

## SUMMARY REPORT OF THE 1986 EXCAVATIONS LATE ISLAMIC SHOBAK

by  
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### Introduction

Shobak Castle, located 30 km. north of Wadi Musa at the edge of Jebal esh-Sharah, was a central node in the settlement pattern of southern Transjordan from its Crusader inception through the entire spectrum of Late Islamic history. The dense architectural ruins that stand today express this 800 year span of virtually continuous occupation under Crusader (1115/6-1189), Ayyubid (1189-1262), Mamluk (1262-1517), and Ottoman (1517-1918) hegemony. Initially fortified by the Crusaders, Shobak remained the most important defensive stronghold south of Kerak until the modern era, for control of this region lay in its possession. This is apparent in Shobak's role within the historical pattern of geo-political relationships. For the Crusaders, Shobak was initially the dominant fortress in a chain of defenses reaching south to the Red Sea and defining the eastern borders of the Latin Kingdom of Jerusalem. Under the Ayyubids, Shobak guarded the essential southern access to the road linking Cairo and the rival Ayyubid power base in Damascus. The castle continued to represent the gate to Greater Syria during the early years of Mamluk expansion, while coastal Palestine was still occupied by the Crusaders, though in later years its military significance diminished with the consolidation of the entire Levant as a Mamluk territory. Under Ottoman rule Shobak provided a necessary frontier post from which to insure the safety of pilgrims traveling to the holy cities of Mecca and Medina.

This wealth of many varied histories and functions, expressed in the occupation sequence and architecture of the site, was investigated during a preliminary examination of the castle ruins. The August 1986 campaign at Shobak included 11 archaeological soundings and an

architectural study (C. Brooker) of selected parts of the site. The project concentrated on the documentation of the occupation sequences associated with the Ayyubid Palace Complex.

On behalf of the staff I wish to express my appreciation to Dr. Adnan Hadidi, then Director-General of the Department of Antiquities. I am also indebted to Dr. Ghazi Bisheh, present Director General of the Department of Antiquities and Dr. David McCreery, then Director of the American Center of Oriental Research for their instrumental advice and encouragement. Mr. Sulieman Farajat of the Department of Antiquities Petra Office was of tremendous assistance in his capacities as project inspector, foreman, and advisor. I am very grateful to the field staff: Colin Brooker (architect), Ramona Grunden, Andrea Lain, John Lee, Lou Ann Wurst (field supervisors), and 'Essa al-S'adi (inscriptions). The hired labourers from the neighbouring villages are commended for their outstanding diligence. A number of others have contributed to the project in a variety of ways and I wish to thank: Khairieh 'Amr (pottery sections), John Betlyon (numismatics), Mark Campbell (draftsman), Patricia Crawford (mollusk analysis), Ruba Kan'an (architect), Frank Koucky (geologist), Jonathan Mabry (draftsman), and Kevin Rielly (faunal analysis). In addition, I am most appreciative of the insights, materials, and advice shared by Terry Allen, Hans-Joachim Bayer, E. Axel Knauf, Cherie Lenzen, Donald Whitcomb, and Khair Yassine.

### Description of the Site

The walled fortress of Shobak Castle is situated upon a steep-sided hill overlooking the scarp of the Wadi el-Bustan (Fig. 1). The ruins (*ca.* 175 m. x 90 m.) encompass the entire summit of the hill.

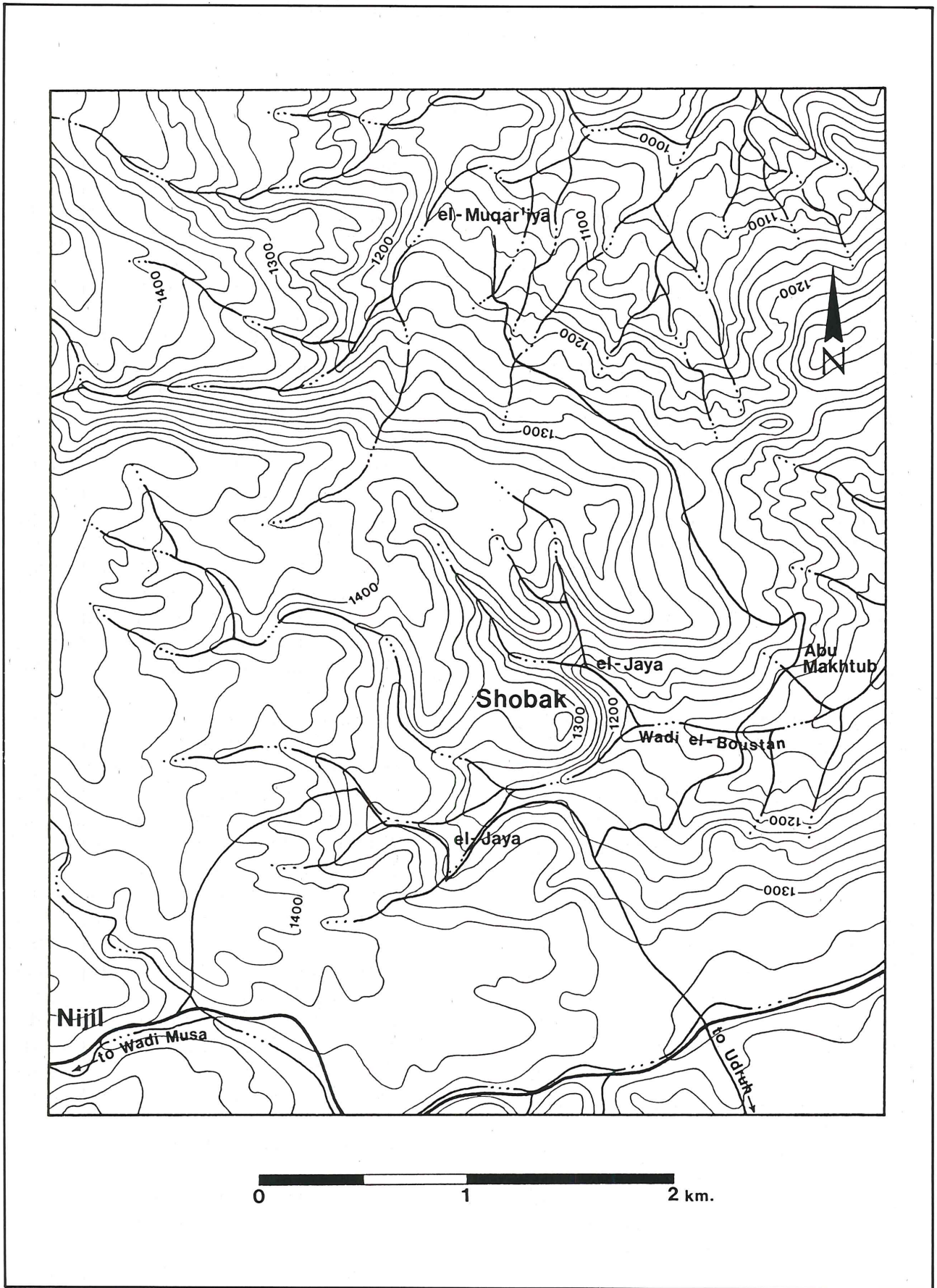


Fig. 1. Map of Shobak and its Vicinity.

Water for the settlement was obtained from streams emerging from the base of the hill and feeding into Wadi el-Bustan. This fertile *wadi* bed is noted for lush vine and fruit crops that historically provided the basis for the rural village economy.

The elliptical fortress is oriented on a NW-SE axis, in accordance with the natural topography (Fig. 2). At least nine towers (A-I) linked by curtain walls ring the site. The present entrance gate, located on the east side of the site, appears to represent the innermost portal of an original triple gate arranged on a bent axis. The broken portcullis in front of the presently standing gate may be compared with the inner gate of the Ayyubid fortress at Qal'at er-Rabad, 'Ajlun (Johns 1932: Fig. 9). Crusader ruins include the Church, the Chapel, and some of the structures along the southwest corridor. The Church is distinguished by: (1) footed moldings at the base of the arches, as at Şafita (Müller-Wiener 1966: Pl. 39); (2) short decoratively carved brackets, similar to examples in Jerusalem (Avigad 1983: Figs. 296-7); and (3) decorative moldings extending over the pilasters, also noted at Jerusalem (*ibid.*) and Tartaous (Müller-Wiener 1966: Pl. 35). The Chapel, which lies beneath the present surface of the site, is located in the southern sector, east of Tower I. A simple construction consisting of a hall terminating in an apse flanked by niches, this chapel is probably contemporary with that of el-Wu'eira (Langendorf and Zimmermann 1964: 139-41, Pls. III-IV, see also Savignac 1903: 115-6).

The most significant architectural component of the Ayyubid occupation is the Palace Complex, which is discussed below. Most of the presently standing towers appear to have been built during the Mamluk period. The inscriptions of Sulţan Ĥusam al-Din Lajin (1297-8) that appear on Towers A, D, and E commemorate a reconstruction campaign, which followed Sulţan al-Ashraf Khalil's 1293 destruction of Shobak. During the Ottoman period the site was periodically occupied by an imperial garrison and a local

village population. The latter dwelled within the ruins, as well as in tents and stone houses that were built on the upper levels of the site. The site was abandoned by the villagers 30-50 years ago.

### The Ayyubid Palace Complex

The identification of the Palace Complex at Shobak (C. Brooker) is predicated upon the monumental Reception Hall, a main feature of Ayyubid and Mamluk palaces. As it is presently exposed, the hall consists of three adjoining chambers (Figs. 2-3). At least one more chamber (presently obscured by debris) joined the hall to the west, though it is likely that a second chamber, serving as the main entrance portico, also lies to the west. The central chamber of the hall is distinguished by two small bays and an adjoining corridor that provided a secondary entrance.

The plan of the Reception Hall is a derivation of the *qa'a* arrangement in which a central chamber or *qa'a* is flanked by two *iwans* and linked to a linear series of chambers. In this plan, the small vaulted *iwans* joining the central chamber are best described as bays or niches. Variations of this plan are documented among Islamic palaces and wealthy residences from a number of periods. A few examples illustrating the widespread use of the form include: Fatimid houses in Fuşţat and Qa'at al-Dardin in Cairo (Hoag 1977: 150, Pls. 186-7); the Seljukid Qasr al-Banat at Raqqa (Toueir 1985: Abb. 2); the palace of the Ayyubid Sulţan Şaliĥ Najam al-Din on Rawdah Island in Cairo (Hoag 1977: Pl. 218); and the Mamluk period Dar al-Sitt Tunshuq in Jerusalem (Burgoyne 1987: Fig. 48.5). Among the Late Islamic monuments in Transjordan, a close comparison may be drawn with the plan of the 14th century Mamluk palace at Kerak (Brown forthcoming).

