, and diagnostic pottery sherds dated to late Iron II/Persian. Earth Layer 7L08:77 was contiguous to 7L08:74 and ran into the north balk. Earth Layer 77 was partially sandwiched between Wall 59 and Wall 61 and appears to be in secondary context. Earth Layer 77 is highly enriched in mudbrick and contains diagnostic pottery sherds from the Middle Bronze Age. The firm soil may have been hauled in from elsewhere to provide a solid foundation for Wall 59.

Wall 59 was founded on Wall 61 and ran at the same orientation; it is likely that standing courses of Wall 61 were reused within Wall 59. Equivocal support for this hypothesis is supplied by the partial deconstruction of Wall 61 in line with, but south of, Wall 59. Small boulders were removed to produce an entry sized space. Earth Layer 7L08:76 covered the section where the boulders had been removed and contained a broken spindle whorl and late Iron II pottery.

The clarification of the phasing of Wall 59 explains several observations from the 1987 and 1989 field seasons. In 1987 it was suggested that the vertical nonconformity associated with Pit 7L08:20 was the remaining trace of a robbed out north-south trending wall. In 1989, an east-west oriented wall, Wall 48 was unearthed; the wall's stratigraphic associations with preserved earth loci indicated that it could have been contemporary with the postulated robbed out wall, and likely belonged to the same structure. It now appears that the remaining courses of Wall 59, a Phase 3 structure, were in alignment with the vertical nonconformity and thus Wall 59 served as the east wall of the structure including Wall 48, and Wall 59 was the hypothesized wall that was robbed out during Phase 2.

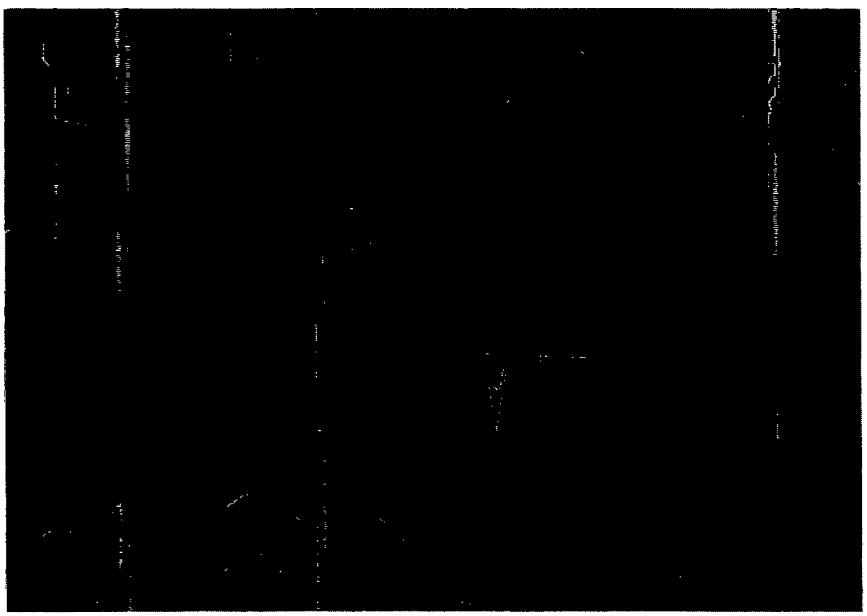
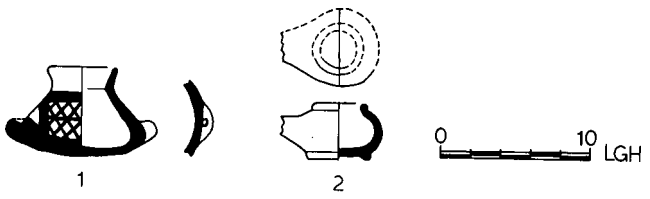


Fig. 6.20. Field F: Phase 3: Photo taken after the removal of Wall 7L08:59 of Phase 3, showing the debris between its founding level and the northeast corner of the Phase 6 building (under the meter stick). Wall 7L08:67 of Phase 9 is to the left.

Contiguous to Earth Layer 7L08:76, Earth Layer 7L08:72 sealed against the west side of Wall 59 and contained little cultural material other than a pair of linked metal earrings. Associated ceramics dated Earth Layer 72 to late Iron II/Persian. Earth Layer 7L08:72 was blanketed by Earth Layer 7L08:70, which also sealed Wall 59 and dated to the same period.

Still west of Wall 59 but further south, Rubble Layer 7L98:81 of Phase 6 was covered by Earth Layer 6L98:82 (=6L98:77) and contained numerous plaster fragments, including molded pieces that appear to have once adhered to the walls of the structure. Cultural material included two fragments of animal figurines, a glazed ceramic figurine (see Dabrowski's discussion of the *pataikos* figurine in this volume), several grinder



Vessel		Provenance				Fabric Color			Non-Plastic				Voids	Manu		Surface Treatment			Decor	Fire
No.	Type	Sq	Locus	Pail	Reg.	Ext	Core	Int	Type	Size	Shape	Density			Ext	Color	Int	Color		
1	Pyxis	6L98	Cl.Up	290	1	7.5YR7/2 Pinkish Gray	10YR6/1 Gray	7.5YR7/2 Pinkish Gray	L	6A 5A 4A 3A	AA SAA SRA RB	M	JR7+A PR5A PR4A PR3B	W	---	10YR7/3 Very Pale Brown	---	7.5YR7/2 Pinkish Gray	Pa 2.5YR4/2 Weak Red	U
2	Lamp	7L08	Cl.Up	0	1	2.5YR6/4 Light Reddish Brown	5YR7/4 Pink	2.5YR6/4 Light Reddish Brown	L	6A 5A 4A 3A	AA SAA SRA RA	M	PA7A PA6A PA5A PR6A PR5A PR4A	M	---	2.5YR6/4 Light Reddish Brown	---	2.5YR6/4 Light Reddish Brown	---	O

Fig. 6.21. Field F: Unstratified: An Iron I pyxis and an early Persian closed lamp.

fragments, a ballistic missile and pottery dating to late Iron II/ Persian. The phase is best dated to the early Persian period.

Two pieces of unstratified pottery are published in fig. 6.21.

Prospectus

The three field seasons at Field F have provided significant insight into our understanding of the history of occupation at Tall al-'Umayri. The eastern shelf's topography encouraged downslope erosion from the acropolis and buried Byzantine and Persian occupations in the area that were obliterated further upslope. Similarly, late Iron Age structures were found at the surface of the *tall* on the summit but were buried under more than two meters of overburden in the westernmost extent of Field F.

For sampling purposes, the position of Field F is fortuitous. During the Iron Age, the western part of the eastern shelf was located in a depression so that sediments accumulated rapidly from upslope. The eastern part of Field F was located at or near a slope, and lost sediment downslope rapidly. The topography of the eastern slope was thus significantly different in the past than today. There would have been more of a horizontal shelf than today.

The ancient *tall* topography is emphasized by the great range of depths of the buried cultural horizons. In an easternmost square (7M90) cultural layers ascribed to the Middle Bronze Age were found only 1.2 m below the surface. Ten meters to the west in Square 7L08, late Iron II structures were buried more than 2.20 m below the surface. Thus, the excavations in Field F have provided a reasonably clear "snapshot" synopsis of 2500 years of diachronic change in settlement and occupation at Tall al-'Umayri.

Nevertheless, severe downslope erosion as well as active dismantling of abandoned structures by subsequent *tall* inhabitants have confounded the interpretation of most of the late Iron II structures encountered in Field F to date. Only the westernmost two meters of excavation area have yielded, by virtue of rapid and deep burial, well preserved late Iron II architecture (the structure associated with Wall 44). Definitive determination of the function of this building in a subsequent season would be a daunting task, as it would require the removal of ca. 3.0 m of overburden.

Excavation this season has clarified several stratigraphic questions posed in previous seasons but to date no late Iron II architecture from the field has been adequately explained. Research in previous seasons has been directed at understanding the spatial extent of the late Iron Age settlement. A clearly defined gate structure has not been identified to date. Such a structure, if it had been positioned on the eastern shelf, has long since collapsed and rolled downslope.

The function of the structure associated with Wall 44 would clearly be of interest. Whether Wall 44 belonged to a domestic structure (Iron Age four-room house) or whether it represented the outer wall of a casemate structure would contribute to our understanding of the settlement system at Tall al-'Umayri. Topographic analysis suggests that an excavation unit immediately to the south and west would have less overburden than has been encountered in 6L98 and 7L08. Exploration of a possible casemate structure could be achieved more easily in new excavation units to the south and north than attempting to open the squares immediately to the west of the currently excavated field.

The ready access to near-surface Bronze Age loci on the eastern edge of the shelf suggests that the eastern squares would be an ideal venue to expand our knowledge about human adaptation and settlement systems in the Bronze Age, although it would appear that much of the architecture is extra-urban.

This field season ended with the exposure of an Iron I destruction layer in the two western squares. Further exploration of these units may provide additional insights into the activities of the inhabitants of Tall al-'Umayri outside the casemate structure and administrative complex on the acropolis.

Addendum

The following figures contain the final balk drawings for all the squares of Field F from the 1987, 1989, and 1992 seasons. It is unlikely that Field F will be opened again and we provide them here as part of the full description of our data.

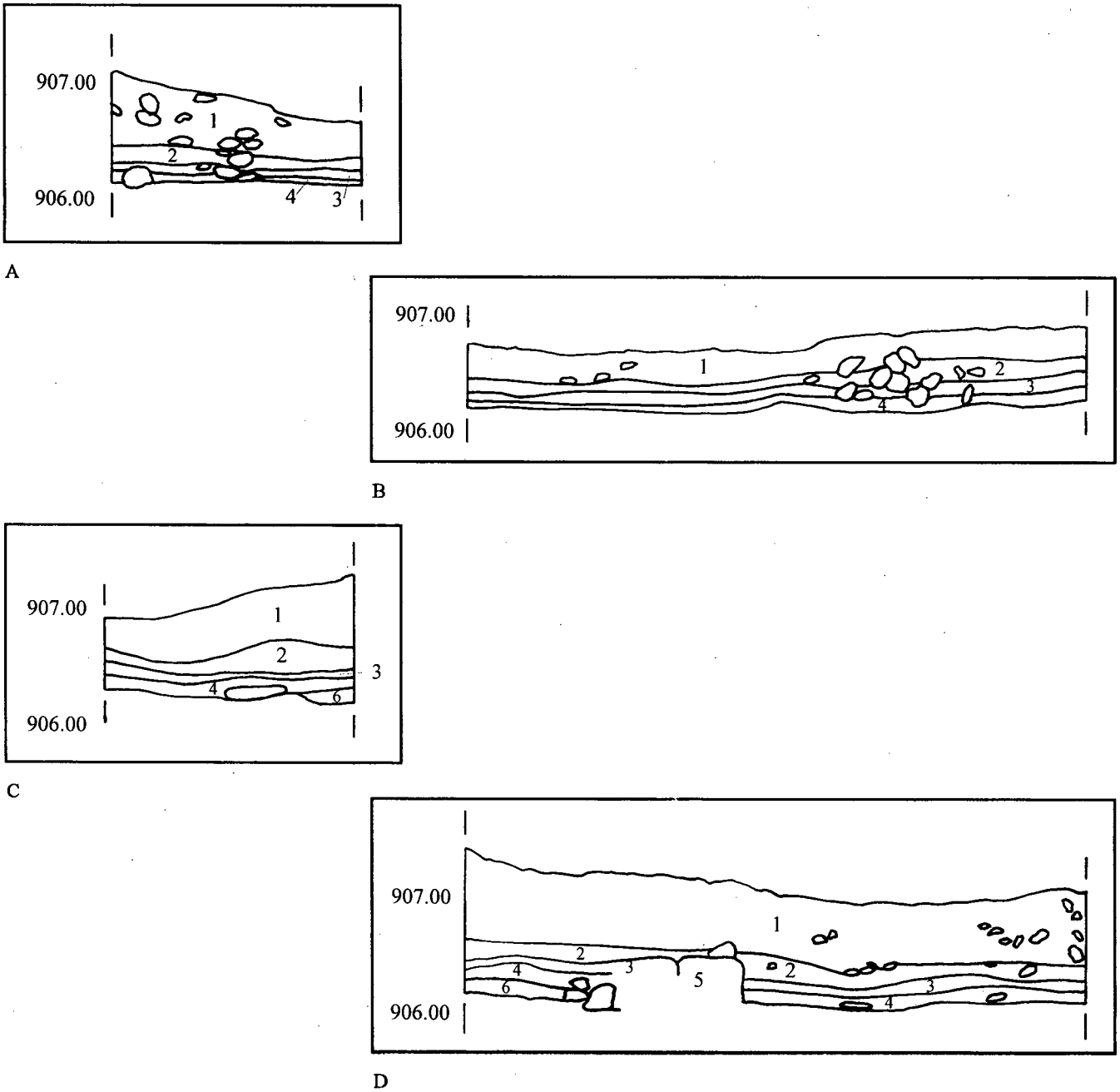
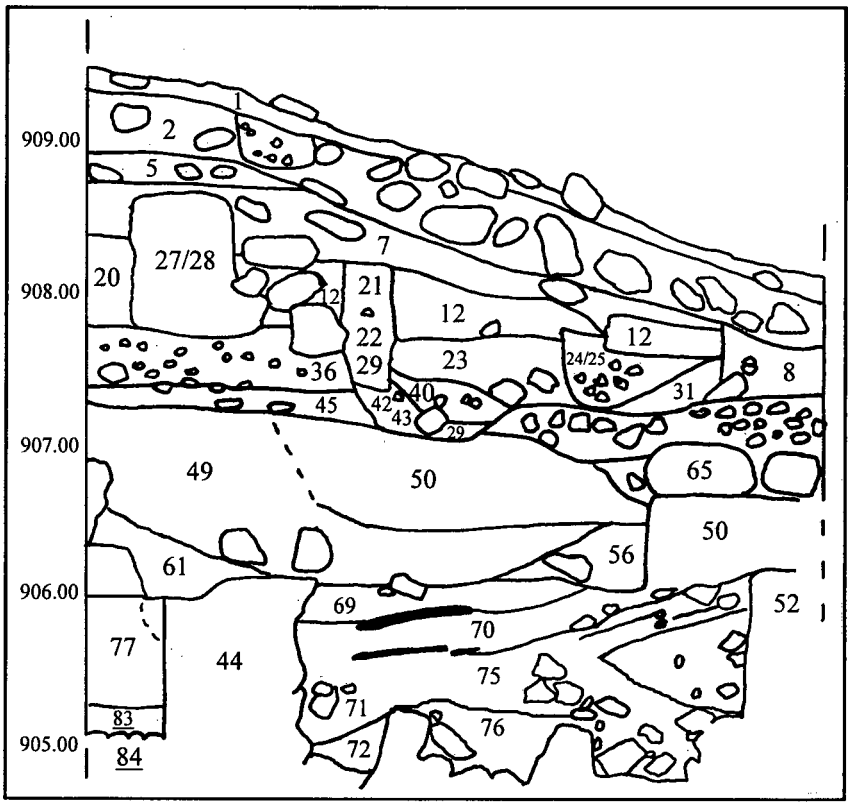


Fig. 6.22. Field F: Balk drawings of Square 6L89 (A: North balk; B: East balk; C: South balk; D: West balk).



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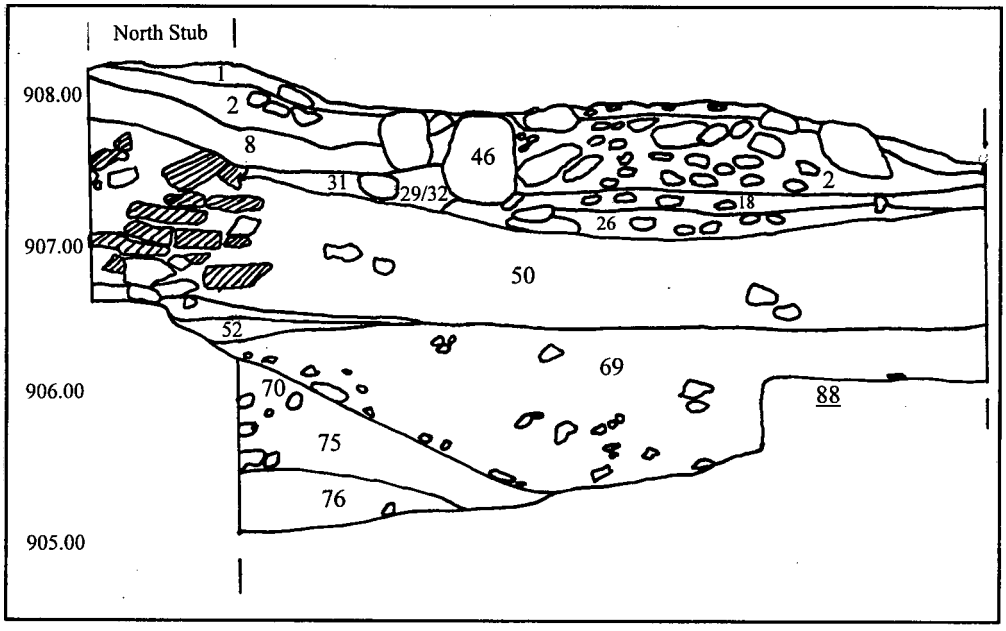
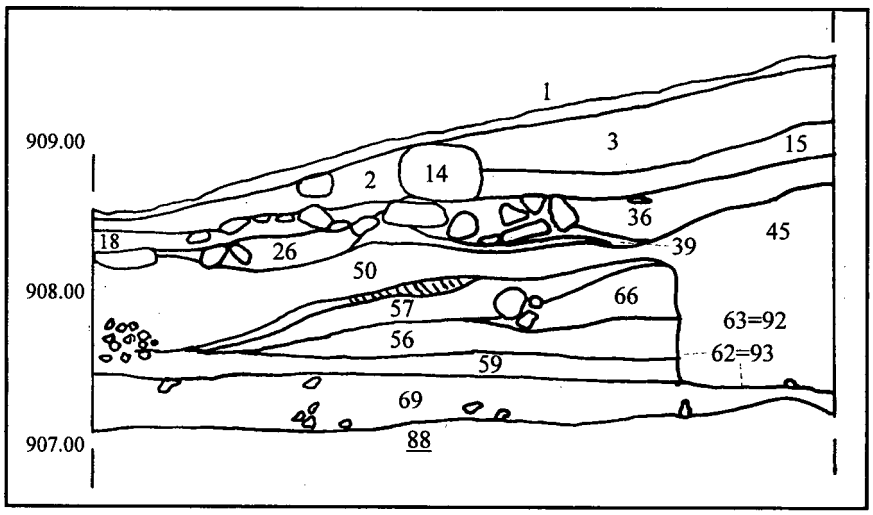
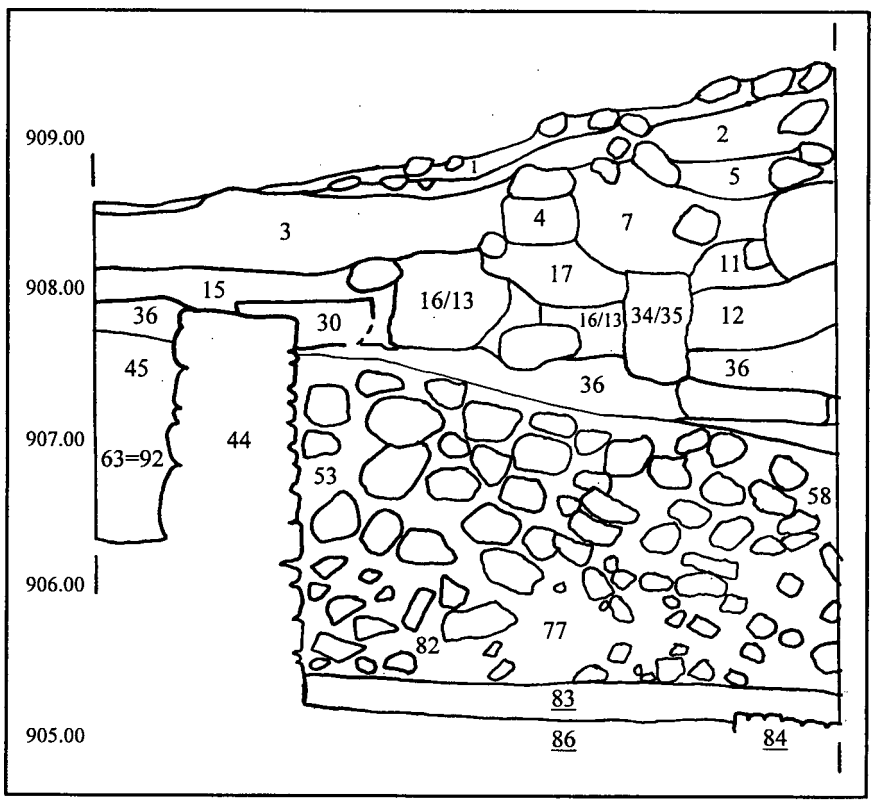


B

Fig. 6.23 A.2. Field F: Balk drawings of Square 6L98 (A: North balk; B: East balk).

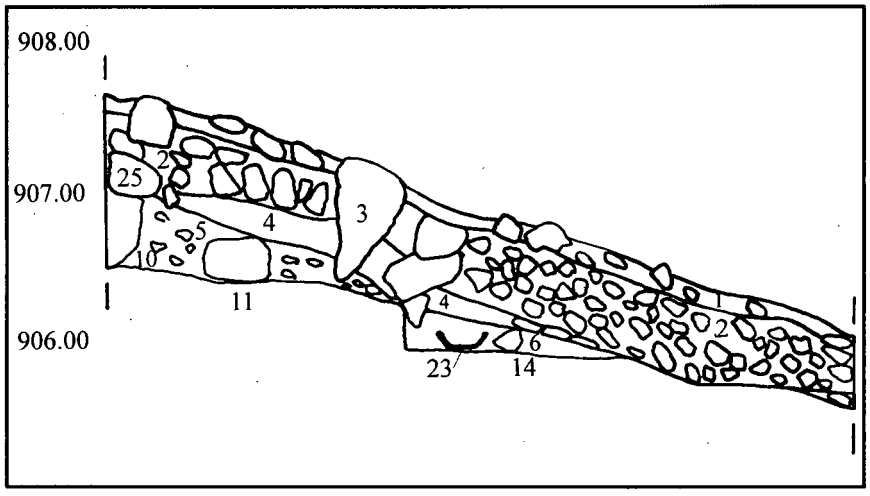


C

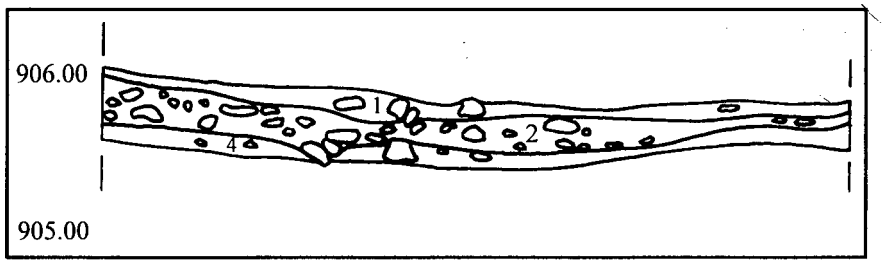


D

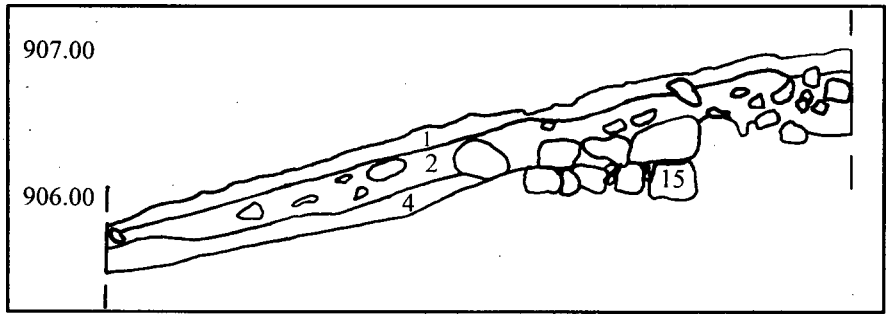
Fig. 6.23 A.2, *continued*. Field F: Balk drawings of Square 6L98 (C: South balk; D: West balk).



A



B



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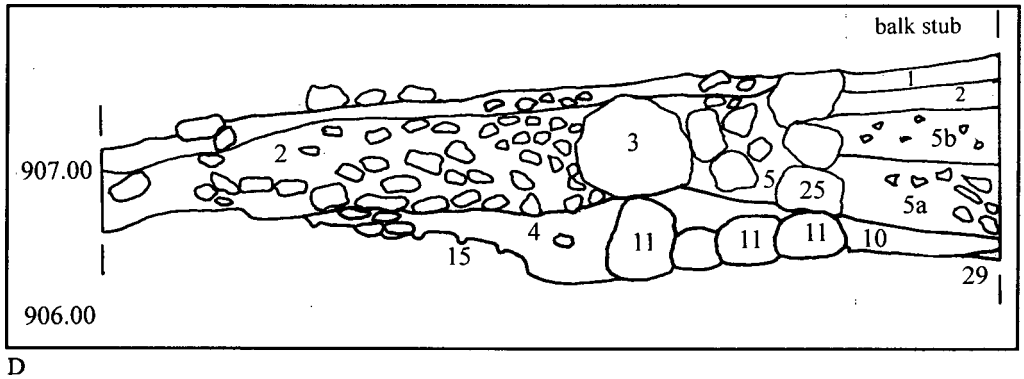
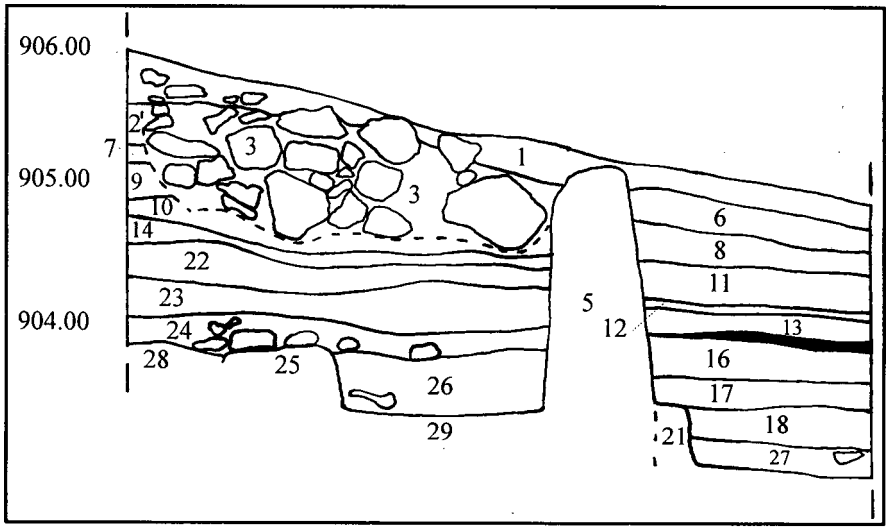
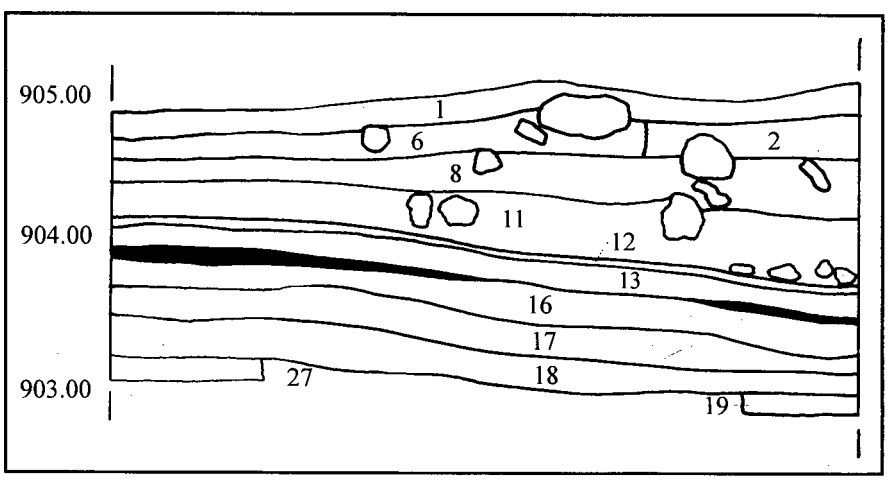


D

Fig. 6.24 A.3. Field F: Balk drawings of Square 6L99 (A: North balk; B: East balk; C: South balk; D: West balk).

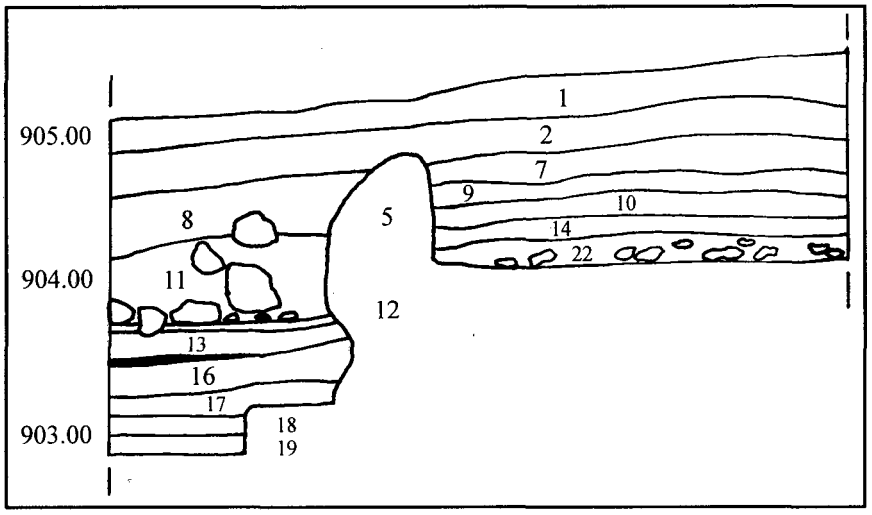


A



B

Fig. 6.25 A.4. Field F: Balk drawings of Square 6M90 (A: North balk; B: East balk).



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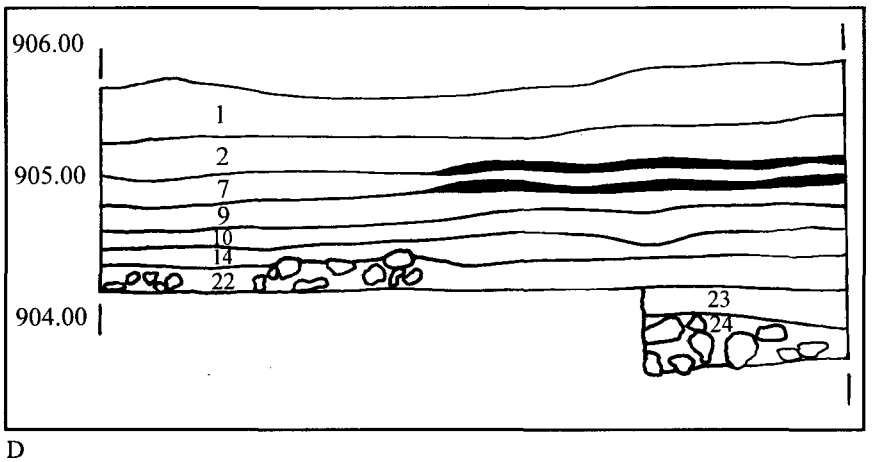
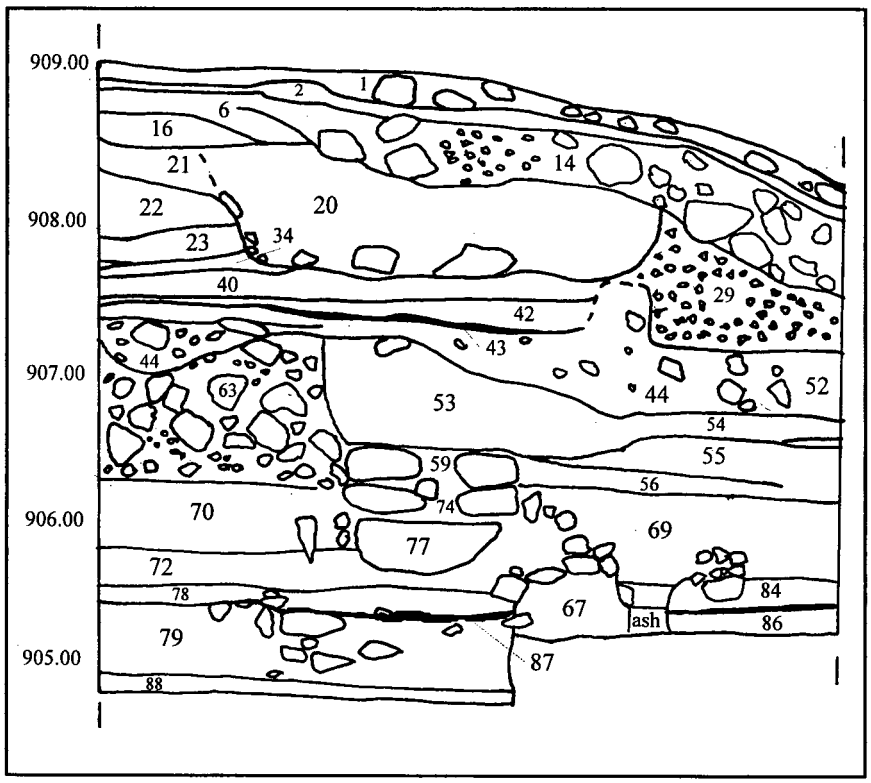
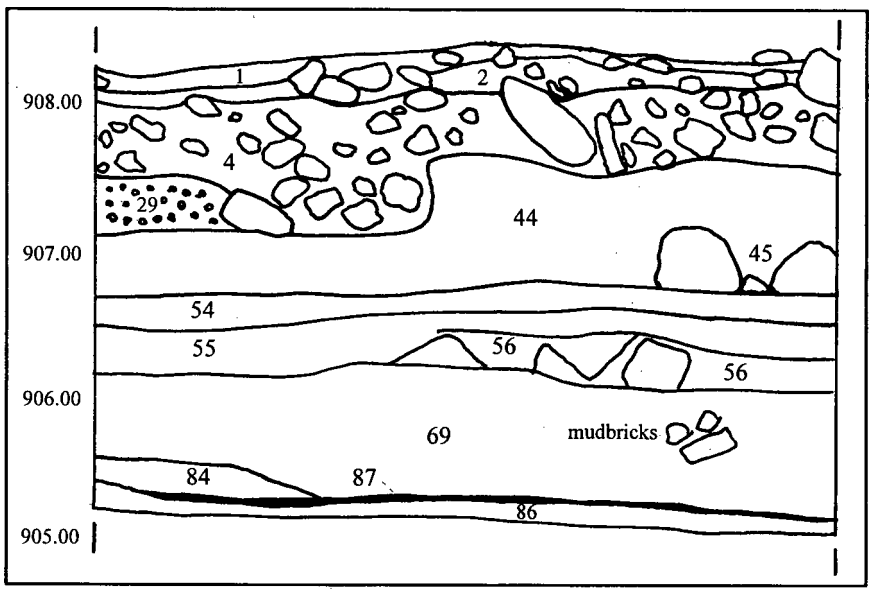


D

Fig. 6.25 A.4, *continued*. Field F: Balk drawings of Square 6M90 (C: South balk; D: West balk).

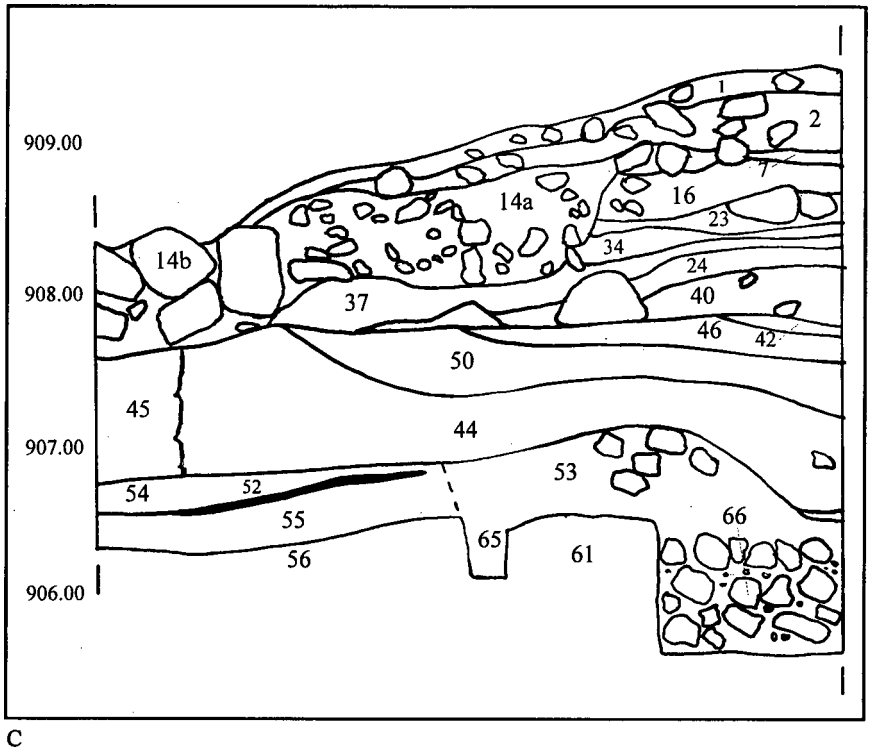


A



B

Fig. 6.26 A.5. Field F: Balk drawings of Square 7L08 (A: North balk; B: East balk).



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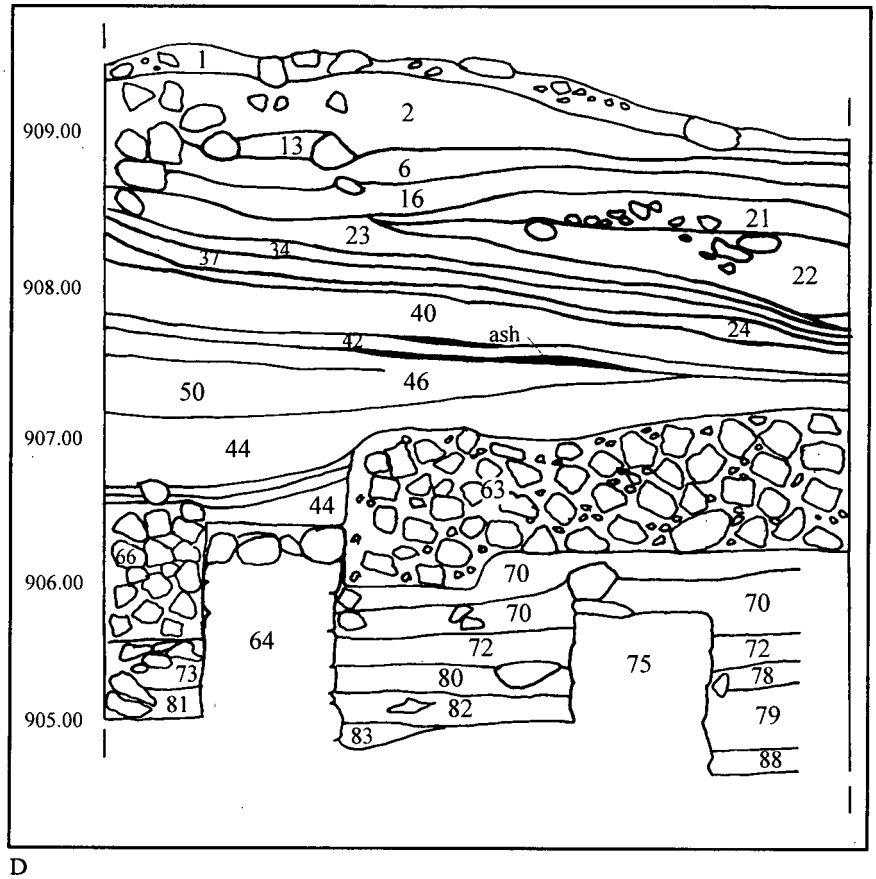
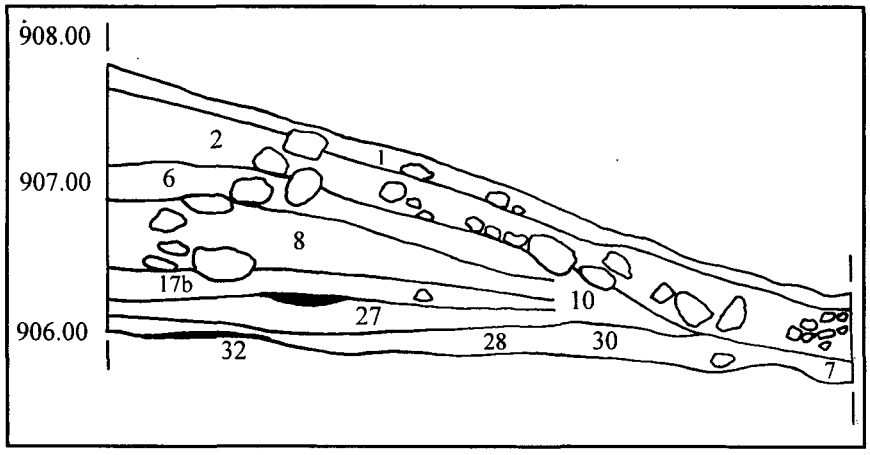
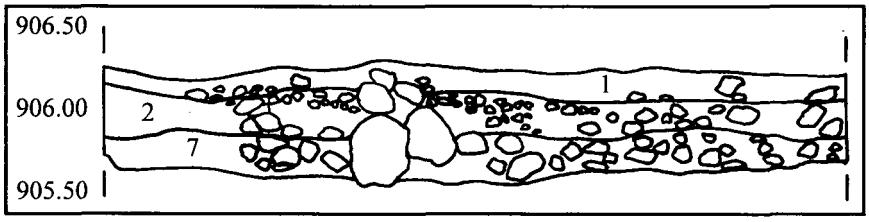


D

Fig. 6.26 A.5, *continued*. Field F: Balk drawings of Square 7L08 (C: South balk; D: West balk).



