

# TELL ESH-SHUNA NORTH 1984: A PRELIMINARY REPORT

by  
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## Introduction

Under the sponsorship of Yarmouk University, the University of Tübingen and the Department of Antiquities of Jordan,<sup>1</sup> salvage excavations were conducted at Tell esh-Shuna North,<sup>2</sup> Jordan, between March 4th and April 23rd, 1984.<sup>3</sup> Located in the northern Jordan Valley at the junction of the main road descending from the Irbid plain down to the north-south valley road, the locational importance of the site's prehistory is reflected in its rapid growth today. As often occurs, the modern growth of Tell esh-Shuna North occurs at the expense of the ancient mound. In the 1960-1961 publications of the 1953 archaeological probe at the site,<sup>4</sup> the size of the *tell* was reported to be approximately one kilometre long with a maximum height of ten metres. Today, though the sherd scatter extends throughout the town, only several small portions of the mound are preserved and/or offer a potential for excavation.

The largest of the preserved segments of Tell esh-Shuna North is located in the middle of the bus stop, under the shadow of the mosque. Even this area, measuring only 45 m. x 50 m. north-south with a maximum preserved height of six metres

above the level of the adjacent asphalt pavement, is only available for excavation due to the destruction of the overlying houses in 1967; the accompanying destruction debris and accumulated garbage deposit themselves accounting for up to one and a half metres of the mound's preserved height. Recent remodelling of the western and southern perimeter of this area by a series of bulldozer cuts have resulted in a step-like cut into the mound, offering an easy strategy for salvage excavation. Initially, three 5.00 m. x 5.00 m. squares were opened on an east-west line, straddling the western cut. The easternmost of the squares, designated EIV on the plan (Fig. 1), was abandoned when it was determined that a large pit of apparent Mamlūk date had destroyed most of the later Early Bronze I to possible Early Bronze II occupational deposits in the area. A fourth square to the west (designated EI), projecting slightly into the parking lot, was then opened in order to increase the exposure of the earlier part of the obtained sequence. In total, a maximum of seventy-five square metres were excavated to a maximum depth of four metres (the overlying "Hashemite" deposits excluded), revealing a continuous sequence dating from the late Chalcolithic

<sup>1</sup> I would especially like to thank Dr. M. Ibrahim, Dr. W. Röllig, Dr. A. Hadidi and Ms. Maha Jeyousi for their generous support and encouragement.

<sup>2</sup> Various spellings have already appeared in the literature: Tell esh-Shuna, esh-Shunah & esh-Shuneh. The choice of Tell esh-Shuna (North) is based on the name given to this site after its initial identification during the archaeological survey of 1953. J. Mellaart, "Preliminary report of the Archaeological Survey in the Yarmouk and Jordan Valley," *ADAJ*, VI & VII (1962) p. 126-157 (site 15).

<sup>3</sup> Our team comprised the author, Mr. Robert A. Erskine and Mr. Hekmet Ta'ani. I would also like to take this opportunity to thank the people of Shuna North who accepted our hole in the middle

of their bus stop with gentle humor, the municipality for their support and occasional front-end loader, and Hanbo, a Korean construction company for the loan of their place-loader which back-filled, in half an hour, the hole we spent seven weeks creating. Finally, I would like to give special thanks to our workmen. Without their enthusiasm, questions, and unexpected interpretations, the excavations would not have been half so much fun.

<sup>4</sup> H. de Contenson, "Three Soundings in the Jordan Valley," *ADAJ*, IV-V (1960) p. 12-98, in particular p. 12-31, figures 1-18; — "Remarques sur le Chalcolithique Récent de Tell esh Shuna," *RB*, 68 (1961) p. 546-556; — "La Chronologie Relative du Niveau le plus Ancien de Tell esh Shuna (Jordanie)," *MUSJ*, 37, (1960-1961) p. 57-75.

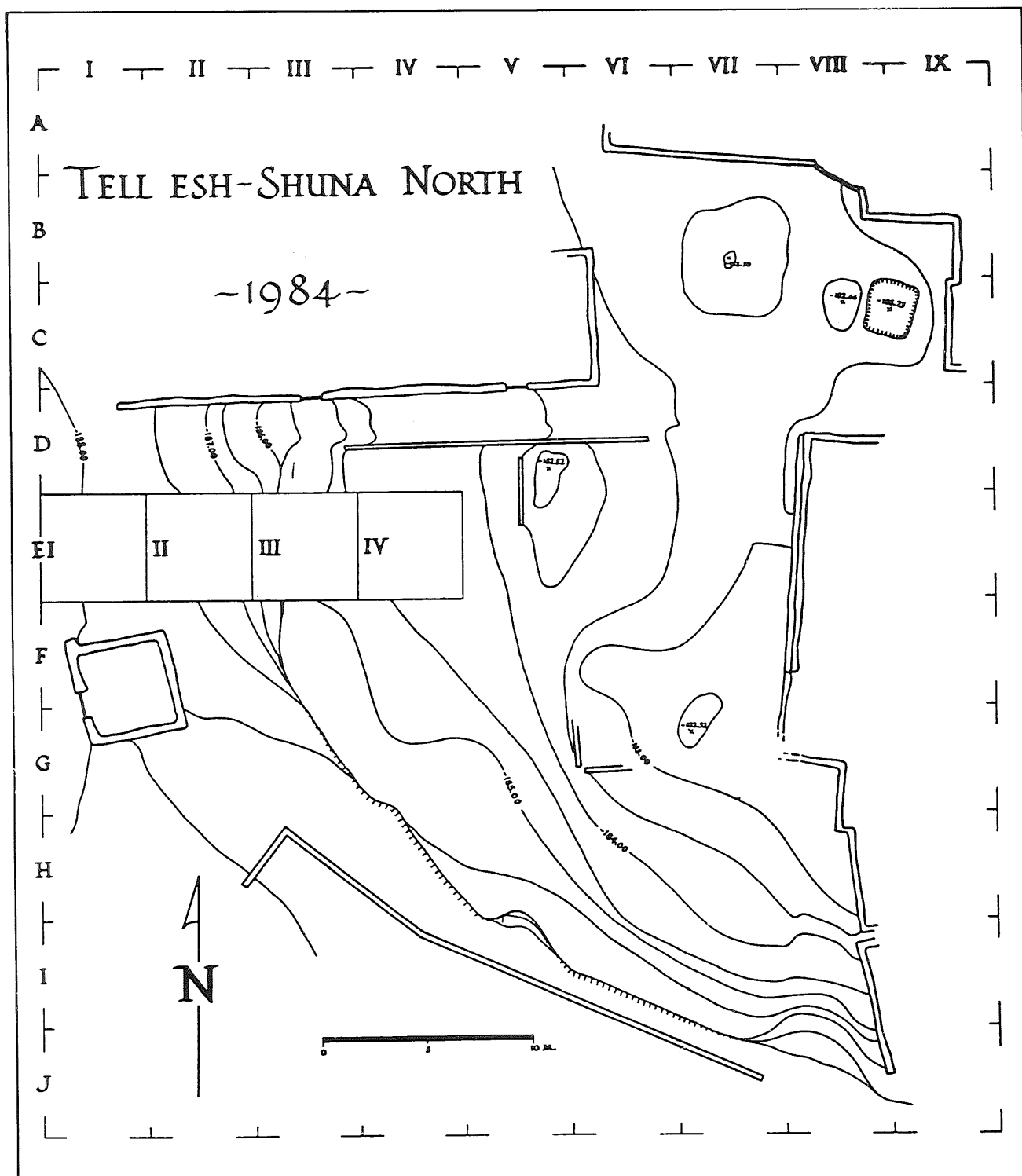


Fig. 1

through the Early Bronze I. Towards the end of the season, the size of the excavated area was reduced to fifty square metres, however, virgin soil was not reached.

#### 1984 Excavations

Though investigated in the early 1950's, the decision to probe deeper into Tell esh-Shuna North was based on the need for a well-stratified sequence span-

ning the late Chalcolithic through Early bronze I in the northern Jordan Valley. During the 1984 season, seventy-three strata were excavated, forming a compact occupational sequence of alternating partially-exposed rooms and associated floors, work surfaces, pits, fills and garbage or ash lenses (Figs. 2-5 and Appendix A: Locus Descriptions).