### The 1986 Excavations

The excavations were concentrated in three sectors of the Ayyubid Palace Complex (Fig. 3): (1) the Reception Hall (Area

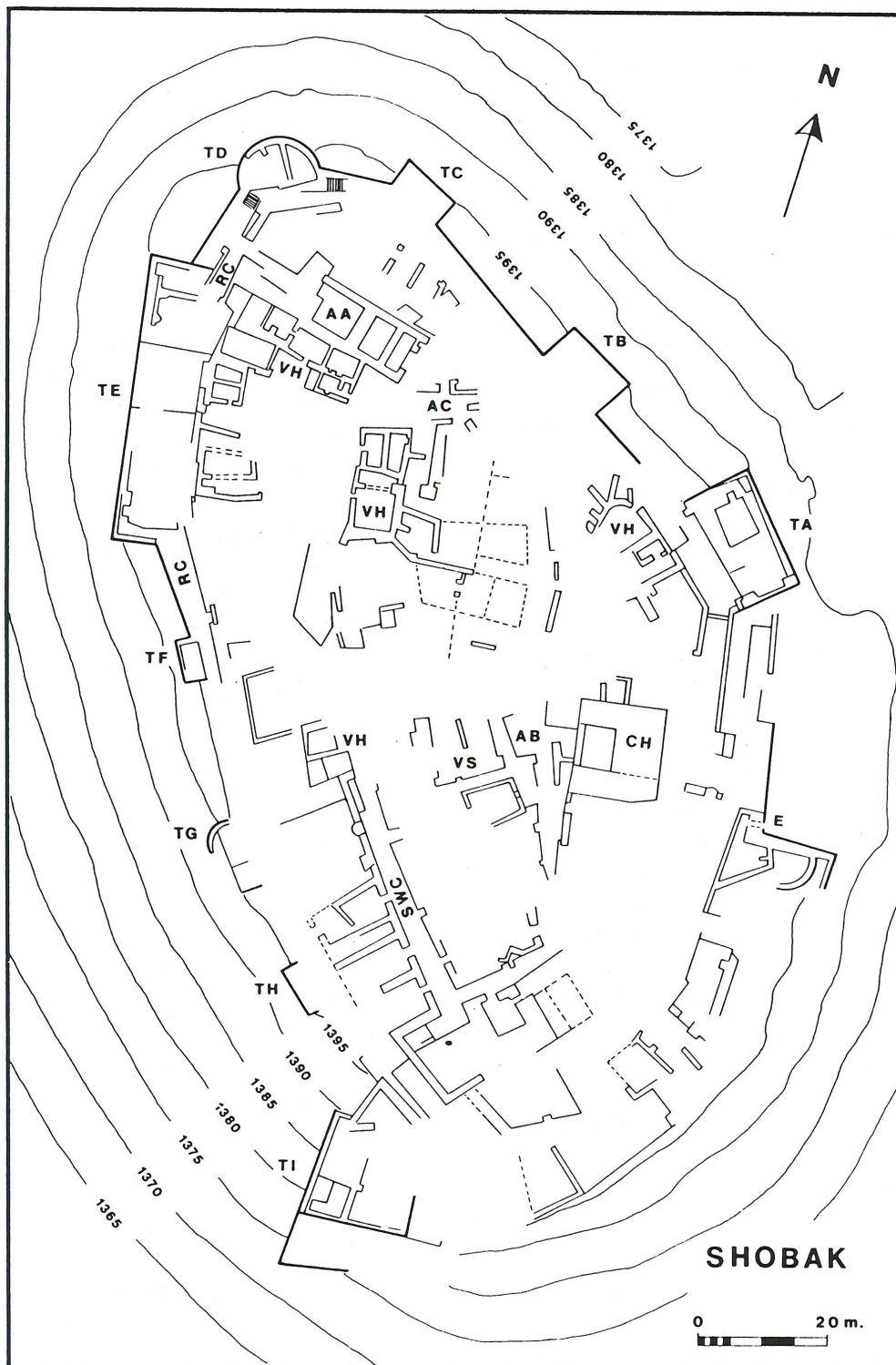


Fig. 2. Shobak Site Plan.

Key: AA = Area A; AB = Area B; AC = Area C;  
 CH = Church; E = Entrance; RC = Ring Corridor;  
 SWC = Southwest Corridor;  
 T = Tower (A-I);  
 VH = Village Houses; VS = Village Shops.

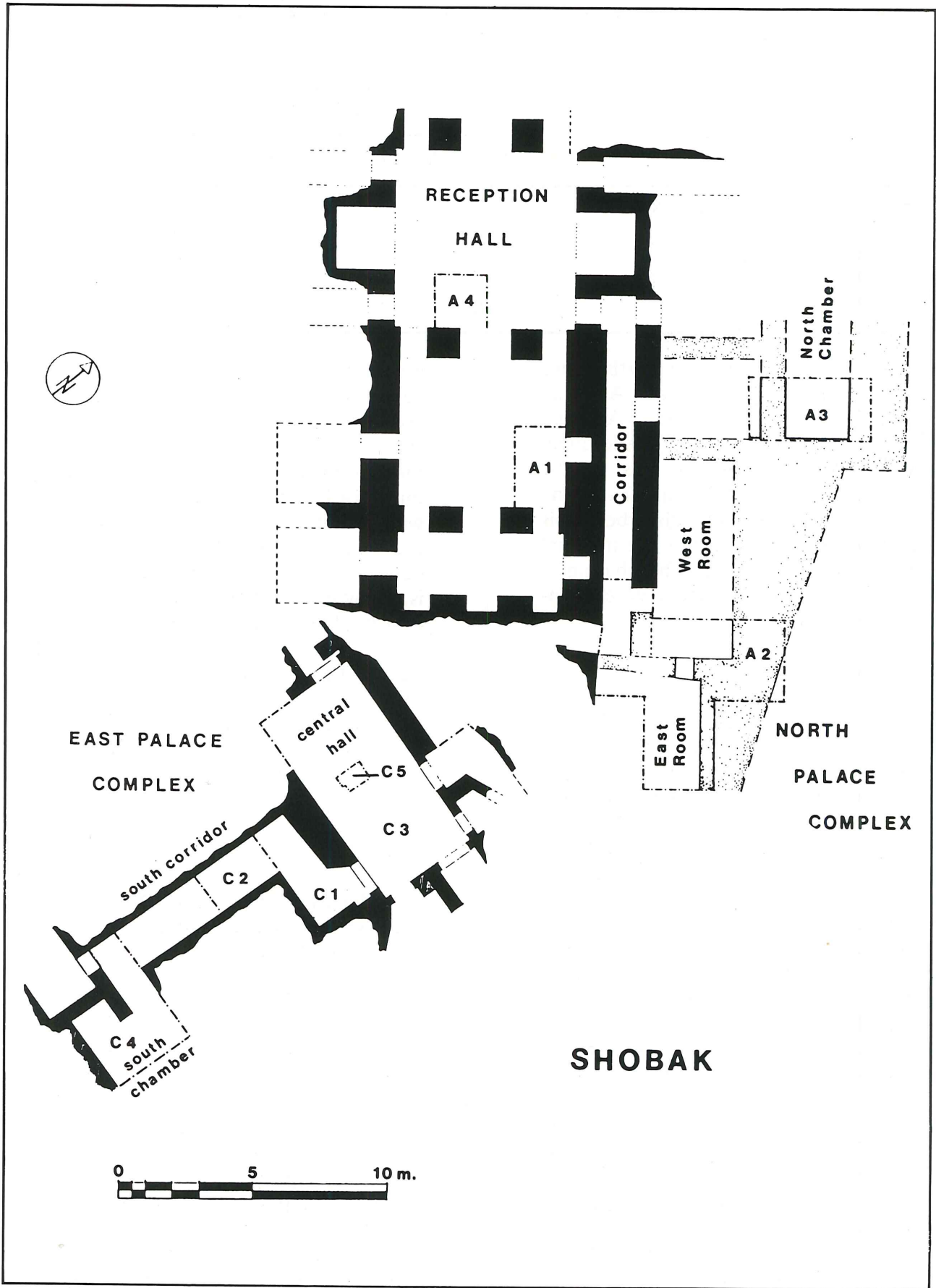


Fig. 3. The Ayyubid Palace Complex.

**Table 1:** The distribution of phases according to excavation units: The Palace Complex Areas A and C.

Phase	Period	Excavation Unit								
		A1	A2	A3	A4	C1	C2	C3	C4	C5
Pre-I	Crusader/Nab	X	X	X	X		X			
I	Ayyubid	X	X	X	X	X	X	X	X	
II	Ayyubid		X							
III	Mamluk		X					X		X
IV	Ottoman	X	X	X	X	X	X	X	X	X

A: Units A1 and A4); (2) the North Palace Complex (Area A: Units A2 and A3); and (3) the East Palace Complex (Area C: Units C1, C2, C3, C4, and C5). Additional soundings were carried out west of the Church (Area B: Units B1 and B2). As the deposits in Area B were disturbed, this discussion will introduce only the material from the Palace Complex. The phasing of stratified deposits from the Palace Complex is outlined in Table 1.

*Pre-Phase I*

Several features pre-dating the construction of the Ayyubid Palace were exposed during the excavation but in no instance was it possible to archaeologically clarify the foundations of these features. As a result, their dating remains tentative and hence the designation "Pre-Phase I." In Unit A1 three drains (A1:11, A1:17, A1:19) representing at least two different Pre-Phase I construction sequences were encountered (Fig. 4). The scant body sherds associated with these features have not clarified whether these drains represent Nabataean occupation, Crusader constructions, or both. In Unit C2 the upper courses of a Pre-Phase I wall (C2:14) were articulated (Fig. 5). The fill (C2:13) against this wall included some 12th century pottery as well as a heavy concentration of Nabataean wares. While the latter suggests a probable Nabataean date of construction, it is not confirmed. The most substantial Pre-Phase I architectural features occurred in Unit A3 (Fig. 6). These include

a cobble wall bedding (A3:12), a boulder pavement (A3:10), and a plastered cistern (A3:11), the latter blocked by an overlying Phase I wall (A3:4). Situated very close to the steep rim of the site, the Pre-Phase I outer fortification wall represented by the wall bedding (A3:12) is probably part of the Crusader defenses. While firm evidence for its construction date is lacking, it is noteworthy that the contemporary adjacent boulder pavement (A3:10) contained a few coarse-ware sherds that probably date to the 12th century. Additional Pre-Phase I features were encountered in Units A2 and A4 but, as in the case of the loci mentioned above, the ceramic samples were very small and generally undiagnostic.