A



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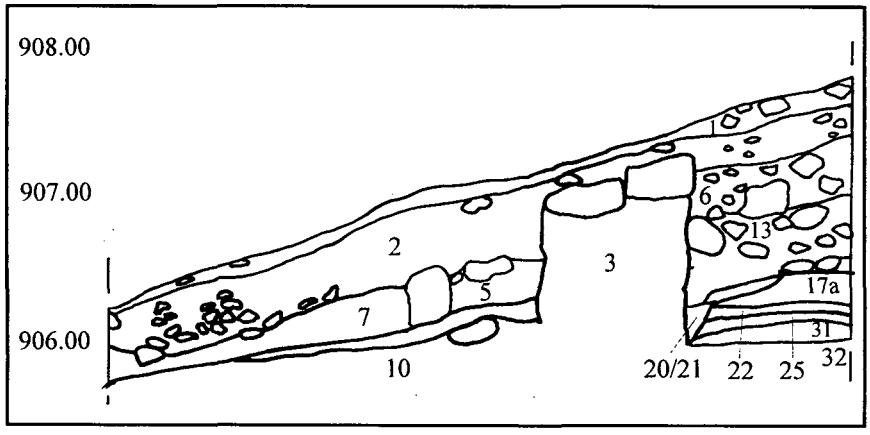

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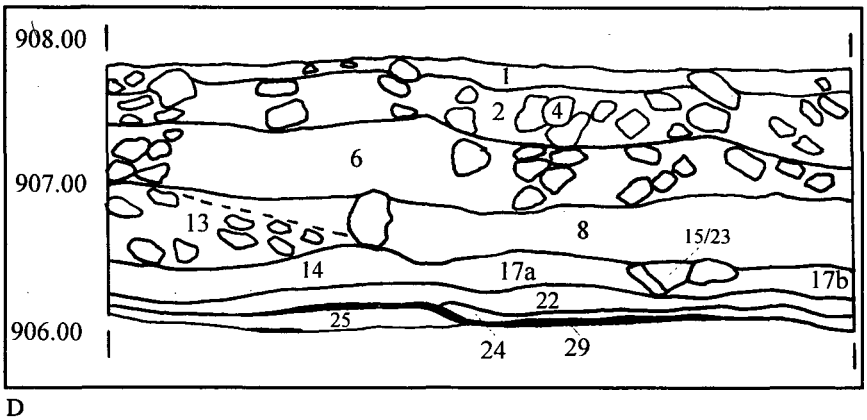
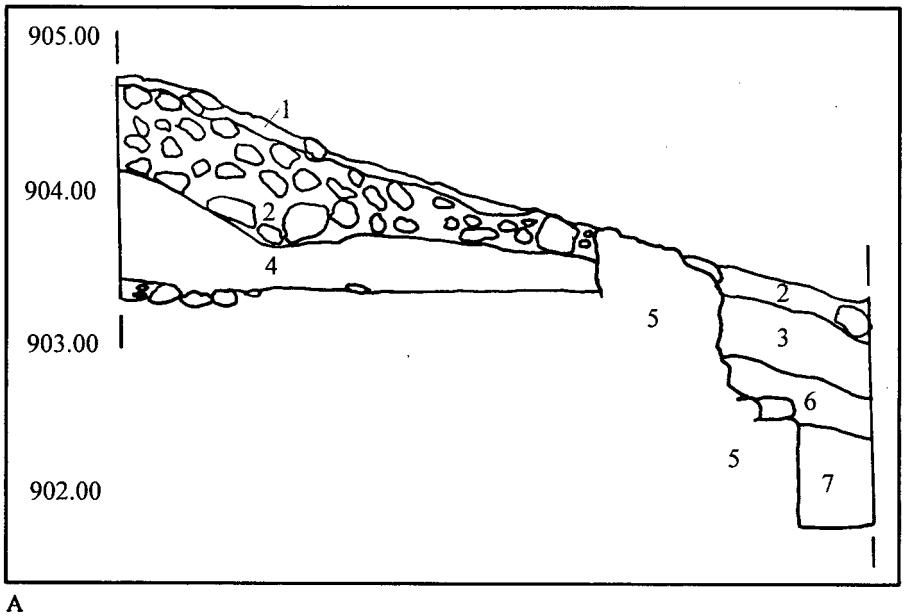
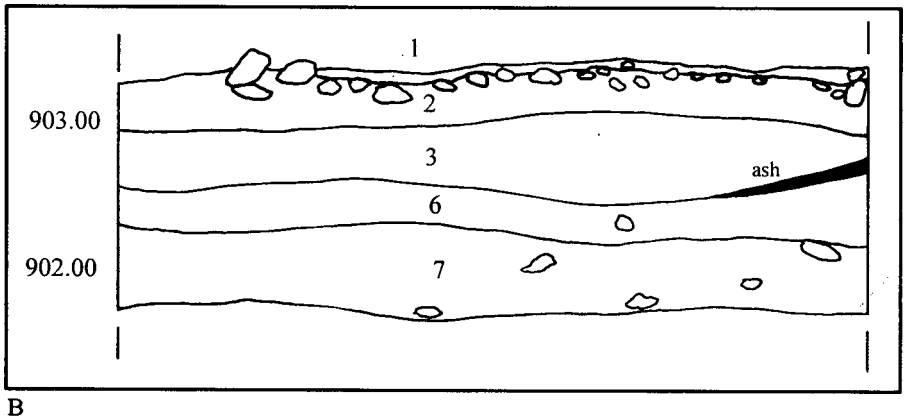


D

Fig. 6.27 A.6. Field F: Balk drawings of Square 7L09 (A: North balk; B: East balk; C: South balk; D: West balk).

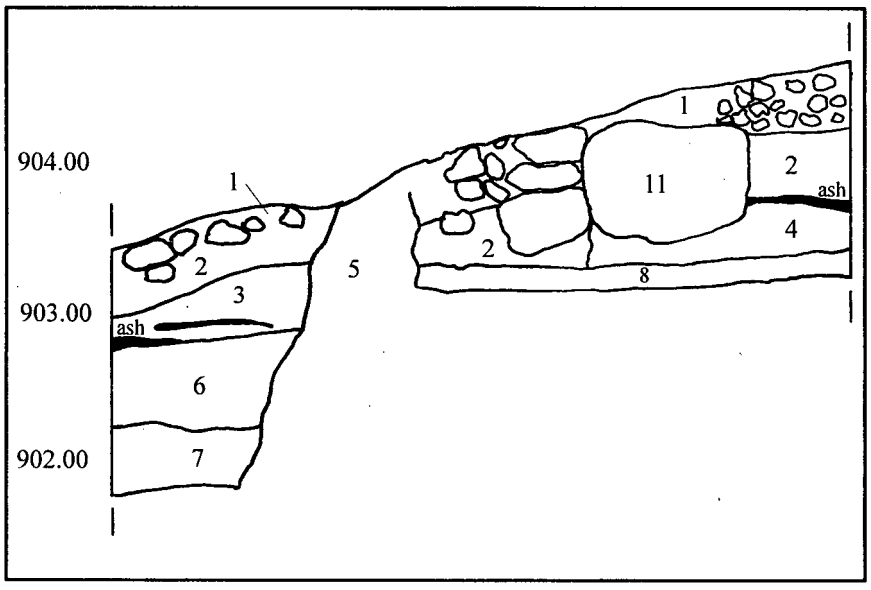


A



B

Fig. 6.28 A.7. Field F: Balk drawings of Square 7M00 (A: North balk; B: East balk).



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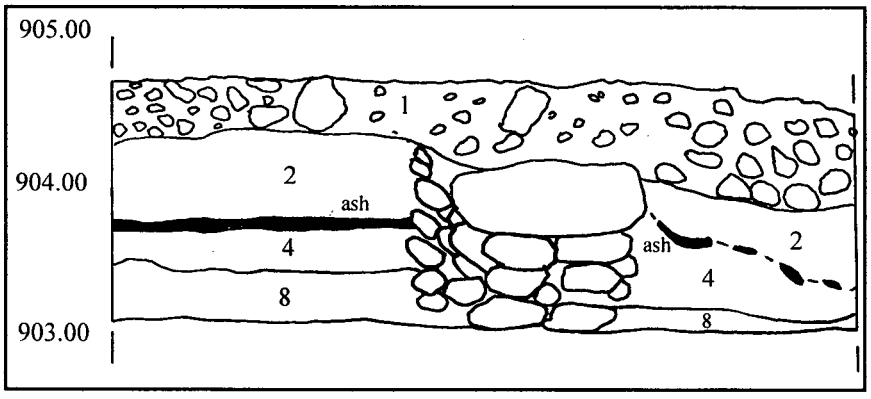

D

Fig. 6.28 A.7. , *continued.* Field F: Balk drawings of Square 7M00 (C: South balk; D: West balk).

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CHAPTER 7

The Pottery

Larry G. Herr *Canadian University College*

The pottery from the 1992 season was handled in much the same fashion as it was in earlier seasons (Herr 1989; 1991; 1997). In this publication we continue our minimal prose discussion begun in *MPP 2*, but adapted from a columnar format to a linear one.

MIDDLE BRONZE AGE

This season, the Middle Bronze Age rampart in Field B was excavated to bedrock in Square 7J88 (see Clark, this volume: Field Phase 12). Most of the pottery in the earth layers belonged to the early Bronze Age in secondary deposit, suggesting the debris making up the rampart was obtained from the remains of earlier settlements. However, enough pottery in every layer belonged to the end of the Middle Bronze Age to make it clear that the construction of the rampart most likely occurred during or just after the end of MB IIC. The parallels we list are taken from the following publications with references for the illustrations:

Middle Bronze Age II in General

Akko (Dothan 1976: Figs. 7-8, 17)
Amman (Dajani 1966a: Pl. 17)
Beit Mirsim (Albright 1932: Pls. 45-46
Bethel (Albright and Albright and Kelso 1968: Pls. 49-52)
Beth Zur (Funk 1968: Figs. 1-6)
Gibeon (Pritchard 1963: Pls. 16-51, 61-64, 68)
Ginosar (Epstein 1974: Figs. 1-11, 13-17)
Hazor (Yadin 1959: Pls. 100-104, 111-121, 132)
Hazor (Yadin 1960: Pls. 109-115)
Hazor (Yadin 1961: Pls. 192, 196-198, 235-237, 239, 259-260, 286-287, 296)
Megiddo (Loud 1948: Pl. 7)
Jericho (Kenyon and Holland 1982: Figs. 103-194)
Lachish (Tufnell 1958: Pls. 68-79, 87)
Pella (Hennessy 1981: 270-284)
Pella (McNicoll 1982a: 93-117)
Pella (Smith 1973: Pls. 27, 35-40, 61-62)
Qiri (Ben-Tor and Portugali 1987: Figs. 61-64)

Middle Bronze Age IIA

Aphek (Beck 1975: Figs. 1-16)
Jerishe (Geva 1982: Figs. 28-33)
Megiddo (Loud 1948: Pls. 8-22)
Mevorakh (Stern 1984: Figs. 15-17)
Pella (McNicoll 1992: Pl. 26)

Middle Bronze Age IIA/B

Gezer (Dever et al. 1974: Pl. 11)
Gezer (Dever 1986: Pls. 1-3)
Jerishe (Geva 1982: Figs. 34-39)

Middle Bronze Age IIB

Gezer (Dever et al. 1974: Pls. 12-14)
Gezer (Dever 1986: Pls. 4)

Hazor (Yadin 1961: Pl. 156)
Jerishe (Geva 1982: Figs. 25-27)
Megiddo (Loud 1948: Pls. 23-38)
Mevorakh (Stern 1984: Figs. 12-13)
Shechem (Cole 1984: Pls. 1-49)
Shiloh (Finkelstein 1993: Figs. 6.5-11)

Middle Bronze Age IIB/C

Gezer (Dever et al. 1974: Pls. 15-19)

Middle Bronze Age IIC

Beit Mirsim (Albright 1932: Pls. 41-44)
Gezer (Dever et al. 1970: Pls. 31-32)
Gezer (Dever et al. 1974: Pls. 20-21)
Gezer (Dever et al. 1986: Pls. 5-8)
Jerishe (Geva 1982: Figs. 23-24)
Megiddo (Loud 1948: Pls. 39-47)
Mevorakh (Stern 1984: Fig. 11)
Pella (McNicoll 1992: Pls. 34-35, 53-58)
Pella (Smith 1973: Pls. 46-57)
Shechem (Dever 1974: Figs. 13-14)
Shechem (Seger 1974: Figs. 3-6)
Shiloh (Finkelstein et al. 1993: Figs. 6.12-23
Tananir (Boling 1975: Pls. 1-5)

Jars

Rim Form: Everted, thickened.
Figure Reference: Fig. 4.13:1.
Previous 'Umayri Publication: MPP 2: Fig. 5.12:7.
Parallels: **MB II**: Beth Zur (Sellers et al. 1968: Fig. 3:4), Gibeon (Pritchard 1963: Fig. 63:53), Jericho (Kenyon and Holland 1982: Figs. 133.22; 134.7-10, 23; 190:2, 6, 8; 193:3); **MB IIA**: Megiddo (Loud 1948: Pl. 20: 20); **MB IIB**: Megiddo (Loud 1948: Pl. 31:11 [jug]), Shiloh (Finkelstein et al. 1993: Fig. 6.9:18); **MB IIC**: Shechem (Dever 1974: Fig. 13:13; Seger 1974: Fig. 5:31).

Jugs

Rim Form: Flaring, triangular thickened.
Figure References: Fig. 4.13:2-5.
Previous 'Umayri Publications: *MPP 2*: Fig. 5.12:5; *MPP 3*: Fig. 4.6:14.
Parallels: **MB II**: Ginosar (Epstein 1974: Fig. 17:2, 5), Jericho (Kenyon and Holland 1982: Figs. 126:13, 16; 173:8; 174:1), Pella (McNicoll et al. 1982a: 107:2; Smith 1973: Pl. 39:540); **MB IIB**: Shechem (Cole 1984: Pl. 40:e-f); **MB IIC**: Gezer (Dever et al. 1974: Pl. 18:24; Dever et al. 1986: Pl. 8:4), Megiddo (Loud 1948: Pl. 40:2), Pella (McNicoll 1992: Pl. 34: 14-15; Smith 1973: Pls. 55:699, 904; 56:47, 280, 1060), Shechem (Dever 1974: Fig. 13:6; Seger 1974: Fig. 3:10, 32).
Note: This is the most frequent type of jug rim at 'Umayri, both in the published and unpublished examples. Many parallels have a handle on the shoulder.

Rim Form: Upright, round thickened.
Figure Reference: Fig. 4.13:6.
Parallels: None.

Rim Form: Everted, thickened.
Figure Reference: Fig. 4.13:13.
Parallels: **MB IIB**: Shechem (Cole 1984: Pl. 40:a-b)
Note: The parallels are not precise.

Platter Bowls

Rim Form: Shallow, sharp upturn.
Figure Reference: Fig. 4.13:9.
Parallels: **MB II**: Gibeon (Pritchard 1963: Figs. 20:2; 30:2; 32:3, but the upturn is thinner than our example), Jericho (Kenyon and Holland 1982: Figs. 104:14; 106:2; 153:4); **MB IIB**: Megiddo (Loud 1948: Pl. 29:10, 23-4), Shechem (Cole 1984: Pl. 3:h); **MB IIC**: Gezer (Dever et al. 1974: Pl. 18:13), Megiddo (Loud 1948: Pl. 45:7), Shechem (Seger 1974: Figs. 5:5; 6:40), Shiloh (Finkelstein et al. 1993: Figs. 6.12:8; 6.22:2), Tananir (Boling 1975: Pl. 1:4).
Note: There are many other close parallels but the upturn is thinner and often points straighter up.

Rim Form: Deep, triangular thickened.
Figure Reference: Fig. 4.13:10.
Previous 'Umayri Publication: *MPP 3*: Fig. 4.6:23.
Parallels: **MB II**: Amman (Dajani 1966a: Pl. 17:11, no paint), Beit Mirsim (Albright 1932: Pls. 45:7; 46:1, no point), Beth Zur (Sellers 1933: Pl. 5:11, no paint), Gibeon (Pritchard 1963: Fig. 61:1, no paint), Jericho (Kenyon and Holland 1982: Figs. 103:23; 106:24, no paint); **MB II/LB I**: Lachish (Tufnell 1958: Pl. 71:42).
Note: Chocolate-on-white paint is very frequent in the MB IIC deposits at 'Umayri.

Carinated Bowls

Rim Form: Closed, everted.
Figure Reference: Fig. 4.13:11.
Previous 'Umayri Publications: *MPP 2*: Fig. 5.12:13; *MPP 3*: Fig. 4.6: 31-32, 34-35.
Parallels: **MB II**: Gibeon (Pritchard 1963: Figs. 20:17; 50:14-15), Hazor (Yadin 1959: Pl. 116:4, 7, 12; Yadin 1961: Pl. 235:23), Jericho (Kenyon and Holland 1982: Figs. 109: many; 156: many; 157), Qiri (Ben-Tor and Portugali 1987: Fig. 61:8); **MB IIA**: Aphek (Beck 1975: Fig. 13:1, 15), Jerishe (Geva 1982: Fig. 28:5), Megiddo (Loud 1948: Pls. 14:26; 19:2-3; 21:8-9), Mevorakh (Stern 1984: Fig. 15:13); **MB IIB**: Gezer (Dever et al. 1986: Pls. 2:23; 3:9-10), Jerishe (Geva 1982: Fig. 25:4-5), Megiddo (Loud 1948: Pl. 28:6), Mevorakh (Stern 1984: Fig. 12:7); **MB IIC**: Beit Mirsim (Albright 1932: Pl. 42:4-6), Gezer (Dever et al. 1974: Pls. 15:21; 19:1; 20:25, 27; Dever et al. 1986: Pl. 7:20), Jerishe (Geva 1982: Fig. 23:1), Lachish (Tufnell 1958: Pl. 68:527), Mevorakh (Stern 1984: Fig. 11:4), Pella (McNicoll 1992: Pl. 34: 21), Shechem (Dever 1974: Fig. 14:4, 7), Tananir (Boling 1975: Pl. 1:14, 16); **LB I**: Hazor (Yadin 1959: Pl. 123:13).

Rim Form: Open, diagonally everted.
Figure Reference: Fig. 4.13:12.
Previous 'Umayri Publications: *MPP 2*: Fig. 5.12:14-15.
Parallels: **MB II**: Beth Zur (Sellers et al. 1968: Fig. 6:1), Gibeon (Pritchard 1963: Fig. 20:30), Hazor (Yadin 1959: Pl.

101:10), Jericho (Kenyon and Holland 1982: Figs. 112:19; 163:2), Pella (Hennessy et al. 1981: Fig. 6:11, 66; McNicoll et al. 1982a: 109:4, 6, 8; Smith 1973: Pl. 36:817, 788); **MB IIA**: Jerishe (Geva 1982: Fig. 28:13); **MB IIB**: Gezer (Dever et al. 1986: Pl. 3:23), Megiddo (Loud 1948: Pl. 36:11-12), Shechem (Cole 1984: Pls. 14:b-c; 15:a); **MB IIC**: Jerishe (Geva 1982: Fig. 23:2), Mevorakh (Stern 1984: Fig. 11:7), Pella (McNicoll 1992: Pl. 54:1-4), Tananir (Boling 1975: Pl. 1:15, 17-18, 20).

Cooking Pots

Rim Form: Holemouth, bent over.
Figure Reference: Fig. 4.13:7-8.
Parallels: **MB IIB**: Shechem (Cole 1984: Pls. 24:c-25:a); **MB IIC**: Shechem (Dever 1974: Fig. 14:10; Seger 1974: Fig. 3:1), Shiloh (Finkelstein et al. 1993: Fig. 6.14:7-8), Tananir (Boling 1975: Pl. 2:39-40, 42-3).
Note: Although this form is typical of cooking pots, the ware on our examples is not; these two vessels may thus be kraters.

Rim Form: Out-turned, simple.
Figure References: Fig. 4.13:14-17.
Previous 'Umayri Publications: *MPP 3*: Fig. 4.7:15-18.
Parallels: **MB II**: Akko (Dothan 1976: Fig. 7:10), Bethel (Albright and Kelso 1968: Pl. 50:2, 5-6), Beth Zur (Sellers 1968: Fig. 6:23), Hazor (Yadin 1960: Pl. 110:11-13; 1961: Pl. 296:6), Jericho (Kenyon and Holland 1982: Figs. 148:8, 15, 17; 150:many; 151:1-3, 29), Pella (McNicoll et al. 1982a: 117:8), Qiri (Ben-Tor and Portugali 1987: Fig. 62:7-8); **MB IIA**: Aphek (Beck 1975: Fig. 1:1); **MB IIB**: Mevorakh (Stern 1984: Fig. 13:4), Shechem (Cole 1984: Pl. 26:151); **MB IIC**: Gezer (Dever et al. 1986: Pls. 5:15; 6:13, 22; 7:17), Jerishe (Geva 1982: Fig. 23:21), Megiddo (Loud 1948: Pl. 46:2), Shechem (Dever 1974: Figs. 13:17; 14:18, 23; Seger 1974: Figs. 4:29-30; 6:3-5); **LB I**: Hazor (Yadin 1959: Pls. 95:6; 138-139).
Note: We have included several varieties of this form together.

Rim Form: Bent back, triangular.
Figure References: Fig. 4.13:18-20.
Previous 'Umayri Publications: *MPP 3*: Fig. 4.7:11-12.
Parallels: **MB II**: Jericho (Kenyon and Holland 1982: Figs. 148:7; 149:14); **MB IIB**: Jerishe (Geva 1982: Fig. 26:5), Mevorakh (Stern 1984: Fig. 13:10); **MB IIC**: Jerishe (Geva 1982: Fig. 23:17, 19), Megiddo (Loud 1948: Pl. 46:7-8), Shechem (Dever 1974: Fig. 13:2; Seger 1974: Fig. 6:2), Shiloh (Finkelstein et al. 1993: Fig. 6.14:3), Tananir (Boling 1975: Pl. 2:44)
Note: This is probably a variant of the type: holemouth, bent back (see above). There are several sub-varieties illustrated here, varying in stance.

Rim Form: Everted, slightly profiled.
Figure References: Fig. 4.13:21-22.
Parallel: **MB II**: Jericho (Kenyon and Holland 1982: Fig. 151:18).

Discussion

Although several of the forms illustrated here are to be found throughout the Middle Bronze Age, such as the carinated bowls and platter bowls, the most diagnostic forms are typical of the end of that age: the flaring, triangular rims of the jugs; the chocolate-on-white paint of the platter bowl; the bent-over cooking pots, including both the holemouth and triangular varieties; and the cooking pots with a simple, out-turned rim.

EARLY IRON I

Two early Iron I phases were found in Fields A and B. Although only one was worked on in Field F this season, two phases were also discovered there in the 1989 season (Low 1997: 189). The earliest phase in Field A (Field Phase 10; see Lawlor, this volume) was composed of rock tumble and two debris layers in a very small sounding in 7K41 and an ash and earth layer in 7K42; no surfaces or walls were exposed. Above the tumble, Field Phase 9 consisted of two walls, a patch of a cobble floor, and three earth layers in 7K41; two walls, two exposure surfaces, and seven earth layers in 7K42; four walls, an oven, and ten earth deposits in 7K51. Most of the earth layers and deposits make up the remains of a massive destruction.

In Field B the actual remains of only one phase have been excavated, but another is inferred. The earliest phase (Field Phase 11B; see Clark, this volume) consists of the debris within the rampart of Phase 11A, which came from an earlier settlement of roughly the same date (7J85:10, 12; 7J86: 4, 6; and 7J87: 6). Although nothing of this settlement has been discovered in Field B, we believe it may be identified with Phase 10 of Field A, the earlier of the two early Iron I phases there. Field Phase 11A comprises parts of two houses and the great fortification system (including the casemate wall, rampart, retaining wall, and dry moat).

Because there seems to be no difference in the assemblages from the two phases (except possibly more LB style cooking pots in the earlier phase), I have combined them in the following discussion. However, they are published separately in the individual Field reports (see Lawlor and Clark, this volume).

The dates suggested for the parallel deposits are based on my own analysis of assemblage sequences. These are derived by comparing advanced or archaic features in an assemblage with similar types in other assemblages. The relatively close dates given to some of the assemblages derive from my attempt to sequence them into the tight boundaries of 150-200 years (ca. 1225-1050). But it should be assumed that the assemblages by themselves can

not be so tightly dated. Because some of the forms overlap with LB IIB assemblages, I have included parallels from LB II sites, as well. In the dating designations for the parallels, a slash indicates a time period around the center of the two dates; for instance, 12th/11th means the late 12th and early 11th centuries, or around 1100 B.C. A dash indicates a span of time between two periods. The following is my suggested sequence of deposits with illustration references:

LATE BRONZE II

Abu Kharaz (Fischer 1991: 87-97)
Ashdod (Dothan and Porath 1993: 161-171)
Dan (Biran 1994: 107-109, 113-119)
Eitun (Tzaferis and Hess 1992: 13-17)
Far'ah (de vaux and Steve 1947: 579)
(de Vaux and Steve 1949: 123, 128-129, 132)
(de Vaux 1951: 407-408, 425, 569-570, 573, 577-579, 588)
(de Vaux 1952: 555, 557)
Gezer (Dever et al. 1974: Pls. 22-24, 38)
(Dever 1986: Pls. 9-12)
Hazor (Yadin 1959: Pls. 85-92, 95-97, 99, 105-111, 113, 125-131, 133-134, 143-146)
(Yadin 1960: Pls. 117-125, 128-148, 151-152)
(Yadin 1961: Pls. 158-163, 195-196, 199-200, 237, 246, 271-282, 291-295, 298)
Husn Survey (Leonard 1987: 360-365)
Jedur (Ben-Arieh 1981: 116-122)
Jerusalem Tomb (Amiran 1960: 35-37)
Kerak Survey (Brown 1991: 273-274)
Megiddo (Guy and Engberg 1938: Pls. 3, 5-6, 11-21, 30-39, 56-67, 75)
(Loud 1948: Pls. 57-67)
Palmahim (Singer-Avitz and Levy 1992: 18-21)
Pella (McNicoll et al. 1982b: 349, 352)
(Hennessy et al. 1983: 333-337)
(Potts et al. 1988: 135, 138)
Qashish (Ben-Tor et al. 1981: 151)
Shechem (Horn and Moulds 1969: Pls. 4, 6)
Yoqne'am (Ben-Tor and Rosenthal 1978: 79-80)

13th Century

Afula (Dothan 1955: 65-69)
Amman Airport (Kafafi 1983: 39-43)
Amman Jebel Nuzha (Dajani 1966a: Pl. 17)
Aphek (Beck and Kochavi 1985: 35-40)
Baq'ah (McGovern 1986: 103-149)
Deir 'Alla (Franken 1992: 29-147)
Gezer (Dever et al. 1986: Pl. 13)
(Gitin 1990: Pl. 1)
(Seger 1988: Pls. 7-33)
Lachish (Tufnell et al. 1940: Pls. 37-59)
(Aharoni 1975: Pls. 39-40)
Rabud (Kochavi 1974: 9-11)
Sa'idiyeh (Tubb 1988: 67)

13th/12th Centuries

Gezer (Dever et al. 1986: Pls. 14-16)
Gibeon Cemetery (Pritchard 1963: Figs. 6-15, 19)
Masos III (Fritz and Kempinski 1983: Pls. 131-138, 148)
Mount Ebal 2 (Zertal 1987: Figs. 11-15)
Sa'idiyeh Cemetery (Pritchard 1980: all)
Sahab Tomb (Dajani 1970: 54-61)

Late 13th-12th Centuries

Megiddo (Loud 1948: Pls. 68-72)

13th-10 Centuries

Irbid Tomb B (Dajani 1966b: Pls. 33-34)

Early 12th Century

Gezer (Dever et al. 1986: Pls. 17-18)
Giloh (Mazar 1981: 19-26)
(Mazar 1990: 81, 85-88)

12th Century

Baq'ah (McGovern 1986: 151-163)
Beth Shan 4 (Yadin and Geva 1986: 57-85)
Deir 'Alla A (Franken and Kalsbeek 1969: 177-180)
Izbet-Sartah (Finkelstein et al. 1986: Figs. 8-13)
Megiddo (Loud 1948: Pls. 73-74)
Shechem (Boraas 1986: 257-262)
Taanak (Rast 1978: Figs.1-17, 88-91)

L12th Century

Ebal 1 (Zertal 1987: Figs. 16-19)
Qasile XII (Mazar 1985: Figs. 11-17)

12th-11th Centuries

Beit Mirsim (Greenberg 1987: 60-62, 66-74)
Gezer (Dever et al. 1986: Pls. 19-42)
Megiddo (Loud 1948: Pls. 75-87)
Pella (McNicoll et al. 1982a: 121-127)
(Hennessy et al. 1983: 344-347)
(Smith and McNicoll 1986: 92-93, 98)
Qiri IX (Ben-Tor and Portugali 1987: 97-103)

12th-10th Centuries

Bethel (Albright and Kelso 1968: Pls. 55-61)

12th/11th Centuries

Ai (Callaway 1980: 259-271)
Dan (Biran 1989: 72-94)
(Biran 1994: 127-145)
Deir 'Alla B (Franken and Kalsbeek 1969: 182-190)
Madaba Tomb (Harding and Isserlin 1953b: Figs. 12-17)
Shiloh (Buhl and Nielsen 1969: Pls. 1-10, 13-16, 18-19)
(Finkelstein et al. 1993: 164-180)

Early 11th Century

Gezer (Dever et al. 1986: Pls. 35-42)
Keisan 10-9C (Briend and Humbert 1980: Pls. 67-81)
Qasile XI (Mazar 1985: Figs. 18-31)

11th Century

Beth Shan 3 (Yadin and Geva 1986: 35-37)
Beth Zur (Funk 1968: Figs. 7-13)
Deir 'Alla C-E (Franken and Kalsbeek 1969: 192-206
Esdar (Kochavi 1969: 28, 31, 35)
Medeineh (Olavarri 1978: 147)
Medeineh el-Mu'arrajeh (Olavarri 1983: 176)
Qiri VIII (Ben-Tor and Portugali 1987: Figs. 15-19)

Late 11th Century

Izbet-Sartah II (Finkelstein et al. 1986: Figs. 14-19)
Keisan 9B (Briend and Humbert 1980: Pls. 57-66)

Collared Pithoi

In the northern house in Field B, parts of many reconstructable collared pithoi were found. But because only a small part of the room was excavated, these pieces were crated and left for reconstruction when the rest of the room is excavated next season. None of these pithoi, therefore, appear in the present publication. Because most of our published examples this year were sherds, we have based our typology on rim type.

Rim Form: Round, thickened.
Figure References: Fig. 3.12:4; Fig. 4.14:1-4.
Previous 'Umayri Publications: *MPP 1*: Fig. 19.20:1; *MPP 3*: Fig. 4.19:2, 4; 4.25:1.
Parallels: **LB II**: Hazor (Yadin 1959: Pl. 113:18, but with handles from rim to shoulder); **13th**: Deir 'Alla (Franken 1992: Fig. 5-16:26); **L13th/E12th**: Ebal (Zertal 1987: Figs. 12:3, 6-9; 13:1, 6, 8; 14:2); **E12th**: Giloh (Mazar 1990: Fig. 5; 1981: Figs. 8:1, 5, 7; 9:2); **12th**: Izbet-Sartah (Finkelstein et al. 1986: Figs. 9:1-2; 13:22; 14:16), Shechem (Boraas 1986: Fig. 5:10), Taanak (Rast 1978: Fig. 4:1); **L12th**: Ebal (Zertal 1987: Fig. 16:7); **12th/11th**: Shiloh (Finkelstein et al. 1993: Fig. 6.48:1-2; Buhl and Nielsen 1969: Pls. 1:8; 14:160; 15:188; 16:191), Ai (Callaway 1980: Figs. 153:37; 154:13), Megiddo (Loud 1948: Pl. 83:4), Kinrot (Fritz 1990: Pl. 58:5).

Rim Form: Triangular, thickened.
Figure References: Fig. 3.12:1; Fig. 4.29:4; Fig. 6.8:3.
Previous 'Umayri Publications: *MPP 1*: Fig. 19.20:2; *MPP 2*: Figs. 4.7:1, 7-8, 10; 8.9:1; *MPP 3*: Figs. 4.14:1; 4.16:1; 4.17:1;4.18:1; 4.19:5, 10; 4.20:5;7.9:1, 3.
Parallels: **E 12th**: Giloh (Mazar 1981: Figs. 8:3, 4; 9:5, 9; 1990: Fig. 3:11); **12th**: Taanak (Rast 1978: Fig. 9:1); **12th/11th**: Shiloh (Finkelstein et al. 1993: Figs. 6.49:3; 6.51:4), Ai (Callaway 1980: Fig. 154:4), Dan (Biran 1989: Fig. 4.1:5, 6).

Rim Form: Ridged.
Figure References:Fig. 3.12:2; Fig. 4.29:1-3; Fig. 6.8:2.
Previous 'Umayri Publications: *MPP 1*: Fig. 19.20:5; *MPP 2*: Fig. 4.7:5; *MPP 3*: Figs. 4.19:9; 4.20:2, 7.
Parallels: **LB II**: Far'ah (N) (de Vaux and Steve 1947: Fig. 2:22); **12th/11th**: Shiloh (Buhl and Nielsen 1969: Pl. 10.123).
Note: The example in Fig. 6.8:2 has the ridge slightly lower than the other examples.
Rim Form: Bent up.
Figure Reference: Fig. 3.12:3.
Previous 'Umayri Publications: *MPP 3*: Figs. 4.19:7; 4.21:1.
Parallels: **12th/11th**: Ai (Callaway 1980: Fig. 154:9), Shiloh (Finkelstein et al. 1993: Figs. 6.48:4; 6.59:10; Buhl and Nielsen 1969: Pl. 15:187, 189).

Rim Form: Out-turned, thickened.
Figure Reference: Fig. 3.12:5.
Parallels: **E12th**: Giloh (Mazar 1981: Fig. 9:13; 1990: Fig. 9:13).

Rim Form: Thickened, pointed.
Figure References: Fig. 3.10:1.
Parallels: **13th**: Amman Airport (Kafafi 1983: Fig. 22:134); **E12th**: Giloh (Mazar 1990: Fig. 3:14).
Note: This could be a krater (Zertal 1987: Fig. 11:13).

Rim Form: Triple-ridged, interior thickened.
Figure References: Fig. 4.29:6.
Parallels: No good parallels; but similar to **12th**: Izbet-Sartah (Finkelstein et al. 1986: Fig. 13:24); **12th/11th**: Shiloh (Finkelstein et al. 1993: Fig. 6:58:10).
Note: Our rim is thickened on the interior and should not be confused with similar rims from very different pithoi found in LB II Galilee at, for instance, Hazor (Yadin 1959: Pls. 86:16, and many more; 1960: Pls. 122:6; 145:5) and Dan (Biran 1989: Fig. 4.17:7).

Rim Form: Thickened, with hammer top.
Figure References: Fig. 4.29:5.
Parallels: None.
Note: This looks similar to MB II pithos rims, but the ware is clearly consonant with the other collared pithoi in our corpus.
Remarks: Our collared pithoi tend to be high necked with rims that flare out, features which I believe to be early in the tradition. The great variety of collars on these and previously published examples (*MPP* 3) also suggests an early date. Very few parallels can be found after the 12th century.

Jars

It is difficult to be precise about what rim forms were definitely jars or not. Some could be jugs. However, the wide diameters and relatively heavy ware of the following forms are strong indications they were jars.

Rim Form: Flaring neck, thickened rim.
Figure References: Fig. 4.29:7, 9, 10, 13; Fig. 4.30:2.
Previous 'Umayri Publications: *MPP 2*: Figs. 5.12:27; 8.9:2, 3; *MPP 3*: Figs. 4.25:2, 7; 4.26:6.
Parallels: **LB II**: Pella (McNicoll et al. 1982b: Fig. 6:5),

Megiddo (Guy and Engberg 1938: Pl. 18:2), Kerak Survey (Brown 1991: Nos. 168-173); **13th**: Amman Airport (Kafafi 1983: Fig. 21:74, 76), Lachish (Aharoni 1975: Pl. 40:14, 15), Sa'idiyeh (Pritchard 1980: Figs. 15:6; 41:4); **L13th/E12th**: Ebal (Zertal 1987: Fig. 14:9), Gezer (Dever et al. 1986: Figs. 15:1, 5, 6; 17:12); **E12th**: Giloh (Mazar 1981: Fig. 8:7, 10; 1990: Fig. 3:4, 6); **12th**: Izbet-Sartah (Finkelstein et al. 1986: Fig. 13:9, 10), Deir 'Alla (Franken and Kalsbeek 1969: Fig. 46:83), Shechem (Boraas 1986: Fig. 5:3-7), Taanak (Rast 1978: Figs. 1:4; 6:4-6; 11:3); **L12th**: Ebal (Zertal 1987: Fig. 17:2); **12th/11th**: Ai (Callaway 1980: Figs. 150:26; 153:12, 21, 23), Shiloh (Buhl and Nielsen 1969: Pls. 13:140, 149; 14:179).

Note: This form includes a large variety of sub-forms.

Remarks: The flaring neck and rim suggest a time near the end of LB and the beginning of Iron I. Again, very few parallels can be found after the 12th century.

Rim Form: Bent up.

Figure References: Fig. 4.29:8; Fig. 4.30:10.

Previous 'Umayri Publications: *MPP 2*: Fig. 4.7:11; *MPP 3*: Figs. 4.26:7; 4.27:6.

Parallels: **LB II**: Megiddo (Loud 1948: Pl. 60:2 [with paint bands]; Guy and Engberg 1938: Pl. 18:3, 4); **13th**: Deir 'Alla (Franken 1992: Fig. 5-11:20); **13th/12th**: Pella (Potts et al. 1988: Fig. 11:5); **12th**: Shechem (Boraas 1986: Fig. 1:7), Taanak (Rast 1978: Fig. 3:3); **12th/11th**: Shiloh (Finkelstein et al. 1993: Fig. 6.51:7; Buhl and Nielsen 1969: Pls. 1:10; 16:193); **M12th-11th**: Qasile (Mazar 1985: Fig. 17:4), Pella (Hennessy et al. 1981: Fig. 16:9).

Remarks: The flaring rim is again an early feature, with very few parallels after the 12th century.

Rim Form: Thickened, flat top.

Figure References: Fig. 4.29:11; Fig. 4.30:13.

Parallels: **12th/11th**: Shiloh (Buhl and Nielsen 1969: Pl. 5:47, 53).

Rim Form: Everted.

Figure References: Fig. 4.29:12; Fig. 4.30:15.

Previous 'Umayri Publications: *MPP 3*: Fig. 4.25:4.

Parallels: **13th**: Amman Airport (Kafafi 1983: Fig. 21:67); **12th**: Gezer (Dever et al. 1986: Pl. 21:2), Shechem (Boraas 1986: Figs. 3:1-4; 5:1); **12th/11th**: Shiloh (Buhl and Nielsen 1969: Pl. 13:158).

Note: Most parallels are to Fig. 4.30:15.

Remarks: These are almost identical to LB forms.

Rim Form: Simple, upright.

Figure Reference: Fig. 4.30:14.

Previous 'Umayri Publications: *MPP 3*: Fig. 4.27:7.

Parallels: **13th**: Afula (Dothan 1955: Fig. 11:23-24); **13th/12th**: Masos (Fritz and Kempinski 1983: Pl. 133:13); **12th**: Izbet-Sartah (Finkelstein et al. 1986: Figs. 10:10; 13:7), Gezer (Dever et al. 1986: Pl. 19:5); **12th-E11th**: Megiddo (Loud 1948: Pl. 83:3), Beit Mirsim (Greenberg 1987: Fig. 10:22).

Jars/Jugs

These vessels could be either jars or jugs. The lack of handles and pinched rims would suggest that the majority were small jars, but we cannot be certain. Moreover, potters probably used the same rim forms for small jars and large jugs.

Rim Form: Thickened, bent up.

Figure References: Fig. 3.12:8-11; Fig. 3.10:2.

Previous 'Umayri Publications: *MPP 2*: Fig. 4.7:11; *MPP 3*: Fig. 4.26:4.

Parallels: **13th**: Deir 'Alla (Franken 1992: Fig. 7-19:208, 212, 231), Gezer (Dever et al 1986: Pl. 12:12); **13th/12th**: Pella (Potts et al. 1988: Fig. 11:5); **E12th**: Gezer (Dever et al. 1986: Pl. 22:15), Giloh (Mazar 1981: Fig. 8:8); **12th**: Deir 'Alla (Franken and Kalsbeek 1969: Fig. 46:72, 83-84), Shechem (Boraas 1986: Fig. 1:4, 7), Taanak (Rast 1978: Figs. 3:3-4; 6:4), Beth Shan (Yadin and Geva 1986: Fig. 26:23), Pella (Smith and McNicoll 1986: Fig. 4:8), Afula (Dothan 1955: Fig. 16:20), Gezer (Gitin 1990: Pl. 3:5, 6); **L12th**: Ebal (Zertal 1987: Fig. 16:19), Gezer (Gitin 1990: Pl. 4:24, 26), Qasile (Mazar 1985: Fig. 17:4); **12th/11th**: Baq'ah (McGovern 1986: Fig. 52:34), Ai (Callaway 1980: Figs. 150:26; 151:7), Shiloh (Buhl and Nielsen 1969: Pl. 1:10), Dan (Biran 1994: Fig. 93:6), Madaba (Harding and Isserlin 1953b: Fig. 15:65); **11th**: Izbet-Sartah (Finkelstein et al. 1986: Figs. 16:20-21; 17:13-16), Masos (Fritz and Kempinski 1983: Pl. 134:18).

Remarks: The flaring neck and rim places this form at home in the LB and earliest Iron I periods.

Rim Form: Thickened, upright.

Figure References: Fig. 3.12:7; Fig. 4.30:6.