The lowest excavated strata of squares EI and EII revealed several partially-

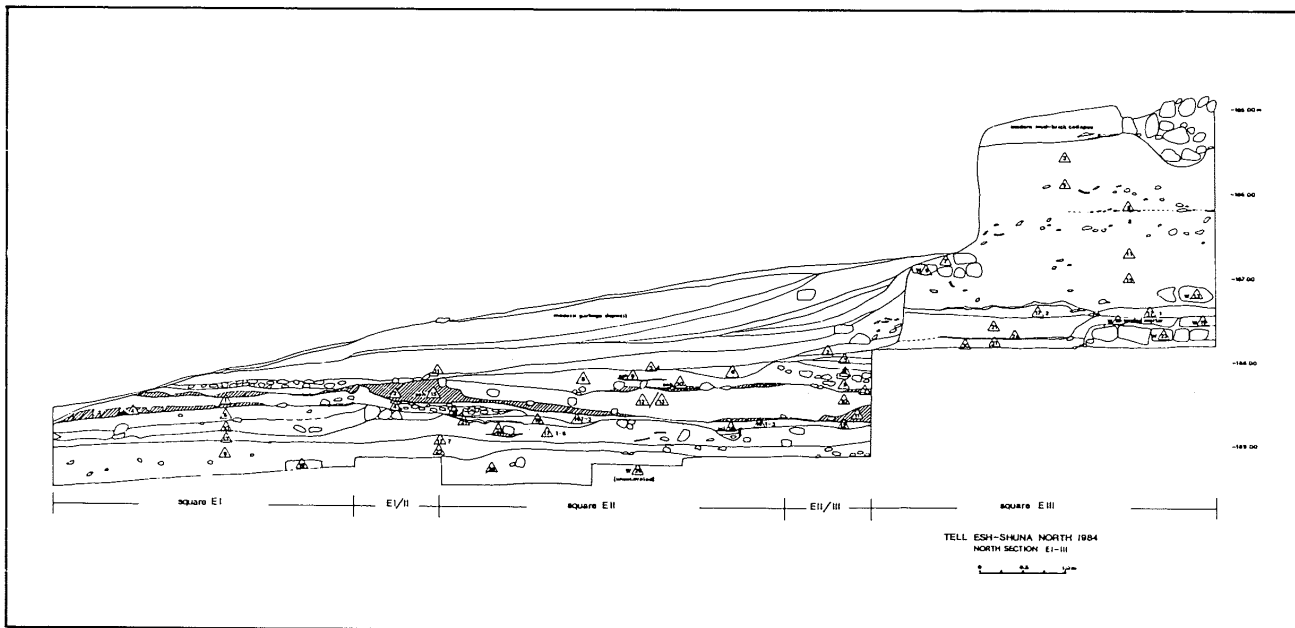


Fig. 2

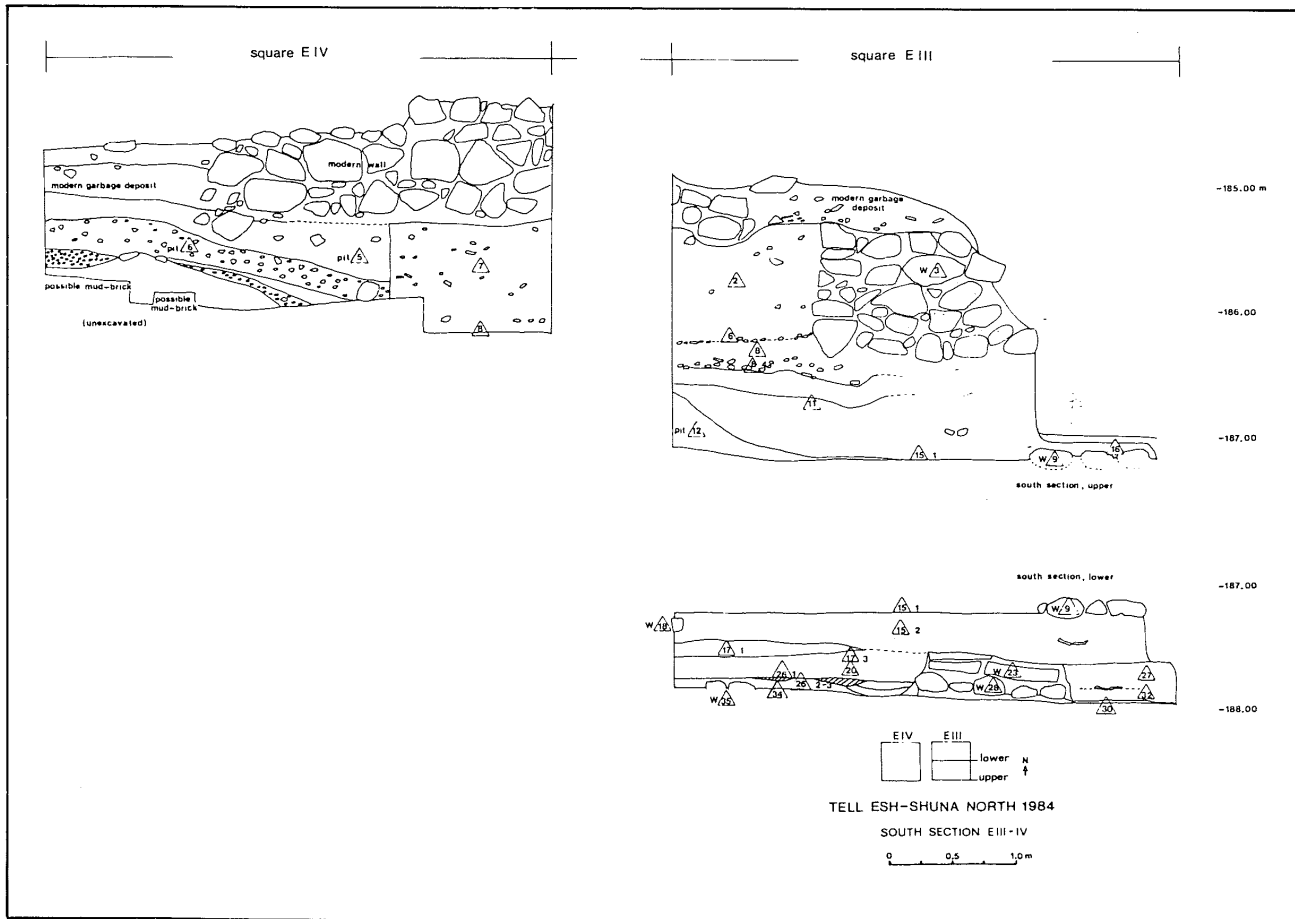


Fig. 3

exposed rooms enclosed by mud-brick walls with white-plastered interior surfaces.<sup>5</sup> In Square EII, building activity then ceased and the area was used for activities involving a series of small to medium sized clay-lined pits with associated hard earth or cobbled surfaces.<sup>6</sup> Con-

temporary with these activities, square EI to the west revealed a series of fragmentary cobbled pavements with a stone-lined fire ring.<sup>7</sup> Building activity was again resumed as represented by a rapid succession of thick beaten-earth floors with associated stone wall foundations of partially-

<sup>5</sup> Loci EI W 18, EII W 29 & EII W 30

<sup>6</sup> Loci EI 27 through 23

<sup>7</sup> Loci EI 16 through 12

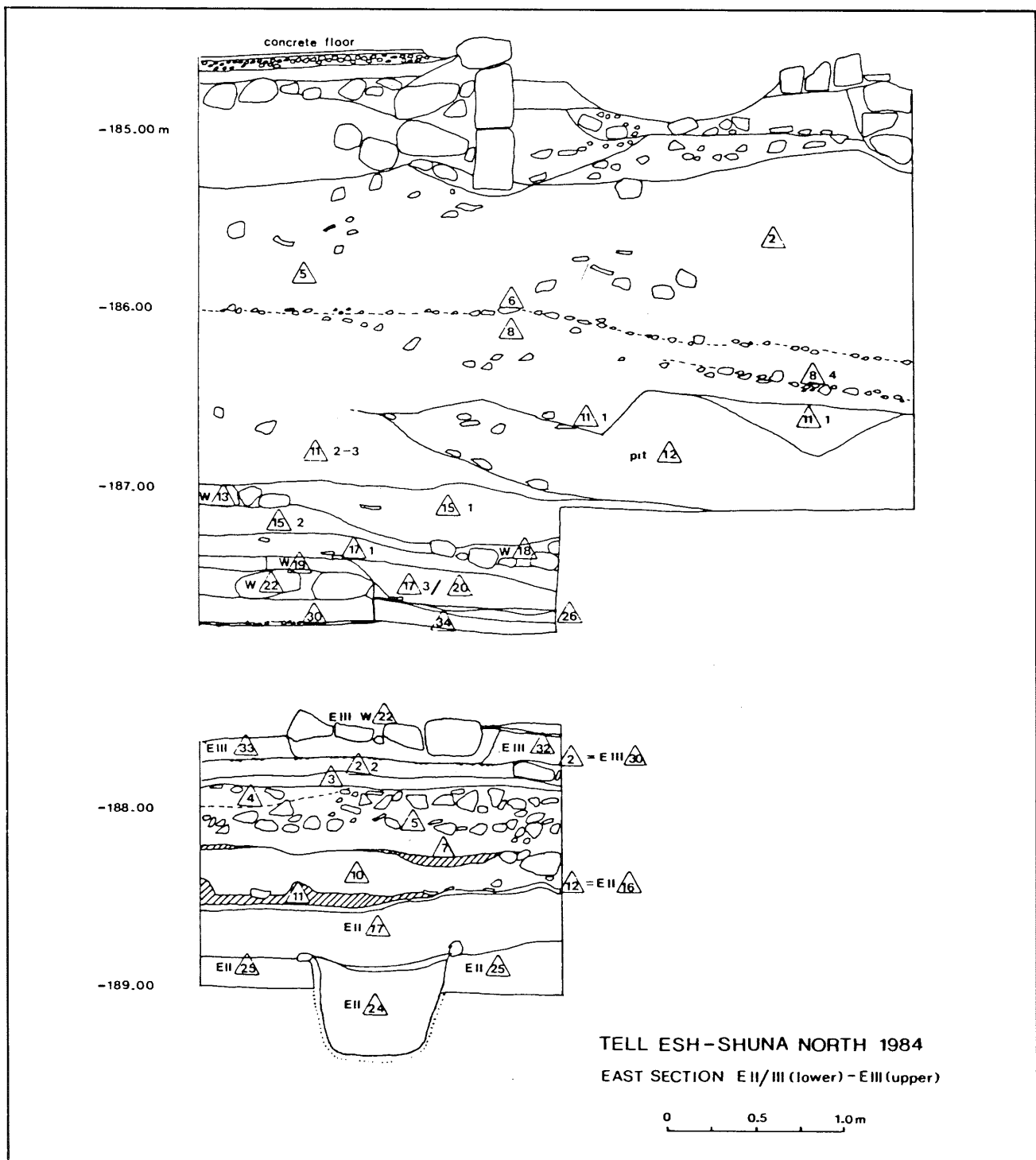


Fig. 4

exposed, rectilinear rooms (Fig. 6-lower).<sup>8</sup> The area west of these buildings continued to belong to outdoor activities of which cobbled pavement fragments and a large ash lens remain.<sup>9</sup>

Concomitant with the introduction of the grey-burnished "Esdraelon" wares, the buildings of square EII fell into disrepair with the northern part of the exposure

becoming an apparent refuse dump characterized by a thick ash lens, slightly later cut into by a large pit.<sup>10</sup> The area represented by squares EI and EII retain the function of a "vacant lot" with work and building activity shifting slightly to the east.<sup>11</sup>

The beginning of the eastern sequence, contemporary with the latter fill

<sup>8</sup> Loci EI W 7, 11; EII W1 - W4, 16.1-3, 19, 20, 21, 22; EII/III 12

<sup>9</sup> Loci EI/II 4; EII 16.4; EI 10 & 4

<sup>10</sup> Loci EII 15, 13 & 12; EII/III 10 & 11

<sup>11</sup> Loci EII 10.1-2 & 8; EII/III 7 & 8

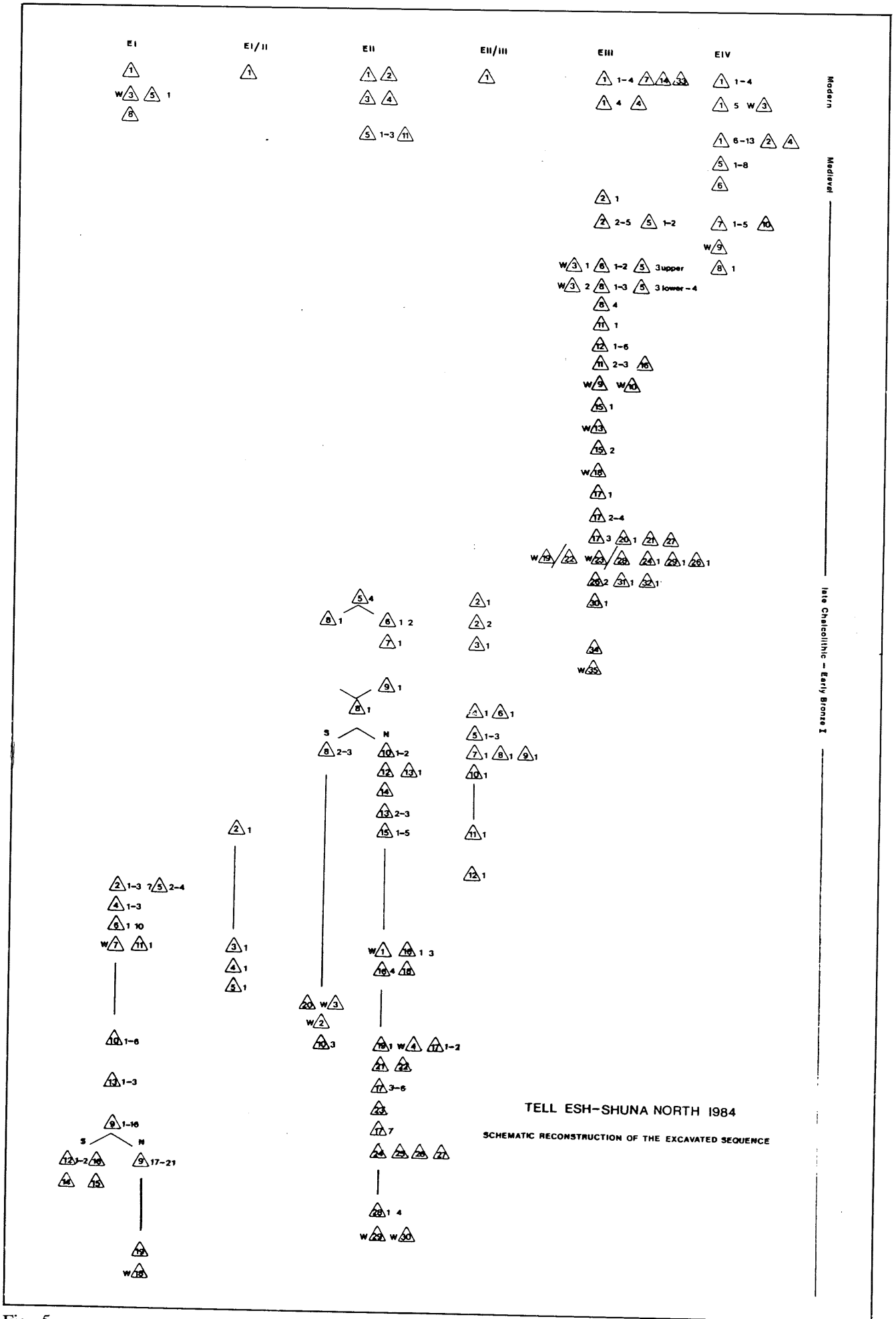
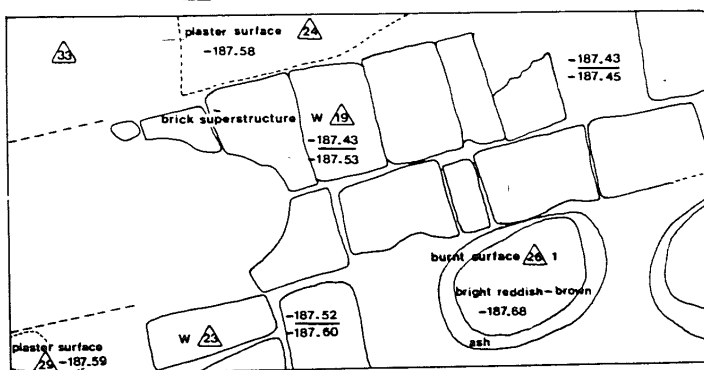
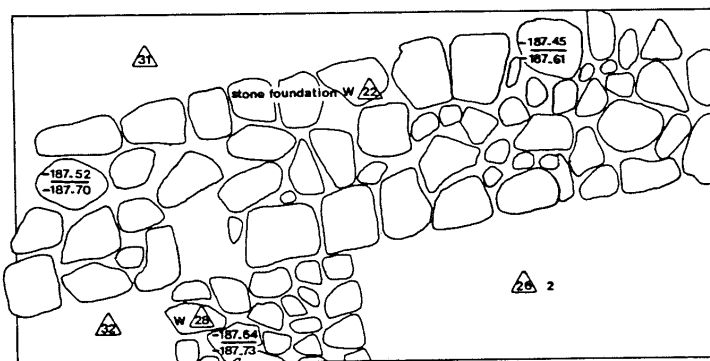