*Phase I*

Phase I pertains to the construction of the Ayyubid Palace Complex. Within the Reception Hall evidence for this construction includes: (1) a foundation trench (A1:21, A1:25) against the east balk wall (Fig. 4); (2) a series of leveling fills (A1:9, A1:13, A1:14, A1:18) and other debris (A1:12, A1:15) associated with the construction process; and (3) cobble layers (A1:5, A1:7) capped with a thick overlying plaster floor bedding (A1:3). The latter probably supported a paved floor, though no traces of pavement remained.

The North Palace Complex consists of a series of rooms situated between the Reception Hall and the edge of the site. The Phase I plan was articulated in Units

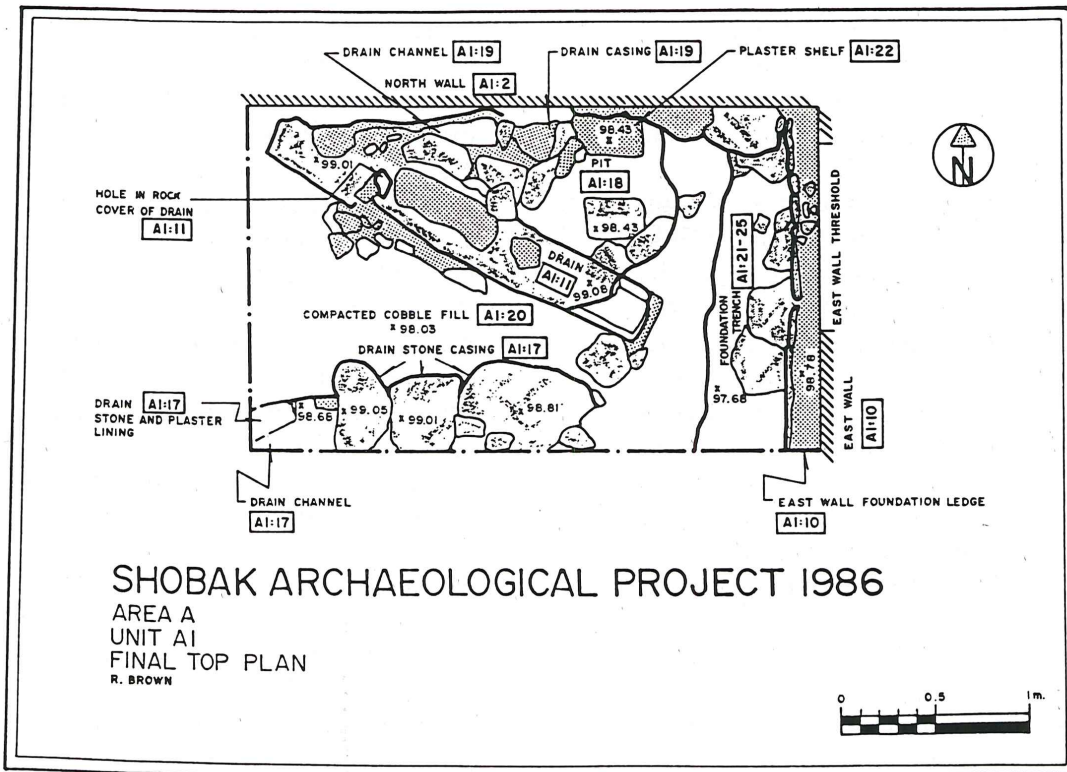


Fig. 4

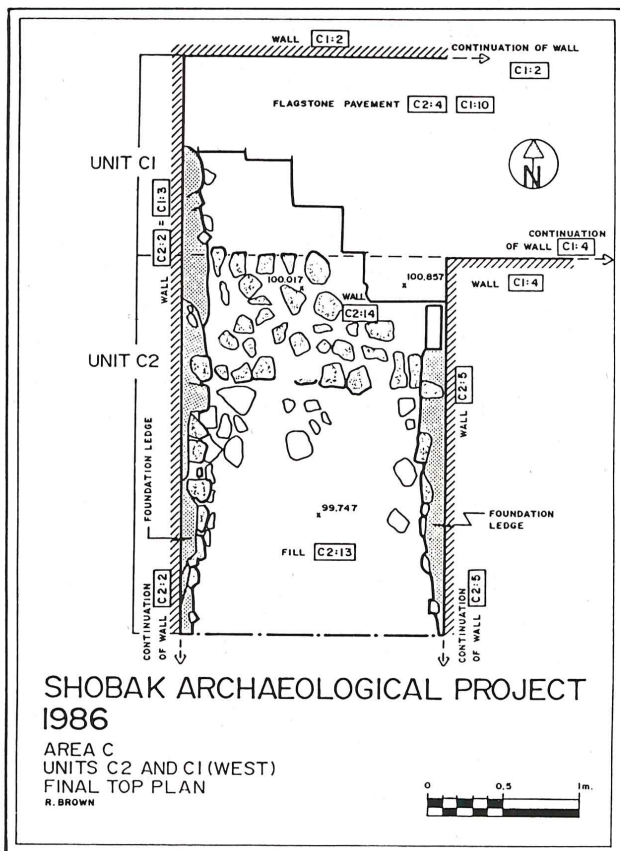


Fig. 5

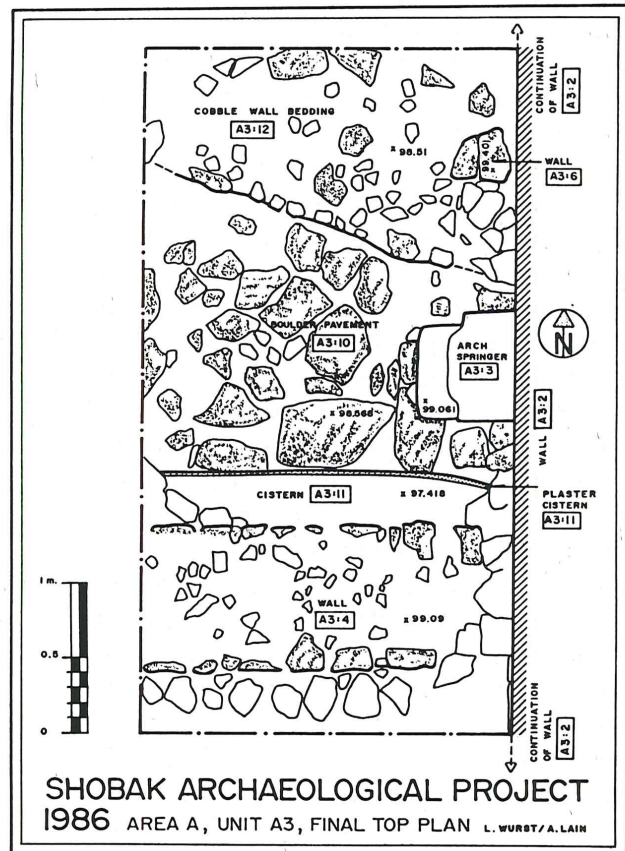


Fig. 6

A2 and A3 (Figs. 3, 7-8). The Phase I features in Unit A2 include: (1) a section of the Phase I outer fortification wall (A2:15, A2:19, A2:38), which also served as the north enclosure wall of the Palace Complex and (2) portions of the East Room, West Room, and Corridor, the latter linking the North Palace Complex with the Reception Hall. Thresholds mark the doorways between these compartments. The Phase I pavement in the West Room was indicated by impressions in the plaster floor bedding (A2:41). To the northwest of Unit A2, the outer fortification wall apparently jogged outward following the rim of the site (Fig. 3), as shown by the excavation in Unit A3 in which a room, designated as the North Chamber, lay between the row of compartments flanking the Corridor, and the fortification wall.

In the East Palace Complex, the South Corridor retained part of its original Phase I pavement (C1:10). In Unit C2, where the pavement had been robbed, the excavation sectioned through the multiple plaster bedding layers that supported the Phase I floor (Fig. 9). Part of the Phase I pavement and the uppermost surface of the plaster bedding was exposed in the South Chamber (C4:11, C4:15) as well.

The ceramic assemblage associated with the foundations and initial occupation of the Palace Complex includes one piece of monochrome glazed ware and two sherds from handmade coarse-ware vessels painted with geometric designs. These 'Ayyubid-Mamluk' wares occur in southern Trans-jordan as early as the 12th century (Brown 1987), but became increasingly common during the Mamluk period. More significant for the dating of Phase I are the assemblages from Units A1 and C2, which contain pottery types that are specific to 12th-early 13th century occupations spanning the Crusader and Early Ayyubid periods. Among these are handmade ceramic drainpipe fragments and handmade coarse-wares. The latter includes sherds painted in the linear design style that are also known from 12th century deposits at el-W'ueira (Brown 1987).

Phase I pottery is shown in Figs.

11-12, Nos. 1-27. Nos. 1-7 and 10-23 illustrate handmade coarse-wares painted with linear designs that include frequent use of criss-cross patterns. Of these, sherds Nos. 2 and 4 are residuals from post-Phase I loci, whereas the rest were from clearly stratified Phase I deposits. Two sherds bearing explicitly geometric designs are shown in Nos. 25-26. A more unusual piece, illustrated in No. 24, bears a design that appears unparalleled, although the thick, soft, buff ware and red paint show close affinity with the linear painted sherds. Part of a handmade drainpipe is shown in No. 27.