Parallels: **LB II**: Kerak Survey (Worschech 1990: Fig. 13:69); **13th**: Deir 'Alla (Franken 1992: Fig. 7-19:196, 219, 221); **L13th-12th**: Masos (Fritz and Kempinski 1983: Pl. 133:8), Megiddo (Loud 1948: Pl. 71:1); **12th**: Izbet-Sartah (Finkelstein et al 1986: Fig. 13:12), Beth Shan (Yadin and Geva 1986: Fig. 32:1); **L12th**: Qasile (Mazar 1985: Fig. 17:2); **M12th-11th**: Pella (Hennessy et al. 1983: Fig. 12:10); **12th/11th**: Shiloh (Buhl and Nielsen 1969: Pl. 5:47); **11th**: Gezer (Dever et al. 1986: Pl. 42:9), Beth Zur (Funk 1968: Fig. 8:1), Esdar (Kochavi 1969: Fig. 13:6), Beth Shan (Yadin and Geva 1986: Fig. 11:13).

Remarks: This is a solid Iron I form. Whereas some of our other forms could be LB as easily as Iron I, forms such as this one show our assemblage to be truly Iron I.

Rim Form: Simple thickened, with small ridge.

Figure References: Fig. 4.30:7-9.

Previous 'Umayri Publications: *MPP 3*: Fig. 4.25:7; 4.27:6.

Parallels: **LB II**: Rabud (Kochavi 1974: Fig. 4:18); **13th**: Deir 'Alla (Franken 1992: Fig. 7- 19:205); **E12th**: Giloh (Mazar 1981: Fig. 8:10).

Note: The ridge is so small that it may not be visible on some drawings: Baq'ah (McGovern 1986: Fig. 52:36—12th/11th), Ebal (Zertal 1987: Fig. 17:1-2—L12th).

Remarks: The flaring rim and the parallels show this to be a LB form that continues into the earliest Iron I.

Rim Form: Flaring neck, round thickened.
Figure References: Fig. 3.12:12-14; Fig. 4.14:5; Fig. 4.30:3-5; Fig. 6.8:4.
Parallels: **LB II**: Hazor (Yadin 1959: Pls. 128:10; 134:7; 1961: Pl. 293:2), Rabud (Kochavi 1974: Fig. 4:11), Kerak Survey (Brown 1991: Nos. 172-173); **13th**: Deir 'Alla (Franken 1992: Fig. 7-19:218), Gezer (Dever et al. 1986: Pl. 12:2; Seger 1988: Pls. 7:12; 8:33), Amman Airport (Kafafi 1983: Fig. 21:74); **E12th**: Gezer (Dever et al. 1974: Pls. 27:9; Gitin 1990: Pls. 2:11); **12th**: Izbet-Sartah (Finkelstein et al. 1986: Fig. 13:9), Shechem (Boraas 1986: Fig. 5:3), Gezer (Gitin 1990: Pl. 3:3); **L12th**: Gezer (Gitin 1990: Pl. 4:21); **12th-11th**: Pella (McNicoll et al. 1982a: Pl. 120:6); **12th/11th**: Ai (Callaway 1980: Fig. 153:12), Madaba (Harding and Isserlin 1953b: Fig. 15:65).
Note: Fig. 6.8:4 has the best LB parallels.
Remarks: This is again a typical late LB II form that continues into early Iron I.

Rim Form: Simple, turned out.
Figure References: Fig. 3.12:15-16.
Previous 'Umayri Publications: *MPP 2*: Fig. 4.7:14-15.
Parallels: **12th**: Taanak (Rast 1978: Fig. 8:14); **12th/11th**: Shiloh (Finkelstein et al. 1993: Figs. 6.47:7; 6.50:11), Baq'ah (McGovern 1986: Fig. 53:32); Ai (Callaway 1980: Fig. 153:16).
Note: This could be a goblet form.

Rim Form: Turned out, squared.
Figure References: Fig. 4.14:6-7.
Parallels: **LB II**: Kerak Survey (Brown 1991: No. 174); **E 12th**: Gezer (Dever et al. 1986: Pl. 21:1); **12th**: Taanak (Rast 1978: Fig. 15:10); **12th-11th**: Beit Mirsim (Greenberg 1987: Fig. 7:18).
Remarks: The flaring rim again suggests that this form is in the LB tradition.

Rim Form: Triangular.
Figure Reference: Fig. 4.14:8.
Previous 'Umayri Publications: *MPP 3*: Fig. 4.25:2.
Parallels: **E12th**: Gezer (Dever et al. 1986: Pl. 22:14), Giloh (Mazar 1990: Fig. 6:15); **12th**: Taanak (Rast 1978: Fig. 3:2), Deir 'Alla (Franken and Kalsbeek 1969: Fig. 47:2); **12th-11th**: Pella (Hennessy et al. 1983: Fig. 12:10); **12th/11th**: Shiloh (Buhl and Nielsen 1969: Pl. 13:149).
Note: The early 12th century parallel from Giloh is exact.

Jugs

These forms usually have thinner walls than the jars and often sport handles.

Rim Form: Flaring, slightly thickened simple.
Figure References: Fig. 3.12:6; Fig. 4.30:12; Fig. 4.31:3-4, 6-7; Fig. 6.8:5-6.
Previous 'Umayri Publications: *MPP 2*: Figs. 4.7:14; 8.9:4; *MPP 3*: Fig. 4.26:10-11.
Parallels: **13th**: Deir 'Alla (Franken 1992: Figs. 5-8:28; 7-19:222); **13th-12th**: Sahab Tomb (Dajani 1970: Pl. 6:199); **E12th**: Gezer (Dever et al. 1974: Pl. 27:5); **12th**: Afula (Dothan 1955: Fig. 18:2, 5); **12th-E11th**: Megiddo (Loud 1948: Pls. 77:6; 84:1-2); **12th/11th**: Baq'ah (McGovern 1986: Figs. 52:32, 33; 53:41, 43, 44), Ai (Callaway 1980: Fig. 153:12, 16), Madaba (Harding and Isserlin 1953b: Fig. 14:61, 63); **11th**: Medeineh (Olavarri 1978: Fig. 2:8).
Remarks: The flaring rim suggests that this jug is in the LB II tradition.

Rim Form: Flaring, bent up.
Figure References: Fig. 4.30:11, 17; Fig. 6.8:7.
Previous 'Umayri Publications: *MPP 3*: Fig. 4.26:7?.
Parallels: **13th**: Deir 'Alla (Franken 1992: Fig. 4-3:14); **12th/11th**: Madaba (Harding and Isserlin 1953b: Fig. 15:64—handle from rim); **11th**: Esdar (Kochavi 1969: Fig. 14:3—handle from rim).
Note: The handle seems to have been on the shoulder.
Remarks: Again, the flaring rim suggests the LB II tradition, but the fact that it is bent up suggests the transition to Iron I. The shoulder handle is probably also a carry-over from the Bronze Age.

Rim Form: Thickened.
Figure References: Fig. 4.14:9-10; Fig. 4.30:16, 19; Fig. 4.31:1-2; Fig. 6.8:8.
Previous 'Umayri Publications: *MPP 2*: Fig. 417:12; *MPP 3*: Fig. 4.25:9.
Parallels: **LB II**: Kerak Survey (Brown 1991: Nos. 167-171); **13th**: Deir 'Alla (Franken 1992: Figs. 4-3:20; 7-19: 217, 219), Sa'idiyeh (Pritchard 1980: Fig. 6:5); **L13th-12th**: Masos (Fritz and Kempinski 1983: Pl. 133:8), Megiddo (Loud 1948: Pl. 71:1); **E12th**: Gezer (Dever et al. 1986: Pl. 22:15); **12th**: Izbet-Sartah (Finkelstein et al. 1986: Fig. 16:13—cooking jug), Taanak (Rast 1978: Fig. 6:5); **12th/11th**: Baq'ah (McGovern 1986: Fig. 52:36), Ai (Callaway 1980: Figs. 151:9, 20, 22; 153:23), Shiloh (Buhl and Nielsen 1969: Pls. 5:47; 13:149), Madaba (Harding and Isserlin 1953b: Fig. 15:65).
Note: The handle can be either on a wide shoulder or at the rim.
Remarks: The mostly upright stance of the rim indicates that this form is essentially Iron I, but the shoulder handle is probably a carry over from the Bronze Age.

Rim Form: Biconical, turned out.
Figure Reference: Fig. 4.30:18.
Previous 'Umayri Publications: *MPP 2*: Fig. 4.9:31.
Parallels: **LB II**: Baq'ah (McGovern 1986: Fig. 38:12), Abu el-Kharaz (Fischer 1991: Fig. 11:3) Amman Airport (Kafafi 1983: Fig. 21:72); **L13th-12th**: Masos (Fritz and Kempinski 1983: Pl. 148:5).
Note: There are many similar LB II and very early Iron I forms but with painted decoration: Deir 'Alla (Franken 1992: Fig. 7-19:190), Keisan (Briend and Humbert 1980: Pls. 71-73), Beth Shan (Yadin and Geva 1986: Fig. 26:4), Pella (Potts et al. 1988: Fig. 11:6), Hazor (Yadin 1960: Pl. 67:17-18).
Remarks: This is a well known LB form, but apparently it continues into early Iron I.

Rim Form: Thickened, squared.
Figure Reference: Fig. 3.12:18.
Parallels: **12th**: Shechem (Boraas 1986: Fig. 1:4), Pella (Hennessy, et al. 1983: Fig. 14:10); **12th-E11th**: Megiddo (Loud 1948: Pl. 81:4), Pella (Smith and McNicoll 1986: Fig. 4:10); **12th/11th**: Ai (Callaway 1980: Fig. 151:7).

Rim Form: Thickened, grooved.
Figure Reference: Fig. 3.12:17.
Parallels: None.
Note: There are many similar forms at other sites with a thinner thickening and a grooved or high- ridged rim/neck—see Shechem (Horn and Moulds 1969: Pl. 6:159—13th-12th).

Rim Form: Thickened, triangular (possibly biconical).
Figure Reference: Fig. 4.14:12.
Parallels: **12th**: Beth Shan (Yadin and Geva 1986: Fig. 26.4—biconical); **12th/11th**: Baq'ah (McGovern 1986: Fig. 52:34).

Rim Form: Bent up.
Figure Reference: Fig. 4.14:11.
Previous 'Umayri Publications: *MPP 2*: Figs. 3.4:2; 4.7:11; 8.6:1-3; *MPP 3*: Fig. 4.27:6.
Parallels: **LB II**: Baq'ah (McGovern 1986: Fig. 47:6), Megiddo (Guy and Engberg 1938: Pl. 59:4); **L13th**: Gezer (Gitin 1990: Pl. 1:4); **E12th**: Gezer (Dever et al. 1986: Pl. 24:23); **12th**: Izbet-Sartah (Finkelstein et al. 1986: Figs. 16:20-21; 17:14-15), Taanak (Rast 1978: Fig. 3:3-4), Deir 'Alla (Franken and Kalsbeek 1969: Fig. 46: 72), Beth Shan (Yadin and Geva 1986: Fig. 26:1-2), Shechem (Boraas 1986: Fig. 1:7); **L12th**: Qasile (Mazar 1985: Fig. 15:6) **12th/11th**: Dan (Biran 1994: Fig. 93:6), Madaba (Harding and Isserlin 1953b: Fig. 15:65), Shiloh (Buhl and Nielsen 1969: Pl. 1:10); **E11th**: Gezer (Dever et al. 1986: Pl. 39:20).
Note: Although the form looks like a cooking pot rim, it is not cooking pot ware.

Rim Form: Flaring, bent out.
Figure Reference: Fig. 4.31:8.
Previous 'Umayri Publications: *MPP 3*: 4.27:7.
Parallels: **13th**: Amman Airport (Kafafi 1983: Fig. 21:68); **E12th**: Gezer (Dever et al. 1986: Pl. 29:10); **12th**: Taanak (Rast 1978: Fig. 6:4, 7).

Rim Form: Flaring, with neck ridge.
Figure Reference: Fig. 6.8:9.
Parallels: **13th**: Baq'ah (McGovern 1986: Figs. 37:7; 47:12) **13th-12th**: Sahab Tomb (Dajani 1970: Pl. 4); **12th**: Deir 'Alla (Franken and Kalsbeek 1969: Fig. 46:85); **12th/11th**: Shiloh (Finkelstein et al. 1993: Fig. 6.47:7).

Rim Form: Thickened and grooved, with neck ridge.
Figure Reference: Fig. 3.10:3.
Parallels: **13th**: Baq'ah (McGovern 1986: Figs. 37:6; 40:7; 47:12).

Juglets

Juglets have been very infrequent at 'Umayri in the past. The larger forms could also be flask rims.

Rim Form: Simple, flaring
Figure Reference: Fig. 4.31:9-10.
Parallels: **LB II**: Deir 'Alla (Franken 1992: Fig. 4-2:7; 4-3:6), Abu el-Kharaz (Fischer 1991: Fig. 9:12), Gibeon (Pritchard 1963: Fig. 11:51), Lachish (Tufnell et al. 1940: Pl. 52:317, 319), Megiddo (Guy and Engberg 1938: Pl. 30:6-9), Gezer (Seger 1988: Pl. 18:1), Hazor (Yadin 1960: Pls. 132:8-9; 139:11-12), Sa'idiyeh (Tubb 1988: Fig. 48:17), Jerusalem (Amiran 1960: Fig. 2:32, 34), Far'ah (de Vaux and Steve 1947: Fig. 2:8; de Vaux 1951: Figs. 2[p. 569]:2-3, 6; 8:1, 4, 11; 1952: Fig. 2.5); **13th-12th**: Megiddo (Loud 1948: Pls. 71:8-9; 73:4-5; 75:9, 14, 16; 81:10, 19; 87:14), Shechem (Horn and Moulds 1969: Pl. 6:156, 158, 161), Sahab Tomb (Dajani 1970: Pl. 6:30), Pella (Potts et al. 1988: Fig. 11:4); **12th**: Shechem (Boraas 1986: Fig. 1:5), Beth Shan (Yadin and Geva 1986: Fig. 27:7), Afula (Dothan 1955: Fig. 18:12), Qasile (Mazar 1985: Fig. 30:17); **12th/11th**: Gezer (Dever et al. 1986: Pls. 35:8; 39:21), Madaba (Harding and Isserlin 1953b: Figs. 14:62), Afula (Dothan 1955: Fig. 13:29).
Note: Flasks with this rim form are frequent: **12th**: Qasile (Mazar 1985: Fig. 11:23); **12th-E11th**: Megiddo (Loud 1948: Pls. 80:3; 86:1), Madaba (Harding and Isserlin 1953b: Figs. 15:79-81, 83-85; 16:87-91); **E11th**: Keisan (Briend and Humbert 1980: Pl. 75:6).
Remarks: The flaring rim and the parallels suggest close affinities to LB II juglets.

Rim Form: Small, upright.
Figure References: Fig. 4.14:14; Fig. 4.31:11.
Parallels: **13th**: Sa'idiyeh (Pritchard 1980: Fig. 30:1).

Kraters

Rim Form: Thickened-everted, with interior ridge.
Figure References: Fig. 3.12:19-23; Fig. 3.10:5; Fig. 4.14:15-16; Fig. 4.32:2; Fig. 6.8:10.
Previous 'Umayri Publications: *MPP 1*: Fig. 19.20:6-7; *MPP 2*: Figs. 4.7:20; 8.6:6; 8.9:5, 8, 20- 21; *MPP 3*: Figs. 4.25:14; 7.9:8-10.
Parallels: **LB II**: Kerak Survey (Worschech 1990: Fig. 10:55; Brown 1991: Nos. 164, 166), Lachish (Tufnell et al. 1940: Pl. 43:163); **13th**: Amman Airport (Kafafi 1983: Fig. 21:60), Deir 'Alla (Franken 1992: Figs. 5-13:14; 7-18:141, 145, 151-152, 154-158, 160-161), Gezer (Gitin 1990: Pl. 1:17, 19); **13th/12th**: Gezer (Dever et al. 1974: Pl. 25:3; 1986: Pls. 15:9-10; 16:22), Masos (Fritz and Kempinski 1983: Pls. 134:1, 12; 136:12, 137:4); **12th**: Izbet-Sartah (Finkelstein et al. 1986: Figs. 8:13; 13:1), Gezer (Dever et al. 1986: Pls. 19.21; 22:4; 24:11-12; 25:2, 6; 31:8; 32:8; Dever et al. 1974: Pl. 27:7), Shechem (Boraas 1986: Fig. 3:7), Taanak (Rast 1978: Figs. 4:8-9; 12:1), Qasile (Mazar 1985: Figs. 14:5; 15:26); **12th/11th**: Shiloh (Finkelstein et al. 1993: Figs. 6:52:7; 6.57:3, 5; Buhl and Nielsen 1969: Pl. 10:118, 120), Baq'ah (McGovern 1986: Fig. 51:24-25), Dan (Biran 1989: Fig. 4.18:4, 10), Madaba (Harding and Isserlin

1953b: Fig. 13:46); **E11th**: Keisan (Briend and Humbert 1980: Pl. 78.1), Qasile (Mazar 1985: Fig. 29:24), Esdar (Kochavi 1969: Fig. 12:2), Medeineh Mu'arrijeh (Olavarri 1983: Fig. 6:14).

Note: There are several sub-forms and stances (including holemouth forms), but all the rims are generally the same type.

Remarks: These kraters are spread over a relatively wide chronological span from the second half of LB through most of Iron I.

Rim Form: Exterior thickened.

Figure References: Fig. 3.12:24; Fig. 6.8:11.

Previous 'Umayri Publications: *MPP 2*: Fig. 8.6:5, 7; *MPP 3*: Fig. 4.25:12.

Parallels: **LB II**: Kerak Survey (Brown 1991: No. 163); **13th**: Deir 'Alla (Franken 1992: Figs. 4-21:17; 7-18:146-148; **13th/12th**: Gezer (Dever et al. 1986: Pls. 18:9, 12; 33:13); **E 12th**: Gezer (Dever et al. 1974: Pl. 27:8); **12th/11th**: Shiloh (Finkelstein et al. 1993: Fig. 6.52:6; Buhl and Nielsen 1969: Pl. 18:237), Ai (Callaway 1980: Fig. 150:18-19, 23), Madaba (Harding and Isserlin 1953b: Fig. 14:53); **E11th**: Keisan (Briend and Humbert 1980: Pl. 78:1f).

Note: This form is closely related to the preceding one.

Rim Form: Thickened, squared.

Figure Reference: Fig. 4.31:17.

Parallels: **12th-10th**: Irbid (Similar to Dajani 1966b: Pl. 34:1—but there are four handles, a disk base, no spout, and no bottom hole).

Note: This was probably a basin used in olive oil production to separate oil qualities. A similar function is associated with vessels found at Tel Miqne from the 7th century B.C. The only similarity in form, however, is the hole near the bottom, clearly a functional feature; the Miqne examples have no spout, are much larger, and sport 11 handles (Gitin, personal communication).

Rim Form: Hammer.

Figure Reference: Fig. 4.14:17.

Parallels: **E 12th**: Gezer (Dever et al. 1974: Pl. 27:6); **12th**: Izbet-Sartah (Finkelstein et al. 1986: Fig. 12:6, 8); **12th/11th**: Megiddo (Loud 1948: Pl. 79:3), Madaba (Harding and Isserlin 1953b: Fig. 14:58); **E 11th**: Keisan (Briend and Humbert 1980: Pl. 78:1a); **11th**: Masos (Fritz and Kempinski 1983: Pl. 137:4), Medeineh Mu'arrajeh (Olavarri 1983: Fig. 6:14).

Note: There are many similar forms which have a somewhat different stance. There are also many similar forms on Philistine kraters.

Rim Form: Slightly flaring, thickened.

Figure Reference: Fig. 4.14:18.

Parallels: **E12th**: Gezer (Dever et al. 1986: Pl. 21:25); **11th**: Medeineh Mu'arrajeh (Olavarri 1983: Fig. 6:13), Aro'er (Olavarri 1965: Fig. 2:1).

Bowls

Rim Form: Large, deep, carinated.

Figure References: Fig. 4.31:12-16.

Parallels: **LB II**: Baq'ah (McGovern 1986: Fig. 34:7); **13th-E11th**: Megiddo (Loud 1948: Pls. 69:5; 70:2; 78:13); **E 12th**: Gezer (Dever et al. 1974: Pl. 26:1; Dever et al. 1986: Pl. 23:14); **12th**: Deir 'Alla (Franken and Kalsbeek 1969: Fig. 46:25); **12th/11th**: Baq'ah (McGovern 1986: Fig. 50:18); **E 11th**: Keisan (Briend and Humbert 1980: Pl. 79:3).

Note: These are similar to small kraters. They vary in stance from slightly flaring to slightly holemouth.

Rim Form: Deep, carinated.

Figure References: Fig. 3.12:25; Fig. 3.13:2-3; Fig. 3.10:7; Fig. 4.14:20; Fig. 4.31:18, 21.

Previous 'Umayri Publications: *MPP 2*: Fig. 4.7:22-23, 25; 5.12:29; 8.9:12, 14; *MPP 3*: Fig. 4.25:17-19; 4.27:14; 7.9:11.

Parallels: **LB II**: Megiddo (Guy and Engberg 1938: Pl. 61:3), Gezer (Seger 1988: Pl. 32:2, 4, 6-8), Baq'ah (McGovern 1986: Fig. 30:8), Far'ah (N) (de Vaux 1959: Fig. 2:9-10); **13th**: Deir 'Alla (Franken 1992: Figs. 3-7:1; 4-2:3; 4-6:2; 4-24:1; 5-13:1, 4; 5-18:3; 5-19:17; 7-16:36-41, 44-54), Amman Airport (Kafafi 1983: Fig. 20:3-5), Amman (Dajani 1966a: Pl. 17:3); **13th/12th**: Sahab (Dajani 1970: Pl. 15:85, 109, 124, 222), Husn (Leonard 1987: Fig. 16:b,d), Masos (Fritz and Kempinski 1983: Pl. 133:20; 138:3), Gezer (Dever et al. 1986: Pl. 18:20); **L13th-E11th**: Megiddo (Loud 1948: Pls. 71:25; 72:1; 74:6; 78:5, 12; 84:18); **12th**: Izbet-Sartah (Finkelstein et al. 1986: Fig. 12:1), Deir 'Alla (Franken and Kalsbeek 1969: Fig. 46: 27-29, 33-34, 41-42, 57-58), Taanak (Rast 1978: Fig. 89:2); **12th/11th**: Dan (Biran 1994: Figs. 93:1; 98:1; 103:1), Qasile (Mazar 1985: Figs. 11:8; 19:36; 22:14), Madaba (Harding and Isserlin 1953b: Fig. 13:42), Afula (Dothan 1955: Fig. 13:13); **E11th**: Keisan (Briend and Humbert 1980: Pl. 79:5-6).

Note: We have grouped several sub-varieties together here, not wishing to proliferate forms. The most typical form includes Figs. 3.12:25, 4.14:20, and 4.31:21; a second type with the carination farther down the body includes Figs. 3.13:3 and 3.10:7; a third type has a small groove near the rim exterior, Figs. 3.13:2 and 4.31:18.

Remarks: All these sub-forms occur from the end of LB into early Iron I.

Rim Form: Shallow, carinated.

Figure References: Fig. 3.12:26; Fig. 4.31:19-20; Fig. 6.8:12.

Previous 'Umayri Publications: *MPP 3*: Fig. 4.27:17.

Parallels: **LB II**: Ashdod (Dothan and Porath 1993: Fig. 12:9), Palmahim (Singer-Avitz and Levy 1992: Fig. 2:6), Kerak Survey (Brown 1991: No. 162), Eitun (Tzaferis and Hess 1992: Fig. 1:16); **13th**: Deir 'Alla (Franken 1992: Fig. 7-16:36-41), Amman Airport (Kafafi 1983: Figs. 20:18-23; 21:42-5); **13th/12th**: Kedesh (Stern and Beit-Arieh 1979: Fig. 9:1, 10), Ebal (Zertal 1987: Fig. 11:9), Gezer (Dever et al. 1986: Pls. 18:20; 22:17; 24:7); **L13-12th**: Megiddo (Loud 1948: Pls. 68:20, 74:3); **12th**: Izbet-Sartah (Finkelstein et al. 1986: Fig. 12:3), Deir 'Alla (Franken and Kalsbeek 1969: Fig. 46: 35, 53); **M12th-M11th**: Qasile (Mazar 1985: Figs. 12:15-16, 18; 19:32- 35), Beit Mirsim (Greenberg 1987: Figs. 6:4, 8:16), Pella (McNicoll et al. 1982a: Pls. 121:11; 122:2); **12th/11th**: Dan (Biran 1994: Fig. 104:1—chalice), Afula (Dothan 1955: Fig. 13:1, 8, 10, 12); **E11th**:

Keisan (Briend and Humbert 1980: Pls. 79:7; 80:1).
Note: Each one of these bowl forms is a sub-variant of shallow carinated bowls. We have combined them here to avoid proliferation of bowl types.

Rim Form: Turned in.
Figure References: Fig. 4.14:19; Fig. 6.8:13.
Previous 'Umayri Publications: *MPP 1*: Fig. 19.19:8-9; *MPP 2*: Figs. 4.7:24, 27; 8.6:9; 8.9:9- 11, 13; *MPP 3*: Fig. 4.25:20.
Parallels: **LB II**: Far'ah (N) (de Vaux and Steve 1947: Fig. 2:3; de Vaux 1951: Fig. 2(p. 569):8; 1952: Fig. 2:6), Pella (McNicoll et al. 1982b: Fig. 6:1), Megiddo (Guy and Engberg 1938: Pl. 65:9); **13th**: Deir 'Alla (Franken 1992: Fig. 7-17:97-99), Lachish (Tufnell et al. 1940: Pl. 38:54), Amman Airport (Fig. 20:31); **13th/12th**: Ebal (Zertal 1987: Figs. 11.1-3;14:5; 16:2-3; 17:3-4); Masos (Fritz and Kempinski 1983: Pl. 131:11), Sahab (Dajani 1970: Pl. 7:408-409); **E12th**: Gezer (Seger 1988: Pl. 2:3); **12th**: Taanak (Rast 1978: Fig. 1:13); **12th-E11th**: Megiddo (Loud 1948: Pl. 78:2); **12th/11th**: Shiloh (Finkelstein et al. 1993: Fig. 6:46:1), Baq'ah (McGovern 1986: Fig. 49:4), Madaba (Harding and Isserlin 1953b: Fig. 12:23-24).
Note: Although there are only two representatives of this form published here, it is one of the most frequent early Iron I bowls in our assemblage. A very similar form has previously been designated by Zertal as "Manasseh bowl" (Zertal 1987: references above), but its appearance in our region means it was more wide-spread than simply the northern hills of Cisjordan.
Remarks: Very few parallels can be found for these bowls in 11th century contexts.

Rim Form: In-curving, interior thickened.
Figure References: Fig. 6.8:14-16.
Parallels: **LB II**: Hazor (Yadin 1960: Pl. 124:9), Jedur (Ben-Arieh 1981: Fig. 1:5, 7-9); **13th**: Amman (Dajani 1966a: Pl. 17:11-12); **13th/12th**: Ebal (Zertal 1987: Fig. 11:1-3); **E12th**: Giloh (Mazar 1981: Fig. 6:2); **12th**: Izbet-Sartah (Finkelstein et al. 1986: Fig. 11:13-20), Deir 'Alla (Franken and Kalsbeek 1969: Fig. 46:43, 46), Shechem (Boraas 1986: Fig. 1:8, 10), Megiddo (Loud 1948: Pl. 74:1), Taanak (Rast 1978: Figs. 3:6-8; 8:2; 13:4-9); **L12th**: Qasile (Mazar 1985: Fig. 12:6); **12th/11th**: Shiloh (Finkelstein et al. 1993: Fig. 6.52:3-4), Baq'ah (McGovern 1986: Fig. 49:5), Madaba (Harding and Isserlin 1953b: Figs. 12:15-16; 13:44); **12th-11th**: Beit Mirsim (Greenberg 1987: Fig. 4:2, 12-13), Pella (Hennessy et al. 1981: Fig. 14:7); **E11th**: Keisan (Briend and Humbert 1980: Pl. 79:13.
Note: Many of the parallels are not quite as in-curved as our examples.

Rim Form: In-curving, squared.
Figure Reference: Fig. 6.8:17.
Previous 'Umayri Publications: *MPP 3*: Fig. 7.9:7.
Parallels: None
Note: This example seems to have been wheel-burnished on the exterior, suggesting it may have originated from an Iron II level.

Rim Form: Small, simple, curving upright.
Figure Reference: Fig. 3.13:1.
Parallels: **12th**: Taanak (Rast 1978: Figs. 1:17; 3:9, 11; 5:1; 8:3-5; 17:1), Izbet-Sartah (Finkelstein et al. 1986: Fig. 11: 2-3); **12th/11th**: Shiloh (Finkelstein et al. 1993: Fig. 6.60:2), Ai (Callaway 1980: Fig. 151:13); **12th-11th**: Beit Mirsim (Greenberg 1987: Fig. 4:12), Pella (Hennessy et al. 1983: Fig. 12:8; McNicoll et al. 1982b: Fig. 8:1), Medeineh Mu'arrajeh (Olavarri 1983: Fig. 6:2); **E11th**: Qasile (Mazar 1985: Fig. 19:15-16); Aro'er (Olavarri 1965: Fig. 1:10).

Rim Form: Large, simple.
Figure Reference: Fig. 4.31:22
Parallels: **LB II**: Abu Kharaz (Fischer 1991: Fig. 10:8), Baq'ah (McGovern 1986: Fig. 29:6), Hazor (Yadin 1959: Pl. 105:2; 1960: Pls. 117:15, 128:13), Ashdod (Dothan and Porath 1993: Fig. 11:9-12), Kerak Survey (Brown 1991: No. 158), Pella (McNicoll et al. 1982b: Fig. 6:3); **13th**: Lachish (Tufnell et al. 1940: Pl. 37:31), Amman Airport (Kafafi 1983: Fig. 20:10-11, 26), Amman (Dajani 1966a: Pl. 17:10); **13th/12th**: Sahab (Dajani 1970: Pl. 9:247, 409), Gezer (Dever et al. 1986: Pls. 14:2; 17:11; 26:7); **L13th-12th**: Megiddo (Loud 1948: Pl. 71:17); **12th**: Deir 'Alla (Franken and Kalsbeek 1969: Fig. 46:39), Shechem (Boraas 1986: Fig. 2:10), Taanak (Rast 1978: Fig. 91:3); **12th/11th**: Madaba (Harding and Isserlin 1953b: Figs. 12:20; 13:45), Shiloh (Buhl and Nielsen 1969: Pls. 9:109; 10:127); **11th**: Medeineh (Olavarri 1978: Fig. 2:16).
Note: This is much like a platter bowl.

Rim Form: Deep, turned in, interior thickened.
Figure Reference: Fig. 3.10:8.
Parallels: **13th/12th**: Sahab (Dajani 1970: Pl. 3:249).
Note: A few similar forms are kraters: Baq'ah (McGovern 1986: Fig. 51:23), Bethel (Albright and Kelso 1968: Pl. 60:15).

Rim Form: Deep, turned out.
Figure References: Fig. 3.10:6; Fig. 6.8:18.
Parallels: **LB II**: Hazor (Yadin 1960: Pl. 117:38), Rabud (Kochavi 1969: Fig. 4:22), Aphek (Beck and Kochavi 1985: Fig. 3:2); **13th**: Deir 'Alla (Franken 1992: Figs. 3-7:2-3; 4-1:1; 4-8:3, 6), Lachish (Tufnell et al. 1940: Pl. 40:97); **13th/12th**: Sahab (Dajani 1970: Pl. 16:165); **12th**: Deir 'Alla (Franken and Kalsbeek 1969: Fig. 46:26); **12th-11th**: Pella (McNicoll et al. 1982a: Pl. 122:2; Hennessy et al. 1981: Fig. 14:4); **12th/11th**: Shiloh (Buhl and Nielsen 1969: Pl. 18:238).
Note: These could be carinated forms in the style of LB carinated bowls. Their resemblance to Philistine bowls is coincidental. Fig. 6.8:18 could be a jar.

Rim Form: Flaring, simple.
Figure Reference: Fig. 3.10:13.
Parallels: **LB II**: Hazor (Yadin 1959: Pl. 143:29—goblet); **13th**: Deir 'Alla (Franken 1992: Fig. 5- 18:7—includes paint on rim); **L13th-12th**: Megiddo (Loud 1948: Pl. 72:2), Gezer (Dever et al. 1986: Pls. 16:13; 20:5; 22:13); **12th**: Shechem (Boraas 1986: Fig. 2:2), Beth Shan (Yadin and Geva 1986: Fig. 22:3-5—with paint); **12th/11th**: Baq'ah (McGovern 1986: Fig. 50:20—chalice), Dan (Biran 1989: Fig. 4.17:1), Madaba (Harding and Isserlin 1953b: Fig. 13:28, 36-38); **12th-11th**: Pella (McNicoll et

al. 1982a: Pls. 120:11; 121:12; 122:5, 9).
Note: These could also be goblets or small chalices.

Rim Form: Squared.
Figure Reference: Fig. 4.32:1.
Parallels: **13th**: Deir 'Alla (Franken 1992: Fig. 7-20:261); **12th/11th**: Shiloh (Finkelstein et al. 1993: Fig. 6.52:2).

Cooking Pots

The first two rim types were by far the most common types at 'Umayri. Virtually all cooking pot rims have an everted stance; only one example leans slightly inward.

Rim Form: Triangular, thickened.
Figure References: Fig. 3.13:9-10, 18-19; Fig. 3.10:10; Fig. 4.14:21-25; Fig. 4.32:4; Fig. 6.8:23.
Previous 'Umayri Publications: *MPP 1*: Figs. 19.19:19-20; 19.20:10-11; *MPP 2*: Fig. 4.7:29; *MPP 3*: Figs. 4.25:22-25, 27-30; 4.26:1; 4.27:21-25; 7.9:13.
Parallels: **LB II**: Pella (Hennessy et al. 1983: Fig. 5:2-3, 6, 10), Far'ah (N) (de Vaux and Steve 1947: Fig. 2:17), Ashdod (Dothan and Porath 1993: Fig. 9:18), Yoqne'am (Ben-Tor and Rosenthal 1978: Fig. 13:13), Qashish (Ben-Tor et al. 1981: Fig. 8:14), Jerusalem (Amiran 1960: Fig. 3:47), Hazor (Yadin 1959: Pls. 107:8, 11; 127:2, 8; 133:16-17; 145:1, 3-5; 1960: Pl. 119:15-17; 1961: Pls. 158:18; 161:5, 21; 200:25; 295:6), Gezer (Seger 1988: Pls. 7:3; 8:13), Megiddo (Guy and Engberg 1938: Pls. 21:2; 49:21), Lachish (Tufnell et al 1940: Pl. 56:368, 371), Gibeon (Pritchard 1963: Fig. 11:52), Rabud (Kochavi 1974: Fig. 4:5, 9, 24), Aphek (Beck and Kochavi 1985: Fig. 3:5); **13th**: Amman Airport (Kafafi 1983: Fig. 22:140), Gezer (Gitin 1990: Pl. 1:25, 27), Deir 'Alla (Franken 1992: Figs. 7-7:33; 7-17:123); **13th/12th**: Gezer (Dever et al 1986: Pls. 14:8; 17:20: 20:1, 4, 14; 21:8; 22:16; 31:5; 33:4), Ebal (Zertal 1987: Figs. 11:13; 13:4), Sahab (Dajani 1970: Pl. 8:23); **E 12th**: Giloh (Mazar 1981: Fig. 7:4-5, 11, 13; 1990: Figs. 3:5; 6:12); **12th**: Izbet- Sartah (Finkelstein et al. 1986: Figs. 10:16; 12:17), Shechem (Boraas 1986: Fig. 3:3-5), Taanak (Rast 1978: Fig. 14:11), Afula (Dothan 1955: Fig. 17:3); **12th-11th**: Pella (McNicoll 1982A: Pl. 121:7; Hennessy et al. 1981: Fig. 15:8); **12th/11th**: Shiloh (Finkelstein et al 1993: Figs. 6:46:6, 9, 11; 6:47:2; 6.50:1; 6.57:6; Buhl and Nielsen 1969: Pls. 5:50; 7:68-69, 71; 8:98), Ai (Callaway 1980: Fig. 152:2), Dan (Biran 1989: Fig. 4.17:3).
Remarks: This form is essentially that of the LB II cooking pot carrying over into early Iron I. There are virtually no parallels that can be clearly dated to the 11th century when most cooking pots carry an inward stance and a longer flange. These cooking pots are one of the most useful items for dating our assemblage, indicating the 13th or early 12th centuries.

Rim Form: Bent up, flanged.
Figure References: Fig. 3.13:4-8, 12, 15; Fig. 4.14:26, 29; Fig. 4.32:3, 5; Fig. 6.8:19-20, 22.
Previous 'Umayri Publications: *MPP 1*: Fig. 19.20:13, 20; *MPP 2*: Figs. 4.7:31-3; 8.9:15-19, 22- 23; *MPP 3*: Figs. 4.25:26; 7.9:14-15.
Parallels: **13th**: Deir 'Alla (Franken 1992: Figs. 7-7:34; 7-18:130, 132); **13th/12th**: Sahab (Dajani 1970: Pl. 8:245), Ebal (Zertal 1987: Fig. 14:6); **E 12th**: Giloh (Mazar 1981: Fig. 7:12; 1990: Fig. 7:1); **12th**: Deir 'Alla (Franken and Kalsbeek 1969: Fig. 46:16), Gezer (Dever et al. 1986: Pls. 25:5; 29:11; 33:2), Afula (Dothan 1955: Fig. 17:20); **12th-11th**: Pella (McNicoll et al. 1982a: Pls. 120:2; 121:5; 1982b: Fig. 7:1; Hennessy et al. 1981: Fig. 15:6; 1983: Fig. 12:1); **12th/11th**: Shiloh (Finkelstein et al. 1993: Fig. 6.57:7, 13; Buhl and Nielsen 1969: Pls. 7:70; 13:136), Ai (Callaway 1980: Figs. 150:16; 152:12); **11th**: Gezer (Dever et al. 1986: Pls. 34:10; 35:15).
Remarks: This cooking pot rim, with the everted stance together with the elongated flange is the next step in the development of the cooking pot rim after the preceding form. The parallels date it from the late 13th century to the early 11th, after which the inverted, flanged rim takes over. Because it can go no earlier than the late 13th century it, together with the preceding form, limit the period of our assemblage from the late 13th century through the 12th century. This form is rare in coastal sites.

Rim Form: Upright, flanged.
Figure References: Fig. 3.13:11, 13-14; Fig. 4.14:27-28.
Parallels: **13th**: Deir 'Alla (Franken 1992: Fig. 7-18:129, 131, 133); **12th**: Deir 'Alla (Franken and Kalsbeek 1969: Fig. 46:708, 20), Beth Shan (Yadin and Geva 1986: Fig. 23:3), Gezer (Dever et al. 1986: Pl. 23:15); **12th-11th**: Pella (McNicoll et al. 1982a: Pl. 121:1); **E11th**: Gezer (Dever et al. 1986: Pls. 35:3; 40:18).
Remarks: This is probably a slightly developed type of the preceding form, but not yet carrying an inward stance. It occurs over a similar chronological and geographical range.

Rim Form: Slightly ridged flange.
Figure Reference: Fig. 6.8:21.
Parallels: **12th**: Deir 'Alla (Franken and Kalsbeek 1969: Fig. 46:11-12); **12th-11th**: Pella (Smith and McNicoll 1986: Fig. 3:3; Hennessy et al. 1983: Fig. 14:2).
Remarks: This is the only cooking pot from 'Umayri with an inward stance and a ridged flange. It probably represents the very beginnings of the 11th century tradition and may belong to a later Iron I phase uncovered only in the 1996 season. However, this form can still date to the 12th century. Note the parallels are all from the Jordan Valley.

Rim Form: Turned out, bulbous.
Figure Reference: Fig. 3.13:17.
Parallels: None, but similar forms are from the L13th-12 centuries: Masos (Fritz and Kempinski 1983: Pl. 133:9); and 12th-11th centuries: Pella (Hennessy et al. 1983: Fig. 7:13).
Remarks: The turned-out rim suggests a date no later than the 12th century B.C.

Rim Form: Turned out, profiled.
Figure Reference: Fig. 3.13:16.
Parallels: None, but similar forms are from LBII: Ashdod (Dothan and Porath 1993: Fig. 169:10); and the 12th century: Deir 'Alla (Franken and Kalsbeek 1969: Fig. 46:4), Taanak (Rast

1978: Fig. 14:13).

Rim Form: Sharply turned out, short.
Figure Reference: Fig. 4.32:6.
Parallels: None, but a similar form is from the 12th/11th centuries: Ai (Callaway 1980: Fig. 152:23).

Lamps

Form: Gently rounded sidewall.
Figure References: Fig. 4.32:9-12.
Parallels: **LB II**: Eitun (Tzaferis and Hess 1992: Fig. 3:7), Aphek (Beck and Kochavi 1985: Fig. 3:7); **13th**: Deir 'Alla (Franken 1992: Figs. 3-7:6-7; 4-2:4; 5-5:4), Amman Airport (Kafafi 1983: Fig. 22:151), Lachish (Tufnell et al. 1940: Pl. 45:202-4; Aharoni 1975: Pl. 40:10), Sa'idiyeh (Pritchard 1980: Figs. 13:10; 24:7; 38:2; Tubb 1988: Fig. 48:15); **L13th-12th**: Megiddo (Loud 1948: Pls. 72:6; 74:13); **12th-11th**: Gezer (Dever et al. 1986: Pls. 11; 38:12), Pella (McNicoll et al. 1982a: Pl. 123:1—flat base; Hennessy et al. 1981: Figs. 12:7; 13:1—flat base); **12th/11th**: Baq'ah (McGovern 1986: Fig. 54:52-53), Shiloh (Buhl and Nielsen 1969: Pl. 9:116—flat base), Dan (Biran 1994: Fig. 98:10), Madaba (Harding and Isserlin 1953b: Figs. 16:95-98, 100, 102, 108—flat base:100, 119); **11th**: Qasile (Mazar 1985: Fig. 20:16), Esdar (Kochavi 1969: Fig. 12:10).
Remarks: This is the normal form of late LB II and early Iron I lamp. Most parallels for flat bases come from Transjordan or the hill country of Cisjordan.