Fig. 5

SQUARE E III: WALLS  $\triangle 19$  &  $\triangle 23$  WITH ASSOCIATED SURFACES  $\triangle 24$ ,  $\triangle 26$  &  $\triangle 29$



E III: UNDERLYING FOUNDATIONS WITH ASSOCIATED FILLS  $\triangle 26$ ,  $\triangle 31$  &  $\triangle 32$



SQUARE E II: WALLS  $\triangle 18$  -  $\triangle 21$  WITH ASSOCIATED SURFACES  $\triangle 16$ ,  $\triangle 19$  &  $\triangle 20$

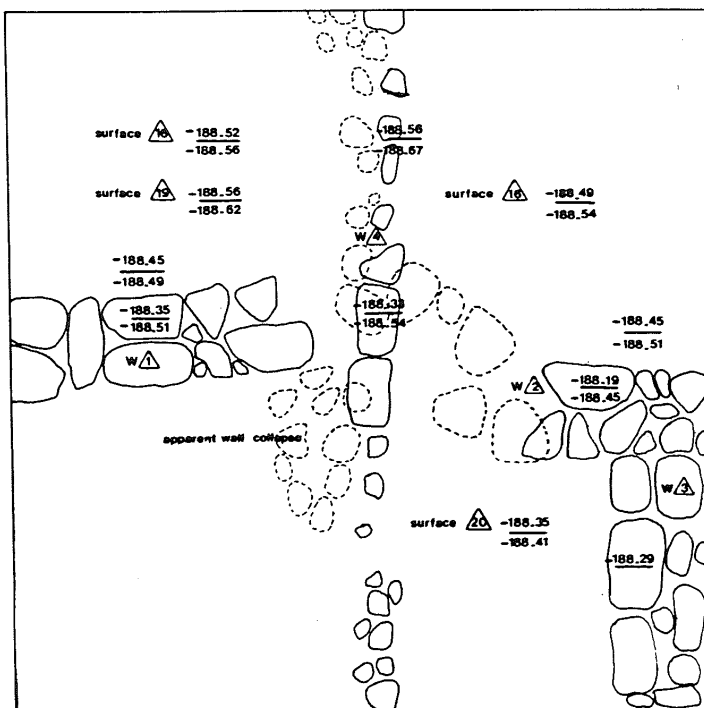


Fig. 6

accumulations of square EII, is characterized by a series of cobbled pavements with a small stone-lined pit revealed in the EII/III baulk excavations.<sup>12</sup> Slightly later in the sequence, a plastered-surface laid on a sand and gravel foundation appears to cover the entire area of squares EIII, EII/III and EII.<sup>13</sup> Though forming a major stratigraphic link between the upper eastern sequence and the lower sequence to the west, this surface is only preserved in its uncontaminated state in the small exposure of EIII. Overlying this surface and concomitant with the appearance of the Early Bronze I "band-slipped" wares are the remains of what must have been a rather substantial, multi-room building (Fig. 6-upper).<sup>14</sup> This building, partially exposed in square EIII, was constructed of large bricks laid on stone foundations, the walls 1.20 m. in width, with associated white-plastered floors. The domestic character of this building is suggested by two oval hearths (or possibly very poorly preserved remains of ovens) on a contemporary, outdoor burned surface.<sup>15</sup> With the abandonment of this building, the area continued to retain its apparent residential function — the archaeological remains characterized by a series of fragmentary stone wall foundations.<sup>16</sup> Throughout this sequence, however the associated floors have not been preserved.

All building activity then shifts away from the area represented by square EIII, the remaining distinctive feature being that of a large pit or dump filled with domestic refuse and a surprisingly large number of flint points.<sup>17</sup> Still within the Early Bronze I horizon, a chipped stone surface associated with a large basalt wall top the preserved

early Shuna North sequence.<sup>18</sup> The purpose of this large wall remains enigmatic, situated as it is well within the determinable perimeter of the Early Bronze I occupation at the site.

At the end of the excavations, a survey of the entire town of Shuna North was conducted in order to estimate the extent of the late Chalcolithic through Mamlūk occupations at the site. Late Chalcolithic-Early Bronze I material was collected in most find spots, however, the grey-burnished "Esdraelon" wares and the characteristic Early Bronze I "band-slipped" wares were rare.

In terms of its artefact repertoire, the Shuna North ceramic assemblage is striking in the persistent use of established pottery-making traditions throughout the excavated sequence, independent of what the archaeologist may wish to call Chalcolithic or Early Bronze I. On the basis of known chronological indicators, the Shuna North sequence is distinguished by the introduction and subsequent discontinuation into its ongoing tradition of two distinct ware types. The grey-burnished "Esdraelon" wares appear approximately one-third of the way through the excavated sequence.<sup>19</sup> The "band-slipped" wares are introduced slightly later, definitely becoming an acceptable part of the ceramic repertoire in the upper third of the sequence.<sup>20</sup>

The basic ceramic assemblage is characterized by a very coarse-tempered plain or red-slipped ware.<sup>21</sup> In general, the fabric is rather soft and crumbly; the fabric colour produced is represented by a rather homogeneous range of very pale brown, pink to reddish-yellow.<sup>22</sup> Though apparent-

<sup>12</sup> Loci EII/III 5 & 6

<sup>13</sup> Loci EIII 30; EII/III 2 & EII 5.4

<sup>14</sup> Loci EIII W 19/W 22, W 23/W 28, 24 & 29

<sup>15</sup> Locus EIII 26.1

<sup>16</sup> Loci EIII W 18, W13, W 9 & W 10

<sup>17</sup> Locus EIII 12.1-6

<sup>18</sup> Loci EIII 6 & W 3

<sup>19</sup> Loci EI/II 2.1; EII 15.3 & 5, 13.1-3, 12.1; EII/III 5.2-3 with isolated sherds appearing in later contexts (EIII 34.1, 30.1, 26.2 & 17.1, 3-4)

<sup>20</sup> Loci EII 13.1-3; EIII 17.2, 12.1,2, 4 & 6 & 6.2

<sup>21</sup> Selected loci used for the preliminary analysis are:

floors and pavements: EI 10, EI 12, EI 13, EII 16, EII 19, EII 20, EII 25, EII/III 5, EII/III 12, EIII 6, EIII 30 & EIII 34; well-sealed ash lenses and pits: EI/II 2, EII 12, EII 13, EII 15, EII 24 & EIII 12; fill strata which may serve as terminus ante quem for preceding strata bare of sherds: EI 9, EII 17 & EIII 17; and the fill stratum representing our lowest excavated level: EII 28.

<sup>22</sup> Munsell colour range: 10YR 8/3-8/4, 7/3-7/4; 7.5YR 8/4-7/4, 7/6-6/6. The surface colour is often slightly lighter (though still within the same colour range); pink to reddish-yellow fabrics are rare: 5YR 7/4-7/6.

ly relatively low-fired, a good oxidation atmosphere was maintained-reduced surfaces and grey-coring (with the exception of the very thick walled vessels) are rare. The tempering shows a wide variation in both grit type and size, however the potter was consistent in both the coarseness and heavy concentrations of the temper he or she added. The use of red slip in decorating the pottery maintained its popularity throughout, though the potters were rarely able to produce a slip which adhered well to the vessel surface. In general, the slips are relatively thin and very fugitive, ranging in colour from light red to red.<sup>23</sup> Thick fugitive slips and well-adhering thin slips or possible "wash"<sup>24</sup> were also elements of the potter's repertoire, however they were rarely produced. Red slip was used in decorating most of the major form categories, perhaps in an attempt to compensate for the coarseness of the ware. A similar red engobe was used on the red-slipped finer-tempered wares, the red-painted and "band-slipped" wares.

A rope-like band on the vessel rim,

neck or body remained the preferred decorative scheme throughout. Although several of the techniques involved in producing this decorative effect varied with specific techniques being more popular during the earlier or latter part of the excavated sequence, the intended effect is retained.<sup>25</sup>

The application of simple red-painted designs, though much less popular than the use of a red slip in the decoration of the vessel surface, is also an element of the Shuna North ceramic assemblage which appears throughout the sequence. Again, several of the painting schemes are restricted to the lower or upper part of the sequence, for example, horizontal parallel bands are restricted to the lower strata,<sup>26</sup> vertical parallel bands to the upper<sup>27</sup> and parallel bands of indeterminate orientation to the middle and upper strata.<sup>28</sup> On the other hand, painted decoration of irregular design which include large swaths of colour, dribbles, a splatter effect and designs similar to those of a child's first attempt to paint appear throughout.<sup>29</sup> Minor decorative techniques include simple incised pat-

<sup>23</sup> Munsell colour range: 10R 6/6-6/8, 5/6-5/8 & 2.5YR 6/6-6/8, 5/6-5/8. A slightly darker red was also produced, though rare: 10R 4/6 & 2.5YR 4/6.

<sup>24</sup> Particularly on vessel types 36, 43 & 58.

<sup>25</sup> Rope-like decoration techniques:

a simple applied horizontal band

(type 83 given below in Appendix B)

b horizontal band applied to the vessel body with an impressed or pinched rope-like decoration (cf. types 20b & 22)

EI 9.17 & 20

EI/II 2.1

EII 12.1, 13.2, 16.2, 17.2, 5 & 7, 20.1, 25.1 & 28.2-4

EII/III 5.2

EIII 6.1, 12.1-2 & 4, 17.3-4 & 26.2

c parallel oblique or vertical impressions on a slightly raised band (cf. types 32 & 79c)

EI 9.21

EI/II 2.1

EII 12.1, 13.1 & 3, 16.2 & 17.2

EII/III 5.2

EIII 12.1-2 & 5

d parallel oblique impressions into the sherd body creating a rope-like effect (cf. types 21a & 79d)

EI/II 2.1

EII 12.1, 15.2 & 16.2

EII/III 5.1-2

EIII 6.1, 26.2 & 30.1

e slightly raised band with parallel vertical to

slightly oblique, closely-spaced incisions (cf. type 84)

EI 9.7

EII 15.2 & 16.2-3

EII/III 5.2

EIII 12.1 & 4

f small pieces of clay applied to the vessel body creating a rope-like design (not illus.)

EII 12.1 & 13.1 & 3

EII/III 5.2

EIII 12.4

g thickened rim with impressed rope-like decoration along bottom edge (cf. type 86)

<sup>26</sup> Red-painted design (a), see type 91 in Appendix B.

<sup>27</sup> Red-painted design (b), cf. type 81; distribution: EII 12.1 & EII 13.3

<sup>28</sup> Red-painted design (c), see type 90

<sup>29</sup> Red-painted design (d), splatter effect, cf. types 25 & 82a; distribution:

EI 17.1

EII 13.3, 16.2 & 17.2 & 7

EIII 12.1 & 6

Red-painted design (e), irregular designs, cf. types 27-28, 79b & 82b-d; distribution:

EI 9.8, 11, 13-16, 18-20, 10.2 & 4, 12.1, 13.2 & 17.2

EII 13.3, 17.6-7, 24.1, 25.1 & 28.2 & 4

EII/III 5.2

EIII 12.4 & 17.4



terns along a horizontal line around the vessel body (Appendix B, types 87 & 88) or a horizontal band of simple punctate decoration on the shoulder of the vessel (Appendix B, fig. 13, type 55c).<sup>30</sup>

The repertoire of forms of the late Chalcolithic-Early Bronze I coarse wares and their distribution within the Shuna North sequence is presented below in Appendix B, Figs 7-15, types 10-69. It is a relatively simple assemblage comprising flared and hemispherical bowls, small wide-mouth pots, a relatively wide variety of holemouth vessels, wide-mouth pots with short flared collars and simple jars. In its simplicity, it forms a rather homogeneous assemblage which, though undergoing continual modification, does not yield to an abrupt change.