### *Phase II*

Phase II, primarily represented by structural rebuilds and additions, was attested only in the North Palace Complex Unit A2. The Phase II features reflect three processes: (1) the redefinition of the patterns of movement and access through the insertion of a partition (A2:35); (2) the apparent weakening of the Phase I structures, as demonstrated by several wall facings (A2:25, A2:42, A2:45) and a wall rebuild (A2:24) (Fig. 8); and (3) a reduced investment in construction noted in the decline of craftsmanship displayed by some of the Phase II architecture. Very few sherds were associated with the Phase II structural modifications and none are suitable for illustration. As the assemblage includes Phase I pottery but generally lacks types characteristic of Phase III, an Ayyubid date is tentatively suggested for Phase II.

### *Phase III*

During Phase III the Palace Complex experienced several alterations. By this time the Reception Hall appears to have been abandoned, probably due to structural collapse. In the North Palace Complex a fill (A2:16, A2:20) was inserted concealing nearly all of the Phase I-II features in Unit A2. Over the fill a thick plaster bedding (A2:14) was laid and above it a flagstone pavement (A2:6) (Figs. 7-8).



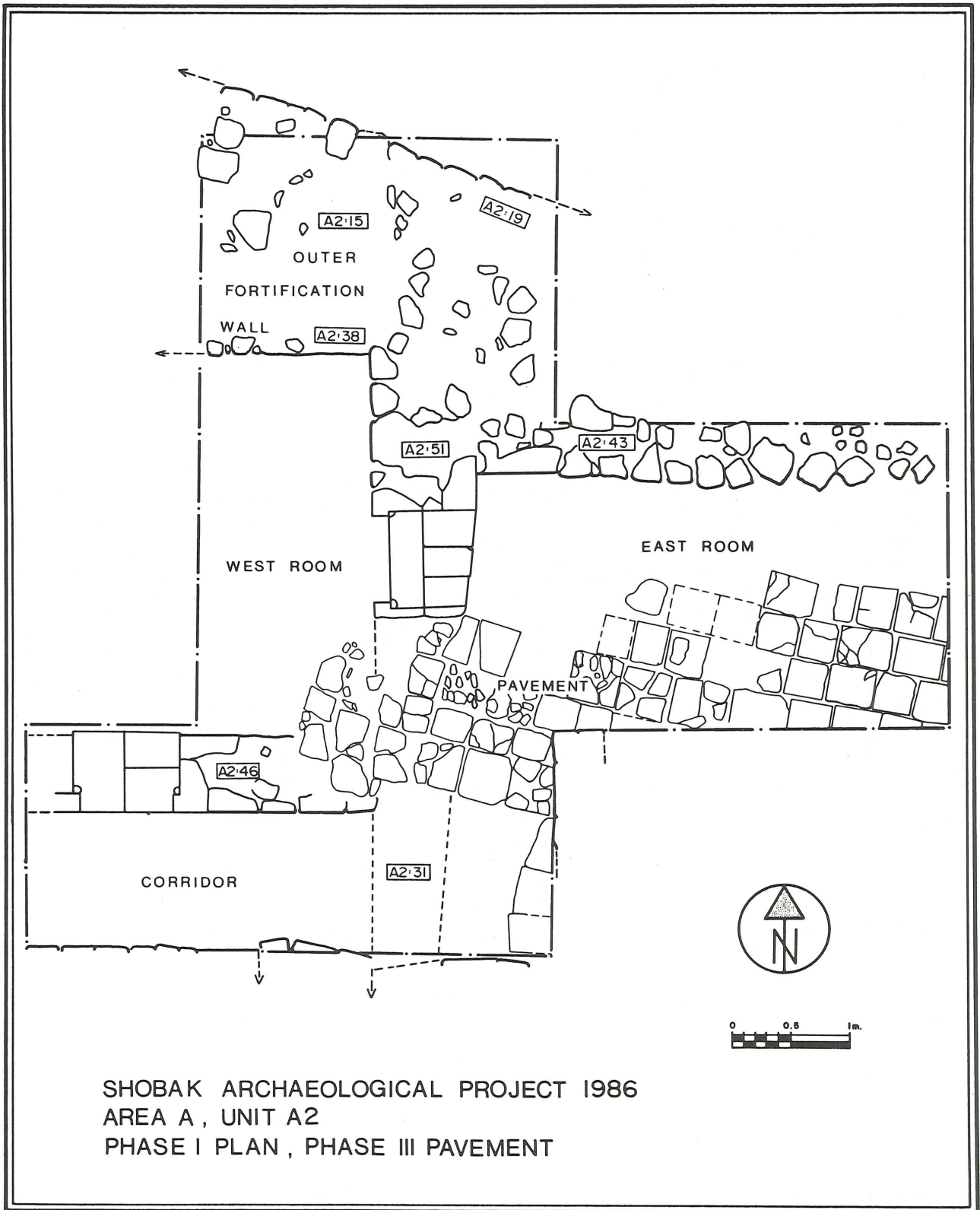


Fig. 7

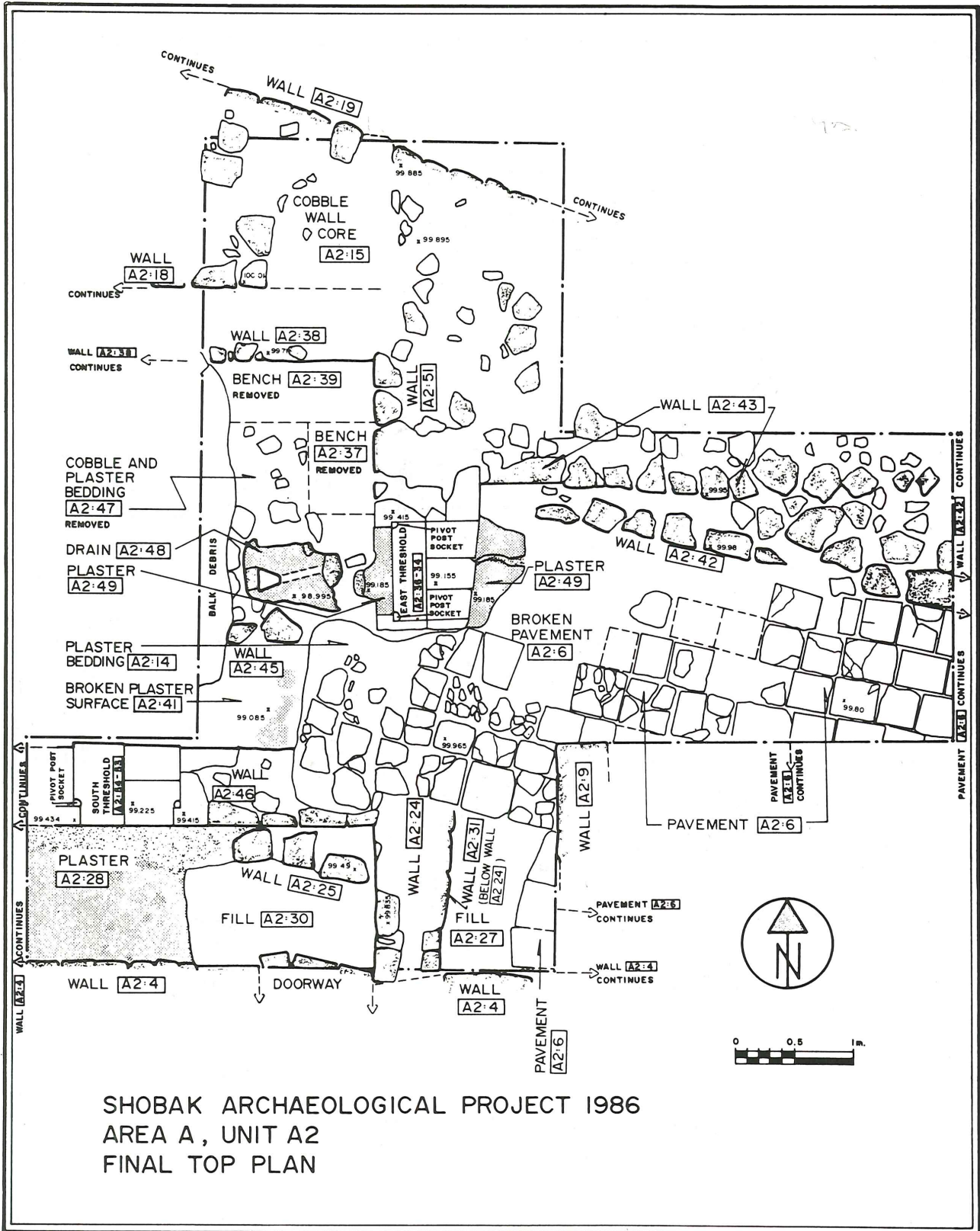


Fig. 8

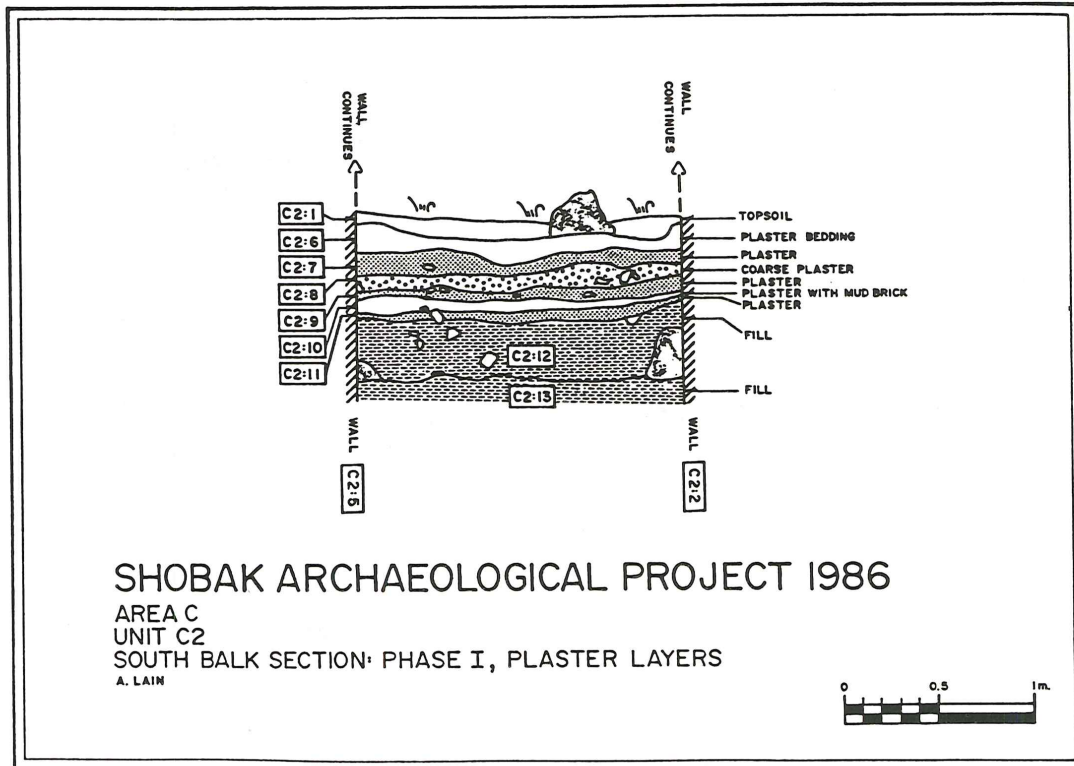


Fig. 9

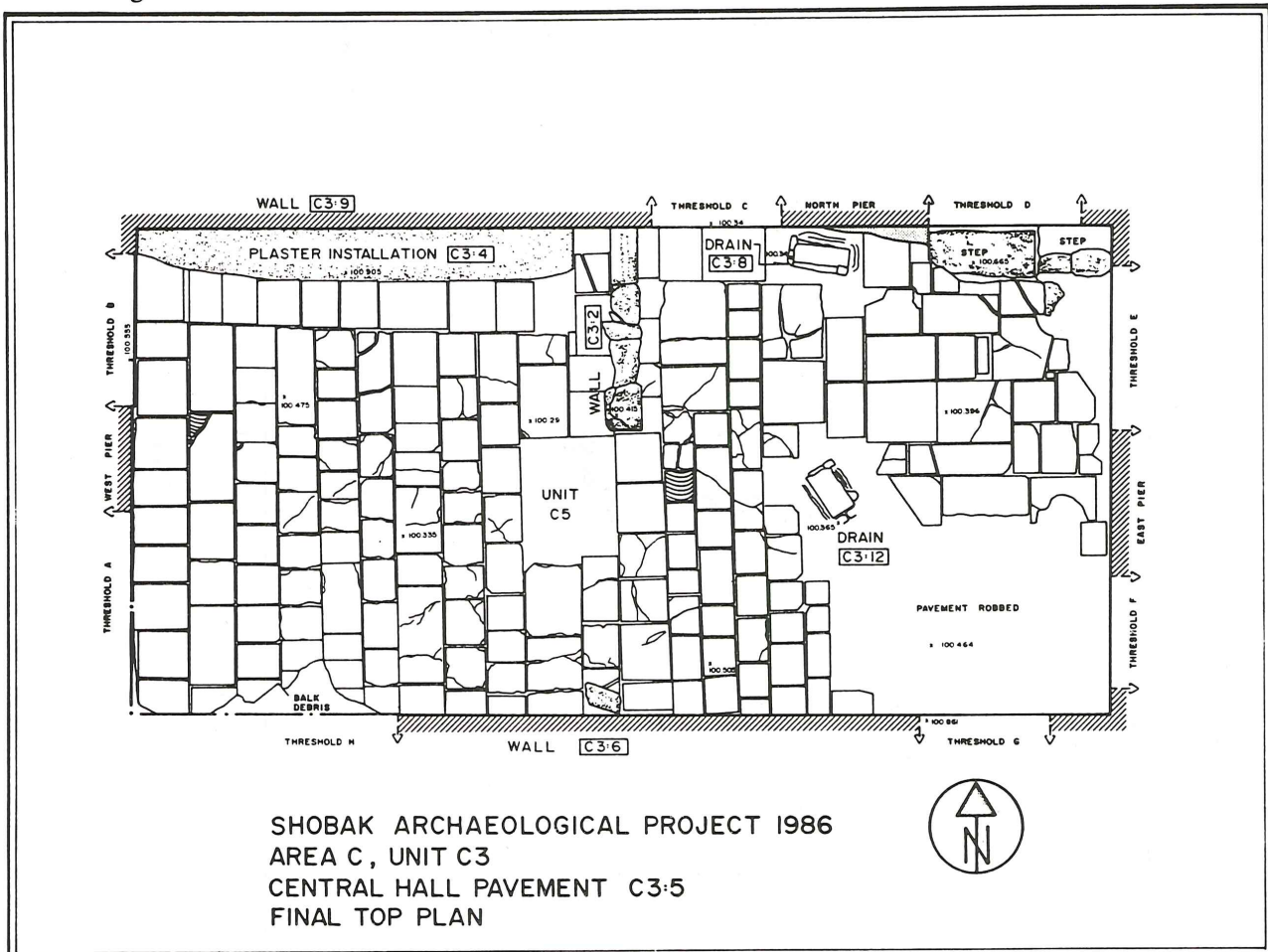