Form: Carinated sidewall.
Figure References: Fig. 3.13:20-21; Fig. 3.10:11-12.
Previous 'Umayri Publications: *MPP 3*: Figs. 4.26:3; 4.28:1.
Parallels: **13th**: Amman Airport (Kafafi 1983: Fig. 148, 155-157); **12th/11th**: Baq'ah (McGovern 1986: Fig. 54:51, 55, 57), Madaba (Harding and Isserlin 1953b: Fig. 16:103-105, 109, 112, 116, 119).
Remarks: So far, good parallels for this form come exclusively from Transjordan, although I have seen one unpublished example from Ai or Raddana at the Rockefeller Museum, courtesy of Z. Lederman and J. Zias.

Pyxides

Most of the parallels listed for our pyxides contain painted horizontal bands. Others do not. Some rare metope designs are present, but they are on upper body forms.

Form: Double carinated.
Figure References: Fig. 4.14:13; Fig. 4.32:7-8.
Parallels: **LB II**: Megiddo (Loud 1948: Pl. 30:12; Guy and Engberg 1938: Pl. 64:6), Eitun (Tzaferis and Hess 1992: Fig. 3:2-4); **13th**: Amman (Dajani 1966a: Pl. 17:48); **13th/12th**: Sahab (Dajani 1970: Pls. 3:275; 5:117, 161), Shechem (Horn and Moulds 1969: Pl. 6:162); **L13th-12th**: Masos (Fritz and Kempinski 1983: Pl. 138:11); **12th**: Sa'idiyeh (Pritchard 1980: Fig. 8:2); **12th-11th**: Gezer (Dever et al. 1986: Pls. 29:18; 38:5), Megiddo (Loud 1948: Pl. 84:9), Qiri (Ben-Tor and Portugali 1987: Fig. 20:8), Beit Mirsim (Greenberg 1987: Fig. 7:24); **12th/11th**: Shiloh (Finkelstein et al. 1993: Fig. 6.50:8), Baq'ah (McGovern 1986: Fig. 53:48), Dan (Biran 1994: Fig. 87:4), Madaba (Harding and Isserlin 1953b: Fig. 15:71-72); **11th**: Qasile (Mazar 1985: Fig. 17:21), Medeineh (Olavarri 1978: Fig. 2:8).
Form: Squat, triangular, with lug handles.
Figure Reference: Fig. 6.21:1.
Parallels: **E 12th**: Gezer (Dever et al. 1986: Pl. 25:8—no paint).
Note: The painted decoration goes from handle to handle.

Flasks

Paint Design: Triangles in a circle, alternating with dots.
Figure Reference: Fig. 3.13:22.
Previous 'Umayri Publications: *MPP 3*: Fig. 4.28:2.
Parallels: **13th**: Amman (Dajani 1966a: Pl. 17:60); **13th/12th**: Sahab (Dajani 1970: Pl. 11:156, 177); **12th/11th**: Madaba (Harding and Isserlin 1953b: Fig. 15:83).
Note: One of the Sahab parallels (Pl. 11:156) is precise.
Remarks: Note that this design pattern has parallels only from the 'Umayri region, between Amman and Madaba.

Discussion

Virtually all of our forms have parallels from the 13th and 12th centuries, particularly the end of the 13th century and the beginning of the 12th century. There is, moreover, no noticeable difference between the pottery from the early phase (Field A, FP 10; Field B, FP 11B) and that of the later one (Field A, FP 9; Field B, FP 11A; Field F, Iron 1). We therefore suggest that both phases represent short-lived settlements dating near the turn of the century, 1200 B.C.

The assemblage includes many forms that are essentially Late Bronze IIB, but others that are clearly early Iron I (the triangular, thickened cooking pot, for instance). Because most of the Late Bronze IIB forms continue into early Iron I at other sites, and because the Iron I forms do not begin in Late Bronze IIB (the bent-up, flanged cooking pot, for instance), the essential character of our assemblage is Iron I.

The best parallels for most of our forms come from Transjordan and the northern highlands of Cisjordan. The relatively few that come from the coastal plain probably represent both geographic distribution as well as cultural affinity. That is, the 'Umayri assemblage, and presumably the people behind it, were closely related to their neighbors in Transjordan and western Cisjordan. The lack of finer vessels and imports also emphasizes 'Umayri's isolation from coastal spheres of influence.

Although our assemblage contains a few vessels usually classified as non-utilitarian (pyxides, the flask, the high proportion of jugs), its basic nature is allied more with those of the highland sites (Mount Ebal, Giloh, Ai,

Raddana) than the large urban centers (Megiddo, Beth Shan, Pella).

EARLY IRON II

Above the Iron I destruction layer in Fields A and B was a shallow phase of early Iron II buildings and earth layers. Although the remains are so fragmentary that very little organization has yet been seen from the remains, the pottery is giving us a good limit on the time period. After the 1996 season it was clear that 'Umayri was also inhabited during the late Iron I. Some of the forms published here probably come from that phase (fig. 3.23:2, 8, 12, 22).

Parallels were chosen from assemblages dated broadly to the Iron II period or to specific centuries. Based on the recent excavations at Beth Shemesh, its deposits are dated to the 8th century (Bunimovitz, Lederman, and Kletter 1991: 143):

IRON II

Beth Shan (James 1966: Figs. 1, 3-33, 44-48)
Galilee (Gal 1992: Figs. 2.2-2.3, 2.5, 3.4, 3.6-3.7 [mixed])
Jericho (Kenyon and Holland 1982: Figs. 195-219)
Gezer (Dever et al. 1974: Pl. 22)
Pella (Smith 1982: Figs. 1-2)
(Edwards et al. 1990: Figs.3-7)
(McNicoll et al. 1982a: 129-133)
Sahab (Harding 1948: 97-102)

10th Century

Gezer (Dever et al. 1974: Pl. 31)
(Gitin 1990: Pls. 8-11)
Hazor (Yadin 1959: Pls. 45-46)
(Yadin 1960: Pls. 51-52)
(Yadin 1961: Pls. 171-177, 207-213)
Jerusalem (Franken and Steiner 1990: Fig. 2-2)
Megiddo (Lamon and Shipton 1939: Pls. 6-8, 19-22, 28, 30-33, 35-38, 40)

10th-9th Centuries

Beth Shan (James 1966: Figs. 59-62)
Galilee (Gal 1992: Fig. 3.9-3.10)
Madaba (Thompson 1986: Figs. 1-6)
Megiddo (Lamon and Shipton 1939: Pls. 17, 28-29, 38, 40)
Pella (McNicoll et al. 1992: Pls. 51, 66, 68-69)

9th Century

Beth Shan (James 1966: Figs. 40-42, 63-66)
Gezer (Dever et al. 1974: Pls. 31-33)
(Gitin 1990: Pls. 11-15)
Hazor (Yadin 1959: Pls. 47-50)
(Yadin 1960: Pls. 52-65)
(Yadin 1961: Pls. 178-180, 213, 218, 247-248)
Jerusalem (Franken and Steiner 1990: Figs. 2-6, 2-13-2-16, 2-20-2.21C)
Keisan (Briend and Humbert 1980: Pls. 48-53)
Megiddo (Lamon and Shipton 1939: Pls. 1-3, 5, 9-11, 17, 23, 26, 29, 34-36, 39)
Samaria (Crowfoot 1957: Figs. 1-3, 17, 24:6)

9th-8th Centuries

Far'ah (Chambon 1984: Pls. 45-62 [mixed])
Hazor (Yadin 1961: Pls. 214-216)
Megiddo (Lamon and Shipton 1939: Pls. 1-5, 9, 11-18, 23-28, 33-39)
Sa'idiyeh (Pritchard 1985: Figs. 1-5)

8th Century

Beer Sheba (Aharoni 1973: Pls. 57-76)
Beth Shemesh (Grant and Wright 1939: Pls. 63-68)
Gezer (Dever et al. 1974: Pls. 33-34)
(Gitin 1990: Pls. 15-22)
Hazor (Yadin 1959: Pls. 51-75)
(Yadin 1960: Pls. 66-76, 79-101, 107)
(Yadin 1961: Pls. 181-190, 219-232, 249-256)
Jerusalem (Franken and Steiner 1990: Figs. 2-23—2.24, 2-30)
Lachish (Tufnell 1953: Pls. 79-104 [mixed])
Megiddo (Lamon and Shipton 1939: Pls. 1-5, 9-12, 16, 18, 23-28, 33-37, 39)
Sa'idiyeh (Pritchard 1985: Figs. 6-14)
Samaria (Crowfoot 1957: Figs. 4-10, 13-16, 18-31, 33)

8th-7th Centuries

Beth Shan (James 1966: Figs. 32-39, 67-72)
Gezer (Gitin 1990: Pls. 22-25)
Kheleifeh (Vandiver and Pratico 1993: Pls. 11-40)
Megiddo (Lamon and Shipton 1939: Pls. 1-5, 9-12, 15-18, 23-25, 27-28, 33-34, 36-37, 39)

Collared Pithoi

Rim Form: Interior thickened, exterior ridged.
Figure Reference: Fig. 3.23:1.
Previous 'Umayri Publications: *MPP 3*: Fig. 4.32:3.
Parallel: **9th-8th**: Sa'idiyeh (Pritchard 1985: Fig. 4:22, but without the ridge).
Note: This seems to be a late form of the Iron I collared pithos. For ridged rims from the early period, see *MPP 3*: Fig. 4.20:1-2, 6-7). The vestigial collar is present in the slight ridge on the shoulder below the rim. For a discussion of collared pithoi in Iron II Transjordan, see Herr forthcoming.

Jars

Rim Form: Upright, exterior thickened.
Figure Reference: Fig. 3.23:2
Parallels: **Iron II**: Jericho (Kenyon and Holland 1982: Fig. 207:10); **8th**: Gezer (Dever et al. 1974: Pl. 34:17), Hazor (Yadin 1959: Pl. 61:12), Lachish (Tufnell 1953: Pl. 96:527).

Jugs

Rim Form: Flaring neck, triangular thickened.
Figure Reference: Fig. 3.23:3.
Parallels: **Iron II**: Gezer (Dever et al. 1974: Pl. 22:30—not precise), Pella (Smith 1982: Fig. 1:2; Edwards et al. 1990: Fig. 7:6); **10th**: Hazor (Yadin 1961: Pl. 213:1—with paint); **10th-9th**: Pella (McNicoll 1992: Pl. 69:3); **9th**: Gezer (Gitin 1990: Pl. 12:1—not

precise), Jerusalem (Franken and Steiner 1990: Fig. 2-21B:147); **8th**: Hazor (Yadin 1959: Pl. 52:17), Samaria (Crowfoot et al. 1957: Fig. 6:12).
Note: The slightly offset triangular rim is quite frequent as a general rim form of jugs in early Iron II.

Rim Form: Upright, offset.
Figure Reference: Fig. 3.23:4.
Previous 'Umayri Publications: *MPP 1*: Fig. 19.6:16; *MPP 3*: Fig. 6.9:13.
Parallels: **Iron II**: Jericho (Kenyon and Holland 1982: Fig. 214:18); **9th**: Hazor (Yadin 1959: Pl. 50:20); **8th**: Lachish (Tufnell 1953: Pl. 86:235, 252); Samaria (Crowfoot et al. 1957: Fig. 22:8); **8th-7th**: Beth Shan (James 1966: Fig. 71:9).
Note: Related rim types are extremely common throughout the Iron II in Palestine on jugs and decanters.

Rim Form: Upright, interior and exterior thickened.
Figure Reference: Fig. 3.23:5.
Previous 'Umayri Publications: *MPP 1*: Fig. 19.6:6.
Parallels: **9th**: Jerusalem (Franken and Steiner 1990: Fig. 2-21A:66-67); **9th-8th**: Sa'idiyeh (Pritchard 1985: Fig. 4:1); **8th**: Hazor (Yadin 1961: Pl. 189:18).
Note: Not enough of the neck is present on our example to know whether the neck was ridged or not.

Rim Form: Bent out.
Figure Reference: Fig. 3.23:6.
Parallels: **9-8th**: Far'ah (Chambon 1984: Pl. 46:8—with paint); **8th**: Beer Sheba (Aharoni 1973: Pl. 62:101—a decanter), Gezer (Gitin 1990: Pl. 19:1).

Kraters

Rim Form: Holemouth, triangular thickened.
Figure Reference: Fig. 3.23:7.
Previous 'Umayri Publications: *MPP 1*: Figs. 19.4:4, 19; 19.13:10.
Parallels: **Iron II**: Jericho (Kenyon and Holland 1982: Figs. 204:11; 205:3), Pella (McNicoll et al. 1982a: Fig. 129:1); **10th-9th**: Madaba (Thompson 1986: Fig. 4:3); **8th**: Hazor (Yadin 1959: Pl. 54:19; 1961: Pls. 183:7, 14; 227:2; 252:8), Sa'idiyeh (Pritchard 1985: Figs. 8:11; 9:15); **8th- 7th**: Beth Shan (James 1966: Fig. 68:15).
Note: There are many related varieties of this popular holemouth krater. We have tried to limit our parallels to rims with relatively vertical outer walls and pointed interiors.

Rim Form: Holemouth, interior bulb with exterior triangular thickening.
Figure Reference: Fig. 3.23:8.
Parallels: **9th-8th**: Megiddo (Lamon and Shipton 1939: Pl. 26:72), Sa'idiyeh (Pritchard 1985: Fig. 1:6); **8th**: Hazor (Yadin 1961: Pl. 183:16).
Note: This type is descended from Iron I kraters (*MPP 2*: Fig. 4.7:20). Varieties also occur in late Iron II at 'Umayri (*MPP 2*: Fig. 19.7:7-8).

Bowls

Rim Form: Deep, slight holemouth, simple.
Figure References: Fig. 3.23:9-11.
Previous 'Umayri Publications: *MPP 1*: Figs. 19.4:9; 19.10:6.
Parallels: **Iron II**: Beth Shan (James 1966: Figs. 5:13; 6:2), Galilee (Gal 1992: Fig. 2.3:11), Jericho (Kenyon and Holland 1982: Figs. 196:29; 198:11) **10th**: Gezer (Gitin 1990: Pl. 10:3), Hazor (Yadin 1959: Pl. 45:8), Megiddo (Lamon and Shipton 1939: Pl. 28:105); **9th**: Gezer (Gitin 1990: Pl. 14:11—with paint), Hazor (Yadin 1960: Pl. 63:25), Jerusalem (Franken and Steiner 1990: Fig. 2-21A:3); **9th-8th**: Hazor (Yadin 1961: Pl. 214:19-21), Sa'idiyeh (Pritchard 1985: Fig. 2:12, 14); **8th**: Beer Sheba (Aharoni 1973: Pl. 59:37), Beth Shemesh (Grant and Wright 1938: Pl. 63:1), Hazor (Yadin 1961: Pls. 219:5; 220:13; 221:1;230:4; 254:10); **8th-7th**: Beth Shan (James 1966: Fig. 67:22).
Note: This is a typical bowl type during the first half of the Iron II period.

Rim Form: Shallow, slightly thickened simple.
Figure Reference: Fig. 3.23:13.
Parallels: **Iron II**: Jericho (Kenyon and Holland 1982: Figs. 195:26—deeper; 196:7); **10th-9th**: Madaba (Thompson 1986: Fig. 5:18); **9th**: Keisan (Briend and Humbert 1980: Pl. 52:2, 5); **8th**: Samaria (Crowfoot et al. 1957: Fig. 4:3).

Rim Form: Interior and exterior thickened.
Figure Reference: Fig. 3.23:15.
Previous 'Umayri Publications: *MPP 1*: Figs. 19.8:26; 19.9:27, 30.
Parallels: **Iron II**: Gezer (Dever et al. 1974: Pl. 22:28); **9th**: Hazor (Yadin 1959: Pl. 47:9, 19; 1960: Pls. 53:14; 54:7; 1961: Pl. 247:9), Jerusalem (Franken and Steiner 1990: Fig. 2-21B:121; **9th-8th**: Hazor (Yadin 1961: Pl. 214:26); **8th**: Beth Shemesh (Grant and Wright 1938: Pl. 66:27- 28), Hazor (Yadin 1960: Pls. 66:23; 80:34; 1961: Pl. 251:16).
Note: Many similar varieties of this rim form are not noted in the parallels. These varieties include smaller interior thickening and larger outer thickening, as well as a more upright stance.

Rim Form: Carinated, simple.
Figure References: Fig. 3.23:16-17.
Previous 'Umayri Publications: *MPP 1*: Fig. 19.9:4-9; *MPP 2*: Fig. 3.14:12-16.
Parallels: **Iron II**: Beth Shan (James 1966: Figs. 19:1), Jericho (Kenyon and Holland 1982: Fig. 197:5-6); **10th-9th**: Beth Shan (James 1966: Fig. 59:7, 10), Madaba (Thompson 1986: Fig. 5:6), Megiddo (Lamon and Shipton 1939: Pl. 28:97-98); **9th**: Jerusalem (Franken and Steiner 1990: Fig. 2-21A:18); **9th-8th**: Far'ah (Chambon 1984: Pls. 57:9, 37), Hazor (Yadin 1961: Pl. 214:12), Sa'idiyeh (Pritchard 1985: Fig. 3:1, 4); **8th**: Beer Sheba (Aharoni 1973: Pls. 59:56-57; 71:11), Beth Shemesh (Grant and Wright 1938: Pl. 66:10, 12), Gezer (Gitin 1990: Pl. 20:5), Hazor (Yadin 1960: Pls. 66:8; 80:23-24; 92:5-6; 1961: Pls. 181:5; 254:2-3), Lachish (Tufnell 1953: Pl. 79:14); **8th-7th**: Beth Shan (James 1966: Fig. 37:1; 67:1, 5), Gezer (Gitin 1990: Pl. 24:1).

Note: This is a typical bowl form of the 9th and 8th centuries B.C.

Rim Form: Carinated, rounded.
Figure Reference: Fig. 3.23:12.
Previous 'Umayri Publication: *MPP 3*: Fig. 7.11:7.
Parallels: **Iron II**: Gezer (Dever et al. 1974: Pls. 22:23—with handle; 32:38), Galilee (Gal 1992: Fig. 3.4:1-2); **10th-9th**: Beth Shan (James 1966: Fig. 59:9); **9th**: Hazor (Yadin 1959: Pl. 49:25; 1960: Pls. 53:10; 63:4); **8th**: Beth Shemesh (Grant and Wright 1938: Pl. 63:7), Lachish (Tufnell 1953: Pl. 79:55).

Rim Form: Carinated, flat-topped.
Figure References: Fig. 3.23:14, 18-19.
Previous 'Umayri Publications: *MPP1*: Fig. 19.9:10, 13; *MPP 2*: Fig. 3.14:1-4.
Parallels: **Iron II**: Galilee (Gal 1992: Fig. 2.2:17), Jericho (Kenyon and Holland 1982: Fig. 197:29), Sahab (Harding 1948: Fig. 3:9); **10th**: Gezer (Gitin 1990: Pl. 10:14); **9th**: Gezer (Gitin 1990: Pl. 13:2, 3), Hazor (Yadin 1961: Pl. 180:3), Jerusalem (Franken and Steiner 1990: Fig. 2-21A:34, 36); **9th-8th**: Sa'idiyeh (Pritchard 1985: Fig. 2:8); **8th**: Beth Shemesh (Grant and Wright 1938: Pl. 66:6), Hazor (Yadin 1961: Pl. 220:7).
Note: We have included several sub-varieties in this form. They can occur with interior thickening, exterior thickening, both interior and exterior thickening, or slightly holemouth. These forms seem to begin early in Iron II and continue into the late phases as well.

Cooking Pots

Rim Form: Ridged.
Figure References: Fig. 3.23:20-21.
Previous 'Umayri Publications: *MPP 1*: Figs. 19.4:13, 22; 19.10:22-25, 28.
Parallels: **Iron II**: Jericho (Kenyon and Holland 1982: Figs. 216:6; 218:12, 16); **10th-9th**: Megiddo (Lamon and Shipton 1939: Pl. 40:13, 19); **9th**: Gezer (Dever et al. 1974: Pl. 32:8), Jerusalem (Franken and Steiner 1990: Fig. 2-21B: 100-101), Samaria (Crowfoot et al. 1957: Fig. 3:18); **9th-8th**: Sa'idiyeh (Pritchard 1985: Fig. 3:27); **8th**: Beer Sheba (Aharoni 1973: Pl. 61:87), Beth Shemesh (Grant and Wright 1938: Pl. 64:23, 25), Lachish (Tufnell 1953: Pl. 93:446), Samaria (Crowfoot et al. 1957: Fig. 6:31); **8th-7th**: Kheleifeh (Vandiver and Pratico 1993: Pls. 16:1; 18:6).
Note: There are two varieties included in this form. The first has an elongated, thickened rim (Fig. 3.23:20) and the second has a slightly bulbous but simple rim above the ridge (Fig. 3.23:21). Both types represent early Iron II cooking pot forms with a relatively upright stance. Later forms lean in more.

Rim Form: Thickened, grooved.
Figure Reference: Fig. 3.23:23.
Previous 'Umayri Publication: *MPP 1*: Fig. 19.10:21.
Parallels: **Iron II**: Jericho (Kenyon and Holland 1982: Figs. 217:11; 218:3); **8th**: Sa'idiyeh (Pritchard 1985: Fig. 6:32).
Rim Form: Thickened, double grooved.
Figure Reference: Fig. 3.23:22.
Previous 'Umayri Publications: *MPP 1*: Figs. 19.10:18, 20; 19.17:1; *MPP 2*: Fig. 3.15:13, 16.
Parallel: **Iron II**: Jericho (Kenyon and Holland 1982: Fig. 216:15).
Note: Many similar forms have been found at 'Umayri, but are rare elsewhere. Related types may be found, but usually not with such a large diameter. During the 1996 season, this cooking pot form was found in significant quantities with late Iron I collared pithoi. It thus most likely belongs to that phase.

Discussion

By far the majority of the parallel forms fall within the 9th and 8th centuries B.C. The deep, slightly holemouth bowls and the cooking pots tend to be older forms whereas the flat-topped bowls are somewhat more advanced. A date for the phase from the late 9th to the middle of the 8th centuries would fit the evidence quite well.

The general trend for geographical connections with the highlands north of Jerusalem confirms biblical and extra-biblical suggestions for a close connection with the nation of North Israel with the Transjordanian plateau at this time (2 Kings 3 and the Mesha Stele).

LATE IRON II TO PERSIAN

This pottery has been discussed in detail in previous reports (Lugenbeal and Sauer 1972; Herr 1989; 1995a). It appears in Figs. 3.29, 3.30, 3.32, 3.33, 4.36, and 6.16 and comprises typical forms of what must now be dated to the 6th and 5th centuries in the region of Amman (Herr 1995b). Although some vessels are late examples of forms normally appearing earlier, they apparently lasted into the 6th century in Ammonite territory (Herr 1995b). The closed lamp in Fig. 6.21:2 is similar to the nozzle of one found in the first season (Herr 1989: Fig. 19.17:14) and at a hinterland site in the second season (Younker 1991: Fig. 12.122:16).

Of note is the Cypriot milk bowl which appeared in a later context (Fig. 3.33:21).

A vessel from a hinterland site formerly seen by me as Islamic (Younker 1991: Fig. 12.122:15) should now be identified as a "New Year's Bottle" imported from Egypt and ascribed to the sixth century (Homès-Fredericq 1992: 187).

BYZANTINE

No new pottery from the Byzantine period was excavated this season, but subsequent to the publication of the pottery from the 1987 season it was determined that pottery published as EB III should really belong to this peri-

od (*MPP 2*: Fig. 7.10: 12-19). Although the out-turned rims and the angular transition to the shoulder look like Early Bronze Age jars, the small diameter, light color, and absence of large inclusions in the wares show that they do not belong to EB assemblages. Our earlier determination was based on form alone. Many excellent Byzantine parallels to this rim form occur throughout Palestine.

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CHAPTER 8

The Objects

Elizabeth E. Platt *University of Dubuque Theological Seminary*

Introduction

During the 1992 season, 155 objects were classified from Tall al-'Umayri. The registry numbers were included within the span of 3001 to 3193 (all registration numbers in the text refer to this series which also includes the objects from Jalul, the survey, and the tombs; but only objects from 'Umayri are published here). Functional categories were roughly the same as, or similar to, those of previous seasons (see especially *MPP 2*: 246-265), including: food preparation (loaf-shaped grinders, querns, hand grinders, grinders, mortars, pestles, whetstones, and stone bowls); military activities (ballistic missiles/slingstones, a javelin point, and a dagger); hardware (a door socket, a mallet head, an axehead, a tent pin, nails, and miscellaneous metal objects); gaming pieces; stone weights; miscellaneous stone objects; bone objects; miscellaneous ceramic pieces (a toy wheel, an ostracon, a burnisher, and ceramic fragments); figurine fragments; cosmetic tools (a mortar, a palette, and a kohl stick); jewelry (fibulae, rings, earrings, bangles, beads, a pendant, a toggle pin, a button, and a mallet pendant); and seals.

Included in the registered numbers but not in this report were objects used in textile manufacture. Dorothy Irvin will discuss spindle whorls, spindle rests, a bodkin, a needle, a spatula, and loom weights elsewhere. Further specialized reports on objects, such as figurines, will be referred to in this chapter.

The object numbers listed below include the four-digit sequential registration number followed by a slash and the full locus identification number (a capital letter for the field designation, the square identification digits followed by a colon, and the locus number). Drawings are the work of Richard H. Brennecke, except where noted.

Food Preparation

Loaf-shaped Grinders. As in other seasons, the basalt loaf-shaped upper millstones used for grinding grain by hand were extremely common. In 1992, therefore, the staff decided not to register fragmentary examples and to leave them in the field in a stone-tool cache at the western foot of the *tall*. They were noted in the field records, but, because they were very similar to each other, not photographed or drawn. Information to be reported about them is approximately the same as for other seasons. "The typical size of a complete millstone is 26.5 cm long by 13.0 cm wide. The two ends are rounded, making an elongated oval shape. The underside (where the grinding took place) is flat, while the back rises in a gentle curve, so two hands could grip it efficiently" (Platt 1991: 246). The maximum thickness at the widest part of the gentle curve is ca. 3.6 cm.

Querns. Again, these basalt lower millstones were rel-

atively prominent; fragmentary examples were, because of size and weight, left in the field after recording.

No. 3182/B 7K80:37 (fig. 8.1:1): complete basalt quern, 38.0 cm across its widest part.

Hand grinders. Eight stone objects were designated "hand-grinders," seven of which were basalt. Their size ranged from 7.0 to 12.0 cm at their largest extent. Characteristically, they had one flat surface and were shaped to be held comfortably in one hand.

No. 3053/B 7J89:Cleanup (fig. 8.1:2).

No. 3054/A 7K40:24 (fig. 8.1:3).

No. 3075/A 7K41:30 (fig. 8.1:4).

No. 3101/A 7K42:48 (fig. 8.1:5).

No. 3135/B 7K80:37 (fig. 8.1:6).

No. 3160/B 7J87:6 (fig. 8.1:7).

No. 3134/B 7K80:60 (fig. 8.1:8): limestone.

No. 3137/B 7K80:37 (fig. 8.2:1): sandstone.

Grinders. Four basalt objects were designated "grinders;" maximum measurements of the fragments ranged from 12.5 cm to 14.0 cm long.

No. 3006/B 7J88:Cleanup (fig. 8.2:2).

No. 3073/A 7K42:44 (fig. 8.2:3).

No. 3074/A 7K42:44 (fig. 8.2:4).

No. 3131/B 7J84:4 (fig. 8.2:5).

Mortars. Four finds were classified as mortars, two complete and two fragments; many other, larger ones were left in the field.

No. 3156/D 5K86:52 (fig. 8.2:6): limestone, complete, 11.5 cm diameter across the top.

No. 3168/D 5K86:58 (fig. 8.2:7): limestone, complete, 7.2 cm diameter across the top.

No. 3136/D 5K86:59 (fig. 8.2:8): limestone fragment, 15.5 cm diameter across the top.

No. 3175/D 5K76:51 (fig. 8.2:9): basalt fragment, 8.5 cm diameter across the top.

Pestles. Pestles, generally smaller than hand grinders, were used with mortars in the preparation of cosmetics and medical products, as well as other small compounds. Held with fingers and thumb around the curved back, the flat side was used for grinding.

No. 3007/B 7J88:Cleanup (fig. 8.2:10): 2 fragments, together 20.5 cm long.

No. 3019/A 7K41:Cleanup (fig. 8.2:11): complete, well-shaped, 8.34 cm long.

No. 3040/A 7K40:24 (fig. 8.2:12): complete, 6.3 cm long.

No. 3079/D 5K77:no locus (fig. 8.2:13): complete, 4.8 cm long.

Whetstone.

No. 3057/F 7L08:69 (fig. 8.2:14): fragment, 6.0 cm long by 0.7 cm thick. Project geologist D. Schnurrenberger identified quartz inclusions, making its hard surface ideal for sharpening instruments. This type of stone is found in Wadi Ramm.

Stone Bowls. Fragments of four stone bowls were found and are awaiting further study.

No. 3059/B 7J84:4 (fig. 8.2:15): fragment, beautifully colored limestone in tan, white, and peach, 9.8 cm long, with a rim 2.0 cm thick.

No. 3099/A 7K42:44 (fig. 8.3:1): fragment, limestone shallow "dish," 13.2 cm diameter.

No. 3130/B 7K80:60 (fig. 8.3:2): fragment, basalt, 14 cm diameter.

No. 3181/B 7K80:37 (fig. 8.3:3): beautifully crafted, footed stone bowl of basalt; now in fragments, but was reconstructed leaving one small area empty; 24.5 cm diameter and 5.0 cm high at one foot.

Military Activities

Ballistic Missiles/Slingstones. As with the loaf-shaped grinders, these objects were left in the field unless complete, noting them in field records.

Javelin Point.

No. 3004/A 7K42:Cleanup (fig. 8.3:4): complete, bronze; 8.93 cm long, 0.27 cm thick.

Hardware

Door Socket.

No. 3094/B 7J84:4 (fig. 8.3:5): limestone, 6.7 cm in diameter, 4.5 cm high.

Mallet Head.

No. 3125/B 7J84:7 (fig. 8.3:6): basalt, 10 cm diameter; it was apparently the head of a sledge hammer, but alternatively, it could have been a stone weight to suspend on a rope.

Axehead.

No. 3173/F 7L08:87 (fig. 8.3:7): bronze, 14.0 cm across the cutting edge.

Nails.

No. 3045/F 7L08:71 (fig. 8.3:8): corroded iron, 5.3 cm long.

No. 3046/B 7J89:29 (fig. 8.3:9): corroded bronze, 3.55 cm long.

Miscellaneous Metal Objects.

No. 3058/B 7J84:4 (fig. 8.3:10): corroded bronze fragment, 6.0 cm long.

No. 3076/B 7K41:28 (fig. 8.3:11); two bronze fragments, the larger 2.35 cm long, and the smaller 1.9 cm long.

No. 3142/B 7K80:60 (fig. 8.3:12): bronze fragment, 3.2 cm wide and 0.3 cm thick.

Gaming Pieces

No. 3122/F 6L98:77 (fig. 8.3:13): smooth stone, 2.27 cm long.

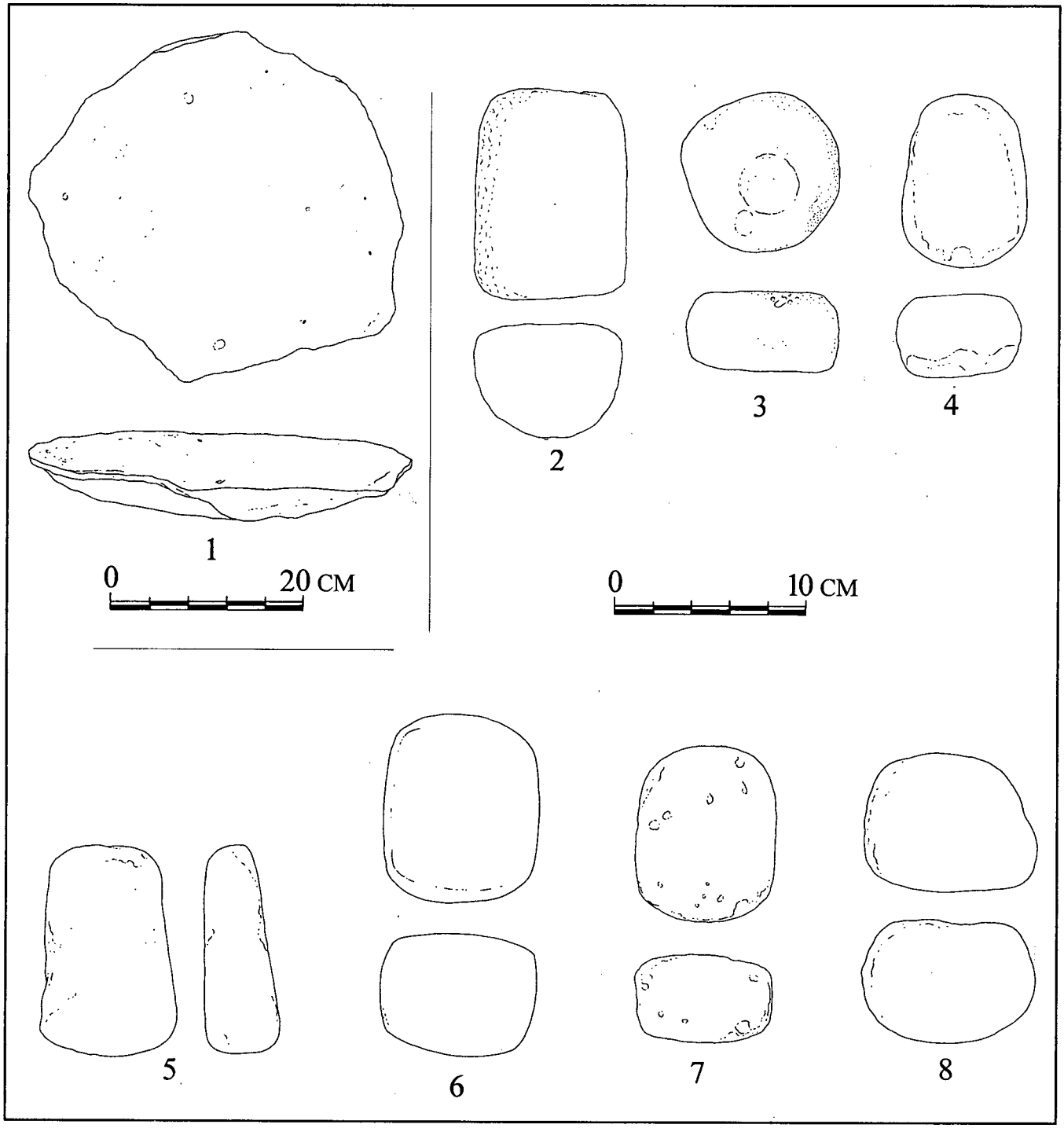

Fig. 8.1. Objects from the 1992 season at Tall al-'Umayri (Drawings by Richard Brennecke).

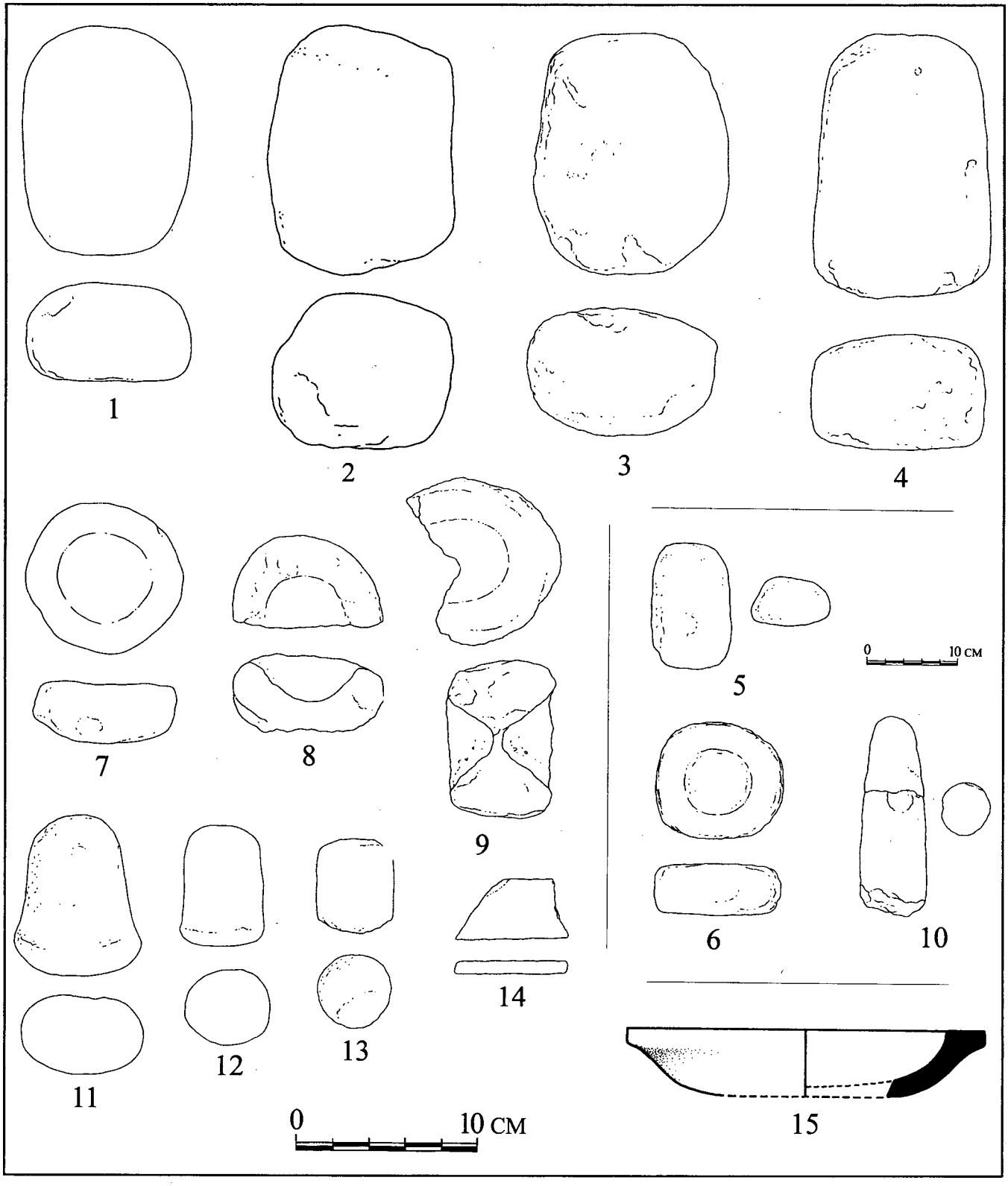

Fig. 8.2. Objects from the 1992 season at Tall al-'Umayri (Drawings by Richard Brennecke; No. 15 by Stefanie Elkins).

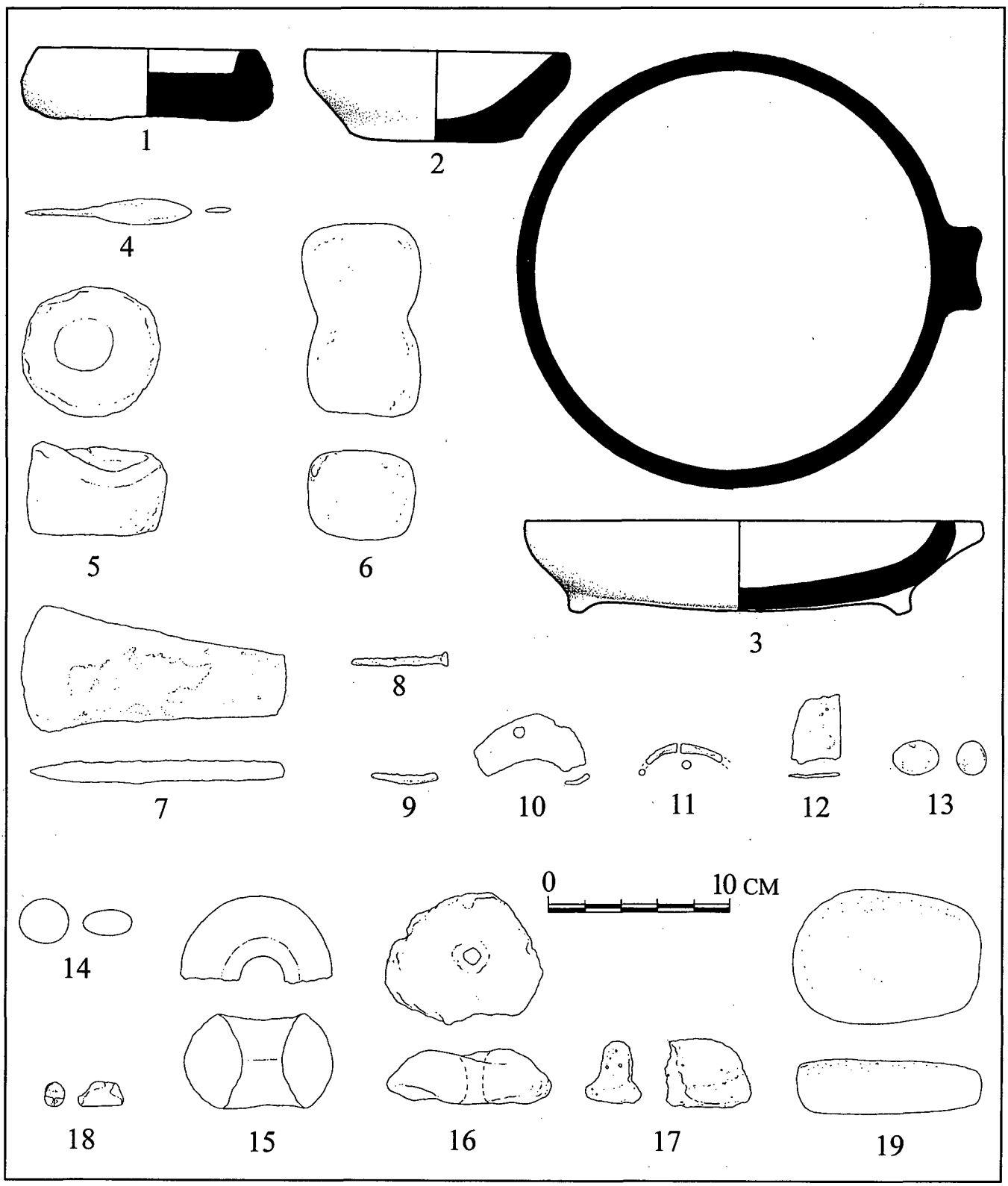

Fig. 8.3. Objects from the 1992 season at Tall al-'Umayri (Drawings by Richard Brennecke; Nos. 1-3 by Stefanie Elkins).