This combination of continuity and gradual change is clearly demonstrated in the following chart:

	<i>Group A:</i>	<i>Group B:</i>	<i>Group C:</i>
type	11 13 14		
	28 44 47		
	51 57 58		
	64 65 66		
	67 69 80		
	91		
		8 22 25	
		26 27 34	
		37 42 43	
		52 60 70	
		71 72 74	
		75 81 82	
		92	
	17 30 39	17 30 39	
	63 86	63 86	
	2 7 10	2 7 10	2 7 10
	12 15 20	12 15 20	12 15 20
	21 24 33	21 24 33	21 24 33
	35 38 53	35 38 53	35 38 53
	55 59 61	55 59 61	55 59 61
	62 68 79	62 68 79	62 68 79
	84 88 89	84 88 89	84 88 89
		9 31 41	9 31 41
		54 59 73	54 59 73

85 90	85 90
	1 3 6
	6 16 18
	19 23 29
	32 36 40
	45 46 48
	49 50 56
	76 77 78
	83 87

All recognizable pottery types (both form and decorative techniques) are grouped according to their appearance prior to the introduction of the grey-burnished "Esdraelon" wares (Group A),<sup>31</sup> concomitant with the presence of the grey-burnished "Esdraelon" wares (Group B),<sup>32</sup> and concomitant with the decline of the grey-burnished wares and the introduction of the "band-slipped" wares (Group C).<sup>33</sup> Twenty-three percent of the ceramic types continue throughout the excavated sequence. Twenty-seven percent of the ceramic types were introduced at a point roughly contemporary with the presence of the grey-burnished "Esdraelon" wares; perhaps a little outside competition stimulated the local market. Ten percent of these new types continue to be reproduced during the latter part of the sequence and 25% of the types appear to be restricted to this phase.

Three other ware categories complete the Shuna North ceramic assemblage: the finer, sand-tempered wares, the coarse chaff-tempered wares and the fine sand-tempered grey- or reddish-yellow burnished "Esdraelon" wares.

The red-slipped and plain sand-tempered wares appear to be nothing more than a slightly finer version of the basic coarse ware tradition. The fabric softness and colour, the use of a well-oxidized firing atmosphere, the colour range and type of slip used in their decoration and their continued production and use throughout the excavated sequence essentially parallels that of the coarse ware.<sup>34</sup> On the other

<sup>30</sup> Distribution on the basis of body sherds: EII 17.2 & 7 & EIII 12.1.

<sup>31</sup> Group A: EI 9, 10, 12 & 13; EII 16-20, 24-25 & 28

<sup>32</sup> Group B: EI/II 2; EII 12-13, 15 & EII/III 11

<sup>33</sup> Group C: EII/III 5, EIII 6, 12, 17, 26, 30 & 34

<sup>34</sup> Distribution: EI 9.16-17 & 19; EII 12.1, 13.1-3, 15.3 & 5, 16.1-2, 17.2, 19.1; EII/III 5.3; EIII 6.1-2, 12.1-6, 17.1-4 & 26.2.

hand, the combined application of a burnished red slip on the vessel surface, though rare, did form a definite part of the potter's repertoire in respect to his or her finer wares.<sup>35</sup> The limited number of forms preserved in the Shuna North sequence are presented in Appendix B, Fig. 1, types 1-9. Again, with the exception of the high-collared pot series (types 8-9) and the absence of holemouth vessels, the finer wares are simply a diminutive version of their coarse ware counterparts.<sup>36</sup>

Unusual in the general ceramic assemblage is a group of plain, very crudely manufactured chaff-tempered vessels (see Appendix B, Fig. 15, types 76-78). These small dishes and rectilinear vessels (type 76a-b) appear only in the large pit of EIII locus 12. Also found in this pit were many small fragments of eroded copper and slag and it may be that these vessels were used by craftsmen working in small-scale metallurgy.

The fine sand-tempered grey-burnished "Esdraelon" wares and associated very pale brown to reddish-yellow burnished wares<sup>37</sup> are rare at Shuna North (see Appendix B, Fig. 15, types 70-75). Their importance lies in their stratified position within the excavated sequence as they add little to what is already known concerning the general "Esdraelon" ware assemblage.

In contrast to the pottery, the non-ceramic artefact inventory at Shuna North is marked for its paucity. Small finds are restricted to several bone awls, simple stone rings and beads. Figurines of any kind are absent in the collected sample. Ground stone utensils and vessels are scarce and in a very fragmentary state of preservation.

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#### Appendix A: Locus Descriptions (all elevations are given at metres below sea level)

<i>Collection Unit</i>	<i>Depth</i>	<i>Description</i>
EI 1.1-3	— <u>188.47</u> m. — 188.76	Continuation of the modern deposit in northern half of the square, beneath the front-end loader clearance. Collection units 1.1-3 include remains of the ash lens contemporary with that of EII 15; however, the material was so disturbed that the collection units were included in the locus 1 series.
1.1	— <u>188.53</u> m. — 188.57	Exposure: 2.60 m <sup>2</sup> in NW quadrant.
1.2	— <u>188.65</u> m. — 188.76	Exposure: 0.30 m <sup>2</sup> along NW edge of square.
1.3	— <u>188.47</u> m. — 188.58	Exposure: 2.60 m <sup>2</sup> in NE quadrant.
EI 2.1-3	— <u>188.58</u> m. — 188.88	Probe, 2.00 m. x 1.00 m. NS, in west-central portion of the square, north of modern W 3, yielding a dark brown soil layer preceding locus series 1 (though in part parallel in elevation), succeeding locus series 6, and in part contemporary with and succeeding ash lens 4 to the N & E.
EI W 3	— <u>188.07</u> m. — 188.86	

<sup>35</sup> Red-slipped and burnished wares (pre-dominantly small loop handle fragments and body sherds) appear in loci EI 9.17 & 19; EII 16.1, 17.2, 28.2; EII/III 5.3; EIII 12.5, 17.1 & 26.2.

<sup>36</sup> Eg., compare sand-tempered ware type 2a with coarse ware type 10, 2b with 13, 3 with 19, 7 with 54a, 5 with 27, 6a with 45 and 6c with 64. It should be noted; however, that these thin-walled vessels were very fragile and poorly preserved, thus

reducing the excavated sample still further. Forms not illustrated include a number of small, loop handle fragments (EII 15.3; EIII 12.1-4 & 6 & 6.2) and a miniature straight spout (4.8 cm. preserved length x 0.7 cm. diameter at the mouth) from EIII 17.1.

<sup>37</sup> Munsell colour range: 10YR 8/4-7/4 & 7.5YR 8/6-7/6-6/6, fabric colour white to very pale brown (10YR 8/2-8/3).

Stone wall foundation and lower portion of super-structure, 0.50 m. x 3.75 m. wide with wall plaster of "Hashemite" date, laid diagonally to the perimeter of the square along a WSW/ENE axis. An associated concrete floor (locus 5.1) lies to the south; evidence of a southern cross wall can be seen in the northern baulk. This house is roughly contemporary to that exposed on the upper mound in squares EIV and EIII.

W 3.1      — 188.41 m.  
                  — 188.86

Foundation trench to W 3 along its northern side; exposure: 0.90 m.<sup>2</sup>

W 3.2      — 188.07 m.  
                  — 188.86

Wall removal.

EI 4.1-3    — 188.57 m.  
                  — 188.68

Black ash lens immediately below locus series 1.1 & 3 and directly above locus series 6. In part contemporary with locus 2.3 to the south; exposure: 2.80 m.<sup>2</sup>

EI 5.1      — 188.57/67 m.

Concrete floor associated with W 3, sloping slightly from east to west; exposure: 5.50m.<sup>2</sup>

5.2      ca.— 188.63 m.  
                  — 188.76

Soil unit beneath concrete floor 5.1; exposure: 5.50m.<sup>2</sup>

5.3      ca.— 188.69 m.  
                  — 188.81

Continuation of collection unit 5.2; exposure: 5.50 m.<sup>2</sup>

5.4      ca.— 188.75 m.  
                  — 188.90

Continuation of the locus 5 series, but including material directly below W 3 (i.e., the southern half of the square), ending at locus 6 and cut into the southeast by pit 8; exposure: 6.25 m.<sup>2</sup>

EI 6.1-13   — 188.58 m.  
                  — 189.04

Fill accumulation layer characterized by a dark brown soil matrix which appears throughout the square. Locus series 6 lies above locus series 10 and is succeeded by locus series 4 and 5.

6.1-2      — 188.58 m.  
                  — 188.78

Dark brown soil layer exposed in northern half of square, beneath ash layer 4 and adjacent to W 7 along the E baulk; exposure: 6.40 m.<sup>2</sup>

6.3-4      — 188.90 m.  
                  — 189.03

Dark brown soil layer in SW quadrant, related to 6.9 in the north, below locus 5.4; exposure: 3.00 m.<sup>2</sup>

6.5-6      — 188.78 m.  
                  — 189.04

Dark brown soil layer in SE quadrant related to 6.1-4, below locus 5.4 and above collection unit 6.10. Cut into in the SE corner by pit 8; exposure: 4.00 m.<sup>2</sup>

6.7-9      — 188.78 m.  
                  — 189.00

Continuation of the overlying 6.1 in NW quadrant, lying directly above surface 10; exposure: 4.00m<sup>2</sup>

6.10      — 188.94 m.  
                  — 189.04

Continuation of 6.5-6 in SW quadrant to surface 10; exposure 4.00 m.<sup>2</sup>

6.11-12   — 188.59 m.  
                  — 188.75

Dark brown soil layer in NE quadrant, N & W of cobbled surface fragment 11.1, succeeding collection unit 6.2; exposure: 3.50 m.<sup>2</sup>

6.13      — 188.75/85 m.  
                  — 188.92

Continuation of dark brown soil layer in NE quadrant with an additional heavy concentration of rubble. This soil unit lies directly above surface 10; exposure: 3.50 m.<sup>2</sup>

EI W 7            — 188.18 m.  
                    — 188.60

Stone wall foundations in E baulk, cut to the S by modern W 3, associated with cobbled surface 11.1 to the W. EI W 7 appears to be contemporary with wall EII W 1 (laid on an E/W axis) and its associated surface EII 16. Both wall foundations, EI W 7 & EII W 1 were still standing when ash lens EII 15 was created. W 7 is overlaid by the modern garbage accumulation and contaminated fill of collection series 1 and lies above locus series 6 (not excavated).

EI 8.1-2           — 188.72 m.  
                    — 189.02

Pit in SE corner of the square, beneath the concrete floor of 5.1, comprising a series of alternating dark and light ashy lenses mixed with stone. This pit cuts into locus series 5.2-4, 6, 9, 10 and 13; exposure: 1.10 m.<sup>2</sup>

EI 9.1-21         — 189.03 m.  
                    — 189.27

Dark ashy soil fill layer exposed over entire square, underlying cobbled surface 13 and overlying the cobble installation of locus series 12 with associated surface 15 and locus 16.

9.1               — 189.03 m.  
                    — 189.08

Dark ashy soil layer in SW quadrant, underlying collection unit 6.4 and overlying collection unit 9.3; exposure: 3.00 m.<sup>2</sup>.

9.2

(designation changed).

9.3-5            — 189.04/13 m.  
                    — 189.25

Probe into dark ashy soil layer underlying soil unit 9.1 in SW quadrant; the upper surface sloping slightly from east to west. Within the ashy soil are light brown clayey patches. Along the W baulk is a small exposure of white clayish material possible from a small pit; exposure: 2.00 m.<sup>2</sup>.

9.6               — 189.08 m.  
                    — 189.16

Expansion of 9.3-5 probe to the north; exposure: 1.75 m.<sup>2</sup>.

9.7               — 189.05 m.  
                    — 189.12

Continuation of the dark ashy layer in SE quadrant to cobbled area designated 16; exposure: 3.50 m.<sup>2</sup>.

9.8               — 189.04 m.  
                    — 189.12

Continuation of dark ashy layer in NE quadrant, below cobbled surface 13.2, above collection unit 9.16; exposure: 3.50 m.<sup>2</sup>.

9.9-12           — 189.18 m.  
                    — 189.21/27

Dark ashy layer above locus 12 in SW quadrant, beneath collection units 9.3-5 and above locus 12; exposure: 3.90 m.<sup>2</sup>.

9.13             ca. — 189.13 m.  
                    ca. — 189.24

Cleaning dark ashy layer above locus 15, underlying collection unit 9.7; exposure: 1.50 m.<sup>2</sup>. The material is possibly contaminated due to heavy rains.

9.14-15         ca. — 189.13 m.  
                    — 189.31

Dark ashy layer in NW corner of the square below locus 13.3. Possible pot burial of secondary deposition in 9.15 fill (designated locus 17); exposure: 1.75 m.<sup>2</sup>.