Fig.10

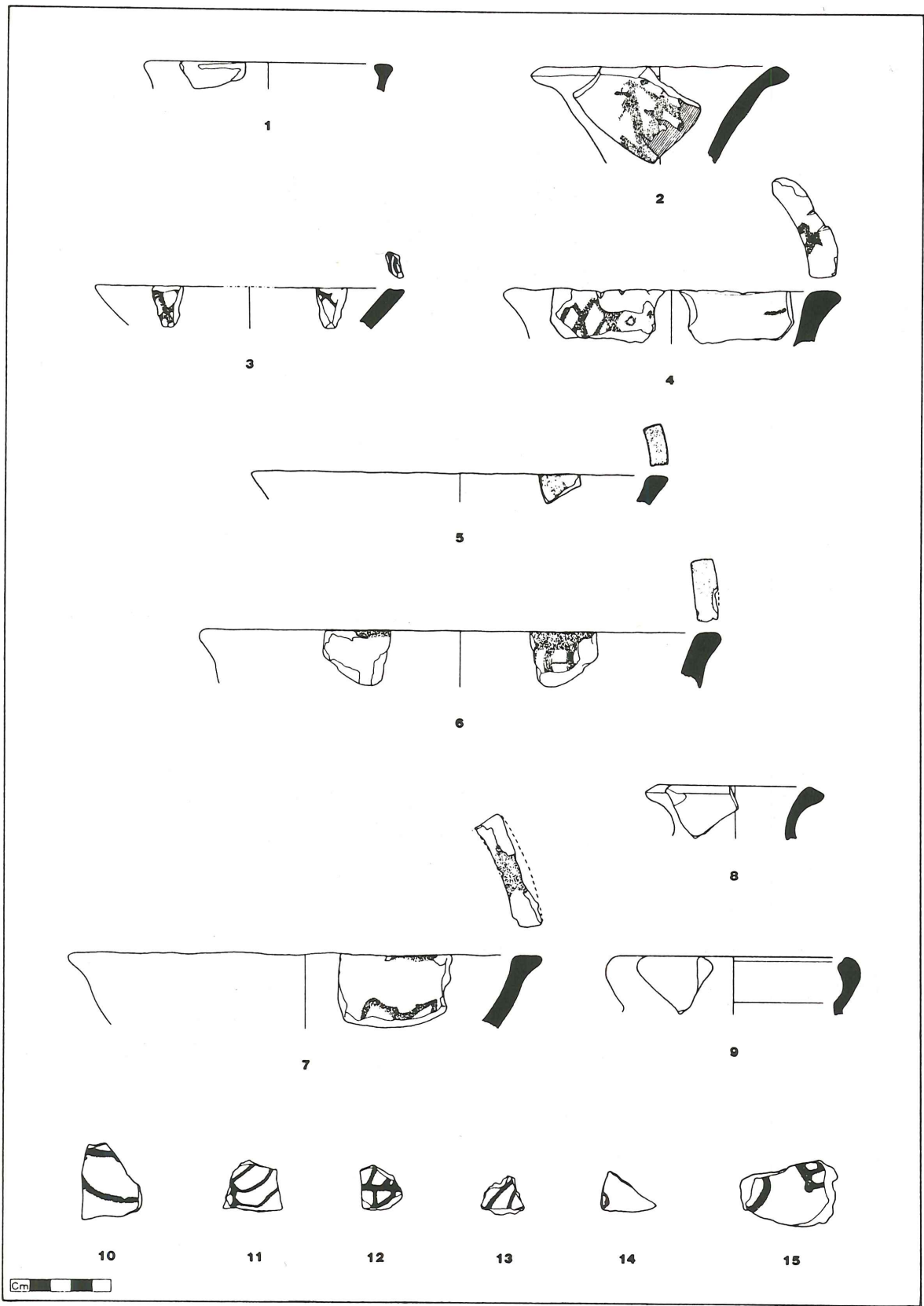


Fig. 11. Pottery from Phase I Loci.

Although portions of the pavement had deteriorated, it appears to have covered most of the unit, probably serving as a courtyard. In the East Palace Complex Central Hall (Unit C3) a Phase III pavement (C3:5) replaced the Phase I floor, as indicated by the Unit C5 sounding that probed beneath the pavement (Fig. 10). The poorly constructed pavement incorporated reused and re-cut flagstones that were laid directly upon soil without plaster or other bedding foundation.

Pottery from Phase II is presented in Figs. 12-13, Nos. 28-45. Among these examples, Nos. 28-9 belong to southern Levantine monochrome glazed wheel-thrown bowls. Data from Tell Hesban (Sauer 1973: Fig. 4), Tell Abu Qa'dan (Franken and Kalsbeek 1975: 131-41; Sauer 1976: 94), and el-Wu'eira (Brown 1987) indicate that monochrome glazed wares circulated in Transjordan from the 12th to the 15th centuries, though they are most typical of 13th to 14th century occupations. Pringle (1986: 147) also notes that these wares occurred at Burj al-Aḥmar in Phases B (ca. 1100-ca. 1150) and C (ca. 1191-ca. 1265), but were more common in the Mamluk Phase D (ca. 1265 - ca. 1390). No. 30 is a sherd from an imported underglaze painted vessel. This piece belongs to a class of pottery widely documented at Ḥama as Type XI (Riis and Poulsen 1957: 202-24, Figs. 682-776) and attributed to the 13th-14th centuries.