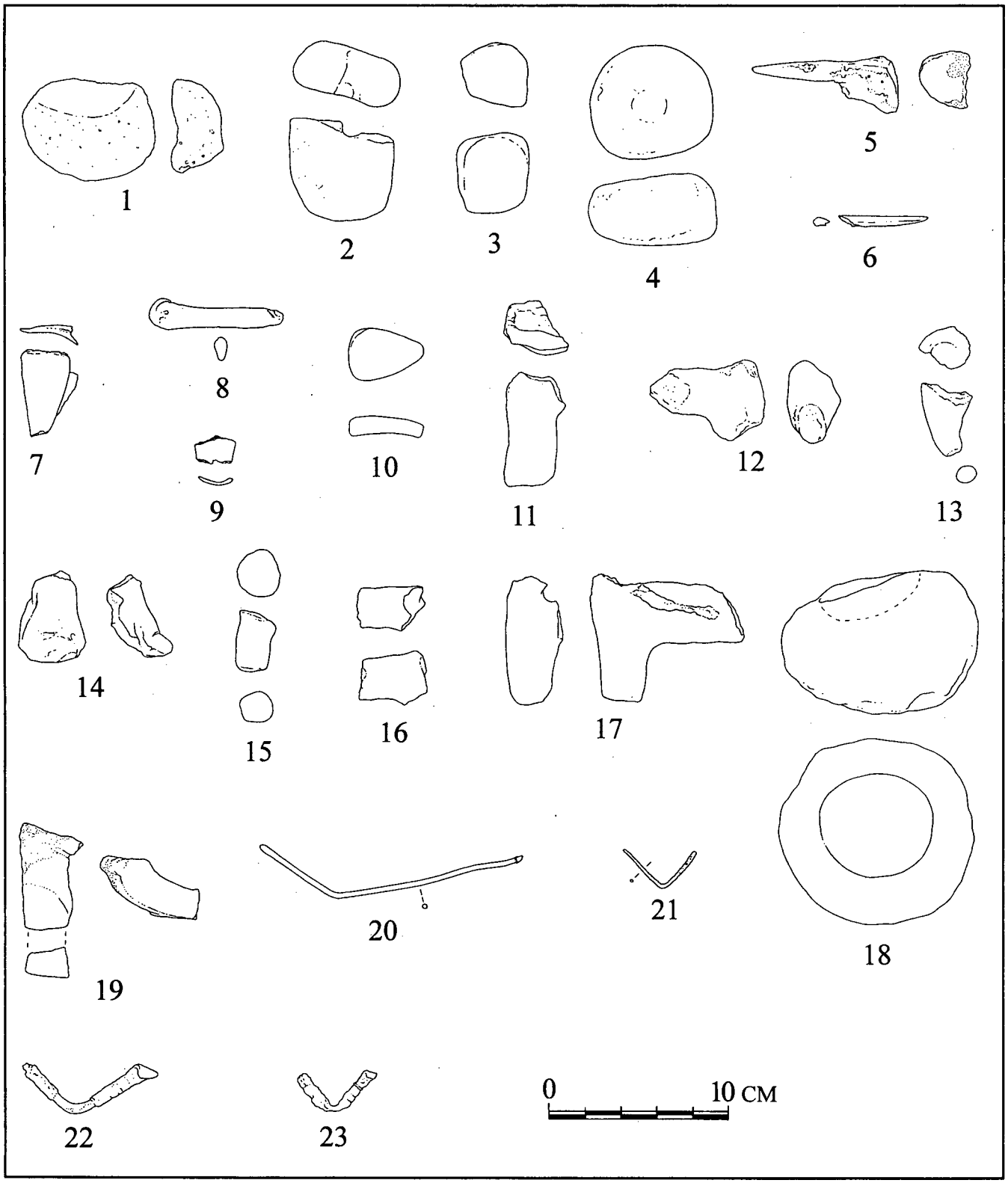

Fig. 8.4. Objects from the 1992 season at Tall al-'Umayri (Drawings by Richard Brennecke).

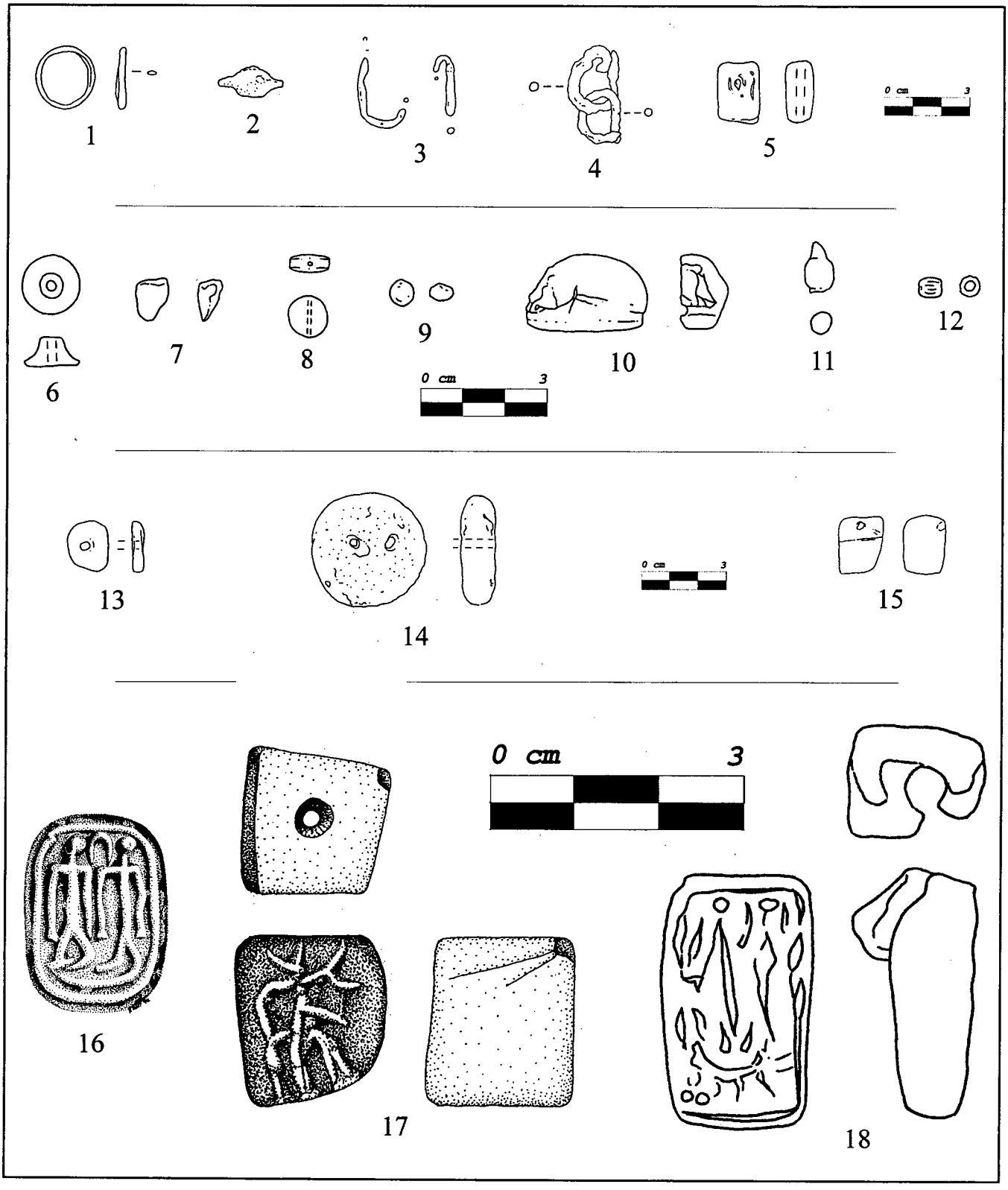

Fig. 8.5. Objects from the 1992 season at Tall al-'Umayri (Drawings by Richard Brennecke; Nos. 16 and 17 by Rhonda Root).

No. 3123/A 7K51:34 (fig. 8.3:14): smooth stone, 2.26 cm long.

Weights

No. 3071/A 7K42:39 (fig. 8.3:15): donut-shaped fragment, basalt, probably 8 cm diameter.

No. 3096/D 5K86:51 (fig. 8.3:16): complete, basalt, irregularly oval with a center perforation; 6.4 cm diameter.

Miscellaneous Stone Objects

No. 3014/A 7K41:Cleanup (fig. 8.3:17): worked pumice fragment, 4.5 by 3.4 cm.

No. 3035/A 7K40:24 (fig. 8.3:18): cylindrical-shaped chert fragment, 2.4 cm long.

No. 3055/B 7J88:10 (fig. 8.3:19): basalt oval, 9.5 by 6.8 cm.

No. 3140/B 7K80:60 (fig. 8.4:1): worked pumice fragment, 6.8 cm long.

No. 3158/A 7K42:57 (fig. 8.4:2): worked sandstone fragment, 5.6 cm in width.

No. 3159/A 7K42:56 (fig. 8.4:3): worked sandstone fragment, 4.3 cm in width.

No. 3170/D 5K86:58 (fig. 8.4:4): worked basalt, 6.7 cm long on the flat side.

Bone Objects

Five finds were classified as bone objects, and one (No. 3167) as ivory.

No. 3080/D 5K77:35 (fig. 8.4:5): fragment of a possible awl, 7.65 cm long.

No. 3126/D 5K76:46 (fig. 8.4:6): fragment of a possible awl, 4.7 cm long.

No. 3129/D 5K87:35 (fig. 8.4:7): possible scraper, the edge measures 4.5 cm long.

No. 3161/D 5K76:46 (fig. 8.4:8): fragment of worked bone, 7.2 cm long.

No. 3167/D 5K76:46 (fig. 8.4:9): curved, polished fragment, possibly ivory, 2.0 cm at its widest.

Miscellaneous Ceramic Pieces

No. 3038/F 7L08:Cleanup (see Dabrowski, Chapter 9, this volume): fragment of a circular object with a raised area at the center perforation; the diameter is 6.67 cm and the thickness at its raised center is 2 cm. It could be part of a toy wheel or a wheel for an animal.

No. 3070/F 7L08:73 (see Herr this volume [inscriptions]): ostracon discovered in Pail 376 at pottery washing. It measures 5.63 cm at its widest and was engraved before firing with the inscription *lb'l* "for Ba'al" (see Herr, Chapter 11, this volume).

No. 3077/F 7L08:74 (fig. 8.4:10): burnisher for pottery, 4.0 cm long.

Figurine Fragments

Fourteen objects were designated "Figurine Fragments" and are being studied by Dabrowski (see Chapter 9, this volume).

No. 3010/A 7K42:Cleanup (fig. 8.4:11): anthropomorphic shoulder, 6.34 cm long.

No. 3020/A 7K42:Cleanup (see Dabrowski, Chapter 9, this volume): "Asherah" head, eye, and hair, 2.35 cm across.

No. 3064/A 7K40:24 (fig. 8.4:12): unknown figurine, 6.07 cm wide.

No. 3082/A 7K41:15 (see Dabrowski, Chapter 9, this volume): pierced foot?, 4.4 cm long.

No. 3091/B 7J84:4 (see Dabrowski, Chapter 9, this volume): zoomorphic head, 6.2 cm.

No. 3095/F 7L08:80 (fig. 8.4:13): zoomorphic foot, 4.1 cm long.

No. 3103/F 6L98:77(see Dabrowski, Chapter 9, this volume): anthropomorphic fragments in turquoise faience with black decoration; Egyptian import depicting a Ptah-like god.

No. 3104/F 6L98:69 (see Dabrowski, Chapter 9, this volume): zoomorphic fragment, 10.56 cm long.

No. 3106/A 7K41:25A (see Dabrowski, Chapter 9, this volume): anthropomorphic figurine, 5.7 cm tall; it may be the lower legs and foot of an "Asherah" plaque.

No. 3108/A 7K42:Cleanup (fig. 8.4:14): zoomorphic leg, 4.7 cm tall.

No. 3109/B 7J84:4 (fig. 8.4:15): zoomorphic leg, 3.15 cm tall.

No. 3110/F 6L98:77 (fig. 8.4:16): zoomorphic torso, 3.4 cm tall.

No. 3113/F 6L98:77 (fig. 8.4:17): zoomorphic hind end with a leg, black decoration, 6.7 cm tall and 8.05 cm long.

No. 3139/D 5K76:46 (see Dabrowski, Chapter 9, this volume): zoomorphic fragment, 4.6 cm wide.

Cosmetic Tools

Mortar.

No. 3023/B 7K80:Cleanup (fig. 8.4:18): small limestone mortar, about 10 cm in diameter across the top; for cosmetic compounds or spices.

Palette.

No. 3039/A 7K51:25 (fig. 8.4:19): fragment of a tooled limestone cosmetic palette for grinding powders; it includes a piece of the base and the top; the present fragment measures 5.65 cm long.

Rod.

No. 3036/B 7J84:2 (fig. 8.4:20): bent but complete bronze kohl stick, ca. 14.5 cm long; with two incised rings.

Jewelry

The objects classified as jewelry include three fibulae fragments, two rings and one fragment, three earrings, two bangles, seven beads and five fragments, one toggle pin, and one button.

Fibulae.

No. 3044/F 7L08:71 (fig. 8.4:21): probably a bent bronze fibula pin, 4.0 cm long.

No. 3047/A 7K40:24 (fig. 8.4:22): bronze fibula bow, 6.5 cm from tip to tip; the pin is missing; although in a corroded state, it can be classified as Stronach's Type III4, "triangular fibulae with grooved rings," typically found at Syro-Palestinian sites from 800 B.C. to the first century AD" (Stronach 1959: 204), with the most important examples dated between the seventh and the fourth centuries B.C. Our example compares favorably with two others found earlier at 'Umayri (*MPP 1*: No. 73/random surface survey Square 8K41 is correctly described but incorrectly illustrated on p. 354; *MPP 2*: No. 741/F 6L99:2).

No. 3093/B 7J86:6 (fig. 8.4:23): corroded bronze bow, 4.15 cm from tip to tip; Stronach's Type III4.

Rings.

No. 3022/B 7J84:2 (fig. 8.5:1): plain bronze penannular ring with a high copper content, 2.2 cm in diameter; the wire is 0.3 cm thick. It could have been worn as a finger ring; it may be modern.

No. 3043/A 7K40:24 (fig. 8.5:2): corroded iron finger ring fragment with a bezel, 1.5 cm in diameter. This is a common type in many periods and can be compared with a bronze ring found earlier (*MPP 2*: No. 653/A 7K71:1 [Fig. 10:56]).

Earrings.

No. 3037/A 7K40:24 (fig. 8.5:3): two fragments of a single corroded bronze lunate earring; the fragment with the characteristic hook for the pierced ear measures 2.2 cm long. It can be compared with an earlier example (*MPP 2*:

No. 1076/A 7K71:6 [Fig. 10.60]).

No. 3063/F 7L08:72 (fig. 8.5:4): corroded but complete bronze earring of the lunate type with a collar projection near the hook. It measures 2.3 cm from the top of the hook to the bottom of the ring. Overlapping it and suspended from the ring is a second, smaller ovoid piece with two ends. This could be a dangle, another earring of the same type, bent and corroded, or a finger ring.

Beads.

No. 3027/F 6L98:69 (fig. 8.5:5): perforated cube of volcanic ash tuff, 2.1 cm on a side. It has indented markings, perhaps for an unfinished seal.

No. 3031/A 7K51:26 (fig. 8.5:6): complete bone bead in excellent condition. The shape is unusual, perhaps like a bell-shaped blossom. The perforation measures 0.65 cm, and the flat-surface diameter is 1.35 cm. An inner ring is carved just inside the outer edge of the flat surface.

No. 3032/A 7K40:24 (fig. 8.5:7): possible fragment of a carnelian bead; one smooth side measures 0.8 cm and the other 0.9 cm.

No. 3033/A 7K40:24 (fig. 8.5:8): well-crafted carnelian bead, of a type classified by Beck as a Cylinder Disc with two Convex Ends (Beck 1972). Its perforation measures 1.0 cm long and 0.41 cm in diameter.

No. 3034/A 7K40:24 (fig. 8.5:9): weathered glass fragment of "medium" blue. Although there is no evidence of a drilled hole or smoothed surface, it was probably a bead. The present diameter is 0.7 cm.

No. 3041/A 7K42:35 (fig. 8.5:10): ovoid bead, designated "amethyst" by Schnurrenberger; there is a smoothly drilled perforation 1.2 cm long. R. Brennecke identified the head and wing case of a beetle carved on one side, making it a scarab, but the engraved area was missing.

No. 3042/F 7L08:71 (fig. 8.5:12): well-shaped melon bead; its perforation is 0.51 cm long and 0.25 cm in diameter. Schnurrenberger identified the stone as "azurite?"

No. 3061/A 7K42:40 (fig. 8.5:11): carnelian fragment of a well-shaped "Lotus Seed Vessel," 1.15 cm long with a base diameter of 0.73 cm.

No. 3176/D 7K76:51 (fig. 8.5:13): gray stone bead with one flat side; the type is classified by Beck as a Cylinder Disc. Its diameter is 1.3 cm with a perforation 0.35 cm long.

Button.

No. 3015/A 7K41:Cleanup (fig. 8.5:14): complete ceramic button, ca. 4.15 cm in diameter and 1.2 cm thick with two holes (see *MPP 2*: 262; fig. 10.89 [Nos. 825/D 6K07:5 and 1342/D 7J86:4]). It could be a toy "buzz," as well.

Seals

Five complete seals and one fragment were found. The inscribed seals are published elsewhere in this volume (chapter 11).

No. 3008/F 7L08:Cleanup (see Herr, Chapter 11, this volume): inscribed scarab with a friable faience coating over a bright red stone core that Schnurrenberger identified as chert. The seal was 0.8 cm thick with a perforation 1.64 cm long.

No. 3012/F 6L98:Cleanup (fig. 8.5:15): unfinished stamp-seal pendant of limestone. It has a partial hole beginning the perforation. Its length is 2.1 cm, while across the top above the hole it is 1.66 cm thick.

No. 3021/A 7K41:Cleanup (see Dabrowski, Chapter 10, this volume): limestone cylinder seal. It is 1.9 cm long and 0.95 cm in diameter.

No. 3025/F 7L08:69 (fig. 8.5:16): volcanic ash (tuff) stamp seal with an oval back. The perforation measures 2.34 cm long and the back is 1.25 cm high. The carving depicts two standing people as stick figures with an upside down crescent between their heads.

No. 3098/F 7L08:79 (fig. 8.5:17): volcanic ash (tuff) stamp seal with a single figure carved deeply into the surface. The seal stands 2.04 cm high and its perforation is 2.0 cm long.

No. 3128/F 6L98:76 (fig. 8.5:18): fragmented, volcanic ash (tuff) stamp seal whose inscribed surface is 2.86 cm long and 1.8 cm wide. Herr suggests the crude depiction is of two people standing on an animal.

Objects and Context

To begin the study of the objects in their archaeological context, we include a list of the objects found this season from selected loci in Fields A and F by square and locus. This list is to provide quick reference to object assemblages. "Cleanup" loci comprise interseasonal erosion deposits and cannot be isolated to any single locus or phase.

How did the objects function *in situ* and how did they function as part of an assemblage? In preliminary reports, such as this one, contextual information is still in its early stages. Nevertheless, to illustrate how the process begins, I shall list the objects from six squares at Tall al-'Umayri, four in Field A (fig. 8.6) and two in Field F (fig. 8.7). Information about the Field A contexts was given generously by John Lawlor and can be found in the Field A report in this volume, although I am responsible for the analyses below.

In both fields we are dealing with late Iron II phases which may be contemporary. The material from Field A comes from the administrative building complex at the western end of the site, while that from Field F, at the eastern edge, stems from a late Iron II/Persian building with cobbled floors. A cautionary note: In both Fields, some of the loci constituted fill layers that included debris in which objects could have originated elsewhere, when builders raised floors for a new phase of construction, as in Buildings A and B of Field A (Phases 6B and 5—see Lawlor, Chapter 3, this volume). Refer to the locus summaries on the Internet for more details.

In Field A, neighboring Squares 7K40 and 7K41 were opened in 1984 and in 1992 work continued, including the removal of the intervening balk. This enabled more complete exposure of Room A3, the eastern room in the southern building of the administrative complex. Many fine objects came from this room in Iron II Fill Locus 7K40:24, above the surface of the room. Square 7K41, especially in Locus 25A, where the LB-type Asherah figurine fragment 3106 was found with occasional LB pottery fragments, abutted Square 7K42 that was worked in 1989. Locus 25A of 7K41 included a wall in the eastern part of the Square where two building phases could be determined during late Iron II/Persian.

Square 7K42 included Iron I walls with two coursesand the fill around the walls. The excavators have indicated that these loci may be outside the southern Building A. Do the finds indicate a domestic household area?

Square 7K51 (in Field A) is in Building B, the central structure with the four-room plan and the late Iron II cobbled floor. The three objects listed were found in the fill, again above the floor.

Phase	Squ: Loc	Object Type	Obj. No.	Phase	Squ: Loc	Object Type	Obj. No.
9	7K42:44	Grinder	3073	5	7K40:24	Carnelian Bead	3033
9	7K42:44	Grinder	3074	5	7K40:24	Blue Glass Bead Frag.	3034
9	7K42:44	Stone Bowl Frag.	3099				
9	7K42:48	Hand grinder	3101	5	7K40:24	Chert Cylinder (Misc. Stone)	3035
9	7K42:57	Misc. Stone	3158				
9	7K42:57	Misc. Stone	3159	5	7K40:24	Bronze Lunate Earring	3037
8	7K51:34	Gaming Piece	3123				
7B	7K42:40	Lotus Seed Vessel Carn. Bead	3061	5	7K40:24	Stone Pestle	3040
				5	7K40:24	Iron Finger Ring	3043
6B	7K41:15	Figurine Frag.	3082	5	7K40:24	Fibula Bow (7-4th c.)	3047
6B	7K41:28	Bronze Frag.	3076	5	7K40:24	Hand grinder	3054
6B	7K41:30	Hand grinder	3075	5	7K40:24	Figurine? Frag.	3064
6B	7K42:35	Amethyst Scarab	3041	5	7K51:25	Limestone Cosmetic Palette	3039
6B	7K42:35	Basalt Weight	3071				
6B	7K51:26	Fine Bone Bead	3031	—	7K41:Clnup	Pumice (Misc. Stone)	3014
5	7K40:24	Carnelian Bead Frag.	3032				
				—	7K41:Clnup	"Buzz"/Button	3015

Fig. 8.6. Objects from Field A.

Phase	Squ: Loc	Object Type	Obj. No.	Phase	Squ: Loc	Object Type	Obj. No.
—	7K41:Clnup	Pestle	3019	—	7K42:Clnup	Asherah Frag.	3020
—	7K41:Clnup	Limestone Seal (Cyl. Pendant)	3021	—	7K42:Clnup	Zoomorphic Figurine Frag.	3108
—	7K42:	Javelin Point	3004	—	7K41:25A	Asherah Frag.	3106
—	7K42:Clnup	Anthro. Figurine Frag.	3010				

Fig. 8.6, *continued.* Objects from Field A.

Squ: Loc	Object Type	Obj. No.	Squ: Loc	Object Type	Obj. No.
6L98:69	Ceramic Unfinished Seal?		7L08:69	Sandstone Whetstone	3057
6L98:?	(Beads)	3027	7L08:71	Azurite Melon Bead	3042
6L98:69	Zoomorphic Figurine Frag.	3104	7L08:71	Fibula Pin Frag.	3044
6L98:76	Seal—figures and scorpion	3128	7L08:71	Iron Nail	3045
6L98:77	Egyptian Figurine Frags.	3103	7L08:72	Bronze Lunate Earring	3063
6L98:77	Zoomorphic Figurine Frag.	3110	7L08:73	Ostracon (Misc. Ceram.)	3070
6L98:77	Zoomorphic Figurine Frag.	3113	7L08:74	Ceramic Pot Burnisher	3077
6L98:77	Gaming Piece	3122	7L08:79	Tuff Seal	3096
7L08:Clnup	Inscribed Scarab Seal	3008	7L08:80	Zoomorphic Figurine Frag.	3095
7L08:Clnup	Toy Wheel for Figurine	3038	7L08:87	Bronze Axehead	3173
7L08:69	Tuff Seal, 2 stick Figurines	3025			

Fig. 8.7. Objects from Field F.

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CHAPTER 9

A Preliminary Report on Figurines and Clay Objects

Boguslav Dabrowski *Warsaw, Poland*
(with Notes by Malgorzata Daszkiewicz)

Egyptian Faience Amulet from Field F

Description. The 1992 season at Tall al-'Umayri yielded a faience dwarf figurine of the type sometimes called *Pataikos* (or Ptah-Patek or Ptah-Sokar). It was allocated to the Horn Archaeological Museum at Andrews University and was registered by the excavation with No. 3103 (figs. 9.1 and 9.2). The figurine was found in Field F on the eastern slope of the *tall* in Earth Layer 6L98:77, a fill layer just above a cobbled floor inside a house made up of Walls 6L98:44A and 6L98:44B (cf. Low, this volume).

The figurine was made of "Egyptian faience", i.e. pure, powdered quartz, which, in a state of moist and elastic paste, was put in a mold and then overlaid with glazing and baked in a kiln (cf. Appendix B, this volume, for the physico-chemical analysis of the amulet by Daszkiewicz). The color of the resulting hard glaze surface on similar figurines was mainly blue and green, but could also be red, black, and yellow-brown, depending on its chemical composition. In the case of our object, light green glaze originally covered the whole body, with the exception of the black-glazed scarab placed on top of the head (Lucas 1962: 155-178; Kühne 1969: 11-26; Riederer 1978: 32-33).

The amulet, 55 mm in height, was found crushed into several small and fragile fragments by a pick during excavation. Although most essential fragments were put together afterwards, the lower parts of the arms, the left leg, and a substantial part of the back are missing. The glaze surface is worn in many places, especially on the head and face. Several small fragments could not be properly joined to the larger, reconstructed piece.

The associated pottery (Pail 317) contained diagnostic sherds dated to the late Iron II/Persian period, but included some early Iron II sherds as well. In other pails from Locus 77, the dates were dominantly late Iron II/Persian.

Although some see "a newborn child," (Murray 1953: 380) or "young child" (McGovern 1985: 18), the faience figurine amulet most likely represents a nude dwarf with a large ovoid head, protruding belly, disproportionately large arms and bowlegs. A black-glazed scarab, of which the lines marking *prothorax* and *elytra* are still recognizable, sits on top of the head. A band representing the hairline or the bottom limit of headgear or a ribbon is visible on the head's left side. A similar band visible on the face's left side depicts the mustache; details of the face, such as the right eye and cheeks are partly visible. The dwarf wears a necklace consisting of two lines framing a row of projected beads; the navel is represented by a small depression on the prominent belly. A horizontal opening, through which a cord was pulled, was modeled on the back part of the figurine formed as a narrow pillar. The leftover fragments indicate other details must have been part of the object (see below).

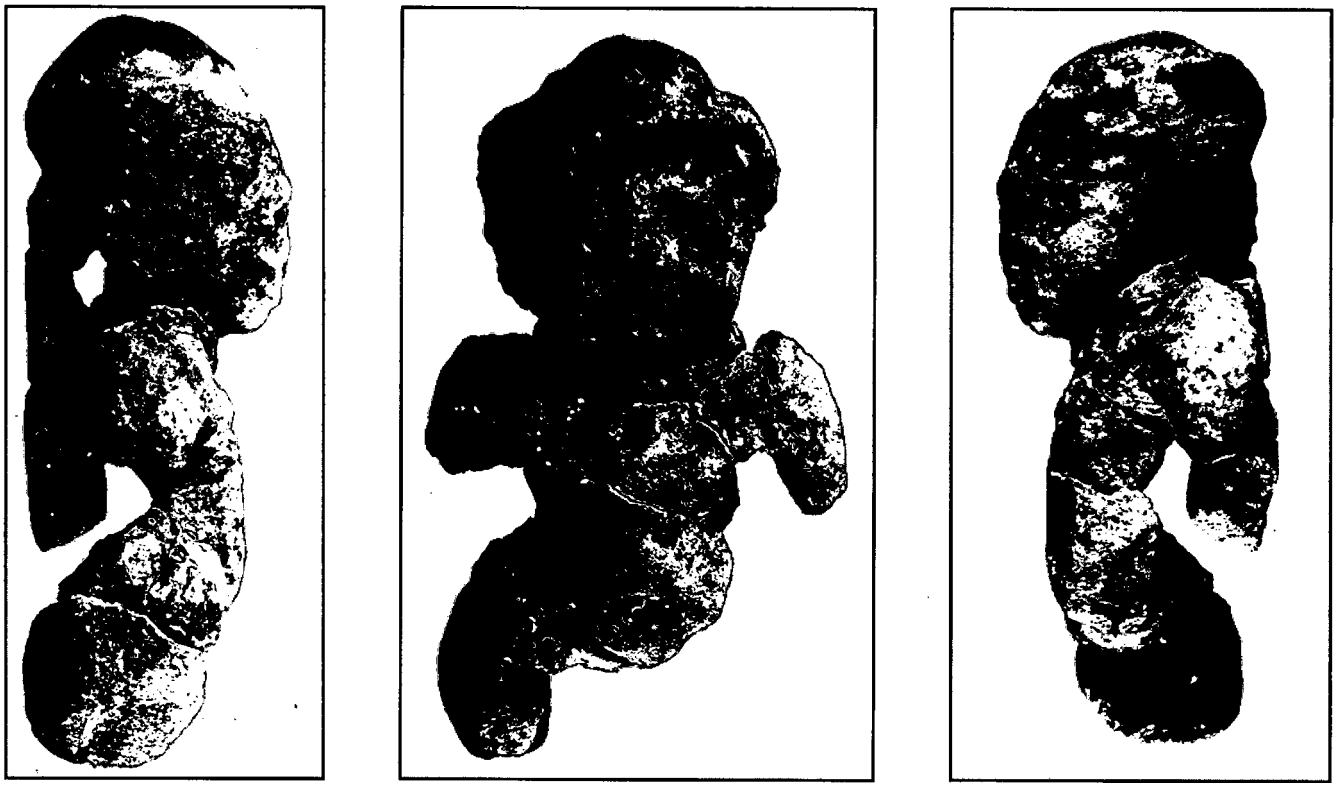
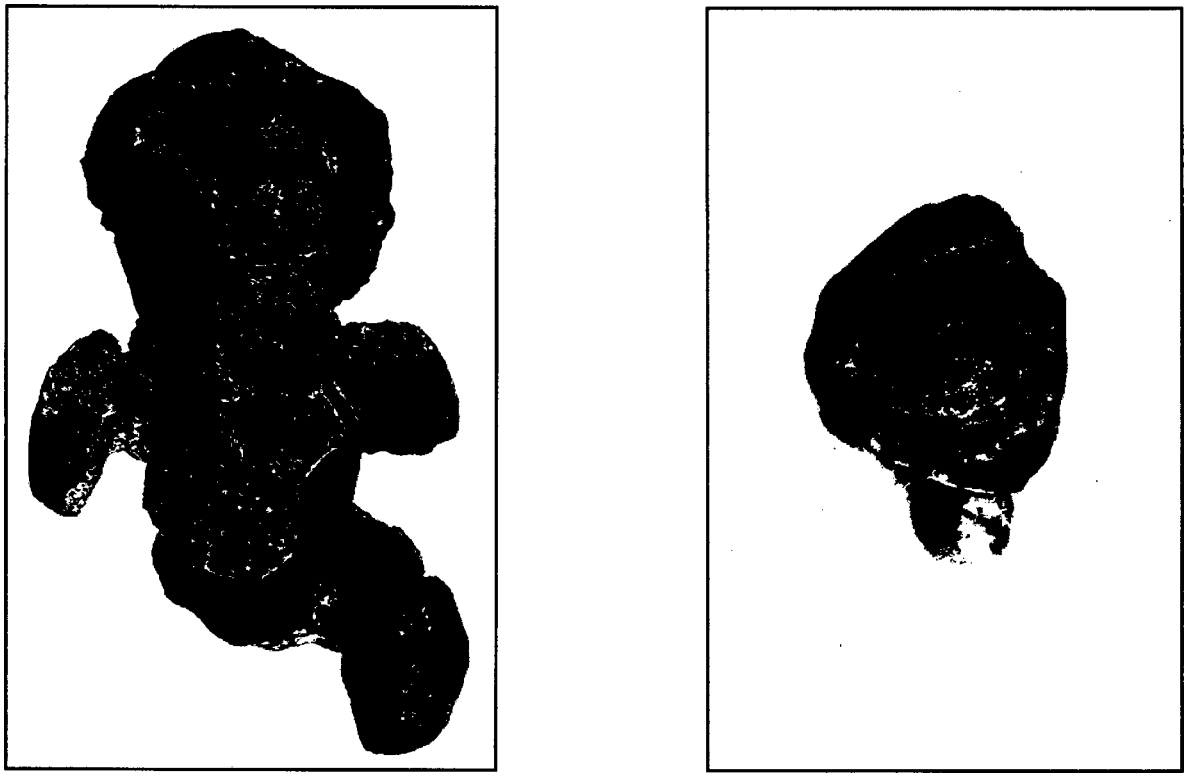


Fig. 9.1. *Pataikos* amulet , No. 3103 (photo by the Department of Mediterranean Archaeology, Jagiellonian University, Kraków, Poland): Upper Left: right side view; Upper Center: front view; Upper Right: left side view; Lower Right: back view; Lower Left: top view.



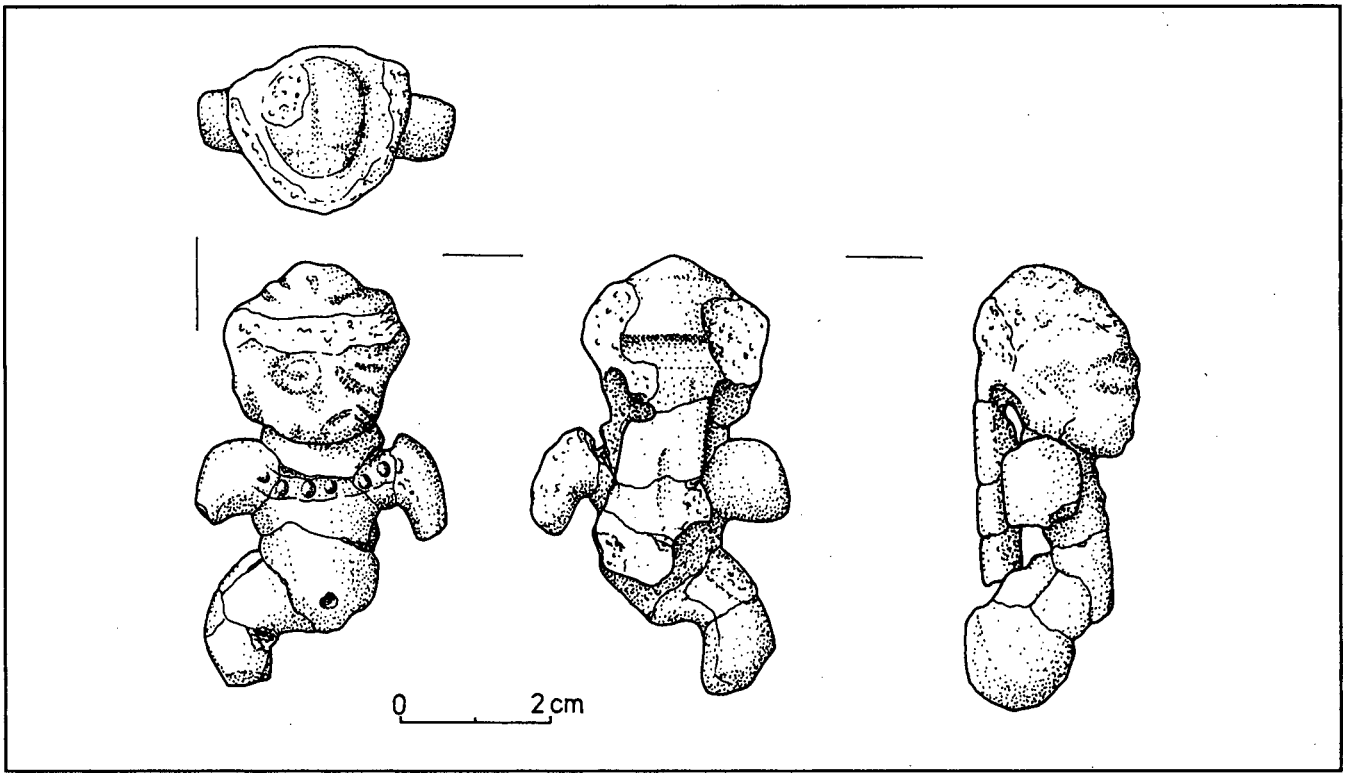


Fig. 9.2. *Pataikos* amulet (drawing by the Department of Mediterranean Archaeology, Jagiellonian University, Kraków, Poland).

Typology, Parallels and Dating. McGovern's classification lists two types of Ptah-Sokar (*Pataikos*) amulets from Late Bronze Age Palestine (1985: 18, 20): Type I.D.1 "Ptah-Sokar - standard" and I.D.2 "Ptah-Sokar - with black open disc on head."

Matzker (1990), having researched the faience and stone amulets from Ägyptisches Museum in Berlin, distinguished eight typological groups of *Pataikos* amulets on the basis of various features: hairdo or headgear; two snakes and/or two knives held in the hands; scarab placed on the head; necklace; two crocodiles on which the dwarf stands; winged Isis-Maat depicted (in relief) on the back; two falcons standing on each shoulder on both sides of the head; two goddesses, Isis and Nephthys, standing on both sides of the dwarf; double depiction; pillar on the back. His typology, however, does not include all groups, e.g. figures wearing a feather crown. *Pataikos* amulets also wear an *atef*-like crown (e.g. from the Temple of Tanit in Carthage [Vercoutter 1945: 294, No. 823]). Interestingly, many Ammonite statues and figurines do as well.

Our object, though unfortunately incomplete and thus missing some details, seems to belong to Matzker's Group 3, characterized by the presence of a scarab and the absence of crocodiles. The goddesses, falcons, hairdo/headgear, were apparently not represented on our amulet. As to the remaining features (snakes/knives held in hands and Isis-Maat relief on the back) one cannot determine whether they were originally present or not.

Similar types of faience and terracotta figurines dating from the late Bronze Age to the Hellenistic/Roman Period, but showing different styles, have been found in Egypt (Daressy 1905-6: Nos. 39.227-39.246; Steindorf 1946: No. 626; an amulet referred to as Ptah-Sokar in feather crown from a Tall er-Retabeh tomb dated to the 22nd Dyn., Petrie 1906: 31-32, Pls. XXXII [upper left], XXXIVA [upper left]), Palestine (Late Bronze and Iron Age examples: Bethsaida [Arav 1995: 44]; Abu Hawam [Hamilton 1934: 27, Pl. 35: 145]; Megiddo [Lamon and Shipton 1939: Pl. 74:11-18; Loud 1948: Pls. 205:12-14, 28, 30-33, 206:48, 50, 52-55, 64]; Beth Shemesh? [Mackenzie 1912-1913: XXVIIIA]; Lachish [Tufnell et al. 1940: Pls. XVI:4, XXI:51; Murray 1953: Pls. 34:11, 35:44, 36:49; Tufnell et al. 1958: Pl. 29:52, 54, 55, 62, 63? [[cf. McGovern 1985: 18, Fig. 6], 65]; Gezer [Macalister 1912: Pl. LXXXIV:30]; Far'ah (S) [Petrie 1930: Pls. XXXIII:359-361, XXXV:415; MacDonald et al. 1932: Pl. XLIX:914, 929, Group 960]; Beth 'Eglaim [Petrie 1931-4: Pl. VIII:172[?]]; Jerisheh [Giveon 1988: 76-79, Nos. 87, 90]; Far'ah (S) tombs [MacDonald et al. 1932: 24-26, Pls. 48, 49, 51]; possibly Beth Shan and Beit Mirsim [McGovern 1985: 20]; cf. Petrie 1914: Pl. XXXI:176k; no examples seem to be published from Transjordan.), Phoenicia (Sarepta [Pritchard 1975: Fig. 43.5]; 'Atlit [Johns 1933: 87, Nos. 732-733, Pl. XXVIII.732 = Rowe 1936: A.1, Pl. XXX.A.1]; cf. also Contenau 1926: 200, Fig. 56; Herter 1949: col. 2552; Poppa 1978: 123, Pl. 22: 17), Cyprus

(Wilson [1975: 94, n. 159] gives five examples of terracottas representing "the Egyptian god Ptah as a dwarf" which belong to the 6th and 5th centuries B.C.), Greece (Popham et al. 1980: Pls. 186: 32.17 and 235a [left]), Carthage (Vercoutter 1945: 288-295, Nos. 800-827), Sardinia (Acquaro 1977: 22, Nos. 578-763), Etruria (Hölbl 1979: pp. 112-118 in vol. I; Pls. 49-54 in vol. II), Spain (Gamer-Wallert 1978: Pls. 36-37), and as far north as modern southwestern Poland (Lusatian Culture; Kosinski and Sliwa 1984: 61-67; Sliwa 1993: forthcoming.).