9.16             — 189.09/12 m.  
                    — 189.13/16

Dark ashy layer in NE quadrant, continuation of collection unit 9.14 to the W and collection units 9.7/13 to the S, impart overlying locus 15 to the S; exposure: 4.40 m.<sup>2</sup>.

9.17-18         — 189.31 m.  
                    — 189.41/41

Continuation of dark ashy layer in NW corner of the square below collection unit 9.15 and above the preserved top of wall W 18. The soil layer in this area slopes slightly

at the base from E to W; exposure: 1.75 m.<sup>2</sup>

9.19           — 189.16 m.  
                  — 189.30

Continuation of dark ashy layer E of collection units 9.14-15, in part below collection unit 9.16 and continuing downward on both sides of a possible drain (designated locus 19); exposure: 1.75 m.<sup>2</sup>

9.20-21       — 189.26 m.  
                  — 189.52

One metre square probe S of collection unit 9.18 along the W baulk exposing the continuation of the dark ashy soil into a depth parallel to the upper preserved portion of W 18. Collection unit 19.21 is the lowest elevation reached in square EI.

EI 10.1-6     *ca.*— 188.91 m.  
                  — 189.10

Fragmentary cobbled surface exposed throughout the square, preceding the fill accumulation of locus series 6, laid on the intervening medium brown fill above cobbled surface 13.

10.1           — 188.92 m.  
                  — 188.99

Small patch of stone rubble lying upon the cobbled surface, collected separately; exposure: 0.25 m.<sup>2</sup>

10.2           — 188.99 m.  
                  — 189.10

Removal of cobbled surface in NW quadrant; exposure: 3.50 m.<sup>2</sup>

10.3           — 188.93 m.  
                  — 189.13

Removal of possibly reconstructable vessel from cobbled surface; exposure: 0.30 m.<sup>2</sup>

10.4           — 188.89 m.  
                  — 189.04

Removal of cobbled surface in NE quadrant; exposure: 3.50 m.<sup>2</sup>

10.5           — 188.81 m.  
                  — 188.99

Removal of stone rubble in SE corner of

the square, lying upon surface 10 (similar to collection unit 10.1); exposure: 0.25 m.<sup>2</sup>

10.6           — 188.90 m.  
                  — 189.05

Removal of cobbled surface in SE quadrant, which, towards the E baulk, directly overlies a preceding cobbled surface (designated locus 13); exposure: 1.75 m.<sup>2</sup>

EI 11.1       — 189.59 m.  
                  — 189.67

Fragmentary small stone and pebble surface associated with W 7 (lying directly against the lower portion of the wall), lying above collection unit 6.11, roughly parallel in elevation to collection unit 6.2 to the W and below the possible rock fall of W 7 found within the contaminated locus series 1; exposure: 0.50 m.<sup>2</sup>

EI 12.1-2     — 189.09/24 m.

Cobble "installation" in SW quadrant comprising an apparent fire ring (a roughly circular, pebble-lined depression filled with ash), an associated though fragmentary cobbled pavement and a burnt earth surface (designated locus 15) to the W. This "installation" underlies the ashy fill accumulation of locus series 9. Due to the heavy rains at the end of the season, locus 12 was not excavated. A small one metre square probe (collection units 12.1-2, reaching a depth of -189.42 m.) along the W baulk and extending into the fire pit was done in order to determine the relationship between locus 12 and 14 which lies both to the W and extends directly under the fire ring (see below).

EI 13.1-3     *ca.*— 189.01 m.  
                  *ca.*— 189.15

Fragmentary hard-packed cobbled pavement extending throughout the square. Similar to the succeeding cobbled pavement of locus 10, pavement 13 may represent a separate phase of the same activity. Locus 13 was laid on the fill accumulation of locus series 9 and to the E is *ca.* 0.15 m. beneath pavement 10, to the W only 0.05 m.

13.1            – 189.01 m.  
                  – 189.07

Removal of cobble pavement in SE quadrant; exposure: 3.50 m.<sup>2</sup>

13.2            – 188.96 m.  
                  – 189.07

Removal of cobble pavement in the NE quadrant; exposure: 3.50 m.<sup>2</sup>

13.3            – 189.07 m.  
                  – 189.15

Removal of cobble pavement in the NW quadrant; exposure: 3.50 m.<sup>2</sup>

EI 14            ca. – 189.10 m.  
                  ca. – 189.25

A small lens of white clayey material along the southern portion of the W baulk exposed at the base of the locus series 9/ and in the 12.1-2 probe. This white lens lies to the west of the 12 fire ring and extends directly under the pebble-lined depression, thinning out around its perimeter. It appears that this material served as a kind of lining for the pit, however interpretation must be kept at a minimum until this area is completely excavated.

EI 15.1-2      ca. – 189.14/24 m.

Layer of burnt, bricky-orange earth; preserved in irregular outline, extending N & E of “installation” 12 and W of the locus 16 cobbles. It appears that many of the cobbles of locus 12 and 16 are embedded into the preserved perimeter of 15, suggesting that 15 itself is slightly earlier, perhaps contemporary with locus 14, though continues in use alongside the 12 fire pit. As with the related loci, 15 is in part succeeded by the ashy fill accumulation of locus series 9, and to the N, contemporary with the earlier deposits of 9.17-18 & 20-21.

15.1            – 189.14/24 m.

Exposure of surface 15 in the centre of the square; exposure: ca. 2.00 m.<sup>2</sup>

15.2            – 189.13 m.  
                  – 189.26

Probe, 1 square metre, into locus 15 and locus series 9.20-21 along the central portion of the W baulk.

EI 16            – 189.09 m.

Exposure of small stone and pebble pavement(?) of irregular outline at the base of locus 9.7, in part embedded into the western perimeter of burnt area 15 (not excavated).

EI 17.1-2      – 189.28 m.  
                  – 189.40

Possible infant pot burial (small skull fragments found in broken pottery vessel of very fragmentary preservation) of secondary deposition, lying in the ashy fill accumulation of locus 9.15. Collection unit 17.1 represents the material lying in the vessel; 17.2 the vessel and bone fragments themselves.

EI W 18        – 189.41/49 m.

Exposure of the preserved top of a mud-brick wall fragment, laid on an approximate E/W axis, near the N baulk, beneath collection unit 9.18. A possible cross-wall appears ca. one metre in from the E baulk. Due to the heavy rains at the end of the season, it was virtually impossible to articulate the bricks, thus the wall(s) and possible associated floors were not excavated.

EI 19            – 189.24 m.  
                  – 189.30

A distinct band, ca. 0.50 m. in width x 1.00 m. exposed length N/S, of small pebbles embedded in bricky-orange soil exposed at the base of collection unit 9.19; possible drain(?).

EI/II 1.1-3    – 187.47 m.  
                  – 188.23/31

Modern deposit comparable to EI 1 & EII 1, EII 2 & EII 11; exposure: 0.75 m.<sup>2</sup>

EI/II 2.1        – 188.23/31 m.  
                  – 188.38

Dark ash deposit comparable to EII 15; exposure: 0.75 m.<sup>2</sup>

EI/II 3.1	$\frac{- 188.32}{- 188.39}$ m.	$\frac{- 187.60}{- 187.77}$ m. W
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Light ash layer mixed with hard brown soil at base of succeeding ash lens, comparable to EII 16; exposure: 0.75 m.<sup>2</sup>

EI/II 4.1	$\frac{- 188.37}{- 188.39}$ m.
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Cobbled pavement fragment west of EI W 7, extending into square EII between EII surfaces 16 and 19. Contemporary with soil unit EI 2 to the west; exposure: 0.40 m.<sup>2</sup>

EI/II 5.1	$\frac{- 188.39}{- 188.39}$ m.
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Pebble surface fragment W of EI W 7, corresponding with locus series EI 6; exposure: 0.40 m.<sup>2</sup>

Material from the EI/II baulk excavations below - 188.40 m. corresponding to EI 10 and 13/ EII 17.3,5-6 and EI 9 /EII 17.7 & 25 was not collected due to time restrictions on efforts to clarify the relationship between the stratigraphy revealed in squares EI & EII.

EII 1.1	$\frac{- 186.70}{- 187.10}$ m.
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Probe, 1 square metre, in NE corner revealing topsoil consisting of loose dirt and plastic "artefact" accumulation.

EII 2.1-3	$\frac{- 186.70}{- 187.30}$ m. E
	$\frac{- 187.10}{- 187.60}$ m. W

Removal of topsoil, loose dirt and plastic "artefact" accumulation from entire square, the collection unit sloping downwards from E to W; exposure: 16.00 m.<sup>2</sup>

EII 3	$\frac{ca. - 186.90}{- 187.30}$ m. E
	$\frac{ca. - 187.30}{- 187.60}$ m. W

Scatter of large fallen stones (no identifiable architectural pattern) on hard earth surface at base of collection unit 2.3; exposure: ca. 16.00 m.<sup>2</sup>

EII 4.1	$\frac{- 187.10}{- 187.30}$ m. E
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Simple drainage gully cut into the hard surface of locus 3, bisecting the square on an E/W line, slightly irregular in form, 0.20 m. to 0.50 m. in width and averaging ca. 0.20 m. in depth. Filled with the top-soil of collection unit 2.3 and associated with surface 3.

EII 5.1-3	$\frac{- 187.35}{- 187.60}$ m. E
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	$\frac{- 187.60}{- 188.00}$ m. W
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Contaminated fill accumulation (loose dirt and plastic) above surface 5.4, beneath surface 3 and its associated drain (designated locus 4) and sloping from E to W; exposure: 16.00 m.<sup>2</sup>

5.4	$\frac{- 187.60}{- 187.62}$ m. E
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	$\frac{- 188.00}{- 188.02}$ m. W
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Thin surface, 0.01 - 0.02 m. thick, of fine yellowish sand and gravel, exposed throughout the square though cut in patches to the W. This surface, though contaminated by modern activities, is nonetheless the western continuation of EII/III 2.1 and the uncontaminated exposure of surface EIII 30. Surface 5.4 overlies collection units 6 & 8.1; exposure: ca. 16.00 m.<sup>2</sup>

EII 6.1-2	$\frac{- 187.75}{ca. - 188.10}$ m.
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Small lens of hard brown soil mixed with gravel, varying in thickness (maximum 0.13 m.), sloping slightly downwards from E to W and restricted to the NE corner of the square. This lens lies directly beneath surface 5.4 and overlies soil unit 7, extending in part into 8.1; exposure: ca. 5.50 m.<sup>2</sup>

EII 7.1	$\frac{- 187.90}{- 187.95}$ m.
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Small lens of hard, reddish-brown clayey soil directly underlying, though more restricted in extent, soil unit 6 in the NE corner of the square. This lens apparently cuts into soil unit 8.1 and extends to the E

(designated EII/EIII 3.1 and EIII 34);  
exposure: 1.30 m.<sup>2</sup>.

EII 8.1-3         $\frac{- 188.00}{- 188.35}$  m.

Fill accumulation characterized by a hard, yellowish-brown soil extending throughout EII though of much thicker deposition in the southern half of the square.

8.1             $\frac{- 188.00}{- 188.13}$  m.

Hard, yellowish-brown soil unit directly below surface 5.4 and cut into the north by soil lenses 6 & 7. This soil unit is disturbed in the NW corner by a rubble layer (designated locus 11) and, unfortunately, is contaminated by intrusive modern material associated with the cuts through surface 5.4, again in the NW corner; exposure: 16.00 m.<sup>2</sup>.

8.2-3         $\frac{- 188.07}{- 188.35}$  m.

Hard, yellowish-brown soil layer in S half of the square, S of walls W 1 & W 2, overlying surface 20 to the E and locus 10.3 to the W; exposure: 4.10 m.<sup>2</sup>.

EII 9.1         $\frac{- 188.12}{- 188.13/14}$  m.

Thin ash scatter at the base of soil unit 8.1, overlying locus series 10.1-2, located near the E baulk in the central area of the square; exposure: 1.50 m.<sup>2</sup>.

EII 10.1-2     $\frac{- 188.13/25}{- 188.18/28}$  m.

Thin patchy layer of dark brown ashy soil at the base of locus 8.1, sealing the preceding soil unit 12 in the N half of the square. Unit 10.1 represents the material collected from the NE quadrant (exposure: 4.50 m.<sup>2</sup>). 10.2 from the NW (exposure: 4.00 m.<sup>2</sup>).

EII 10.3        $\frac{- 188.41}{- 188.55}$  m.