The influence of Far Eastern ceramics of the era is attested by bowl fragments Nos. 32-3. The former is an imitation Chinese celadon while the latter belongs to an authentic celadon. Engraved on the interior of No. 32 is a series of overlapping ovoids, arranged like scales and possibly denoting stylized petals. The graceful celadon bowl profile shown in No. 33 consists of a porcelain body coated with a thick pale green glaze. While Chinese wares had long been present at sites in the Islamic Near East, imported celadons reached their zenith in the Levant during the late 13th and 14th centuries (Lane 1957: 8-9).

Wheel-thrown cream wares typically associated with water jugs, jars, and to a

lesser extent cups and bowls, first appear in Phase III at Shobak. Sherds of this group, Nos. 34-9, are characterized by pink, buff, and white wares that are generally smooth surfaced and self-slipped, though a white slip was occasionally applied. Numerous examples of cream wares have also occurred in stratified 14th century deposits in the Mamluk palace at Kerak (Brown forthcoming).

Although one fragment of a wheel-thrown drainpipe was included in the Phase II corpus, these pieces are generally characteristic of Phase III occupation. Examples are shown in Nos. 40-1.

The handmade coarse wares with painted geometric designs that are so ubiquitous during the Ayyubid and Mamluk periods are poorly represented in Phase III. The conspicuous absence of this ceramic group could be due to either the small sample of Phase III pottery or local stylistic preferences. A different kind of painted handmade coarse-ware occurs at Shobak in Phase III. As shown in Nos. 42-45 this pottery is painted with red and black bichrome designs that display a free-hand style of composition apparently unconstrained by the conventions of geometric patterning. These sherds, representing several different vessels, may reflect a site-specific decorative style, for sherds bearing similar or derived decorations also occur in Phase IV deposits.

The rim from a large zir or storage jar shown in No. 46 was not stratified but may belong to Phase III for it shares some technical aspects with the cream ware group, including Mamluk industrial vessels such as sugar pots (Franken and Kalsbeek 1975: 143-54).

#### *Phase IV*

Phase IV occupation at Shobak reflects the Ottoman period village settlement. A low rubble wall (A4:4) and pit (A1:4, A1:6) characterize this occupation in the Reception Hall, while the remains of a Phase IV stone dwelling (A3:2) with mud plaster floor were present in Unit A3. Other features including portions of a

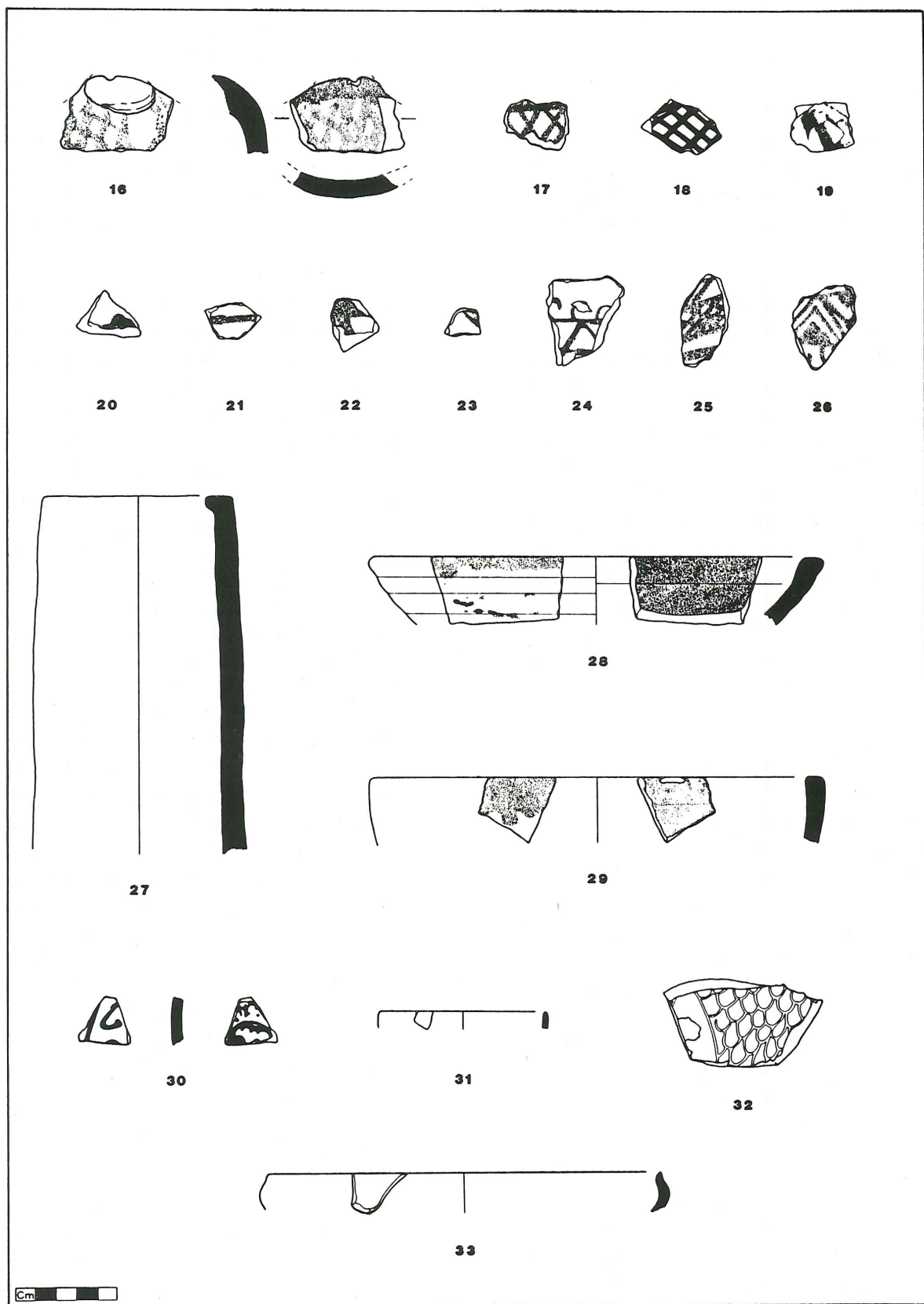


Fig. 12. Pottery from Phase I (Nos. 16-27) and Phase III (Nos. 28-33) Loci.

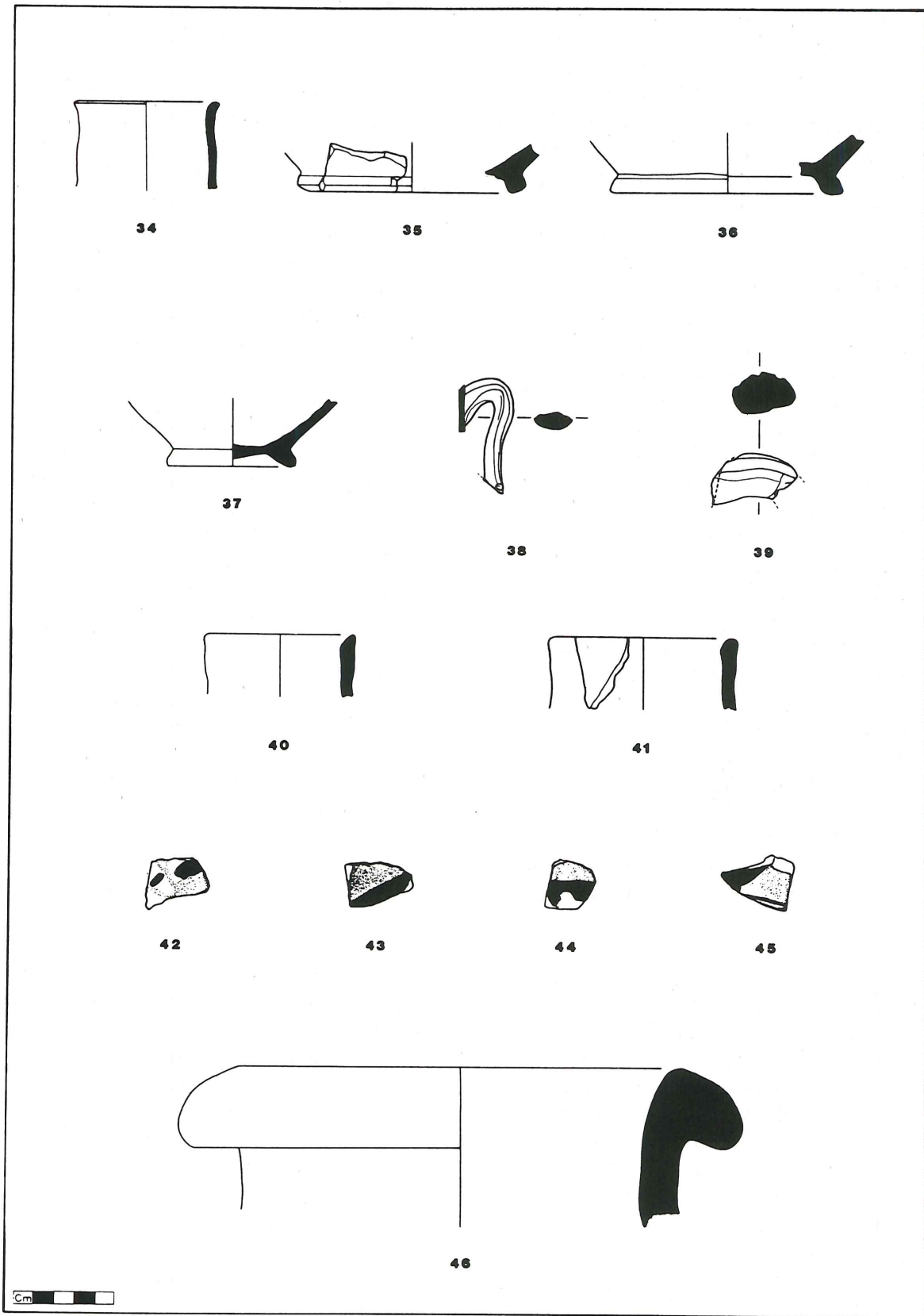


Fig. 13. Pottery from Phase III Loci.

house (A2:9, A2:56), an adjacent courtyard (pavement A2:6, reused) and a low stone enclosure (A2:7, A2:17) lay on the surface of Unit A2. The East Palace Complex was fully adapted to domestic occupation during this period. According to local sources the Central Hall, South Corridor, and South Chamber comprised the home of Sheikh Ibn Mra'hil who lived there until his death some 60 years ago. Archaeologically this occupation is attested by fills in nearly every unit of Area C as well as partition walls (C4:3A and C4:3B) and a plaster-lined stone basin (C4:8, 10) in the South Chamber. The Central Hall contained a plaster installation (bench seat or storage bin C3:4) and a stone alignment (C3:2). These features, in addition to the concrete adhering to the walls and doorways, can be attributed to the Phase IV occupation.