The earliest examples of such dwarf-like representations come from Old Kingdom Egypt (Morenz 1954: 289, n. 52). But, together with other Egyptian faience amulets representing Sekhmet, Isis and Horus, Harpocrates, Bes, Nefertum, Mut, Horus eye, diverse animals, etc., *Pataikoi* do not seem to have found their way into Palestine until the 18th Dynasty, i.e. the late Bronze Age (McGovern 1985: 18, 20; Murray 1953: 379). They were common both in Egypt and Palestine in the Late Dynastic Period, with the greatest popularity during the 22nd, 25th, and 26th Dynasties (Murray 1953: 379; Herter 1949: cols. 2553-2554). They seem to have appeared in Phoenicia in the 8th century B.C. and lasted down to the Hellenistic period. Their presence elsewhere in the Mediterranean basin seems to have been related to their popularity in the Phoenician colonies (Herter 1949: 2553-2554).

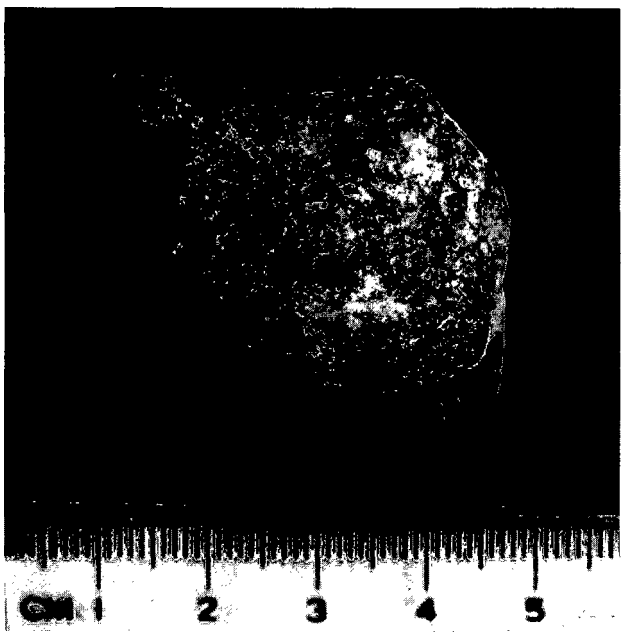


Fig. 9.3. Solid animal hindquarter, Object No. 3139.

Identification, Symbolism, and Function. The *Pataikos* amulets from Egypt that depict dwarfs were a manifestation of folk religion (Seyfried 1986: cols. 1432-1435). They are generally assumed to have been linked with the Memphite god Ptah on the following basis: some amulets bear a short hieroglyphic or demotic inscription containing the name Ptah (Vercoutter 1945: Nos. 817, 823; Acquaro 1977: No. 599; Spiegelberg 1925: 8-11); Herodotus (III 37) compares an image of Hephaistos (identified with Ptah) from his temple in Memphis with pygmy-like *Pataikoi*, with which the Phoenicians embellished the prows of their ships. Herodotus also says that the *Kabeiroi*, whom he identifies with sons of Hephaistos (Ptah) and who had their temple in Memphis as well, were of similar posture (Rawlison 1875: 438-440; Morenz 1954). Dwarfs were frequently related to Ptah (Holmberg 1946: 182-185; Seyfried 1986: cols. 1432-1435; Bonnet 1971: 584). Some point to the proximity of the name *Pataikos* to that of Ptah, yet this is not certain (Rawlison 1875: 439, n. 1; Herter 1949: col. 2550; Griffiths 1982: col. 915, n. 5).

The iconography of *Pataikos* amulets resemble representations of other related gods: "Horus-the-Child", transliterated in Greek as Harpocrates, is often represented on small stelae, called *Horus cippi*, as standing on croco-

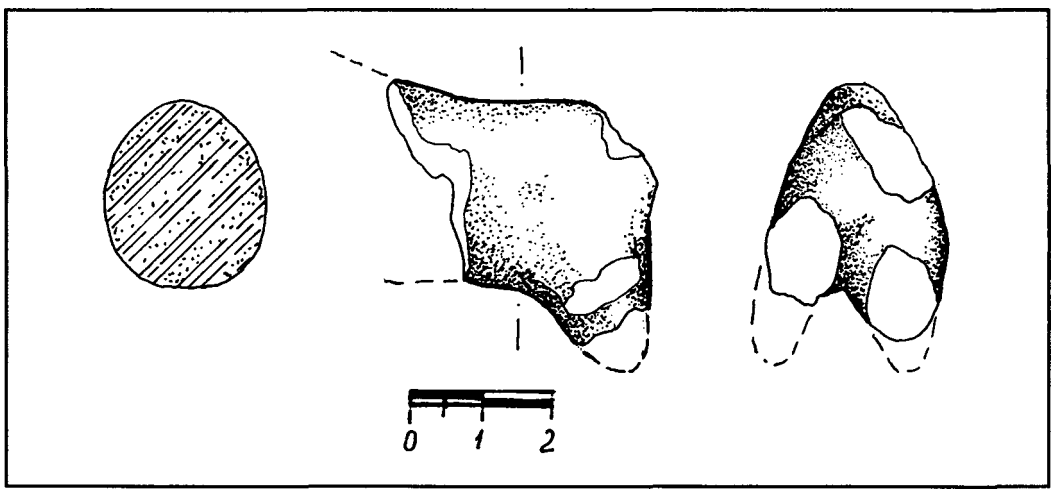


Fig. 9.4. Drawing of solid animal hindquarter, Object No. 3139.

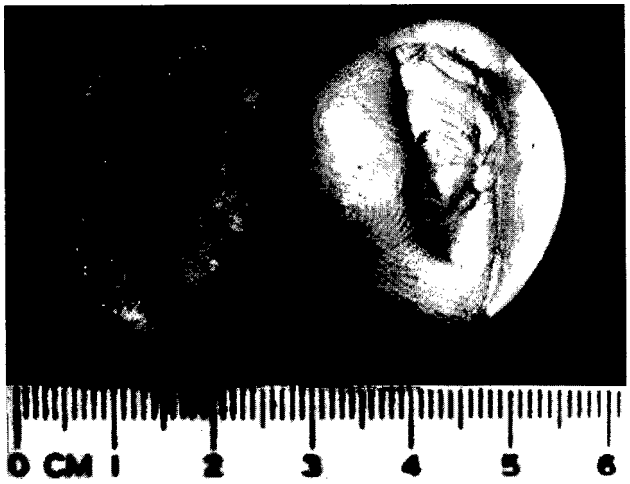


Fig. 9.5. Mold of a female face, Object No. 3020.

diles, strangling snakes, and/or accompanied by Isis and Nephthys. This manifestation was very popular in the 26th Dynasty (Wilson 1975: 81; cf. Hall 1977; Bonnet 1971: Fig. 143, p. 586; Giveon 1988: 76).

The affinity to a hawk-headed deity identified with Sokar/Sokaris (Egyptian god of the dead closely connected with Ptah [Morenz 1954: 282; Brovarski 1984: 1059]), might be seen in double figurines representing both *Pataikos* on one side of an amulet and a hawk-headed dwarf on the other (Dunham 1950: 16, Pls. LII:A, B and LVII:B; Sliwa 1985: No. 78; cf. Rawlison 1875: 438; Bonnet 1971: 586). Plain *Pataikos* figurines also are often labeled Ptah-Sokar (cf. McGovern 1985: 18).

Pataikos dwarfs also show similarity to another very well known grotesque deity, Bes (Wilson 1975: 77-103; Giveon 1988: 76). Figures of Bes and *Pataikos* may even be difficult to distinguish (McGovern 1985: 20). Vercoutter associates Punic "Ptah-Patèques" with Melqart (1945: 288). It is also described as "Ptah-Sokar-Osiris" (Johns 1933: 87, No. 732; Rowe 1936: A.1; Giveon 1988: 76).

The term *Pataikos* can also be understood in a wider context. It may represent other gods since the god Ptah was perceived to encompass all the deities (Morenz 1954: 283-284; Hückel 1934).

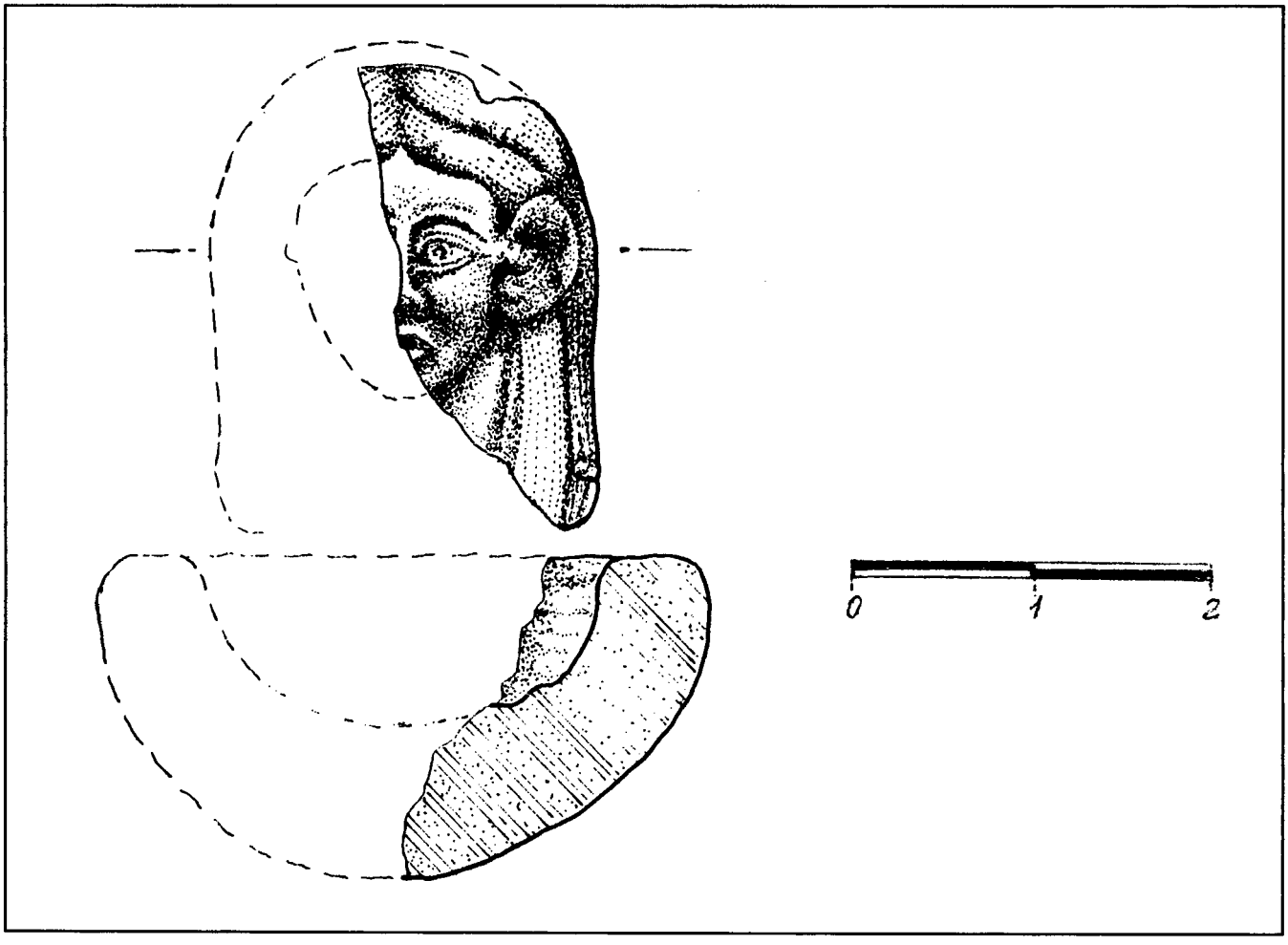


Fig. 9.6. Drawing of a female face, Object No. 3020.

The function of *Pataikoi* represented on the prows of Phoenician triremes undoubtedly was apotropaic, i.e. to drive away any evil forces from seamen and their ships, as well as to frighten enemies on hostile ships and sea coasts.

The *Pataikoi*, when worn as amulets on an individual's neck as indicated by the loops on their backs and Egyptian texts (Spiegelberg 1925: 11), had parallel purposes to those on the prows of Phoenician ships and to Horus stelae and Bes amulets, that is, to shield against danger and illness, against bites of animals, to protect sleep, to serve the household, etc.

Pataikos talismans with known archaeological contexts have been found in large numbers of graves, pointing to their magical role of providing protection in the afterlife. However, they have also been found in temples (Contenau 1926: Fig. 56) and occupational strata.

Conclusion. The 'Umayri amulet does not seem to have been made by either a local or itinerant artist. The material, manufacture, and style suggest it was imported to central Transjordan from elsewhere. Since the object demonstrates clear Egyptian inspiration and is a part of the large group of contemporary Egyptian amulets found in Palestine, one may point to an artist in the Delta as responsible for its modeling. Phoenician mediation, however, cannot be excluded (Homès-Fredericq 1987: 89-96).

Given the date of the associated pottery as well as the range of popularity of *Pataikoi*, the 'Umayri amulet would fit in the 7th-6th centuries BC.

The identification of the amulets with Ptah-like gods could have been perceived distinctively in different parts of the Mediterranean, including Jordan. The 'Umayri object could have been identified with a local divine being/genius. Its primary function, however, probably remained similar to amulets from Egypt and other parts of the Mediterranean.

Terracotta Figurines

Apart from the terracotta figurines from the recent season we are adding an update on two fragments of model shrines from the 1987 and 1989 seasons.

Terracottas from the 1992 Season. The 1992 season at Tall al-'Umayri yielded 14 pieces of terracottas including three human representations, nine animals including the first EB fragment from the *tall*, a fragment of a wheel-model, and one undefined fragment. Altogether, four seasons of excavation yielded some 95 anthropomorphic and zoomorphic terracotta figurines or fragments of figurines, vessels, stands, shrine or house models, molds, and other objects. There are 27 human motifs (17 female, 4 male and 6 undetermined), and about 50 animal motifs. The remainder consists of undetermined fragments.

A large number of the animal figurines belonged to zoomorphic vessels. However, we have not succeeded in finding "bodies" of these vessels. Two possible explanations can be offered. One is that after a vessel was broken its zoomorphic (or anthropomorphic) motif was kept for certain reasons. A more probable explanation, however, is that some of the vessel fragments were not recognized as different from normal body sherds in the pottery processing of the excavation.

Description of Selected Figurines

A description of seven interesting pieces from the 1992 season will follow. Apart from No. 3104, allocated to the Department of Antiquities of Jordan, all fragments are housed in the Horn Archaeological Museum.

Solid rear end torso fragment No. 3139 (figs. 9.3 and 9.4) is so far the only EB zoomorphic terracotta from Tall al-'Umayri. It is a solid fragment of a free standing figurine representing a quadruped. It was found in Field D within an occupational deposit (Locus 5K76:46) in an open area between houses belonging to Phase 6, dated late EB III (Harrison, this volume). The figurine could be as early as EB II, however. Parallel examples are found at Yarmut (de Miroschedji 1988: 84-85, 234-235, Pls. XX-XXII).

A fragment of a mold of a female face, No. 3020 (figs. 9.5 and 9.6), was found in Field A in a cleanup locus (interseason erosional deposits) in Square 7K42 from a pail with Iron I and late Iron II pottery. The features of the face clearly correspond to those on two molds from Amman Citadel Tomb F (Dornemann 1983: Fig. 88:1 and 2). The former shows the same unsuccessful rendering of an ear as the 'Umayri mold. Dornemann presents a detailed discussion of the Amman citadel Tomb F molds, including their hair styles, facial features, and ears, along with parallel painted female heads from the same tomb. He offers a late Iron II date for them, most probably 8th-7th century B.C. (Dornemann 1983: 132-135). Analogous iconography may be found on ivories from Nimrud (Barnett 1975: Pl. LXIII.S150b).

A solid standing human fragment from Field A, No. 3106 (fig. 9.7; cf. Dabrowski forthcoming), was found during balk removal among the stones of a small wall (7K41:25A) which has not yet been clarified stratigraphically, but was located above the Phase 6B floor, dating the depost to the late Iron II/Persian range (Lawlor, this volume). It shows the lower part of the torso and legs dressed in an ankle-length pleated robe and a sash of which two ends are still visible. The fragment, which stood on a base, was pressed from a single mold. The figure's right arm hangs along the body and it appears that the left arm was bent at the elbow, because there is no visible trace of that arm. The closest iconographic parallel to this figurine—pleated robe, long ends of the sash, position of the arms—is the Yerah 'Azar limestone statue from the Amman

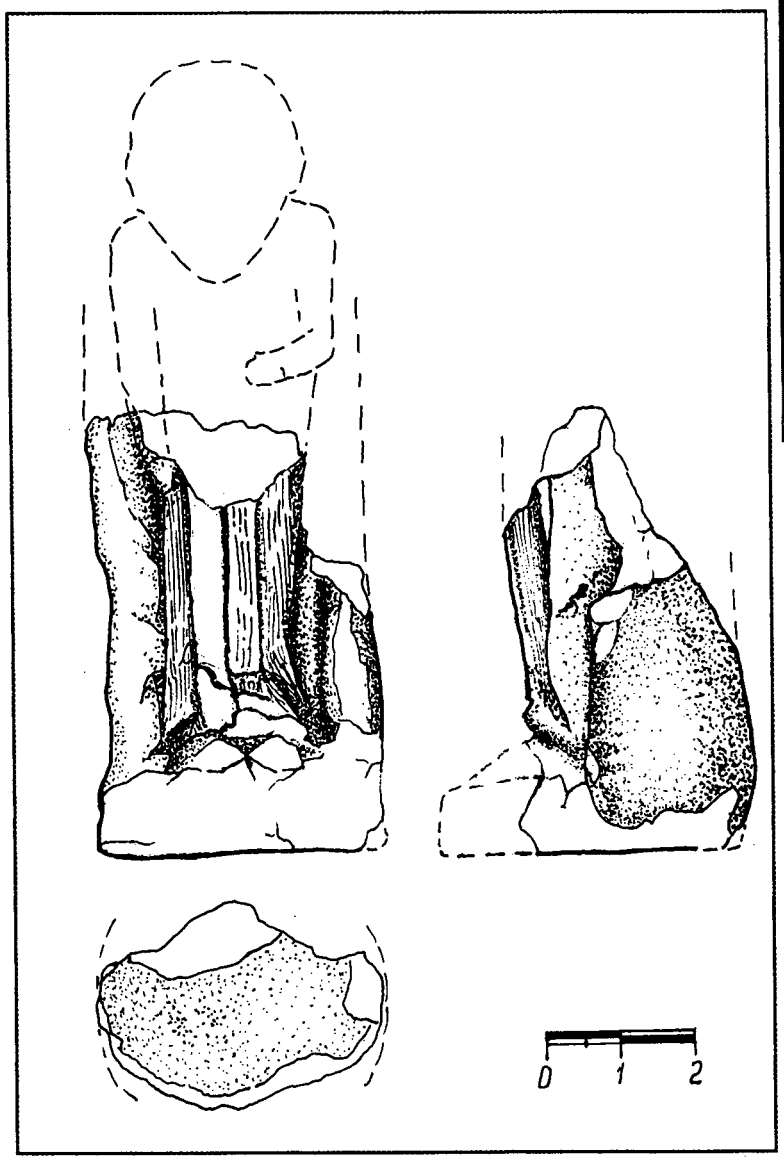


Fig. 9.7. Solid standing human, Object No. 3106.

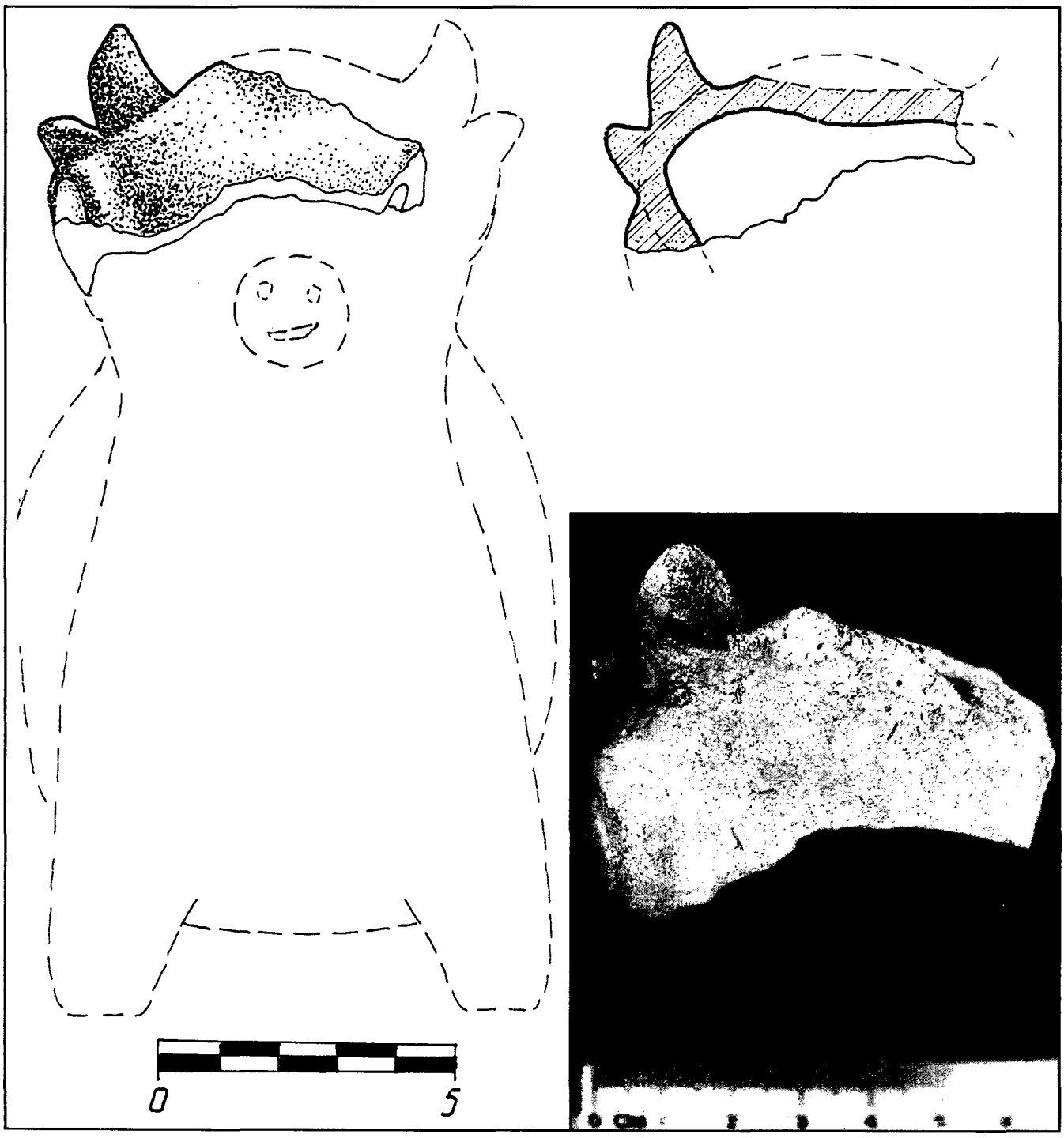
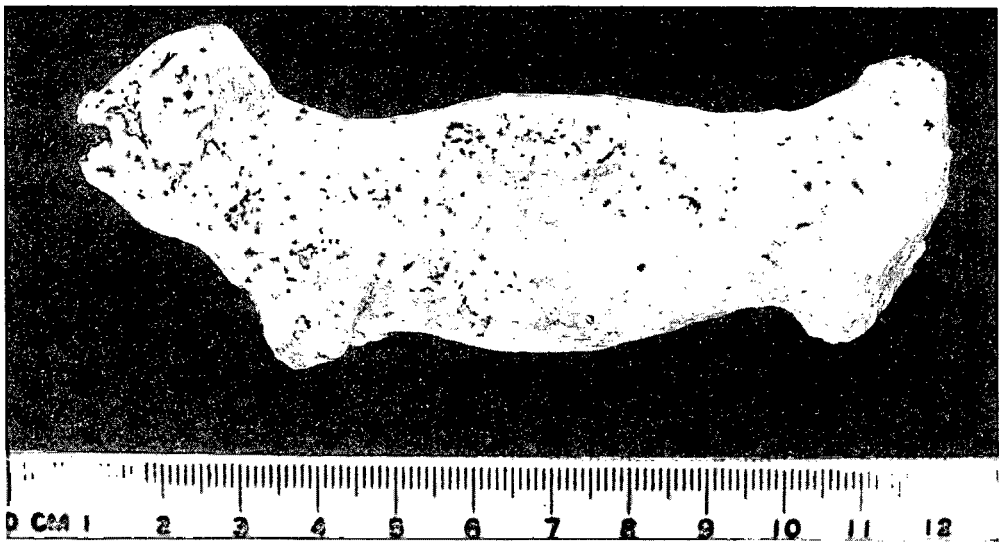


Fig. 9.8. Hollow bovine head, Object No. 3091.



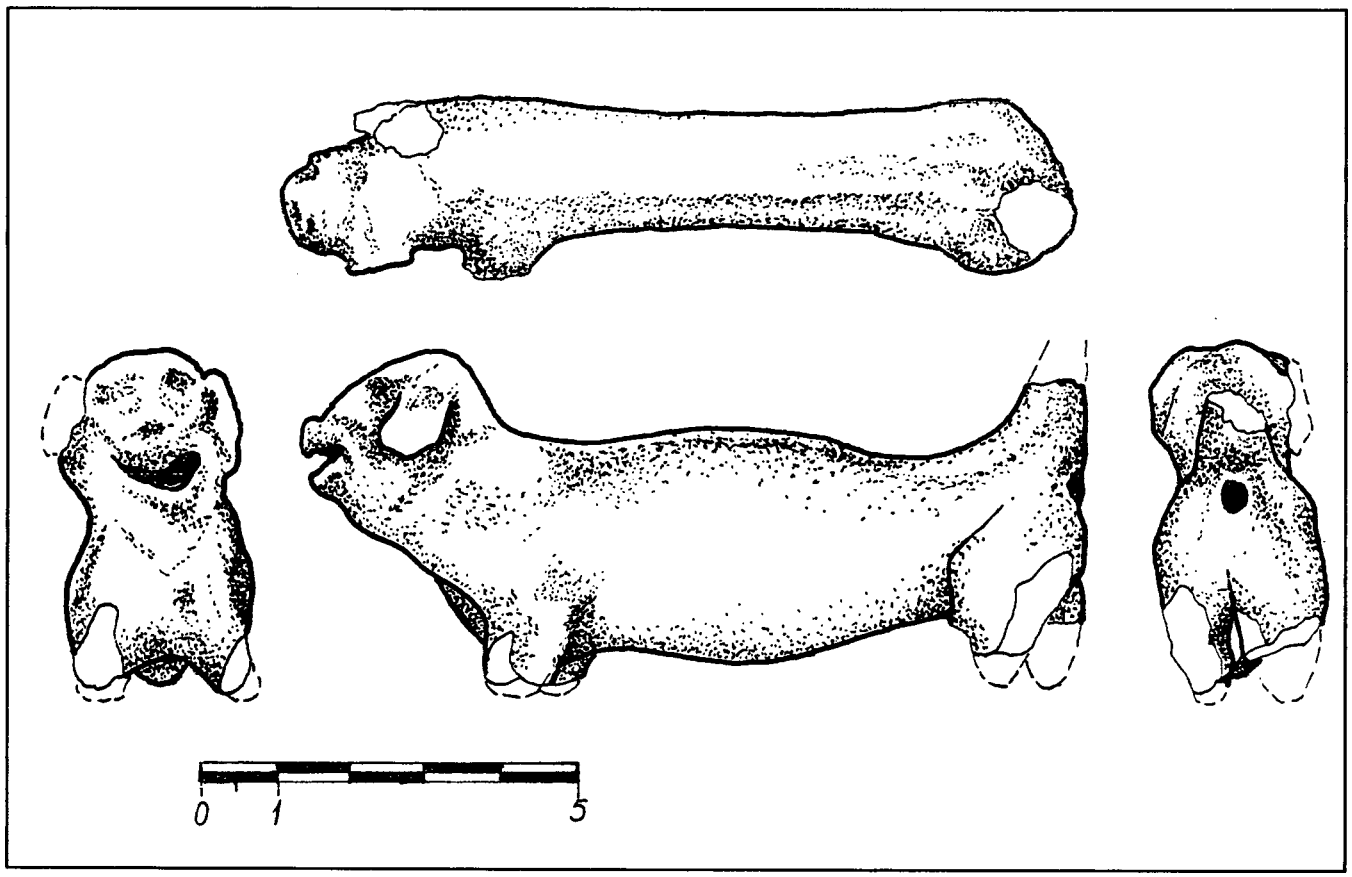
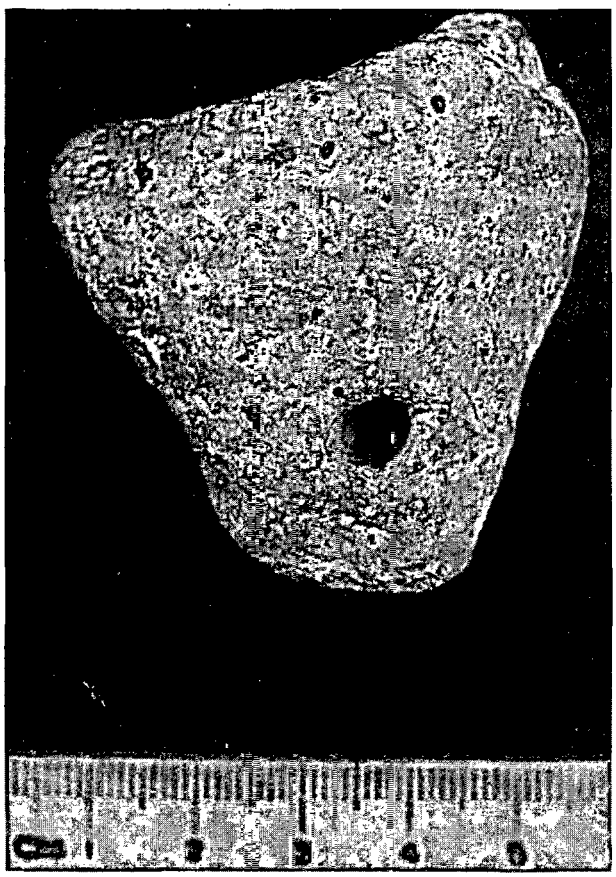


Fig. 9.9. Solid pig, Object No. 3104.



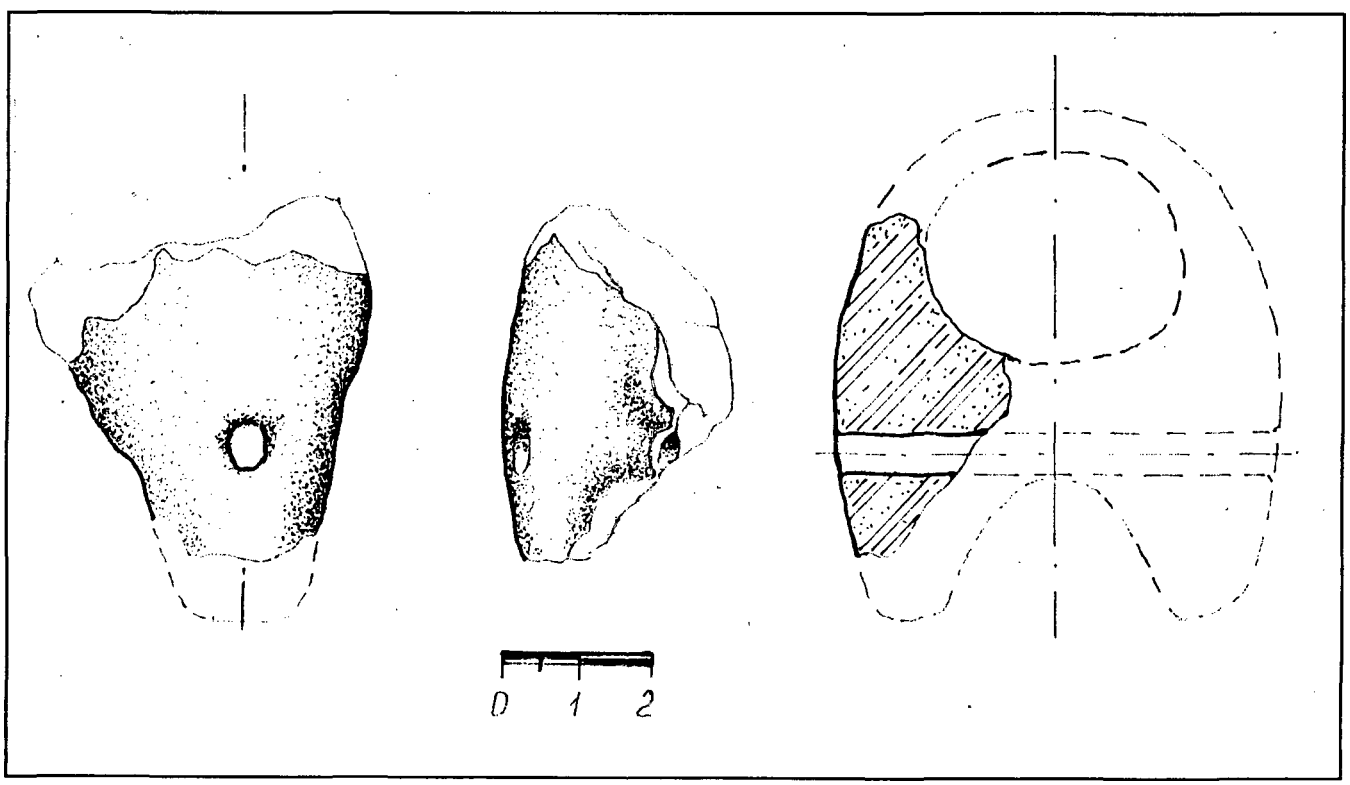
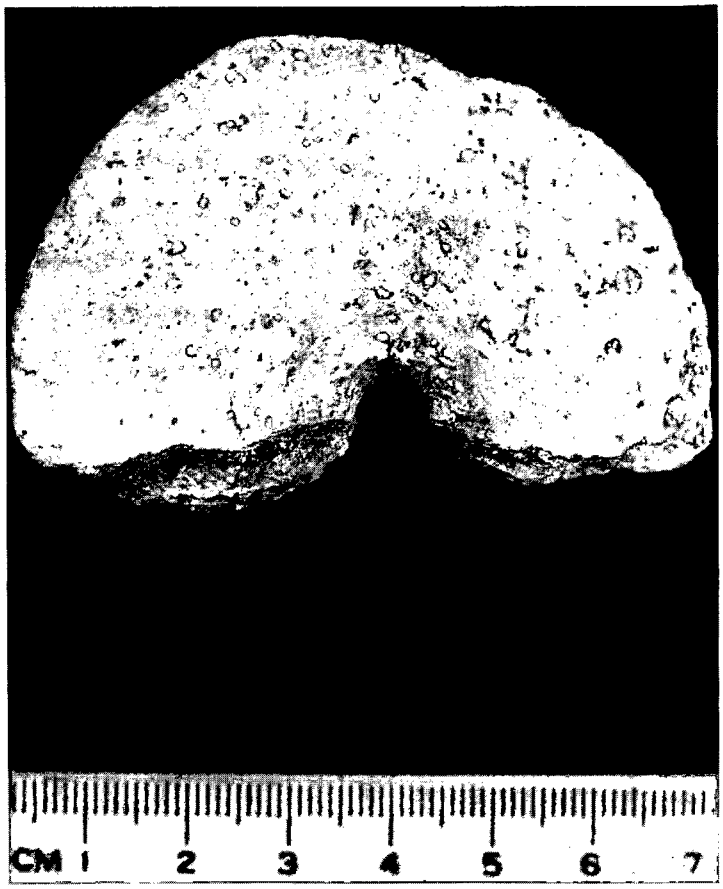


Fig. 9.10. Hollow wheeled quadruped, Object No. 3082.



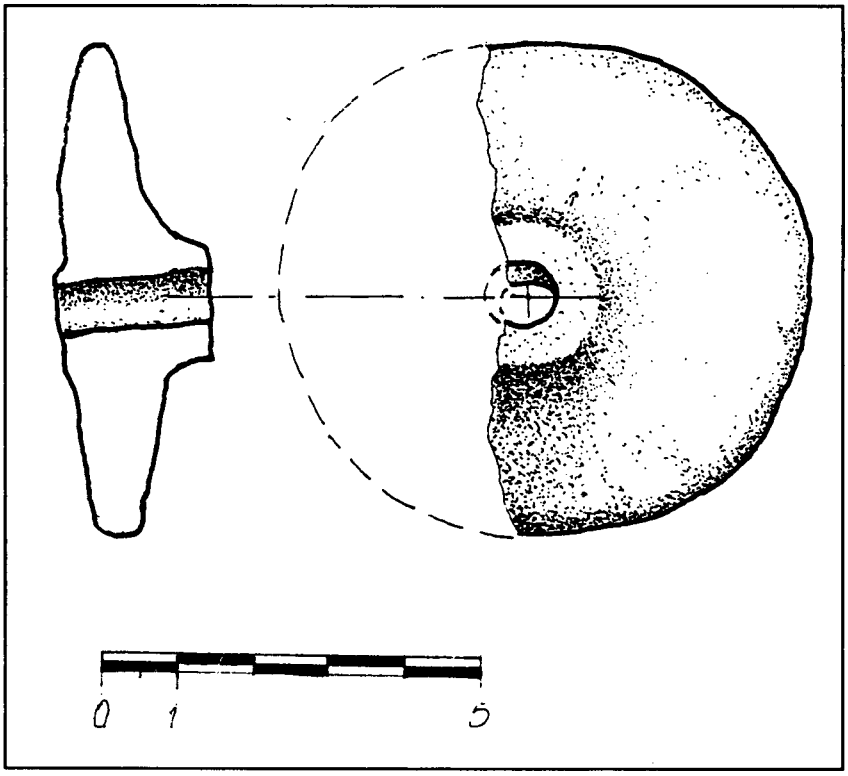
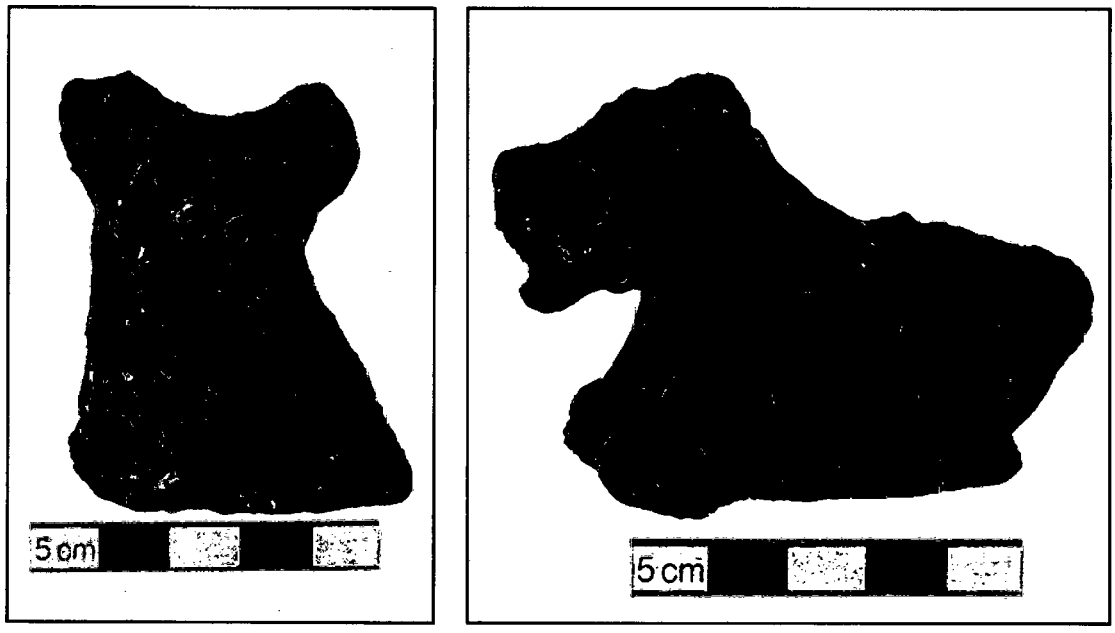


Fig. 9.11. Model wheel, Object No. 3038.



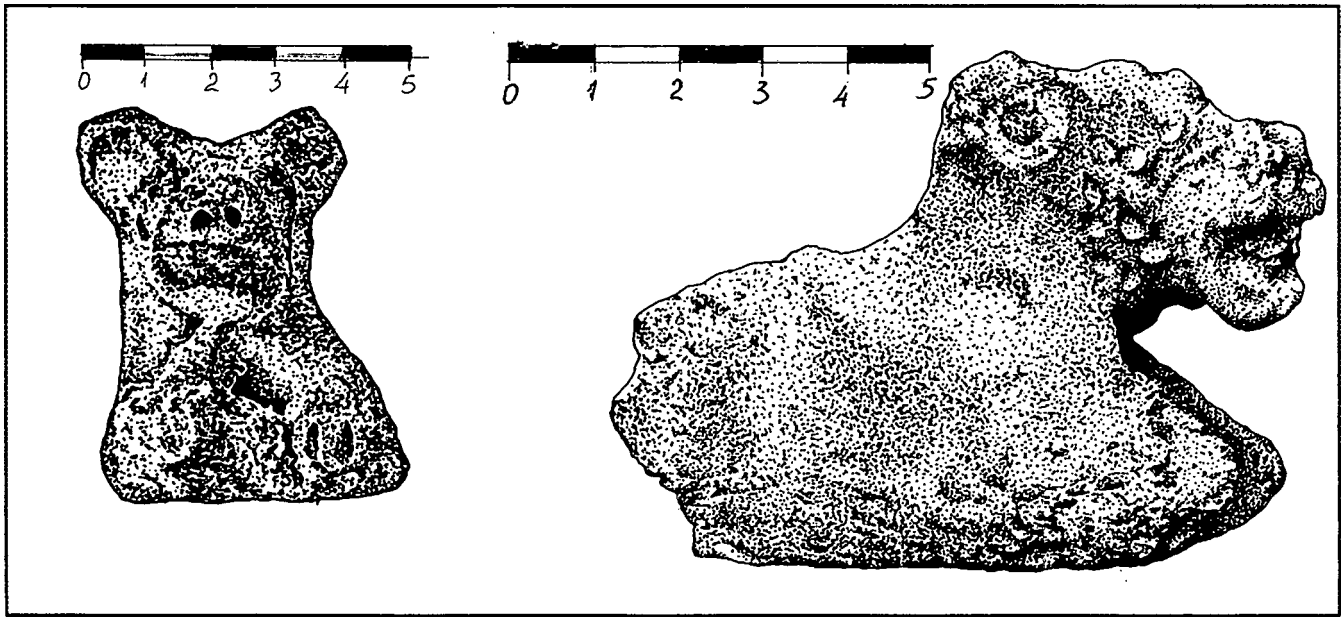


Fig. 9.12. Model shrine, Object No. 1344.