Disassociated from collection units 10.1-2, 10.3 represents a rather non-distinct, compact brown soil layer beneath surface 20 in the SE quadrant of the square and apparent fill strata 8.3 in the SW quadrant;

exposure: 7.50 m.<sup>2</sup>.

EII 11.1        $\frac{ca. - 188.00}{- 188.15}$  m.

Pebble and stone scatter in NW corner of the square, extending to the W in the EII baulk (designated EII 1.3) and disrupting surface 5.4; exposure: 0.70 m.<sup>2</sup>.

EII 12.1        $\frac{- 188.20}{- 188.27}$  m.

Silty light brown soil layer extending over the northern half of the square, cutting into the preceding ash lens 15 and sealed by soil unit 10.1-2. Locus 12.1 is the upper portion of a thick lens, the continued excavation of which was labelled 13.1-3; exposure: 7.25 m.<sup>2</sup>.

EII 13.1-2     $\frac{- 188.27}{- 188.54}$  m.

Probe, 1.00 x 2.00 m. along the northern half of the east baulk, into the silty layer first identified as 12.

13.3         $\frac{ca. - 188.27}{- 188.50}$  m.

Complete clearance of the light brown silty soil layer in the northern half of the square which takes this soil layer (identified as 12/13) down to its complete depth. Collection unit 13.3 is simply the western extension (to the W baulk) of probe 13.1-2; exposure: 5.25 m.<sup>2</sup>.

EII 14.1        $\frac{- 188.27}{- 188.33}$  m.

Small stone scatter in NE corner of the square between collection units 13.1 and 13.2; exposure: 0.60 m.<sup>2</sup>.

EII 15.1-5     $\frac{ca. - 188.35}{ca. - 188.45}$  m.

Large dark ash lens extending throughout the entire northern half of the square, blocked in its southern extension by wall stubs W 1 & W 2. This lens was later cut into by the combined loci 12/13 pit, thus the preserved thickness, though averaging ca. 0.07 m., varies from 0.17/0.21 m. in its eastern and western extensions (respectively), thinning out to a very thin line in patches. Locus 15 lies directly on top of surface 16; exposure: 7.50 m.<sup>2</sup> (15.1: 2.00



m.<sup>2</sup>, 15.2: 6.00 m.<sup>2</sup>, 15.3: ca. 1.00 m.<sup>2</sup> along the west baulk and 15.4-5 represent the material collected from sieving).

EII W 1             $\frac{- 188.35 \text{ m.}}{- 188.51}$

Stone wall foundations (1.75 m. exposed length x 0.60 m. width) laid on an approximate E/W line, constructed of large unhewn stone, mud-mortar, single course preserved. This wall fragment is associated with surface 16 to the N and is laid directly upon surface 19.

EII W 2             $\frac{- 188.19 \text{ m.}}{- 188.45}$

Stone wall foundations (1.00 m. exposed length x 0.50 m. width) laid on an E/W line, constructed of a double row of mixed small to large unhewn stone, mud-mortar, single course preserved. Surface 20 was laid directly beneath the S half of W 2; surface 16, underlying surface 20, lies directly beneath the N half of the wall. W 2 forms an E/W cross wall to N/S W 3.

EII W 3             $\frac{- 188.29 \text{ m.}}$

Stone wall foundations (1.50 m. exposed length x 0.50/0.60 m. width) laid on an N/S line, intersecting W 2 to the N. W 3, constructed of a double row of mixed small and large unhewn stone with mud-mortar, lies directly upon surface 16. Surface 20 abuts W 3 along its western face.

EIII W 4            $\frac{- 188.56 \text{ m.}}{- 188.67}$

Possible, poorly preserved or intentionally destroyed wall foundations (represented by an irregular alignment of stones) of an E/W wall, possibly bisecting the square, however definitely functioning as the E limit of surface 19 in the northern half of the square.

EII 16.1-3         $\frac{\text{ca.} - 188.44 \text{ m.}}{\text{ca.} - 188.56}$

Hard beaten-earth surface, varying in thickness from ca. 0.05 to 0.11 m., abutting the N face of W 1 and extending over the entire northern half of the square. At - 188.44 m. surface 16 goes under walls W 2 & W 3, however, it is cut and

subsequently replaced by surface 20 in the SE quadrant of the square. In the NW quadrant, surface 16 directly overlies surface 19. In the NE, it seals the preceding fill accumulation of locus 17; exposure: ca. 8.00 m.<sup>2</sup>

EII 17.1-6         $\frac{- 188.55 \text{ m.}}{- 188.87}$

Thick, densely-packed mottled brown soil layer extending throughout the northern half of the square. This soil layer precedes the construction of surface 19 & 16 and succeeds the fill accumulation of 17.7. In comparison with EI, this fill accumulated between the laying down of cobbled pavements EI 10 & EI 13.

17.1-2             $\frac{- 188.55 \text{ m.}}{- 188.72}$

Hard, mottled light brown soil layer in NE quadrant (EII/III baulk included); exposure: 5.50m<sup>2</sup>

17.3               $\frac{- 188.62 \text{ m.}}{- 188.72}$

Extension of 17.1-2 to the W, beneath surface 19; exposure: 3.00 m.<sup>2</sup>

17.4               $\frac{- 188.72 \text{ m.}}{- 188.87}$

Lower portion of 17 soil layer in NE quadrant, below 17.1-2, succeeding 17.7; exposure: 4.00 m.<sup>2</sup>

17.5-6             $\frac{- 188.72 \text{ m.}}{- 188.87}$

Lower portion of 17 soil layer in NW quadrant, below 17.3 and succeeding 17.7; exposure: 6.00 m.<sup>2</sup>

EII 17.7            $\frac{- 188.87 \text{ m.}}{- 188.98}$

Mottled, dark reddish-brown and dark grey, coarse-textured soil layer extending throughout the entire northern half of the square (EII/III baulk included), preceding soil layer 17.1-6 and contemporary with locus 25 to the E. EI 17.7 is equivalent to locus EI 9 to the west; exposure: 10.00 m.<sup>2</sup>

EII 18              $\frac{- 188.56 \text{ m.}}{- 188.82}$

Two small clay-lined, oval pits (0.40 x 0.33

m., 0.26 m. in depth and 0.30 x 0.23 m., 0.14 m. in depth), dug into the upper surface of 17.1-6 and sealed by the laying down of surface 16.

EII 19.1             $\frac{- 188.56}{- 188.62}$  m.

Hard beaten-earth floor exposed in NW quadrant, stopping at the N/S line of stones in the centre of the exposure (designated W 4, possibly a wall which was dismantled when surface 16 was laid down), and continuing under W 1 at the S perimeter of the exposure (EII excavations are now restricted to the northern half of the square only); exposure: 3.00 m.<sup>2</sup>

EII 20.1             $\frac{- 188.35}{- 188.41}$  m.

Hard beaten-earth floor exposed in SE quadrant, continuing halfway under E/W W 2 and abutting N/S wall W 3. Beneath W 2, surface 20 directly overlies surface 16 to the N, thus when the newer surface 20 was laid down in the area defined by walls W 2 & W 3, surface 16 was either heavily eroded or intentionally removed. Surface 20 is destroyed by rockfall along its W perimeter, thus its intended western extension can not be determined.

EII 21               $\frac{- 188.62}{- 188.65}$  m.

Very thin patches of a heavily eroded, white sandy material (possibly the remains of a heavily eroded surface) exposed in the NW corner of the square, directly under surface 19; exposure 0.40 m.<sup>2</sup>

EII 22               $\frac{- 188.63}{- 188.66}$  m.

Small stone scatter, burnt, immediately E of locus 21, directly under surface 19 and penetrating slightly into locus 17.3; exposure: 0.20m.<sup>2</sup>

EII 23               $\frac{- 188.85}{- 188.92}$  m.

Two shallow ash lenses, flecked with charcoal, in NW corner of the exposure, within the 17.6 fill context; exposure: 0.15 m.<sup>2</sup>

EII 24.1             $\frac{- 188.87}{- 189.35}$  m.

Large oval pit (0.70 x 0.50 m., 0.48 m. in depth) lined with light brown to yellowish clay (0.03 m. thick); the opening ringed with pebbles. This pit is partially exposed along the E baulk and associated with pavement 25.

EII 25.1             $\frac{- 188.89}{- 189.04}$  m.

Patchy, cobbled pavement in central and eastern area of the exposure, petering out to the W. This pavement is laid upon the upper surface of locus 28 and succeeded by soil layer 17.7. Associated with this pavement are pits 24, 26 & 27; exposure: 6.50 m.<sup>2</sup>

EII 26.1             $\frac{- 188.95}{- 189.09}$  m.

Small circular ash pit (0.40 m. in diameter, 0.14 m. in depth) associated with pavement 25.

EII 27.1             $\frac{- 188.98}{- 189.14}$  m.

Small circular pit (0.36 m. in diameter, 0.16 m., in depth) lined with hard clay and pebbles and associated with pavement 25.

EII 28.1-4         $\frac{ca. - 189.00}{- 189.33}$  m.

Mottled reddish-brown and grey, densely-packed soil layer with a heavy concentration of gravel. This soil layer lies beneath pavement 25 and succeeds the building represented by walls W 29 & W 30.

28.1-2             $\frac{- 189.00}{- 189.16}$  m.

Above preserved top of walls W 29 & W 30; exposure: 6.00 m.<sup>2</sup>

28.3-4             $\frac{- 189.16}{- 189.33}$  m.

W of the exposed portion of W 29; exposure: 3.00 m.<sup>2</sup> (lowest excavated depth reached in EII).

EII W 29            $\frac{- 189.10}{- 189.10}$  m.

Exposed preserved top of a mud-brick wall, ca. 0.50 m. in width x 2.00 m. exposed length N/S, white-plastered on its western face.

EII W 30      — 189.10 m.

Exposed preserved top of possible E/W cross wall to W 29, white-plastered on northern face. Due to the heavy rains at the end of the season, articulation of the bricks was difficult, thus both walls (W 29 & W 30) and possible associated floors were not excavated.

EII/III 1.1    — 186.56 m.  
                 — 187.74

Dark brown topsoil with plastic "artefact" assemblage, removed as a single unit (comparable to EII 2-5); exposure: 2.20 m.<sup>2</sup>. (N.B. Only the northern half of the EII/III baulk was excavated.)

EII/III 2.1    — 187.70 m.  
                 — 187.72

Thin surface of fine yellowish sand and gravel (equivalent to EII 5.4 & EIII 30); exposure: 2.20 m.<sup>2</sup>

EII/III 2.2    — 187.72 m.  
                 — 187.87

Thin layer of hard brown soil (equivalent to EII 6); exposure: 2.20 m.<sup>2</sup>

EII/III 3.1    — 187.87 m.  
                 — 187.94

Thin layer of hard, reddish-brown clayey soil (equivalent to EII 7 & EIII 34); exposure: 2.20 m.<sup>2</sup>

EII/III 4.1    — 187.94 m.  
                 — 188.06

Dark brown soil layer with heavy concentration of gravel, within EII 8.1 elevation range; exposure: ca. 1.00 m.<sup>2</sup>

EII/III 5.1-2   — 188.06 m.  
                 — 188.16

Series of apparently 2 cobbled pavement fragments laid one upon the other in quick succession. No equivalent appears in square EII, however these pavements are within the elevation range of EII 8.1 fill accumulation; exposure: 2.20 m.<sup>2</sup>

EII/III 5.3    — 188.16 m.  
                 — 188.20

Thin layer of brown soil with very light

concentration of pebbles, beneath the 5.1-2 pavements and succeeding ash lens 7; exposure: 2.20 m.<sup>2</sup>

EII/III 6.1    — 187.95 m.  
                 — 188.08

Circular to oval, stone-lined pit (0.41 x 0.23 m. exposed N/S, 0.13 m. in depth), partially exposed along the S baulk, associated with locus 4, filled with reddish-brown clayey soil characteristic of locus 3 and cutting through locus 5.

EII/III 7.1    — 188.18 m.  
                 — 188.28

Dark brown to grey ashy soil, charcoal-flecked (equivalent to EII 10.1-2); exposure: 2.20 m.<sup>2</sup>

EII/III 8.1    — 188.27 m.  
                 — 188.28

Thin scatter of dark ash at base of locus 7; exposure: 0.50 m.<sup>2</sup>

EII/III 9.1    — 188.29 m.  
                 — 188.31

Thin ash lens in NE corner of the exposure, S of locus 8, at base of locus 7, 0.27 m. in diameter.