The pottery from this period is difficult to define due to the accumulation of residual sherds from earlier periods within the Phase IV deposits. Another complicating factor is the relatively small samples of ceramics from the precedings phases, for ceramic types belonging to Phases I-III may not be represented in the stratified assemblages from these periods. This makes definition of Phase IV ceramics through a process of elimination a tentative procedure. Nevertheless some observations may be presented in a preliminary fashion.

The ceramic industries of Transjordan appear to have experienced a considerable transition during the Ottoman period. The patterns that illustrate this transition are: (1) the sharp decline and apparently the ultimate disappearance of imported glazed vessels and southern Levantine wheel-thrown wares, both glazed and unglazed, and (2) a continuation of handmade ceramic production, though for the most part of a technological and artistically rudimentary nature. This latter form of production clearly dominated the industry during this period.

Sherds from Phase IV loci are shown in Figure 14, Nos. 47-54. All of these belong to handmade coarse wares, though

the cooking pot fragments shown in Nos. 53-4 are distinctive in fabric. The jug-jar forms pictured in Nos. 47-8 were crudely fashioned and have heavily chaff-pocked surfaces. The painted decorations show schematic designs that appear commonly in this period, though some pieces that more clearly exhibit a relationship to the geometric styles common during the Ayyubid and Mamluk periods also occur. Another jug/jar rim, No. 49, displays a deeply engraved decoration or signature. The stump of a loop handle, with three raised bands of clay that extend from the vessel body to the handle is illustrated in No. 50. This handle is characteristic of large globular storage jars that have been manufactured by villagers within the last hundred years. The flat base in No. 51 is typical of a variety of handmade coarse ware forms throughout the Late Islamic Period. However, the chaff-pocked, red slipped exterior surface and other technological aspects indicate that this piece can be attributed to Phase IV. Similarly, the jug/jar handle shown in No. 52 exhibits a mottled red slip and faint lines of a black painted decoration. Nos. 53-4, cooking pot rims from a Phase IV dump, are distinguished by hard gray wares and impressed raised bands that were joined to the vessel just below the rim.

### Summary Historical Remarks

The 1986 Shobak Archaeological Project concentrated on the excavation and documentation of the only known Ayyubid palace in Transjordan. The data from this preliminary investigation provide an introduction to the architectural and archaeological manifestations of a Late Islamic royal palace as it was conceived and occupied in the rural province of southern Transjordan (for a detailed historical interpretation see Brown 1988). The origin of the Palace remains unknown, for the historical sources do not contain specific reference to this structure. While at least three Ayyubid rulers sponsored constructions at Shobak, several factors indicate that it was probably built and occupied by al-Mu'azzam 'Isa ibn



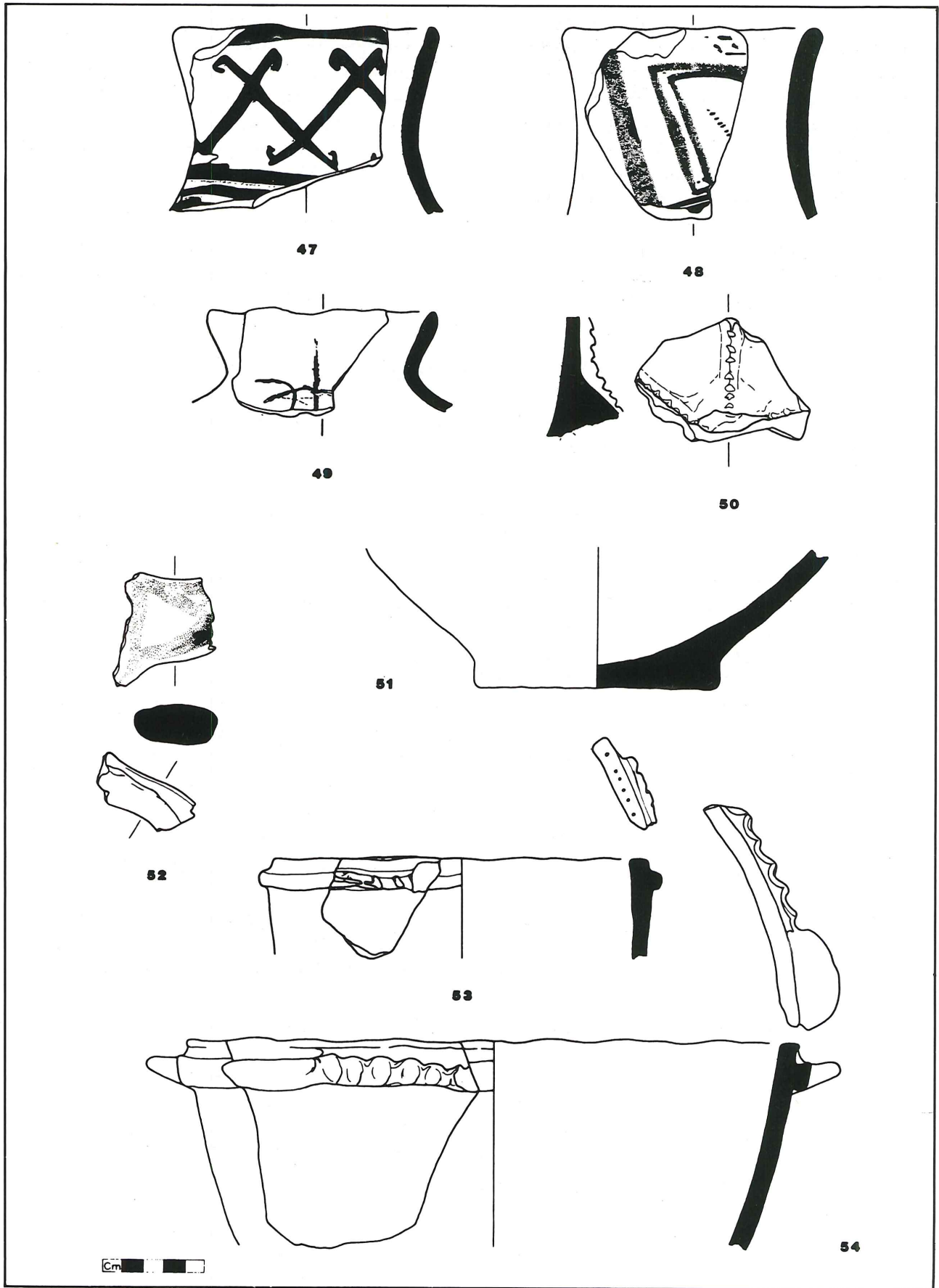


Fig. 14. Pottery from Phase IV Loci.

al-'Adil. Al-Mu'azzam 'Isa ruled Shobak from 1197 to 1218, as governor appointed by his father al-'Adil Abu Bakr, and continued to hold Shobak within his territorial domain from 1218 to 1226 while serving as the Sultan of Damascus. As recorded by the late 13th century historian Ibn Shaddad (in Dahan 1963: 80-1), Al-Mu'azzam 'Isa's investments at Shobak were considerable, for he is credited with having fortified and beautified Shobak, planting gardens whose beauty rivaled the

gardens of Damascus. The exceptional energies that al-Mu'azzam 'Isa devoted to Shobak indicate that he maintained his personal residence there, at least until assuming power in Damascus. As such, the Palace may also be counted among the accomplishments of this Ayyubid prince.

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### WARE DESCRIPTIONS

Introduction to the ware descriptions: W=ware; S=slip; P=paint; G=glaze; I=interior; E=exterior; C=core; D=diameter; m=mottled; (H)=handmade. Numerical color values from: Munsell (1975) and Kornerup and Wanscher (1981).

Sherd No.	Unit/Loc/PB Reg. No.	Phase	Description: Form/Ware/Surface/Core
1	C2:12.14 69	I	Bowl: W = 2.5YR 6/6 L. Red; ES = 5YR 4/1 D. Gray; C = none; D = 12; (H)
2	A3:5.4B 101		Bowl: W = 5YR 6/4 L. Reddish Brown; ES = 7.5YR 7/4 Pink; EP = 5YR 6/4 L. Reddish Brown; C = 80%; D = 12.5; (H)
3	C2:11.9 26	I	Bowl: W = 2.5YR 6/6 L. Red; ES = 7.5YR 8/4 Pink; I&EP = 10R 4/6 Red; C = 90%; D = 15; (H)
4	A2:16.96 1		Bowl: W = 5YR 7/4 Pink; Self Slip; EP = 2.5YR 6/4 L. Reddish Brown; C = 90%; D = 16.5; (H)
5	C2:11-12.25 53	I	Bowl: W = 5YR 6/4 L. Reddish Brown; Self Slip; IP = 10R 5/6 Red; C = 100%, D = 20; (H)
6	C2:11-12.25 66	I	Bowl: W = 2.5YR 6/6 L. Red; I&ES = 5YR 7/4 Pink; IP = 10R 5/6 Red; C = 100%; D = 25.5; (H)
7	A2:39.93 1	I	Bowl: W = 5YR 7/4 Pink; IS = 7.5YR 8/2 Pinkish White; IP = 2.5YR 6/4 L. Reddish Brown; C = 95%; D = 23; (H)
8	C2:12.13 17	I	Jar: W = 5YR 6/4 L. Reddish Brown; ES = 5YR 5/1 Gray; C = none; D = 8.5; (H)
9	C2:11-12.25 26	I	Jar: W = 5YR 6/3 L. Reddish Brown; ES = 5YR 5/1 Gray; C = 95%; D = 12; (H)
10	C2:12.15 89	I	Body Sherd: W = 5YR 7/3 Pink; ES = 10YR 7/3 V. Pale Brown; EP = 10R 5/4 Weak Red; C = 85%; (H)
11	A1:18.26 5	I	Body Sherd: W = 5YR 7/4 Pink; ES = 7.5YR 7/4 Pink; EP = 2.5YR 6/4 L. Reddish Brown; C = 85%; (H)
12	C2:12.14 84	I	Body Sherd: W = 5YR 7/3 Pink; ES = 5YR 7/4 Pink; EP = 10R 5/6 Red; C = 60%; (H)
13	A1:9.11 10	I	Body Sherd: W = 5YR 7/3 Pink; ES = 5YR 7/4 (m) Pink; EP = 10R 4/6 Red; C = 80%; (H)
14	C2:13.28 64	I	Body Sherd: W = 5YR 7/3 Pink; ES = 5YR 7/4 Pink (m); EP = 10R 5/6 Red; C = 30%; (H)