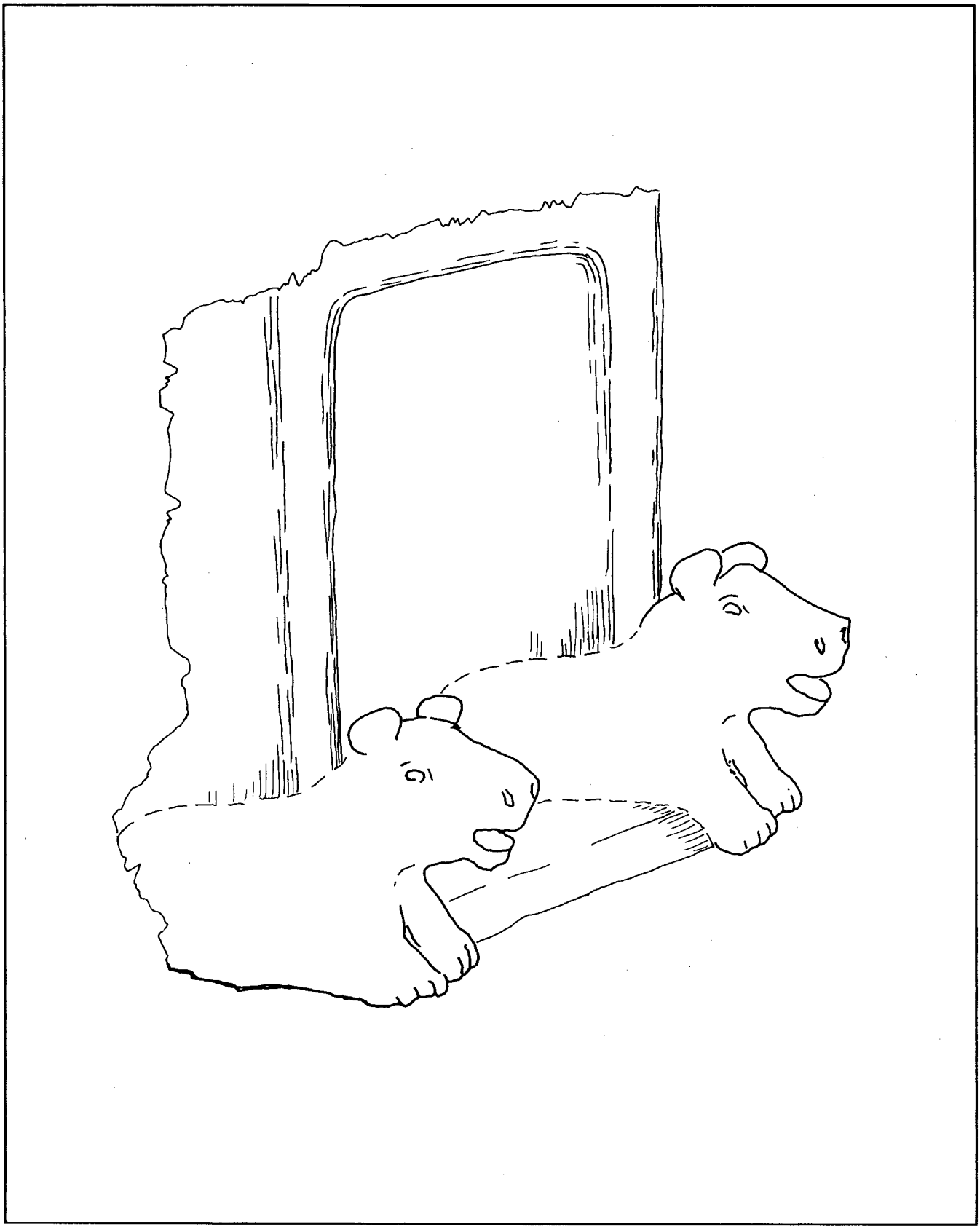


Fig. 9.13. Proposal of a model shrine, Object No. 1344, reconstruction.

Citadel (Amman Museum No. J1656; Zayadine 1991: Fig. 38). The other two complete male stone statues from the Amman region—one of limestone from Khirbet el-Hajjar (Amman Museum No. J12953; Zayadine 1991: 41) and one of basalt from Amman Citadel (Amman Museum No. J1657; Zayadine 1991: Fig. 39)—show the same gesture of arms (cf. also two headless torsos from the Amman Citadel [Amman Museum No. J8124: Abou Assaf 1980: Torso XI; Zayadine et al. 1989: 359, Pl. LI]). All statues are dated to the 8th century BC. A bronze caryatid censer from the Umm Udhaina tomb in Amman represents a female dressed in a robe with horizontal folds and a sash with long ends and shows the same gesture of hands as the male stone statues (Khalil 1986; Zayadine 1991: Fig. 115). The censer is dated to the early Persian period (6th century BC). A pleated, belted robe appears also on a terracotta female figurine from Deir 'Alla dated to 600-300 BC (van der Kooij and Ibrahim 1989: 107, No. 152).

A bovine hollow head fragment (fig. 9.8) from Field B, No. 3091, is part of a zoomorphic vessel. It was from Fill Layer 7J84:4, which lay directly above Surface 5 of the late Iron II/Persian phase on a bedrock shelf within the Iron I moat (this phase could not be connected with any of the late Iron II/Persian phases inside the fortification system—Clark, this volume). A very close parallel to this fragment is on display in the Madaba Archaeological Museum. It has a juglet-like body, small opening on the back, spouted snout, applied legs, and tail.

An almost intact solid pig figurine, No. 3104 (fig. 9.9), was uncovered in Field F from a locus (6L98:69) of occupational deposits outside (east of) the large late Iron II house in the western extremity of the field (Low, this volume). The pottery was mixed late Iron II and Iron I (with MB and EB sherds, as well). Several iconographic parallels are reported from Palestinian sites: a solid pig (wild boar) figurine from Jemmeh (Petrie 1928: 18, Pl. XXXIX.7); zoomorphic vessels shaped like pigs (wild boars) from Mazar (Jordan University Museum; 'Amr 1980: No. 201); Megiddo (Loud 1948: 247.6); Gibeon (Holland 1975: J.III.b.4) (one of them, in the Amman Museum J6407, is of unknown provenance ('Amr 1980: No. 202); and a pig(?) figurine fixed to the bottom of a kernos bowl from Beth Shemesh (Grant 1934: Fig. 4.1931-26).

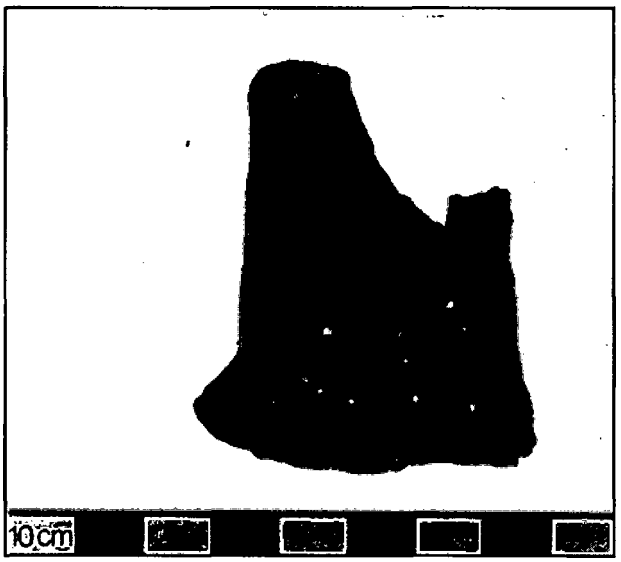


Fig. 9.14. Miniature model shrine.

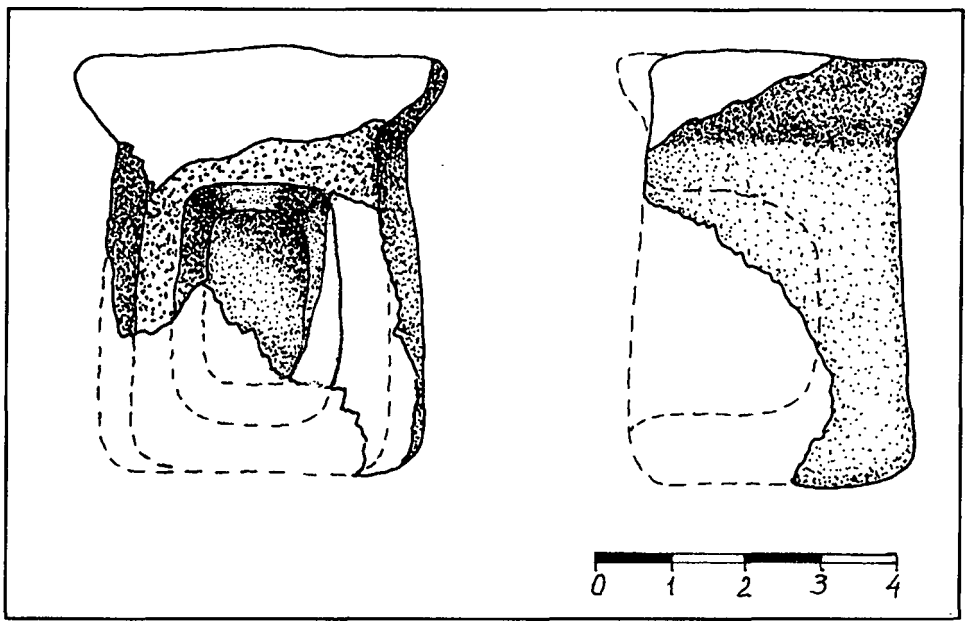


Fig. 9.15. Drawing of miniature model shrine, Object No. 1892.

A pierced, hollow quadruped leg, No. 3082 (fig. 9.10) came from the Phase 6B surface of Room A3 in Field A (7K41:15) (Lawlor, this volume). The phase belongs to the late Iron II/Persian transition (but other pottery from the locus included Iron I sherds). This is the third terracotta animal with an axle hole pierced through legs coming from 'Umayri. The other unpublished examples, one hollow (No. 783) and one solid (No. 780), were found in Field B in the 1987 season. Other Iron Age parallels (all apparently solid), either with pierced holes or loops replacing legs, with or without a lug for a string, come from such sites as Jemmeh (Petrie 1928: 18, Pl. XXXIX.19; Holland 1975: G.II.e.7), Beth Shemesh (Grant 1934: Pl. XXII.4; Grant and Wright 1938: Pl. LI.37), Hazor (Yadin, et al. 1961: Pl. CCXVIII.15), Gezer (Macalister 1912: Pl. CXXIV.25), and one is of unknown provenance (Ornan 1986: No. 19). Rahmani (1981), who also lists earlier and later examples from Palestine and other regions, argues that pulled animals were children's toys. Ornan lists ram, horse, cock, bear, and otter as the species represented by pulled animal terracottas in the ancient Near East (1986: 52).

A model wheel fragment, No. 3038 (fig. 9.11) from a cleanup locus in Square 7L08 of Field F, might have been part of a similarly pulled animal or one associated with a model wagon. Four-wheeled and two-wheeled wagon models in bronze, stone, and terracotta are reported from Mesopotamia, Iran, Anatolia, and Syria and are dated from the early third millennium B.C. and later (Littauer and Crouvel 1979). Perforated discs with projecting hubs on the outer face were found at many Palestinian sites, e.g. Gezer (Macalister 1912: Pl. CXXXII.15) and Megiddo (May 1935: Pl. XXI.M908). A wheel of a model chariot was also found at Deir 'Alla (Homès-Fredericq and Franken 1986: 157, No. 458). Interestingly, a "ceramic toy wheel?" from the 1984 season is also reported from Field B at 'Umayri (Platt 1989: No. 366, Fig. 20.11).

Model Shrine Fragments

A "Zoomorphic figurine fragment" found during the 1987 season in Field A, No. 1344 (Geraty et al. 1988: 249, Pl. 26), is most likely a lion's protome that flanked a model shrine (figs. 9.12 and 9.13). Several factors indicate this: evidence that the figurine broke off a shrine's floor is visible behind the lion's left paw; a broken portion above the lion's back indicates that the lion carried part of the shrine's wall (or a pillar?); the continuation of the lion's torso to the rear may also have been part of the shrine's wall; finally, fragments of a model shrine (of which two parallel lion protomes with attached portion of the shrine's floor) were found in the vicinity of Mt. Nebo (Weinberg 1978: 34, Fig. 4). A tradition of guardian lions continued in central Transjordan well into later periods as indicated by the Iraq el-Amir palace (Villeneuve 1989: 49).

A ceramic "box" fragment, No. 1892, was found during the 1989 season. It was most probably a miniature (57 mm high) non-decorated model of a simple shrine with a single cella (figs. 9.14 and 9.15). A niche or a cella might have either housed a miniature figure fixed to the floor (the floor is missing in our object), or a movable item, or was empty. A decorated model *naiskos* from Sidon dated to the 5th century B.C. is almost of the same height (60 mm) and contains a figure (Bisi 1988: 353). Most model shrines, however, are larger.

Note: Physico-Chemical Analysis of the Egyptian Amulet (Malgorzata Daszkiewicz)

X-ray Diffraction Analysis. Analysis was carried out with a DRON 1.0 X-ray diffractometer, and was performed with the following parameters: radiation Co Ka; conditions of Co lamp's work - U = 33 kV, I = 15 mA; form of work - step 0.04° 2Q; counting time in canal - 3s; radiation range - 2.7-78° 2Q.

Measurements were performed on a fine powdered sample sedimented from water solution on a glass slide.

Result: only quartz in the core of the amulet as well as in glass can be registered.

Electron Microprobe Analysis. Electron Microprobe Analysis was obtained by means of a JEOL 840A Scanning Electron Microscope fitted with a Link System AN 10.000/855 energy dispersive spectrometer.

Results of examination for three places of the amulet's core are shown in figs. 9.16-18 and for glaze in figs. 9.19-21; a secondary electron image of a section through the amulet shows a surface of glaze and a glaze-core interaction layer which merges into a quartz core containing interstitial glass (fig. 9.22).

Microscopic Studies of Thin Section. All sections were examined on a Carl Zeiss Jena polarizing Amplival type microscope.

Result: matrix: siliceous; clastic material: quartz decidedly predominating, grain size above 0.01 mm up to 0.4 mm; a few cryptocrystalline carbonates and isolated alkali feldspars; glass between quartz grains can be seen in places; part of the surface is covered by glass (figs. 9.23-25).

TG, DTG, and DTA Analysis. A sample for measurements was milled in an agate mortar and passed through a 120-mesh sieve. Analysis was performed for air-dried samples. Examination was carried out with a Derivatograph Q-1500D thermoanalyser with the following parameters: samples were heated to 1000°C; heating rate: 10°C/min; paper feed: 2mm/min; atmosphere: air, static; reference material: aAl_2O_3; crucible: platinum; sensitivity: TG 100mg, DTG 500mV, DTA 250mV.

Result: in the amulet's core no loss of weight can be observed; on the DTA curve only quartz peak, i.e. polymorphic transformation of quartz, is observed.

Conclusion. The analyzed sample is a faience produced by efflorescence glazing method.

Element	Zaf	%Elmt	Atom.%		%Oxide	Formula
NaK :15	0.861	0.000	0.000	Na201	0.000	0.000
MgK :16	0.961	0.377	0.326	Mg101	0.624	0.049
AlK :15	0.925	2.376	1.851	Al203	4.489	0.281
SiK :16	0.952	32.276	24.156	Si102	69.044	3.666
S K : 5	0.853	4.822	3.162	S 103	12.041	0.480
P K :15	0.777	0.105	0.071	P 205	0.240	0.011
ClK :15	0.861	0.119	0.070	Cl101	0.172	0.011
K K :15	0.999	1.225	0.659	K 201	1.475	0.100
CaK :15	0.964	4.372	2.293	Ca101	6.117	0.348
TiK :15	0.865	0.296	0.130	Ti102	0.493	0.020
MnK :15	0.935	0.000	0.000	Mn101	0.001	0.000
FeK :14	0.920	2.435	0.916	Fe203	3.481	0.139
CuK :15	0.778	1.454	0.481	Cu101	1.820	0.073
O K :0	0.000	50.144	65.885			10.000
Total		99.998	100.000		99.998	5.178

15.00 kV Tilt=0.00 Elev.=40.00 Azim.=0.00 Cosine=1.000

Last element by Stoich., normalized; (2 Zafs)

Fig. 9.16. Table of elements in the first core sample from the *Pataikos* amulet done by Electron Microprobe Analysis.

Element	Zaf	%Elmt	Atom.%		%Oxide	Formula
NaK :15	0.837	0.000	0.000	Na201	0.000	0.000
MgK :16	0.932	0.510	0.441	Mg101	0.845	0.067
AlK :15	0.906	1.001	0.780	Al203	1.891	0.119
SiK :16	0.949	38.407	28.746	Si102	82.160	4.375
S K : 5	0.827	1.571	1.030	S 103	3.922	0.157
P K :15	0.744	0.000	0.000	P 205	0.000	0.000
ClK :15	0.855	0.149	0.088	Cl101	0.216	0.013
K K :15	0.993	0.482	0.259	K 201	0.581	0.039
CaK :15	0.965	1.333	0.699	Ca101	1.865	0.106
TiK :15	0.872	0.197	0.087	Ti102	0.329	0.013
MnK :15	0.945	0.034	0.013	Mn101	0.044	0.002
FeK :14	0.932	1.377	0.518	Fe203	1.969	0.079
CuK :15	0.780	4.932	1.632	Cu101	6.174	0.248
O K :0	0.000	50.004	65.706			10.000
Total		99.997	100.000		99.997	5.219

15.00 kV Tilt=0.00 Elev.=40.00 Azim.=0.00 Cosine=1.000

Last element by Stoich., normalized; (2 Zafs)

Fig. 9.17. Table of elements in the second core sample from the *Pataikos* amulet done by Electron Microprobe Analysis.

Element	Zaf	%Elmt	Atom.%		%Oxide	Formula
NaK :15	0.827	0.000	0.000	Na201	0.000	0.000
MgK :16	0.922	0.468	0.407	Mg101	0.776	0.062
AlK :15	0.900	0.836	0.655	Al203	1.579	0.100
SiK :16	0.945	39.587	29.781	Si102	84.685	4.553
S K : 5	0.822	0.388	0.256	S 103	0.968	0.039
P K :15	0.737	0.000	0.000	P 205	0.000	0.000
ClK :15	0.856	0.000	0.000	Cl101	0.000	0.000
K K :15	0.995	0.411	0.222	K 201	0.495	0.034
CaK :15	0.966	1.408	0.743	Ca101	1.971	0.114
TiK :15	0.873	0.120	0.053	Ti102	0.200	0.008
MnK :15	0.948	0.104	0.040	Mn101	0.134	0.006
FeK :14	0.936	1.314	0.497	Fe203	1.878	0.076
CuK :15	0.781	5.842	1.943	Cu101	7.313	0.297
O K :0	0.000	49.522	65.405			10.000
Total		100.00	100.000		100.000	5.289

15.00 kV Tilt=.00 Elev.=40.00 Azim.=.00 Cosine=1.000

Last element by Stoich., normalized; (2 Zafs)

Fig. 9.18. Table of elements in the third core sample from the *Pataikos* amulet done by Electron Microprobe Analysis.

Element	Zaf	%Elmt	Atom.%		%Oxide	Formula
NaK :15	0.879	0.221	0.202	Na201	0.298	0.031
MgK :16	0.974	0.632	0.545	Mg101	1.047	0.084
AlK :15	0.932	3.197	2.485	Al203	6.041	0.384
SiK :16	0.948	36.082	26.931	Si102	77.186	4.158
S K : 5	0.836	1.164	0.761	S 103	2.908	0.118
P K :15	0.754	0.073	0.050	P 205	0.168	0.008
ClK :15	0.864	0.350	0.207	Cl101	0.508	0.032
K K :15	0.997	2.838	1.522	K 201	3.419	0.235
CaK :15	0.959	2.040	1.067	Ca101	2.854	0.165
TiK :15	0.867	0.225	0.099	Ti102	0.376	0.015
MnK :15	0.935	0.063	0.024	Mn101	0.081	0.004
FeK :14	0.919	2.779	1.043	Fe203	3.973	0.161
CuK :15	0.777	0.910	0.300	Cu101	1.139	0.046
O K :0	0.000	49.424	64.765			10.000
Total	100.00	100.000	99.998	5.440		

15.00 kV Tilt=.00 Elev.=40.00 Azim.=.00 Cosine=1.000

Last element by Stoich., normalized; (2 Zafs)

Fig. 9.19. Table of elements in the first glaze sample from the *Pataikos* amulet done by Electron Microprobe Analysis.

Element	Zaf	%Elmt	Atom.%		%Oxide	Formula
NaK :15	0.885	0.000	0.000	Na201	0.000	0.000
MgK :16	0.982	0.360	0.305	Mg101	0.597	0.046
AlK :15	0.940	2.820	2.151	Al203	5.328	0.323
SiK :16	0.956	35.680	26.142	Si102	76.326	3.929
S K : 5	0.838	4.069	2.612	S 103	10.161	0.393
P K :15	0.759	0.111	0.074	P 205	0.255	0.011
ClK :15	0.851	0.229	0.133	Cl101	0.332	0.020
K K :15	0.987	0.266	0.140	K 201	0.320	0.021
CaK :15	0.960	1.204	0.618	Ca101	1.685	0.093
TiK :15	0.868	0.189	0.081	Ti102	0.316	0.012
MnK :15	0.933	0.093	0.035	Mn101	0.120	0.005
FeK :14	0.916	2.736	1.008	Fe203	3.912	0.152
CuK :15	0.775	0.516	0.167	Cu101	0.646	0.025
O K :0	0.000	51.725	66.534			10.000
Total		100.00	100.000		99.999	5.030

15.00 kV Tilt=0.00 Elev.=40.00 Azim.=0.00 Cosine=1.000

Last element by Stoich., normalized; (2 Zafs)

Fig. 9.20. Table of elements in the second glaze sample from the *Pataikos* amulet done by Electron Microprobe Analysis.

Element	Zaf	%Elmt	Atom.%		%Oxide	Formula
NaK :15	0.835	0.071	0.066	Na201	0.095	0.010
MgK :16	0.941	0.440	0.386	Mg101	0.73	0.059
AlK :15	0.912	2.141	1.690	Al203	4.045	0.257
SiK :16	0.947	29.393	22.291	Si102	62.878	3.383
S K : 5	0.859	4.883	3.245	S 103	12.194	0.492
P K :15	0.791	1.399	0.962	P 205	3.206	0.146
ClK :15	0.866	0.086	0.052	Cl101	0.124	0.008
K K :15	1.003	2.167	1.181	K 201	2.611	0.179
CaK :15	0.967	2.982	1.585	Ca101	4.173	0.241
TiK :15	0.873	0.693	0.308	Ti102	1.157	0.047
MnK :15	0.939	0.000	0.000	Mn101	0.000	0.000
FeK :14	0.923	5.376	2.051	Fe203	7.686	0.311
CuK :15	0.781	0.879	0.295	Cu101	1.100	0.045
O K :0	0.000	49.488	65.89			10.000
Total		100.00	100.000		99.998	5.177

15.00 kV Tilt=0.00 Elev.=40.00 Azim.=0.00 Cosine=1.000

Last element by Stoich., normalized; (2 Zafs)

Fig. 9.21. Table of elements in the third glaze sample from the *Pataikos* amulet done by Electron Microprobe Analysis.

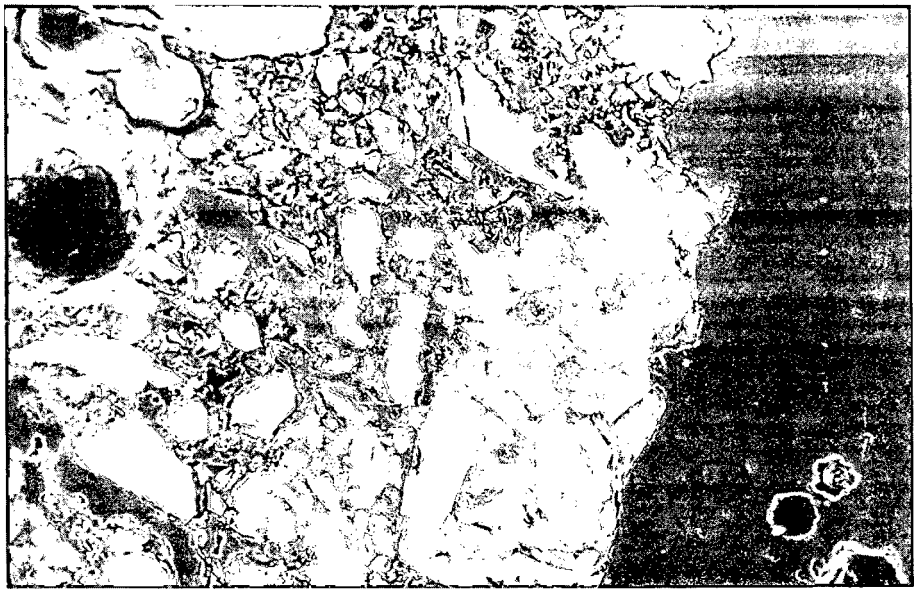


Fig. 9.22. Secondary electron image of section through amulet.

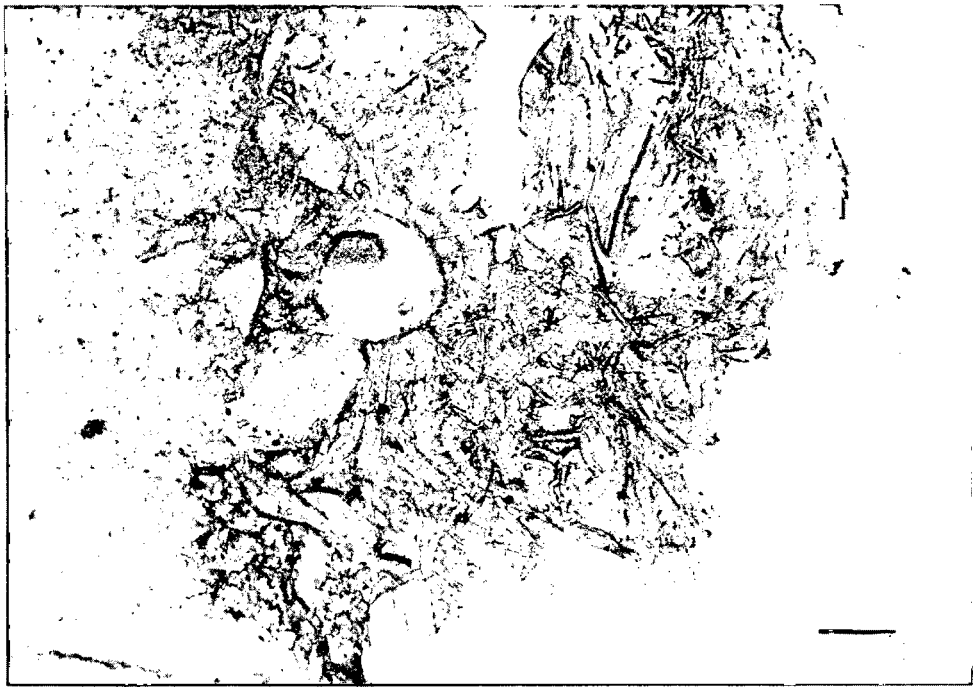


Fig. 9.23. Photomicrograph of thin section. Left side: matrix of sample; right side: glass. PPL; bar represents 200 mm.

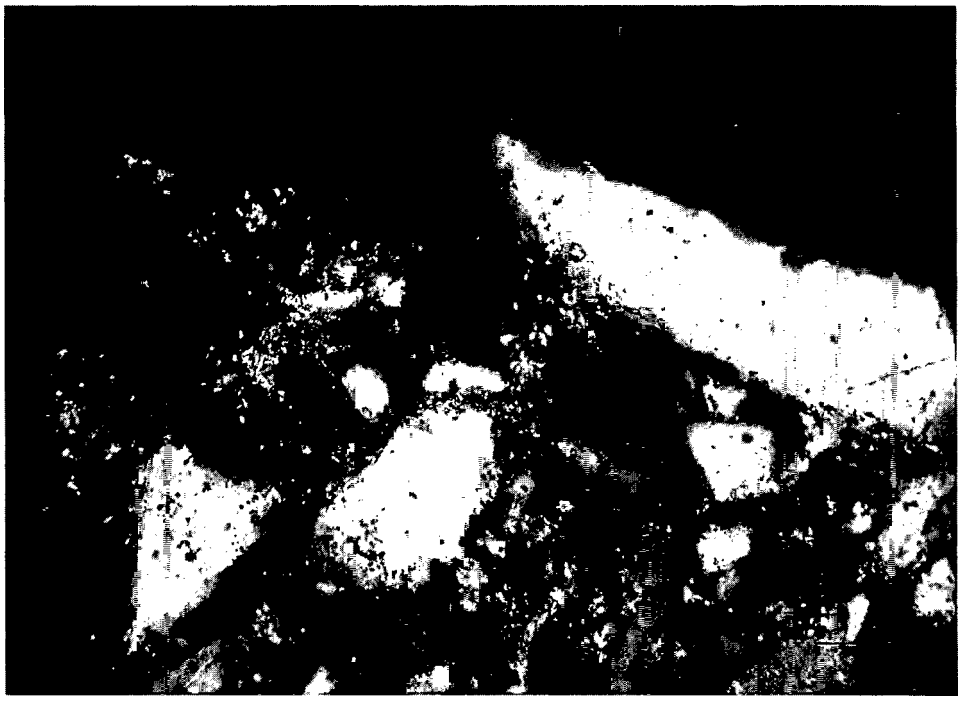


Fig. 9.24. Photomicrograph of thin section. Glass between quartz grains. Polarizers not totally crossed; bar represents 50 mm.

Fig. 9.25. Photomicrograph of thin section. Typical view. XPL; bar represents 50 mm.

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CHAPTER 10

Cylinder Seal No. 3021

Boguslav Dabrowski *Warsaw, Poland*
(with Note by Malgorzata Daszkiewicz and Jacek Jelitto)

This cylinder seal is the third so far found at Tall al-'Umayri (figs. 10.1-3). The first two were discovered during the 1984 season (Porada 1989).

Description

The seal was found in Field A, Square 7K41, during cleanup operations before excavation began (Pail 173). It was allocated to the Horn Archaeological Museum where it will ultimately reside. It was carved from a kind of siliceous sedimentary rock(?) (cf. Daszkiewicz and Jelitto, Appendix C, this volume). The scene was cut in flat relief on the seal whose measurements are 19.5 mm high, 10.5 mm in diameter, and with a perforation 1.8 mm wide. The scene shows two male figures dressed in Egyptian garments and in a typical Egyptian pose facing right (as on the impression); one wears an Egyptian double crown and the other holds two cobras; they face an incense altar.

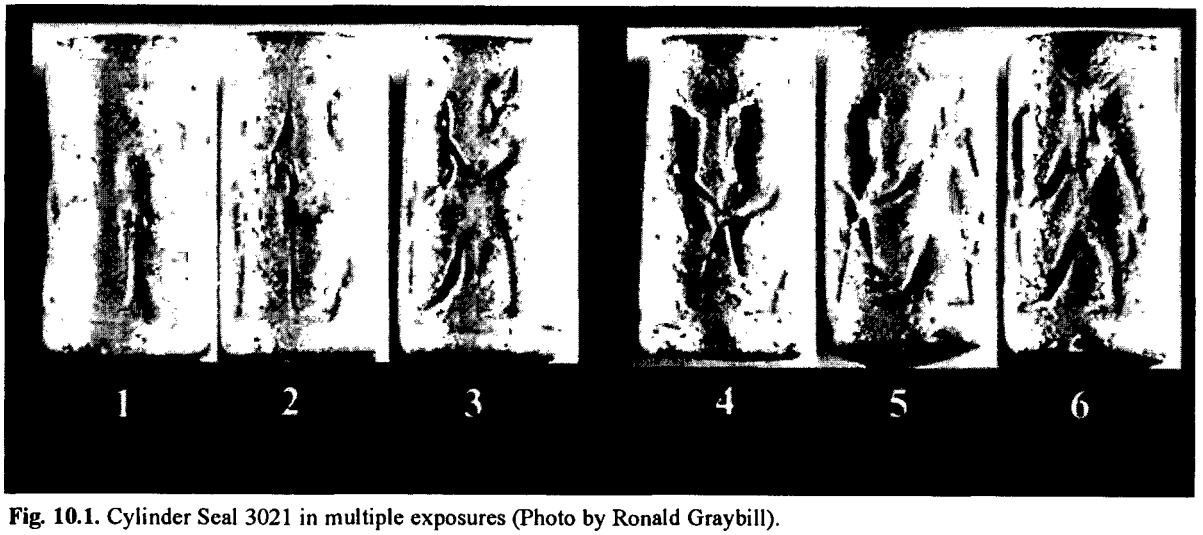

Fig. 10.1. Cylinder Seal 3021 in multiple exposures (Photo by Ronald Graybill).

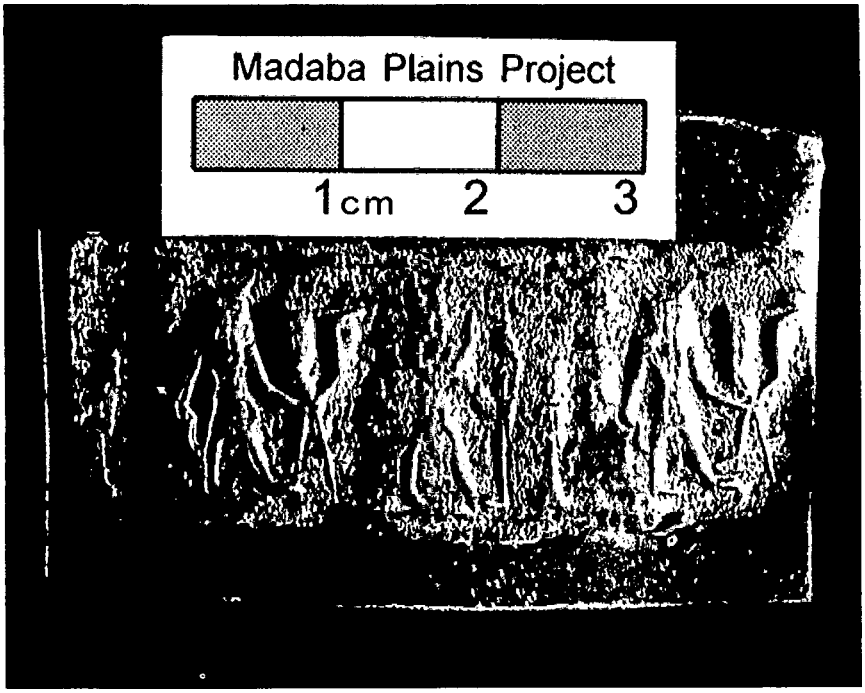

Fig. 10.2. Impression of Cylinder Seal 3021 (Photo by Ronald Graybill).

Iconography and Parallels

No parallel to the scene as a whole has been found. There are, however, parallels to each element of the scene:

Figure in the Egyptian Crown. The figure standing before the altar wears the double crown of Upper and Lower Egypt and a pleated royal kilt. In his left hand he holds the *w3s* scepter with a large head. His right arm, with an open palm, is lifted toward the altar in a gesture of either protection or worship.

Similar figures in Egyptian art from the end of the Old Kingdom onward are characteristic of deities protecting a king, e.g. the hawk-headed Horus bringing Horemheb before Isis from the New Kingdom (Hornung 1971: 40, Pl. 2). Kings in such a pose are also represented, but those scenes are only occasional, e.g. Ramses III before Amon-Re (Hölscher 1953: Pl. 260A).

The motif of a standing deity or human with a type of scepter in one hand and another arm raised with open palm is very popular on Middle Bronze Age cylinder seals from Syria and Palestine. From Shechem comes a figure in Egyptian kilt without a headcover (Parker 1949: 11, Pl. III.20); from Byblos is a hawk-headed deity in the double crown (Keel 1989: 251, Fig. 6); and at Tell Atchana was a hawk-headed deity in a feather crown (Brentjes 1983: Fig. on p. 110). A Late Bronze Age cylinder seal from the Amman Airport building shows a figure of a "king" wearing "what appears to be the double crown." The position of the arms seems to be different from that of the 'Umayri figure (Ward 1964: 48-49, Pl. XXI top). A bearded god in a double crown, short kilt, and holding the *w3s* scepter in his left hand appears on the Balu' stela from the 12th century B.C. (Ward and Martin 1964; Pritchard 1954: 488). His right hand is raised and, unlike our seal, holds the *'nh* sign, giving it to a ruler. A similar Egyptianized figure in the same pose but in a different style appears unaccompanied on many Palestinian and Phoenician stamp seals dated to the 8th-7th centuries B.C. These include two "probable" Ammonite seals (Aufrecht 1989: Nos. 12 and 35), a Moabite seal (Bordreuil 1987: No. 171), and a Phoenician one (Moscati 1966: Fig. 28; Bordreuil 1992: Fig. 290).

Figure holding two cobras. The other figure shown on the seal standing behind the first figure wears a puzzling

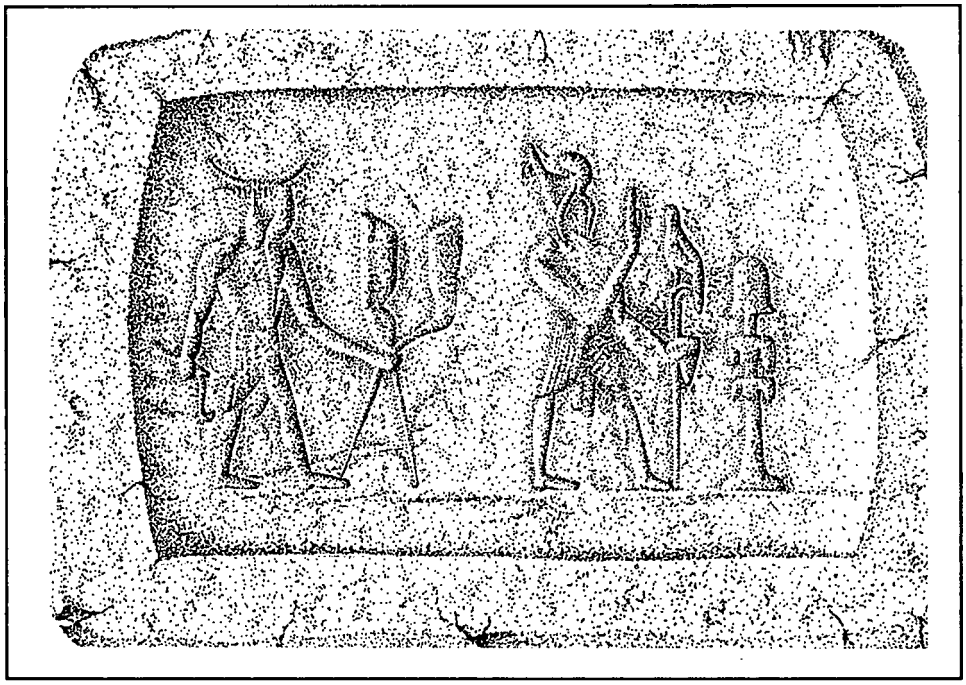

Fig. 10.3. Drawing of Cylinder Seal 3021 (Drawing by Stefanie Elkins).

flat headcover with two horns(?) represented *en face*, a frequent addition to caps of Asiatic deities. The figure sports a pointed beard and is dressed in an Egyptian kilt and holds a sword (a popular Egyptian *hps*?; Wolf 1926: 66-68, Pl. 7) or a scepter in the right hand and two crossed giant cobras with large heads in the left hand.

Cobras. The device of two intersected serpents is also an Egyptian motif known from the Old Kingdom onward. It appears on MB IIB Syro-Palestinian seals (e.g. Schroer 1985: Pl. 73). Two cobras with large heads flanking a divine figure also occur as a popular motif in MB II Syria and Palestine. Serpents held in both hands frequently appear as an attribute of a female deity represented on the New Kingdom stelae of Qudshu (Schulman 1982) and on Late Bronze/Iron I Palestinian terracotta plaques. The motif of a deity, either kneeling or standing on an animal, flanked by two *uraei*, continues to appear on New Kingdom seals both in Egypt and Palestine (Dabrowski 1992).

Serpents held in the hands by a four-winged figure appear on Iron Age Syro-Palestinian seals, including examples from Ammon (Aufrecht 1989: No. 107), Moab (Bordreuil 1987: No. 168; Galling 1941: No. 92), and other places (Galling 1941: No. 91). An interesting example is a relief dating to the 5th century B.C. from the region of Tyre showing a fragment of a deity in front of a petalled altar holding two crossed serpents and a staff in one hand with another hand raised. (Gubel 1992c: Fig. 341).

Incense Altar. The altar is in the form of a tall (non-ceramic?) stand which widens into a round foot. Decoration consists of six stylized down-turned flower petals arranged in two rows (three petals in each row) right below the stand's top. On top of the stand is a domed lid. Usually, the lids had one or more openings for the smoke to circulate, but they are not visible on this seal.