EII/III 10.1   — 188.31 m.  
                 — 188.42

Light brown silty soil layer (equivalent to EII 12/13); exposure: 2.20 m.<sup>2</sup>

EII/III 11.1   — 188.42 m.  
                 — 188.48

Dark ash lens beneath locus 10 (equivalent to EII 15); exposure: 2.20 m.<sup>2</sup>

EII/III 12.1   — 188.48 m.  
                 — 188.56

Hard beaten-earth surface (equivalent to EII 15); exposure: 2.20 m.<sup>2</sup>

With the appearance of surface EII/III 12 (=EII 16), the EII/III baulk excavations become incorporated into the general excavation of square EII.

EIII 1.1-3    — 184.88/96 m.  
                 — 185.45

Contaminated fill accumulation fronting the western enclosure wall of the "Hashe-

mite" complex, immediately below the "topsoil" which was scraped off (material not saved, most of which was plastic bags of rotting tomatoes) and overlying locus 2; exposure: 7.00 m.<sup>2</sup>

EIII 1.4         $\frac{- 185.35 \text{ m.}}{- 185.55}$

Sand and gravel drainage area fronting the gutter of the "Hashemite" complex, within locus 1.2-3 context and intruding into locus 2.1; exposure: 0.50 m.<sup>2</sup>

EIII 2.1         $\frac{- 185.45 \text{ m.}}{- 185.55}$

Contaminated fill accumulation between the top of wall W 3 and the western enclosure wall of the "Hashemite" complex, exposure covering entire EIII East, preceding locus 1.3 and succeeding locus 2.2; exposure: ca. 5.00 m.<sup>2</sup>

2.2-5         $\frac{- 185.55 \text{ m.}}{- 186.00/25}$

Back fill (excavated in ca. 0.10 m. units) to wall W 3, characterized by a mottled grey-brown soil matrix, white-flecked, cut in the E by the western enclosing wall of the "Hashemite" complex and locus 4, preceding locus 2.1, succeeding surface 6 and corresponding wall W 3. Northern probe trench loci 5.1 & 5.2 are related to loci 2.4 & 2.5 respectively (also equivalent to EIV 7 & 10); exposure: 8.00 m.<sup>2</sup>

EIII W 3         $\frac{- 185.32/39 \text{ m.}}{- 186.23/35}$

Large basalt wall fragment bisection EIII on a NNW/SSE line, maximum preserved width 1.88 m. (western face destroyed by recent bulldozing activity). The wall was constructed of predominantly large basalt stones (with a small proportion of limestone), small stone spacers in an irregular pattern and hard mud-mortar. W 3 is contemporary with surface 6, precedes loci 2.5/5.2 and succeeds the fill accumulation of 8.1-2/5.4.

W 3.1         $\frac{- 185.32/39 \text{ m.}}{- 186.23/35}$

Dismantling wall.

W 3.2         $\frac{- 186.23/35 \text{ m.}}{- 186.42}$

Soil unit immediately below wall W 3, sloping slightly downward NW/SE. No foundation trench identified, material comparable to locus 8.2, preceding the construction of the wall, and overlies locus 11.1.

EIII 4.1         $\frac{- 185.49 \text{ m.}}{- 185.59}$

Shallow foundation trench of western enclosure wall of the "Hashemite" complex, intrusive into locus 2.1; exposure: 3.00 m.<sup>2</sup>

EIII 5.1-4       $\frac{- 185.77 \text{ m.}}{- 186.22}$

Probe trench along N baulk 2.70 m. x 1.00 m. N/S, excavated in approximate 0.10 m. units.

5.1         $\frac{- 185.77 \text{ m.}}{- 185.88}$

Indistinct brown soil matrix, white-flecked, (equivalent to locus 2.4) similar to the over-and underlying soil units of loci 2.3 & 5.2.

5.2         $\frac{- 185.88 \text{ m.}}{- 186.00}$

Comparable to overlying soil unit 5.1 (equivalent to locus 2.5 to the S). At the base of this collection unit are patches of chipped-stone pavement (designated 6.1).

5.3         $\frac{- 186.00 \text{ m.}}{- 186.10}$

Basic continuation of the rather indistinct brown fill accumulation of 5.4 beneath the chipped-stone pavement (equivalent to locus 8.1 to the S).

5.4         $\frac{- 186.10 \text{ m.}}{- 186.22}$

Indistinct brown, compact soil matrix, white-flecked, parallel to the lowest course of W3, immediately preceding the laying down of pavement 6 (equivalent to locus 8.1 to the S).

EIII 6.1-2       $\frac{- 186.00 \text{ m. N.}}{- 186.05}$

$\frac{- 186.23 \text{ m. S.}}{- 186.25}$

Pavement constructed of chipped and

broken limestone, ranging in size from small flakes (predominant) to larger sharp-edged pieces ranging from 0.10-0.15 m. in length; maximum thickness of pavement 0.05 m. Surface 6 was laid directly against the lower course of wall W 3, thus succeeding the construction of the wall by only a short period of time. This surface rests on the upper surface of locus 8.1/5.3 and is succeeded by the apparent back-fill of locus series 2 (EIII 6 is equivalent to EIV 8); exposure: 6.00 m.<sup>2</sup>

6.1           — 186.00/23 m.

Material directly on the surface.

6.2           — 186.00 m. S  
                  — 186.05  
                  — 186.23 m. N  
                  — 186.25

Material from dismantling the surface.

EIII 7.1      ca. — 186.65 m.  
                  — 186.76/95

Surface cleaning of modern debris from EIII West, lower mound surface, the base of the cleaning operation resulting in a surface which slopes from N to S (equivalent to locus 14 to the N); exposure: ca. 6.00 m.<sup>2</sup>

EIII 8.1      — 186.06/23 m.  
                  — 186.20

Indistinct, compact brown soil matrix level with the lowest course of wall W 3, and an apparent simple continuation of the preceding fill accumulation of loci 8.2-3 (equivalent to locus 5.4 of the northern test probe). This collection unit does not extend to the S baulk due to the downward slope of the overlying surface 6; exposure: 6.00 m.<sup>2</sup>

8.2-3         — 186.20 m.  
                  — 186.48

Excavated in approximate 0.10 m. units, these collection units represent a fill accumulation characterized by brown, compact soil, collection unit 8.2 is roughly equivalent to W 3.2 to the W; exposure: 10.00 m.<sup>2</sup> Wall W 3 appears to have been constructed directly on the top of soil unit 8.2/W 3.2,

pavement 6 on soil unit 8.1. Surface 6 lies directly against wall W 3 and is thus, in part, contemporary with it. Since the relative elevation of surface 6 is higher than the base of wall W 3, the creation of the "fill" locus 8.1 would appear to have been intentional, however the soil matrix of locus 8.1 does not visibly differ from the preceding collection units 8.2-3 which would argue against an independent depositional history.

EIII 8.4      — 186.40 m.  
                  — 186.48

A fragmentary pebble surface, preserved only in the SE corner of the square, ca. 1.50 x 1.25 m. N/S, appears at the base of locus 8.3 and was laid upon the upper surface of locus 11.1.

EIII W 9      — 186.76 m. S  
                  — 186.86/99  
                  — 187.10 m. N

Stone wall foundations, laid N/S, constructed of 3 parallel rows of unhewn stone, mud-mortar (0.90 m. x 4.40 m. exposed N/S), single course preserved sloping downward from N to S. Superstructure and corresponding floor(s) not preserved. Wall W 9 was constructed on the upper surface of soil unit 15.1, soil unit 11.3 lies at a parallel elevation to the E, the area to the W was destroyed by recent bulldozing activity.

EIII W 10     — 186.78 m.  
                  — 186.92

Stone wall foundation fragment, laid E/W, constructionally bound to N/S wall W 9; single course preserved, mud-mortar. In the corner formed by walls W 9 & W 10 is a small, yellowish-brown clayey patch, possibly representing the remains of a corresponding surface, however the very poor state of preservation precludes any certain functional identification. Similar to W 9, though at a slightly higher foundation level W 10 was constructed directly upon the upper surface of soil unit 15.1 with soil unit 11.3 lying at a parallel elevation.

EIII 11.1-3   — 186.42/48 m.  
                  — 186.96/99

Excavated in ca. 0.20 m. units (as opposed to the even more frustrating 0.10 m. units of the preceding ca. 1.50 m. of fill), locus 11 is a thick soil layer characterized by a compact and hard brown soil, lightly flecked with white limestone and charcoal. The locus 11 series extends from the base of wall fragments W 9 & W 10 to the base of soil unit 8.3. To the W, soil units 11.2-3 are cut by pit 12; exposure: 11.00 m.<sup>2</sup>

11.1       $\frac{- 186.42/46 \text{ m.}}{- 186.64}$

“Fill” accumulation exposed over entire EIII East.

11.2       $\frac{- 186.64 \text{ m.}}{- 18.84}$

“Fill” accumulation from top of wall fragments W 9 & W 10 to the succeeding soil unit of 11.1, cut in the W by pit 12.

11. 3       $\frac{- 186.84 \text{ m.}}{- 186.99}$

“Fill” accumulation, ca. parallel in elevation to wall fragments W 9 & W 10, similar to the overlying, nondescript brown soil of 11.2. No floor(s)/surface(s) were found in this collection unit in association with the walls.

EIII 12.1-6       $\frac{- 186.59 \text{ m.}}{- 187.17}$

Large pit of irregular contour covering the SE area of EIII, measuring in partial exposure 1.75 m. x 3.00 m. N/S, and characterized by a loose, mottled dark grey and brown soil matrix heavily flecked with charcoal and yielding a large quantity of bone, sherds and flint points. The upper surface of the pit was cut into twice along its eastern exposure (clear in section), the SE cut refilled or eventually filled with a compact, hard brown soil; the NE cut by soil unit 11.1. This pit also appears to have been cut or dug into along its SW perimeter. Pit 12 precedes the fill accumulation of soil unit 11.1, in turn cutting into preceding loci 11.2-3 & 15.1 (and possibly continuing), and is later in the depositional sequence of Shuna North than the architecture represented by wall fragments W 9 & W 10.

12.1       $\frac{- 186.59/62 \text{ m.}}{- 186.76}$

Northern area of pit; exposure: 1.90 m.<sup>2</sup>

12.2       $\frac{- 186.59/62 \text{ m.}}{- 186.95}$

N & NW area of pit; exposure: 1.90 m.<sup>2</sup>

12.3       $\frac{- 186.75 \text{ m.}}{- 186.83}$

SE area of pit; exposure: 0.75 m.<sup>2</sup>

12.4       $\frac{- 186.70 \text{ m.}}{- 186.86}$

Central and S area of pit; exposure: 2.80 m.<sup>2</sup>

12.5       $\frac{- 186.86 \text{ m.}}{- 187.03/12}$

Central area of pit; exposure: 2.25 m.<sup>2</sup>

12.6       $\frac{- 187.12 \text{ m.}}{187.17}$

S area of pit; exposure: 1.00 m.<sup>2</sup>.

EIII W 13       $\frac{- 186.90 \text{ m.}}{- 187.10}$

Stone wall foundation fragment, lying NNW/SSE, exposed in NE corner of the square, constructed of a parallel row of unhewn stone, hard mud-mortar (0.65 m. x 1.00 m. exposed NNW/SSE). Superstructure and possible corresponding floor(s) not preserved. This wall was constructed directly on the upper surface of soil unit 15.2, lies at a parallel elevation to soil unit 15.1 and is succeeded by fill accumulation 11.3.