15	C2:12.14 52	I	Body Sherd: W = 7.5YR 7/4 Pink; ES = 10YR 7/4 V. Pale Brown; EP = 10YR 5/4 Weak Red; C = 95%; (H)
16	C2:12.13 15	I	Handle: W = 5YR 7/3 Pink; S = 7.5YR 8/4 Pink; P = 10R 5/6 Red; C = 99%; (H)
17	C2:12.16 2	I	Body Sherd: W = 10YR 7/3 V. Pale Brown; Self Slip; EP = 2.5YR 6/7 L. Reddish Brown; C = 40%; (H)
18	C2:13.28 46	I	Body Sherd: W = 5YR 7/3 Pink; ES = 5YR 6/4 L. Reddish Brown; EP = 5YR 5/1 Gray; C = 90%; (H)
19	C2:12.14 85	I	Body Sherd: W = 7.5YR 8/4 Pink; ES = 7.5YR 7/2 Pinkish Gray; EP = 10R 5/4 Weak Red; C = none; (H)
20	C2:12.11 4	I	Body Sherd: W = 5YR 7/4 Pink; ES = 7.5YR 7/3 Pink; EP = 10R 5/4 Weak Red; C = 99%; (H)
21	C2:12.14 65	I	Body Sherd: W = 5YR 7/4 Pink; ES = 5YR 7/3 Pink (m); EP = 2.5YR 5/6 Red; C = 99%; (H)
22	C2:12.18 8	I	Body Sherd: W = 7.5YR 8/2 Pinkish White; Self Slip; IP = 2.5YR 6/4 L. Reddish Brown; C = none; (H)
23	C2:12.15 49	I	Body Sherd: W = 5YR 7/4 Pink; Self Slip; EP = 10R 4/6 Red; C = 60%; (H)
24	C2: - 27 4	I	Body Sherd: W = 7.5YR 7/4 Pink; IS = 5YR 6/4 L. Reddish Brown; ES = 5YR 6/6 Reddish Yellow; EP = 10R 5/4 Weak Red; C = 30%; (H)
25	A2:29.56 21	I	Body Sherd: W = 10R 6/4 Pale Red; ES = 10YR 8/2 White; EP = 10R 5/4 Weak Red; C = 95%; (H)
26	A2:29.54 3	I	Body Sherd: W = 7.5YR 7/4 Pink; ES = 5YR 7/4 Pink; EP = 10R 5/6 Red; C = 70%; (H)
27	A2:48.102 1	I	Drain Pipe: W = 7.5YR 5/4 Brown; Self Slip; C = 90%; (H)
28	C5:3.3 1	III	Bowl: W = 10YR 7/2 L. Gray; IG = 27/F7 (Green) (m); C = 60%; D = 22
29	C5:2.2 21	III	Bowl: W = 2.5Y 8/2 White; IG = 4/7B (Yellow) (m); C = none; D = 22
30	C5:3.3 (45)	III	Body Sherd: W = 10YR 8/2 White (frit); I&ES = White; I&EP = 7.5YR N2/Black; C = none
31	C5:3.3 (46)	III	Cup: W = 10YR 8/2 White; I&EG = 22/3B (Blue); C = none; D = 8
32	A2:16.23 3	III	Body Sherd: W = 10YR 6/1 Gray; IG = 30/5D (Gray), EG = 3/7C (Yellow-Green); C = none
33	A2:23.52 (8)	III	Bowl (Porcelain): W = 10YR 8/1 White; I&EG = 27/3B (Pale Green); C = none; D = 19
34	A2:16.26 3	III	Jar: W = 5YR 7/4 Pink (m); Self Slip; C = none, D = 7
35	A2:14.14 2	III	Base: W = 5YR 6/4 L. Reddish Brown; Self Slip; C = none
36	A2:16.23 7	III	Base: W = 5YR 7/4 Pink; ES = 10YR 8/2 White; C = 10%
37	A2:14.14 3	III	Base: W = 2.5YR 6/4 L. Reddish Brown, 10YR 8/2 White; Self Slip; C = none
38	A2:16.26 4	III	Handle: W = 5YR 7/4 Pink (m); Self Slip; C = 90%

39	A2:14.41 2	III	Handle: W = 10YR 8/3 V. Pale Brown; Self Slip; C = none
40	A2:16E.61 9	III	Drain Pipe: W = 5YR 7/4 Pink; Self Slip; C = 90%, D = 7.5
41	A2:16E.61 6	III	Drain Pipe: W = 5YR 7/4 Pink; Self Slip; C = 90%; D = 9
42	C5:4.4 6	III	Body Sherd: W = 7.5YR 7/4 Pink; EP = 2.5YR 4/6 Red; 5YR 3/1 V. Dark Gray; C = none; (H)
43	C5:2.2 8	III	Body Sherd: W = 5YR 7/4 Pink; EP = 10R 5/6 Red, 5YR 2.5/1 Black; C = none; (H)
44	C5:2.2 5	III	Body Sherd: W = 7.5YR 7/4 Pink; EP = 2.5YR 5/6 Red, 2.5YR N2.5/ Black; C = 80%; (H)
45	C5:3.3 4	III	Body Sherd: W = 7.5YR 7/4 Pink; EP = 10R 5/4 Weak Red, 7.5YR N3/ V. Dark Gray; C = none; (H)
46	A2:13.15 1		Zir: W = 5YR 7/4 Pink; IS = 10YR 8/2 White; C = none; D = 21.5
47	A4:1.2 11	IV	Jug/Jar: W = 5YR 6/4 L. Reddish Brown; ES = 10R 5/6 Red (m); EP = 10R 3/1 D. Reddish Gray (m); C = 70%; D = 13; (H)
48	A1:4.4 4	IV	Jug/Jar: W = 2.5YR 6/6 L. Red; ES = 5YR 8/4 Pink; EP = 10R 5/4 Weak Red, 5YR 3/1 Dark Gray; C = 95%; D = 12.5; (H)
49	A3:5.8 4	IV	Jug/Jar: W = 5YR 8/4 Pink; Self Slip; C = 40%; D = 11; (H)
50	C5:1.1 2	IV	Handle: W = 5YR 7/4 Pink; ES = 10YR 8/3 V. Pale Brown (m); C = 50%; (H)
51	A4:1.2 9	IV	Base: W = 5YR 7/4 Pink; ES = 10R 5/4 Weak Red; C = 80%; (H)
52	A4:1.2 5	IV	Handle: W = 2.5YR 6/6 L. Red; ES = 10R 5/6 Red; EP = 10R 4/1 D. Reddish Gray; C = 90%; (H)
53	C3:1.2 26	IV	Cooking Pot: W = 5YR 5/1 Gray; C = 25%; D = 18.5; (H)
54	C3:1.2 37	IV	Cooking Pot: W = 5YR 5/1 Gray; C = none; D = 29.5; (H)

## References

Abel, A.

- 1956 La citadelle eyyubite de Bosra Eski Cham. *Les Annales Archéologiques de Syrie* VI: 95-138.

Brown, R.

- 1987 A 12th Century A.D. Sequence from Southern Transjordan: Crusader and Ayyubid Occupation at el-Wu'eira. *ADAJ*. XXXI:267-288.

- 1988 Report of the 1986 Excavations at Shobak. Ms. on file: Department of Antiquities Registration Centre, Amman.

forth- Excavations in the 14th Century A.D. Mamluk Palace at Kerak. *ADAJ*.  
coming

- Burgoyne, M.  
1987 *Mamluk Jerusalem: An Architectural Study*. Essex: Scorpion Publishing.
- Dahan, S.  
1963 *Liban, Jordanie, Palestine: topographie historique d'Ibn Šaddād. Édition critique d'Al-A'laq al-Ḥatīra*. Damas: Institut Français de Damas.
- Franken, H.J. and J. Kalsbeek  
1975 *Potters of a Medieval Village in the Jordan Valley*. Amsterdam and New York: North-Holland Publishing Co.
- Hoag, J.D.  
1977 *Islamic Architecture*. New York: Abrams.
- Johns, C.N.  
1932 Medieval 'Ajlūn I. The Castle. (Qal'at ar-Rabaḍ). *QDAP* I: 21-33.
- Kornerup, A. and J.H. Wanscher  
1981 *Taschenlexikon der Farben*. Zürich and Göttingen: Muster-Schmidt.
- Lane, A.  
1971 *Later Islamic Pottery*. London: Faber and Faber.
- Langendorf, J.-J., and G. Zimmermann  
1964 Trois monuments inconnus des croisés. *Bulletin du Musée d'art et d'histoire de la ville de Geneve* XIII: 123-65.
- Munsell  
1975 *Munsell Soil Color Charts*. Baltimore: Munsell Color Co.
- Müller-Wiener, W.  
1966 *Castles of the Crusaders*. London: Thames and Hudson.
- Pringle, D.  
1986 *The Red Tower (al-Burj al-Ahmar): Settlement in the Plain of Sharon at the Time of the Crusaders and Mamluks, A.D. 1099-1516*. Monograph Series I. London: British School of Archaeology in Jerusalem.
- Riis, R.J. and V. Poulsen  
1957 *Hama fouilles et recherches 1931-1938, IV, 2: les verreries et poteries médiévales*. Copenhagen: Nationalmuseet.
- Sauer, J.A.  
1973 *Heshbon Pottery 1971*. Andrews University Monographs Vol. VII. Berrien Springs: Andrews University.  
1976 Pottery Techniques at Tell Deir 'Allā. *BASOR* 224: 91-4.
- Savignac, M.R.  
1903 Chronique: Ou'āirah. *RB* XII: 114-120.
- Toueir, K.  
1985 Der Qaṣr al-Banāt in ar-Raqqā: Ausgrabung, Rekonstruktion und Wiederaufbau (1977-1982). *Damaszener Mitteilungen* 2: 298-319.