Ceramic stands with petalled decoration were found at Megiddo (May 1935: 21-22, Pl. XX.P6056), Tell es-Safi (Ornan 1986: No. 51), Tell Amal, and other sites. From Tell el-Safi also comes a domed fenestrated lid of an incense burner (Ornan 1986: No. 50). Petalled ceramic stands from Palestine can be dated to the 10th-6th centuries B.C. (Ornan 1986: 104). Bronze incense burners with petals have also been found on Cyprus. One of them was dated to the 8th century B.C. (Gubel 1992c: Fig. 340). Analogous representations of altars/incense burners appear on Assyrian reliefs, e.g. from the times of Tiglath-Pileser III (Barnett and Falkner 1962: 18-19, Pl. LX) and Assurbanipal (Frankfort 1954: Pl. 114). Altars with petalled decoration (1-3 rows of petals) were common in Phoenicia and were called *thumiaterion* by the Greeks (Gubel 1992c). They appear on stamp seals, from such places as Sidon and Amrit, dating mostly to the 5th-4th centuries B.C. (Parrot et al. 1977: Fig. 115; Gubel 1992b: Fig. 160; Gubel 1992c: Fig. 342). Similar altars appear on Persian reliefs from the 5th century B.C. (cf. Frankfort 1954: Pl. 184a). Altars are very rare on Ammonite inscribed seals. None of them shows a similar form to that on our cylinder (Aufrecht 1989: 351). The only inscribed seal from Aufrecht's corpus with a possible example is identified by Herr as Phoenician (Aufrecht 1989: No. 97).

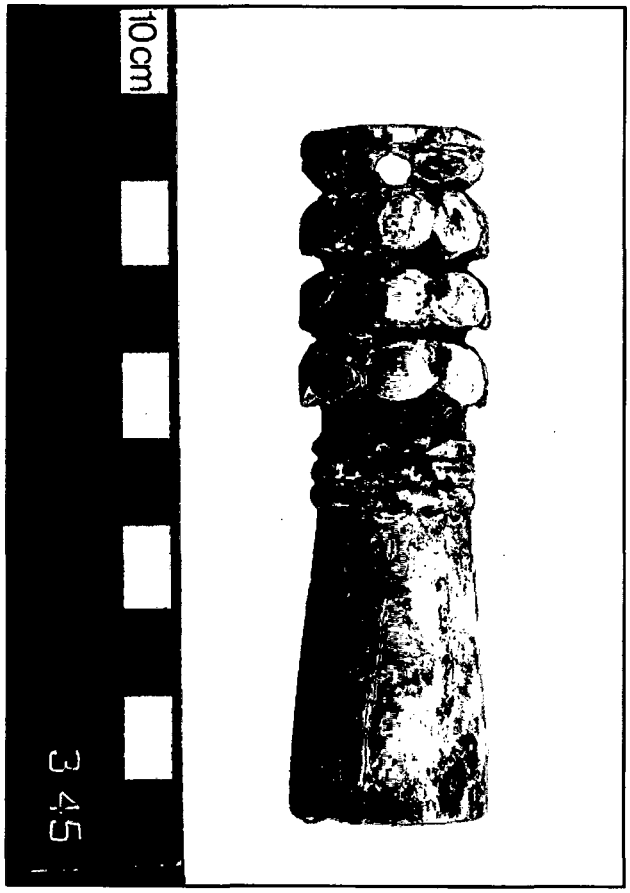

Fig. 10.4. Bone object with petalled decoration, No. 345, from 'Umayri.

Petalled decoration. Petalled decoration is very popular in Palestine and the Near East, having its prototypes in the Late Bronze Age (Gubel 1992c). Apart from metal and ceramic altars, it appears on other kinds of ceramic vessels (Ornan 1986: No. 52) as well as on other objects: the stone balustrades from Ramat Rahel and Jerusalem (Prag 1987); the Phoenician ivory representations of balustrade windows from Nimrud, Arslan Tash, Khorsabad, and Samaria dated mostly to the 8th and 7th centuries B.C. (Barnett 1975: 145); the stone miniature representations of balustrade windows from Phoenicia and Cyprus (Barnett 1975: 145); and an unpublished bone object, Reg. No. 345, from the 1984 season at Tall al-'Umayri (fig. 10.4).

Composition and Interpretation of the Scene

It is difficult to say whether the seal depicts one scene with two figures standing in front of the altar or two sepa-

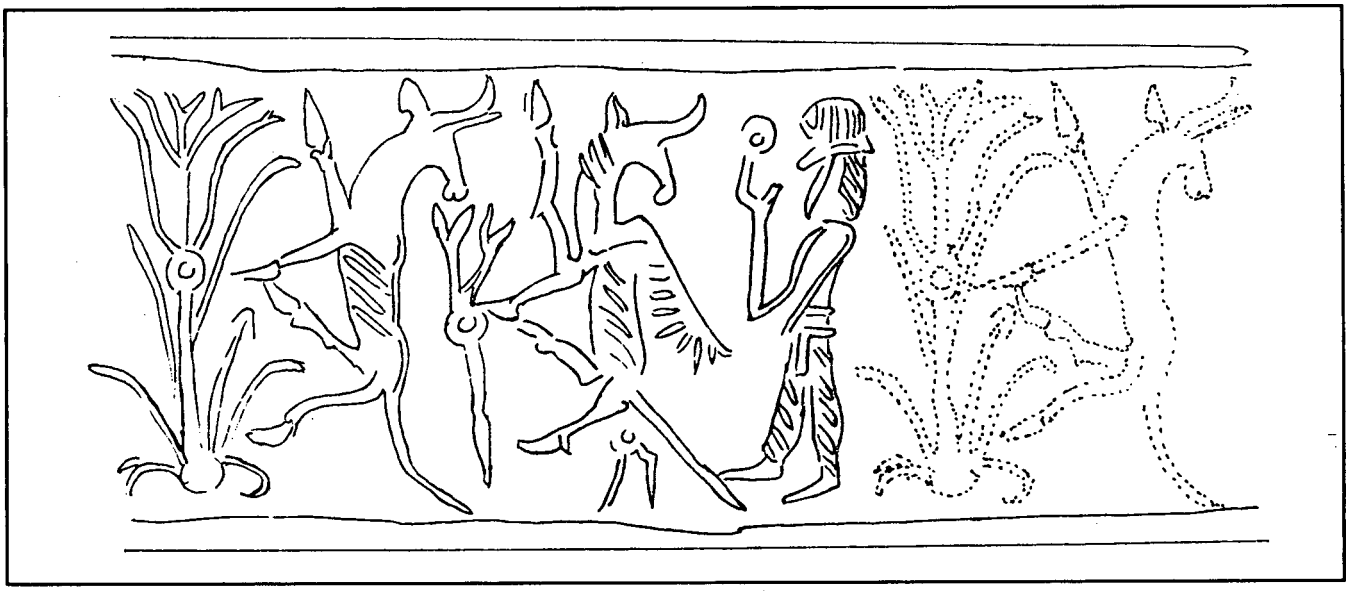

Fig. 10.5. Cylinder seal, No. 49 from 'Umayri (cf. Porada 1989: Fig. 23.1).

rate scenes where the figure in the double crown together with the altar make one scene and the figure with two cobras, standing either behind or in front of the other, makes a second scene. We assume that a single homogeneous scene was intended.

Two interpretations of the scene may be given: 1) a worshipping king in front of the altar protected by a deity standing behind him; 2) two deities in front of the altar (the rules of perspective making one figure stand behind the other).

The figure holding two cobras displays eclectic attributes. Whereas the kilt, sword, and crossed cobras are typical Egyptian motifs, there are also Asiatic motifs, such as the pointed beard and possible horns and headcover (cf. Gubel 1992a). These features suggest that the figure represents a local Asiatic or northwest Semitic deity. We might add that also the snakes appear very often as attributes of Asiatic male and female deities; moreover, the sword(?) appears to be Asiatic in origin.

The Egyptian attributes of the figure in the double crown are too conventional to determine whether a god or a mortal was intended. Also the gesture of a raised hand is typical both for a deity who receives an offering (protection) or for a king who gives an offering (worship and adoration). If a deity was intended, it could also be Asiatic in character because its iconography is similar to representations derived from the god Seth; specifically, it is similar to the appearance of the male god on the Balu' stela.

Dating

The seal was found in an interseason erosional deposit ("Cleanup A") which contained mixed pottery, with late Iron II and early Persian forms dominant. The pail also contained one possible Iron I sherd. The architectural structure within which the seal was found was the Ammonite administrative complex of the 6th-5th centuries B.C. The two other cylinder seals from 'Umayri were also dated to the 6th-5th centuries B.C. (Porada 1989). Taking into consideration the depiction of the altar and its parallels, the late Iron II/early Persian period, or slightly earlier, could also be accepted for this seal's manufacture.

However, we may also propose that the seal was made several hundred years earlier, in Iron I, and was finally deposited in the late Iron II/early Persian levels. Several factors might indicate this: 1) the perfect rendering of the Egyptian elements suggests the seal was made closer to the period of dynamic interactions between the Levant and Egypt in the Late Bronze Age; 2) the divine male figure of the Balu' stela of the 13th-12th centuries B.C. seems to be the closest parallel to one of the figures on the seal; 3) the material of the seal can be correlated with that of other stamp seals found at 'Umayri, some of which date to Iron I, but others come from Iron II phases (see the appendix to this article); 4) Ward wrote that "Cylinder seals were often kept for long periods of time, suggesting that the archaeological context provides only a date *ante quem* for these objects" (Ward 1964: 47).

Place of Manufacture

The Egyptian features of the scene are pristine and vigorous. Thus, it seems that it was engraved by an Egyptian artisan, possibly an itinerant one, or at least by someone who perfectly mastered the Egyptian canon of art.

The presence of an Asiatic deity and Asiatic elements suggests perhaps that the primary recipient of the cylinder

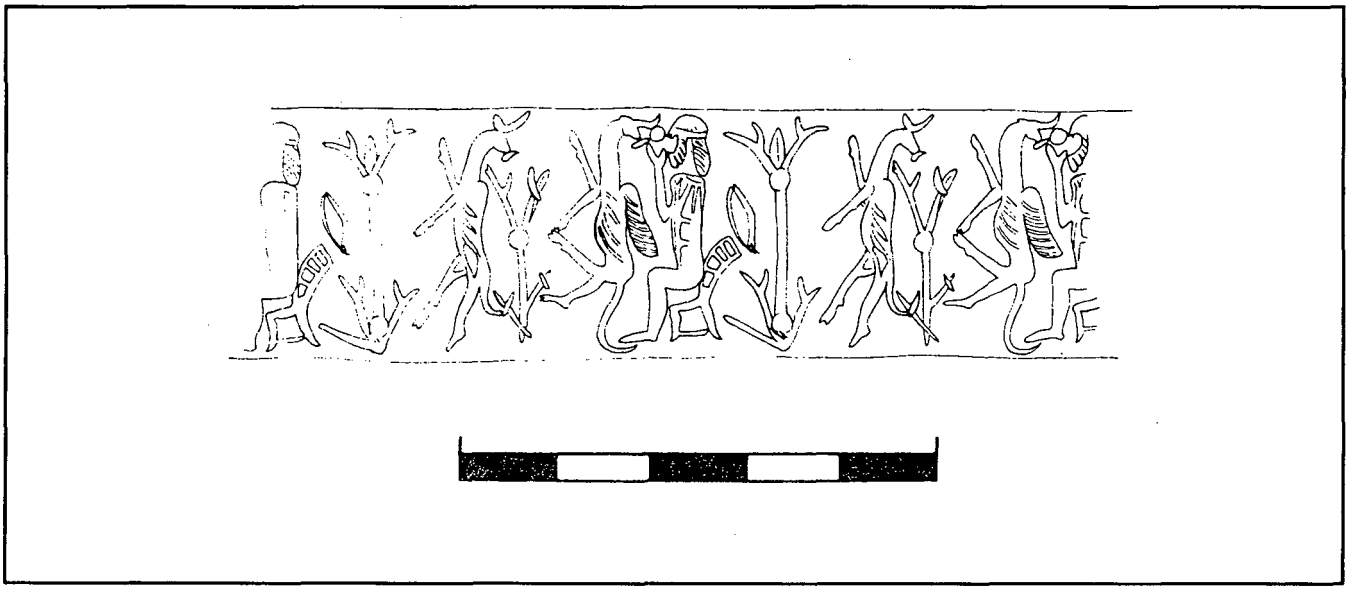

Fig. 10.6. Cylinder seal, No. S977/S4, from Tall as-Sa'idiyah (after Pritchard 1985: Fig. 173.2).

seal was a Levantine Semite and that the Levant (or the Nile Delta?) was its place of manufacture. Phoenicia seems to be another possible location. (Note that Phoenician cylinder seals were replaced by stamp seals at the very beginning of the 1st millennium B.C. [Gubel 1992b: 193].) One may argue, however, that Transjordan is also possible. The region had a long tradition of representing local deities in Egyptian guise (Balu' stela); most elements of the scene are not foreign to the Iron Age art of Transjordan; the cylinder's material is similar to that of numerous local stamp seals from 'Umayri.

Assuming the cylinder's manufacture in Iron I, it could not have found itself at 'Umayri before the date of its final deposition in the late Iron II/early Persian period because the occupation on the tall went through more than one hiatus from early Iron I through late Iron II (Herr, Chapter 2, this volume).

Addendum on Cylinder Seal No. 49 from the 1984 Season

In her report on two cylinder seals from the 1984 season at 'Umayri, Porada wrote about seal No. 49 (fig. 10.5), "No parallels are known for this composition, nor for the posture of the bulls" (1989: 381, Fig. 23.1). Actually a vey close parallel, examined and drawn by Porada herself, exists (fig. 10.6). It is a cylinder from Tell el-Sa'idiyeh (Pritchard 1985: 87, Fig. 173:2; also Pritchard 1969: 860). A comparison of the two scenes on the seals proves their iconography and style are strikingly similar. One may even propose that they were manufactured in the same workshop. The figure represented on both seals is bearded and his hair/wig is held in place by a band much like the Yerah-'Azar statue from the Amman Citadel (Zayadine 1991: Fig. 38).

Note: Physico-Chemical Analysis of Five Seals

(Malgorzata Daszkiewicz and Jacek Jelitto)

A physico-chemical analysis was conducted on four stamp seals, Nos. 3012, 3025, 3098, and 3128 and a cylinder seal, No. 3021, all from the 1992 season.

X-ray Diffraction Analysis. Analysis of the five seals was conducted with a DRON 1.0 X-ray diffractometer, and was performed with the following parameters: radiation Co Ka; conditions of Co lamp's work: U = 33 kV, I = 15 mA; form of work: step 0.04° 2Q; counting time in canal: 3s; radiation range: 2.7-78° 2Q. Measurements were performed on all samples (surface) without any destruction.

Results: No. 3012: first surface: quartz (primary compound), calcite; second surface: similar intensity of quartz and calcite; No. 3025: quartz, calcite (rare compound); No. 3098: quartz, calcite (rare compound), traces of kaolinite and plagioclases; No. 3128: quartz, calcite (rare compound), traces of chlorite; No. 3021: quartz (primary compound), kaolinite.

Electron Microprobe Analysis. Electron Microprobe Analysis of one seal, No. 3128, was obtained by means of JEOL 840A Scanning Electron Microscope fitted with a Link System AN 10.000/855 energy dispersive spectrometer.

Result: secondary electron image of the sample showed matrix with rhomboedric voids (figs. 10.7 and 10.8). In the matrix only quartz could be observed, but on the rims of voids traces of Al, Ca, and S were also observed.

Microscopic Studies of Thin Sections. Sections of two seals, Nos. 3012 and 3128, were examined on a Carl Zeiss

Jena polarizing Amplival type microscope.

Result for both seals: cryptocrystalline quartz; traces of chalcedony and a rhomboedric void from carbonate could be observed in thin sections (figs. 10.9-12).

Analysis of a Fresh Fracture Surface. Analysis of two seals, Nos. 3012 and 3128, was performed in reflected light. It showed grain fracture (figs. 10.13 and 10.14).

Conclusion. Two of the seals, Nos. 3012 and 3128, were made from some variety of siliceous sediments. They have the characteristics of chert. However, typical chert is a hard dense rock that shows a smooth conchoidal fracture and the surface of these seals showed grain fracture which conspicuously differed from the characteristics of typical chert. The hardness of these seals was ca. 5 (Mohs scale). For the rest of the seals, Nos. 3021 (cylinder), 3025, and 3098, only X-ray diffraction analysis was conducted. Bearing in mind the results of these analyses, they most probably were also made of some variety of siliceous sediments. In regard to the content of kaolinite, the cylinder seal decidedly differed from the analyzed stamp seals, but it was most probably a surface effect unconnected with the cylinder seal's core.

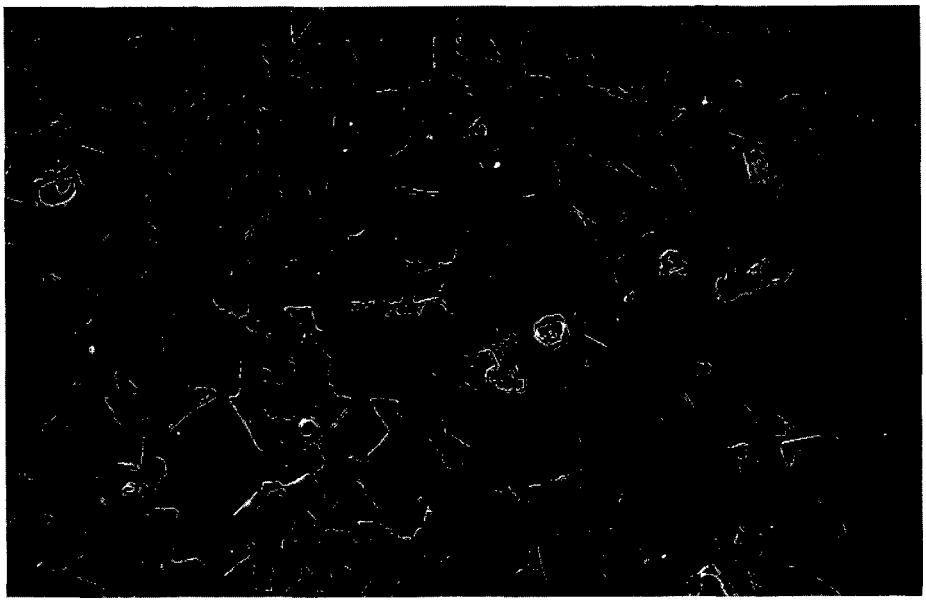

Fig. 10.7. Secondary electron image of sample No. 3128. 300x.

Fig. 10.8. Secondary electron image of sample No. 3128. 3000x.

Fig. 10.9. Photomicrographs of thin section, sample No. 3012. PPl, bar represents 100mm.

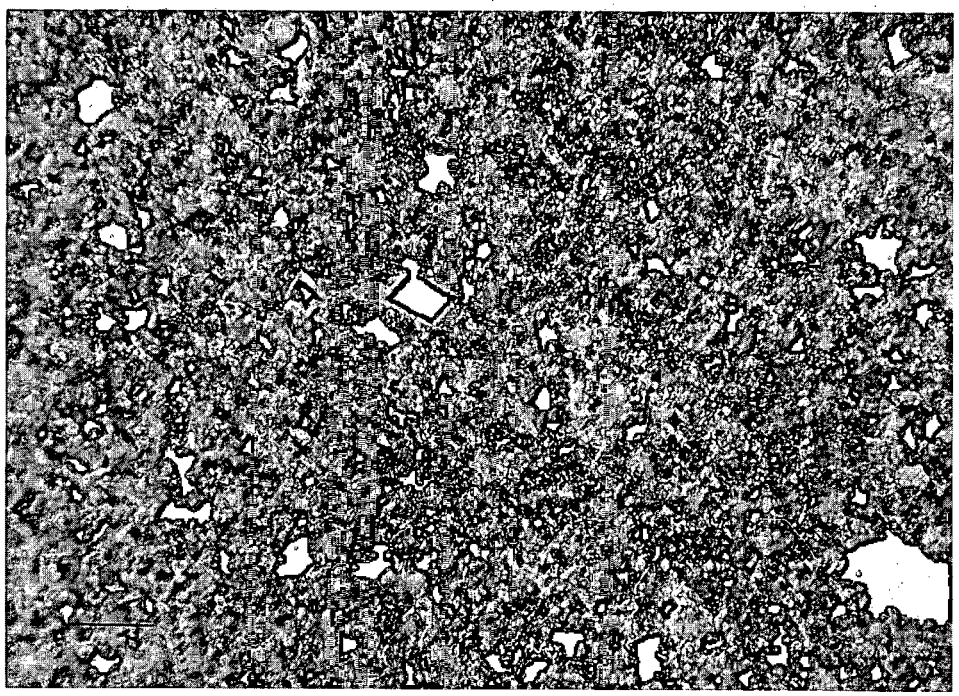

Fig. 10.10. Photomicrographs of thin section, sample No. 3012. XPl, bar represents 100mm.

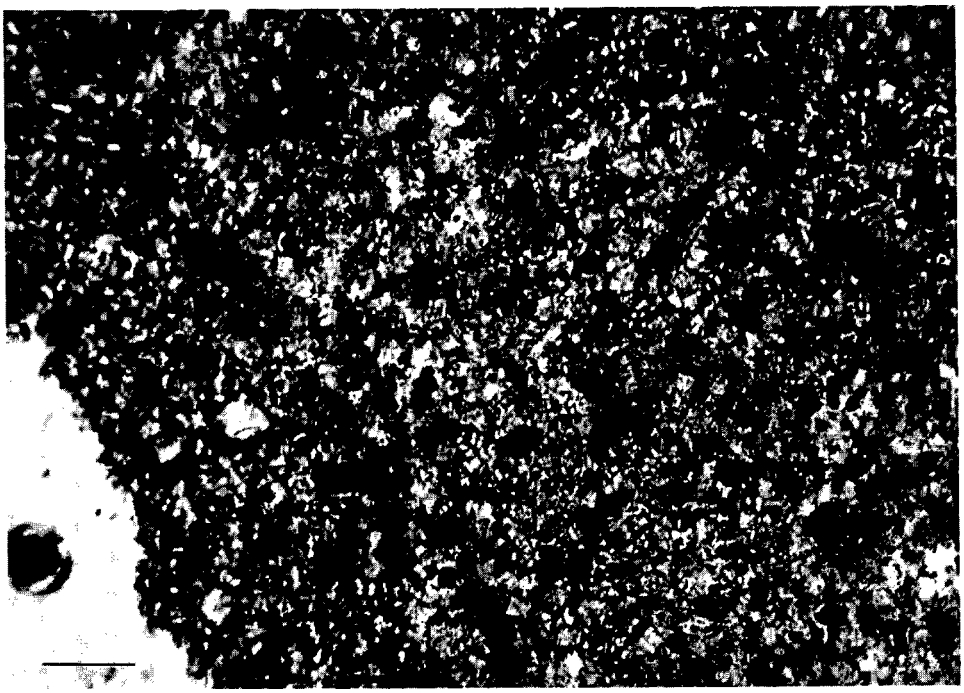

Fig. 10.11. Photomicrographs of thin section, sample No. 3128. PPl, bar represents 100 mm.

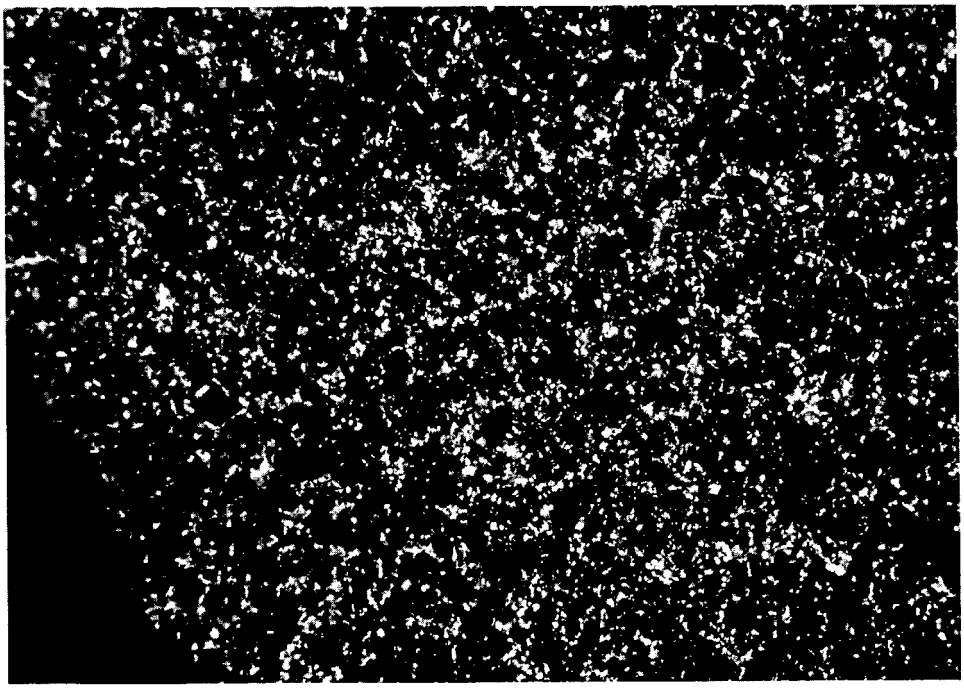

Fig. 10.12. Photomicrographs of thin section, sample No. 3128. XPl, bar represents 100 mm.

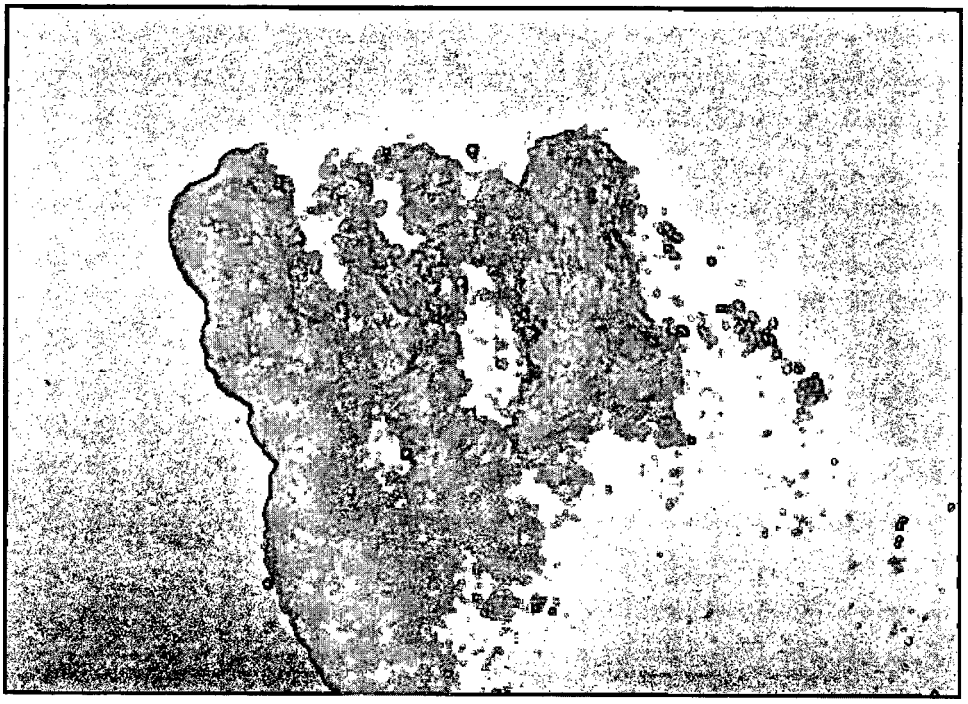

Fig. 10.13. Fresh fracture surface of sample No. 3012. 60x.

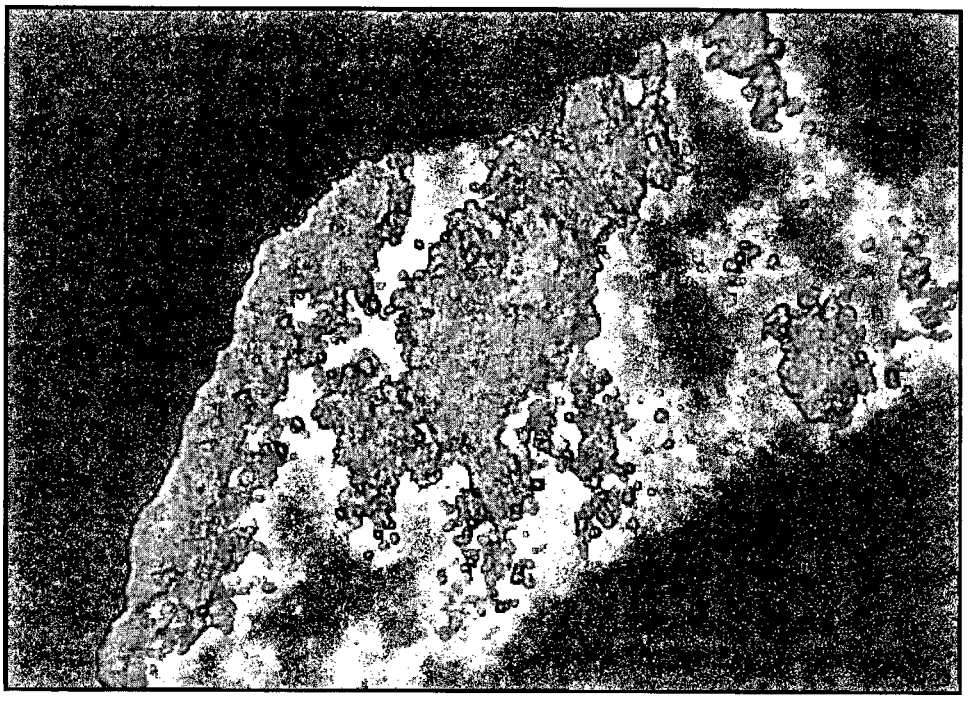

Fig. 10.14. Fresh fracture surface of sample No. 3128. 60x.

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CHAPTER 11

The Inscriptions

Larry G. Herr *Canadian University College*

One seal and one ostracon inscribed before firing were found this season, both in Field F.

The Seal

The scaraboid seal (Object No. 3008—figs. 11.1 and 11.2) was found while sifting cleanup debris that had entered Square 7L08 during interseasonal rains (the project sifts all debris regardless of origin). It must have come from a portion of one of the balks that had collapsed during the off-season; its locus number is therefore unknown. It is made of a thin (2 mm thick) layer of faience (2.5YN8/ white) overlying a red (5R4/8 red) core possibly of chert (D. Schnurrenberger) which is visible in a small area on one of the sides where the faience broke off. About a third of the inscribed surface was covered with calcrete and was cleaned by Laura D'Alessandro of the Oriental Institute. The faience is discolored making the seal difficult to photograph. My thanks to Bruce Zuckerman and West Semitic Research for taking on the task.

Both seals so far found in Field F (the first one was the Shim'az or Shima' seal—Herr 1991: 377) are of inferior quality, probably reflecting a more modest living standard in the eastern part of the site than Field A in the west where the very fine seal of 'Il'amats (Herr 1997: 323) and the seal impression of Milkom'ur, an official of the king (Herr 1989: 369), were found.

The inscribed side of the seal measures 16 mm long and 15 mm wide, and the seal is 7 mm thick. A perforation for a string runs the length of the seal and is 2 mm in diameter. The inscription is encircled by a thin line and divided into two registers by two parallel lines bisecting the length of the seal. At the bottom center is a circular depression surrounded by a semi-circular line, possibly a stylized solar disk and lunar crescent; the combination is a typical iconographic feature on Ammonite seals (see, for instance, Aufrecht 1989: Nos. 34, 62, 68, 87, 110, and 129).

The inscription reads *lnṣr' lb//n' lmšl*, "Belonging to Natsar'il son of 'Ilmashal." The letters are somewhat unevenly spaced and vary in size, suggesting that the scribe did not plan the inscription with care: the first two letters of each line are large and so much vacant space is left between them that each line is crowded toward the end; the *bet* on the first line is so crowded that its head is disproportionately small; and the broad *šin* in the second line takes up so much room it was placed beneath the *mem*.

Palaeographically the letters are typically Ammonite, fitting best into the late seventh or early sixth centuries. Unfortunately, there are few chronologically diagnostic letters. The closed head of the *reš* could suggest it was inscribed in the seventh century rather than the sixth, but *reš*

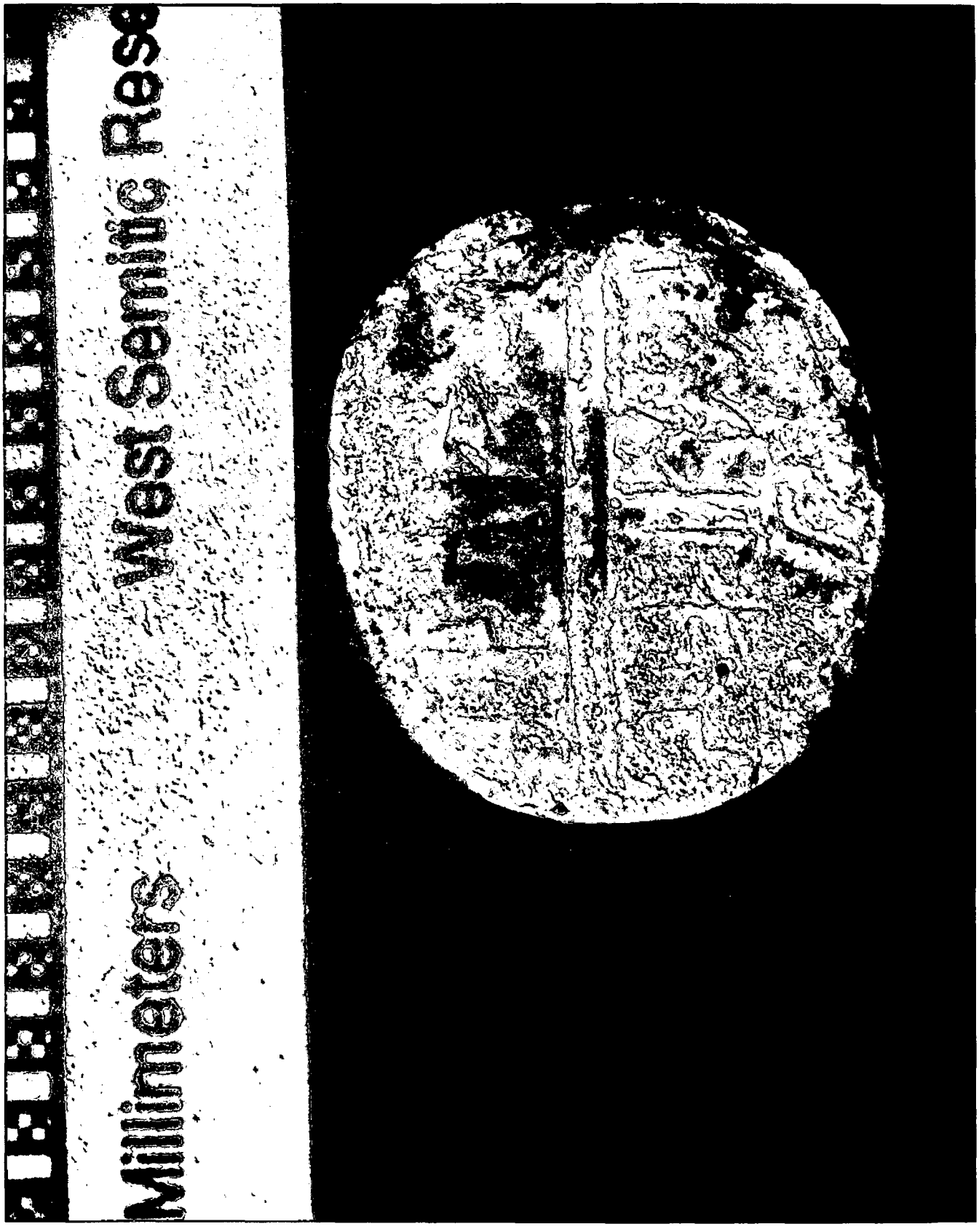

Fig. 11.1. Photo of the inscribed surface of the Natsar'il seal (Photograph by Bruce Zuckerman).

Fig. 11.2. Drawing of the Natsar'il seal impression.

appears in both closed and open forms on seals in the late seventh and early sixth centuries (Herr 1978: Fig. 45). The conservative *'alep* also occurs on seals as late as the early sixth century (Herr 1978: Fig. 42). And the three-stroke head on *mem* is a common Ammonite form throughout the seventh and early sixth centuries (Herr 1978: Fig. 44). Perhaps the most diagnostic form is the *ṣade* with its advanced two-stroke head, but the letter is so rare that a secure typology has not yet been established for it.

Unfortunately, archaeological provenance cannot help, because the seal was found in interseasonal debris. Moreover, provenance should not be used to establish a tight chronological niche for seals, because they can be used for a long period of time. Thus, a late-seventh or early-sixth century date does not contradict the early sixth century founding date for the late Iron II/Persian settlement at 'Umayri. The seal could have been made elsewhere and brought to the site by an administrative official.

Both names occur on previously published Ammonite seals and are typical of the Ammonite onomasticon. They are rare or do not exist in other onomastica. The name of the seal owner, *nṣr'l* ("'Il has guarded"), occurs on two Ammonite seals (Avigad and Sass 1997: Nos. 866 [undatable due to an unusable publication] and 957 [early seventh century]); a woman's name on an Aramaic seal of the late eighth to early seventh centuries uses the verbal root as a hypocoristicon (Avigad and Sass 1997: No. 756); although the place name Nazareth is based on the verbal root of our name, no biblical Hebrew personal name uses it. As for the patronym, *'lmšl* ("'Il rules") has been found on two Ammonite seals (Avigad and Sass 1997: Nos. 896 [difficult to date due to its worn condition] and 912 [early seventh century]); the verbal root *mšl* occurs in two personal names in Phoenician (Avigad and Sass 1997: 513) and as a place name in the Hebrew Bible (1 Chr. 6:74—Mashal). There is no evidence to suggest that the individuals on our seal can be identified with those on the other Ammonite seals. Certainly a comparison of the writing styles on the four seals encourages no connection.

The Ostracon

The ostracon (Object No. 3070) was inscribed prior to the firing of the vessel (perhaps a jug-decanter) and is probably mostly preserved; it probably never contained more than one word or name (figs. 11.3 and 11.4). The inscription reads *lb'l* with only the base of the first *lamed* missing and should be translated "For Ba'al," understood as a dedicatory inscription for the jug and its potential con-

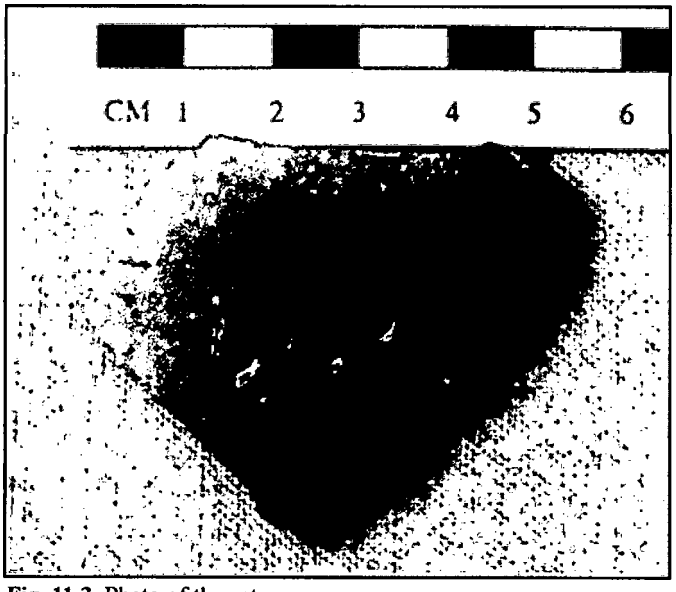

Fig. 11.3. Photo of the ostracon.

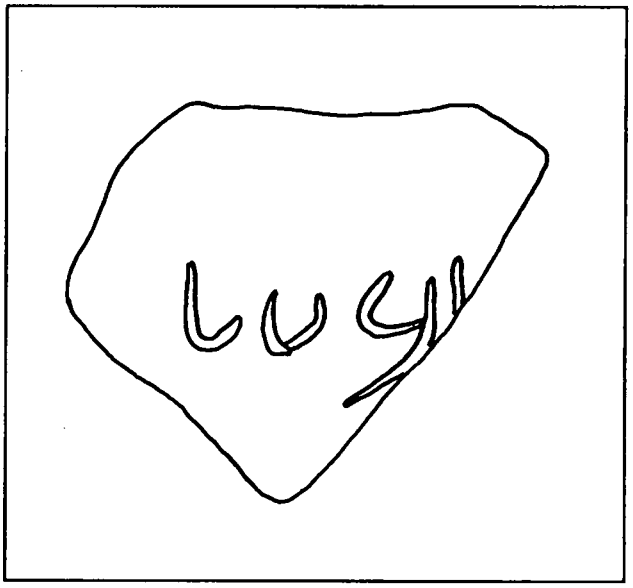

Fig. 11.4. Drawing of the ostracon.

tents unless the jug was made with a specific votive contents in mind. Alternatively, it is possible that the inscription is a name with *b 'l* as the theophoric element, in which case there would probably be two letters preceding the first *lamed.*

The Ammonite palaeography of the ostracon is virtually identical to that of the Siran Bottle, which dates to the early sixth century (Thompson and Zayadine 1973). The head of *bet* is strongly open while the upright curves down into a sloping horizontal line with no angle between the two. Indeed, both elements are made with one stroke as on the Siran Bottle. *'Ayin* is open and was made in two strokes exactly like the open *'ayin* on the Siran Bottle. The upright *lamed* curves into the base just like it does on the Siran Bottle. These letter forms are not typical of the Ammonite seal script and should perhaps be designated an Ammonite semi-formal script. The short ostracon from Umm ad-Dananir in the Baq'ah Valley north of Amman displays a similar script type (McGovern 1989: 129).

Both the find spot and the script suggest the ostracon was Ammonite. But Ba'al is not mentioned frequently in Ammonite inscriptions. The primary Ammonite deity, probably known as Milkom (but see Aufrecht forthcoming for an opposing view), who was probably the same as the 'Il found in the names of most Ammonite seals. The term *b 'l* was probably a title for Milkom.

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Editorial Staff *Andrews University*