EIII 14.1       $\frac{- 186.98 \text{ m.}}{- 187.03}$

Scraping of EIII West lower mound surface, modern contamination (roughly comparable to locus 7 to the N though at a lower elevation), above locus 16; exposure: 1.65 m.<sup>2</sup>

EIII 15.1       $\frac{- 186.96 \text{ m.}}{- 187.10}$

Fill accumulation parallel to wall fragment W 13, characterized by a brown to yellowish-brown soil with a slightly sandy texture, relatively free from white limes-

tone or charcoal flecks. This soil unit succeeds 15.2 and associated wall fragment W 18, is cut in the W by pit 12 and precedes soil unit 11.3; exposure: 12.00 m.<sup>2</sup>

15.2             $\frac{- 187.10 \text{ m.}}{- 187.29}$

Beginning with locus 15.2 and the underlying locus sequence 17-35, excavation in EIII is restricted to the northern half of the square (4.00 m. x 2.00 m. N/S). Locus 15.2 is of a similar sandy brown soil, though slightly harder packed than the succeeding soil unit of 15.1 and lies at a parallel elevation to wall fragment W 18. Both locus 15.2 and W 18 lie upon the upper surface of locus 17; exposure: 8.00 m.<sup>2</sup>

EIII 16.1         $\frac{- 186.99 \text{ m.}}{- 187.13}$

Soil unit above the S end of wall W 9, comparable to the soil unit 11.3 though the soil is much more compact and hard (possibly due to the weathering processes occurring after the bulldozer cut which created the lower mound surface), however collected separately due to possible contamination from the overlying lower mound surface; exposure: 1.00 m.<sup>2</sup>

EIII 17.1-4      $\frac{- 187.29 \text{ m.}}{- 187.48}$

Locus series 17 is characterized by varied fill accumulations and possible erosion deposits overlying the brick superstructure of W 19/W 22 & W 23/W 28; exposure: 8.00 m.<sup>2</sup>

17.1             $\frac{- 187.29 \text{ m.}}{- 187.40/43}$

Hard, compact mottled greyish-brown soil layer flecked with charcoal, overlying the eastern half of W 19/W22, preceding fill accumulation 15.2; exposure: 3.20 m.<sup>2</sup>

17.2             $\frac{- 187.30 \text{ m.}}{- 187.40/43}$

Clayey grey to reddish-brown soil layer overlying the northwestern portion of W 19 and room fill 21. A long patch of what appears to be disintegrated, light beige sandstone in the N area of the 17.2

exposure separates this soil unit from the succeeding fill accumulation of 15.2. The similarity of composition between this soil unit and the reddish-brown mortar used in the construction of W 19 strongly suggests that this soil unit represents a layer of mortar, eroded after the destruction or dismantling of W 19 to its preserved level. A thin layer of similar "mortar", extending to the S over W 19 and under soil unit 17.4 further strengthens this interpretation; exposure: 1.20 m.<sup>2</sup>

17.3             $\frac{- 187.41 \text{ m.}}{- 187.48}$

Compact mottled grey-brown soil flecked with white limestone and charcoal, lying at a parallel elevation to W 19 along its southeastern face, continues the fill accumulation of the underlying locus 20, below the S portion of collection unit 17.1; exposure: 1.75 m.<sup>2</sup>

17.4             $\frac{- 187.30 \text{ m.}}{- 187.43}$

Sandy light brown mottled soil unit overlying the SW portion of W 19 & W 23 as well as the fill deposit above room 29 (designated locus 27). This soil matrix is similar in composition to the bricks of walls W 19/W 23 and appears to represent a brick erosion layer, underlying locus 15.2; exposure: 2.75 m.<sup>2</sup>

EIII W 18         $\frac{- 187.25 \text{ m.}}{- 187.35}$

Possible stone wall foundation along the E baulk of which only a single row of unhewn stone with hard mud-packing is exposed. This row of stones lies directly on the upper surface of soil unit 17.1 and is parallel in elevation with soil unit 15.2. Though similar in alignment, the construction of W 18 is definitely earlier than that of W 13 which lies on the upper surface of locus 15.2.

EIII W 19         $\frac{- 187.43 \text{ m.}}{- 187.53}$

Superstructure to stone wall foundation W 22 (1.20 x 3.25 m. exposed) laid along a roughly WSW/ENE axis, constructed of "sandy brick" or possibly sandstone slabs

(sandstone-like in composition, brick in form with a slightly clayey texture, now heavily eroded). The composition of the bricks varies from a yellowish-brown sandy-textured material flecked with grey to a greenish-grey clay with a sandy-texture. Several of the bricks have been completely eroded leaving only the negative impression in the reddish-brown clayey mortar. Brick size also varies from 0.42 x 0.62 x 0.10 m. or its half, 0.17 x 0.62 m. (original width not preserved) of the northern row to 0.50 x 0.50 x ca. 0.10 m. (though the S edge of these seems to be slightly eroded) or 0.17 x 0.30 m. (preserved length) of the southern row. This brick superstructure is cut and destroyed in the W with the intrusion of a large basalt stone.

EIII 20.1-3     — 187.48 m.  
                  — 187.69

Fill accumulation S of wall W 19/W 22 and E of wall W 23/W 28; above burnt layer 26 and preceding locus 17.3; exposure: 1.75 m.<sup>2</sup>

20.1           — 187.48 m.  
                  — 187.55

Lightly flecked, mottled brown soil similar to the preceding locus 20.2 and the succeeding though slightly more compact soil of collection unit 17.3, roughly parallel in elevation to the lower portion of W 19.

20.2           — 187.55 m.  
                  — 187.62/65

Mottled brown soil with loose texture, heavily flecked with white as well as many small patches of white plaster (similar in composition to floors 24 & 29). This collection unit terminated with the appearance of a small ash lens, designated locus 25).

20.3           — 187.62/65 m.  
                  — 187.69

Mottled brown soil with loose texture, overall lightly flecked with white with a heavy concentration of white flecks in the SW corner. "Bricky" collapse, i.e., lumps of greenish-grey sandy material similar to some of the bricks of W 19 & W 23, was

also found in the SW corner near the latter wall.

EIII 21.1-2     — 187.40 m.  
                  — 187.68

Fill accumulation N of W 19/W 22, below 17.4 and deposited after surface 24 fell into disuse. This area is cut in the west by modern bulldozer activity; exposure: 0.50 m.<sup>2</sup>

21.1           — 187.40 m.  
                  — 187.48

Compact brown to slightly reddish-brown soil, ca. parallel in elevation to W 19.

21.2           — 187.48 m.  
                  — 187.68

Compact brown to slightly reddish-brown soil, ca. parallel in elevation to the upper half of stone wall foundations W 22, lying directly upon plaster surface 24.

EIII W 22       — 187.43 m. E  
                  — 187.59  
                  — 187.55 m. W  
                  — 187.74

Single course stone wall foundations of superstructure W 19, 1.20 m x 4.25 m. exposed length, constructed of unhewn stone in irregular layout, generally with larger facing stones, hard mud-mortar and mud-plastered. The wall was laid upon a shallow, hard earth packing and slopes slightly downward from ENE to WSW.

W 22.1         — 187.43 m.  
                  — 187.74

(maximum dimensions) Dismantling wall.

W 22.2         — 187.59/74 m.  
                  — 187.77

Shallow, hard earth packing directly below W 22, cut into fill layer of collection units 26.2, 31 & 32; exposure: 5.10 m.<sup>2</sup>

EIII W 23       — 187.43 m.  
                  — 187.60/64

"Brick" superstructure, 2 courses partially preserved, of NNW/SSE wall, 1.25 x 0.60 m. exposed length, perpendicular to W 19/W 22 and enclosing floor 29 to the W and area 26 to the E. This wall lies directly



below locus 17.4 and was built upon stone wall foundations (designated W 28). The bricks are similar to the yellowish-brown or reddish-brown sand and the sandy-textured greenish-grey clayey bricks of W 19, however they differ slightly in form and dimension. Two courses are preserved, the poorly preserved upper course yielding only a single row of two bricks, one trapezoidal in form (0.67 x 0.25 m. exposed length and 17/ca. 0.32 m. x 0.60 m. preserved/ ca 0.75 m. expected length, original thickness of brick not preserved) and the lower course comprising a double row of bricks, again including the trapezoidal form (0.42 x 0.50 m. exposed/ 0.62 m. expected x 0.10 m. and 0.22/0.30 x 0.72 x 0.10 m.). The lower course of bricks lies roughly parallel in elevation to the upper part of the stone wall foundations of cross wall W 19/W 22. Again similar in construction to W 19, a reddish-brown clayey mortar mixed with small pebbles was used between the bricks and as a wall plaster.

W 23.1     — 187.43 m.  
              — 187.51

Dismantling upper course.

W 23.2     — 187.51 m.  
              — 187.60/64

Dismantling lower course.

EIII 24     — 187.68 m.  
              — 187.59/60

Thin, heavily eroded white plaster floor of room N of wall W 19/W 22, destroyed to the W, only ca. 0.20 m.<sup>2</sup> exposed. The white plaster floor was laid against the mud-plastered stone foundations (W 22), at an elevation slightly lower than the brick superstructure (W 19). Unfortunately, no evidence is preserved indicating whether or not the inhabitants used a white plaster on the walls as well. Surface 24 lies on the upper surface of soil unit 31 and is succeeded by fill accumulation 21.

EIII 25     — 187.65 m.  
              — 187.67

Small, thin ash lens in NE corner of area defined by locus 20, ca. 0.35 m. in diameter

and lying directly on the upper surface of collection unit 20.3.

EIII 26.1     — 187.69 m.  
              — 187.70/74

Burnt layer preceding fill 20/17.3, succeeding collection unit 26.2 and lying against the S face of W 22. This thin layer is characterized by 2 large, roughly oval patches, ca. 1.00 m. maximum length, of bright, bricky-orange colour, each surrounded by a greyish weak red ash ring, set within a varied soil layer composed of a sandy-textured, dark weak red to purplish-grey, black-flecked soil in the SE and a more compact brownish, black- and white-flecked soil in the SW; exposure: 1.40 m.<sup>2</sup>

26.2         — 187.70/74 m.  
              — 187.78/82

Varied soil characterized by grey to weak red ash and dark reddish-brown sandy-textured patches interspersed and often partially overlapping within a crumbly, mottled brown to reddish-brown soil matrix. Several of the small ash patches cut into the preceding locus 34.

EIII 27.1-2   — 187.51 m.  
              — 187.69

Fill accumulation characterized by a compact, indistinct brown soil layer, lightly flecked with white. Locus 27 is enclosed by W 19/W 22 to the N, W 23/W 28 to the E and the bulldozer cut to the W. Pail numbers indicate collection on two different days; exposure: 0.30 m.<sup>2</sup>

EIII W 28     — 187.60/64 m.  
              — 187.73

Stone wall foundations of superstructure W 23, laid NNW/SSE, constructed of relatively small unhewn stones in an irregular pattern (1.25 x 0.60 m. exposed length), single course preserved.

W 28.1       — 187.60/64 m.  
              — 187.73

Dismantling wall.

W 28.2       — 187.73 m.  
              — 187.67

Compact, indistinct brown soil beneath the

stone foundations. Whether or not the surface between the foundations was initially prepared in anyway is unclear; exposure: 0.75 m.<sup>2</sup>

EIII 29.1       $\frac{- 187.69 \text{ m.}}{- 197.70}$

Heavily eroded, thin white plaster floor, similar to that of locus 24 to the N, of a room enclosed by W 19/W 22 to the N and W 23/W 28 to the E; exposure: 0.10 m.<sup>2</sup>

EIII 30.1       $\frac{- 187.68/74 \text{ m.}}{- 187.70/76}$

Poorly preserved, thin greenish-white plastered surface laid on a thin sand and gravel foundation, broken in the SE by locus 26.2. This surface, directly overlying surface 34, precedes soil layer W 22.2/W 28.2, 31, 32 and 26.2. the stratigraphic connection of E III 30 with EII/III 2 and EII 5.4 is clear in section though the western extension of this surface has been contaminated by modern activity; exposure: 6.60 m<sup>2</sup> (though fragmentary).

EIII 31.1       $\frac{- 187.58 \text{ m.}}{- 187.68}$

Fill accumulation characterized by a light brown, white-flecked soil layer mixed with gravel, beneath floor 24, above surface 30 and destroyed in the W by the bulldozing activity; exposure: 0.40 m.<sup>2</sup>

EIII 32.1       $\frac{- 187.59 \text{ m.}}{- 187.73}$

Reddish-brown, white-flecked soil layer below floor 29, above surface 30 in SW corner of the exposure; exposure: 0.40 m.<sup>2</sup>

EIII 33.1       $\frac{- 187.58 \text{ m.}}{- 187.71}$

Modern contamination (plastic bags and rubber shoes) due to bulldozer activity, destroying the western area of locus 31; exposure: 0.20 m.<sup>2</sup>

EIII 34.1       $\frac{- 187.78/82 \text{ m.}}$

Top exposure of a concentration of hard, clayey patches heavily pitted by overlying locus 26.2, overlaid along its N perimeter by surface 30 (possibly equivalent to EII/III 3 and EII 7, not excavated); exposure: 2.70 m.<sup>2</sup>

EIII W 35       $\frac{- 187.64 \text{ m.}}$

Possible (though doubtful) stone wall foundations (represented by 2 stones only in the SE corner of the exposure), protruding into locus 34 (not excavated).

The locus descriptions for square EIV are not included here as they bear little on the discussion of the late Chalcolithic-Early Bronze I of Tell esh-Shuna North.

## Appendix B: Catalogue of Ceramic Types

Type:	Locus:	Ware:	Surface treatment:	Alternate Surface treatments:	Other Occurrences:
Fig. 7:					
1	EIII 12.6	sand-tempered	plain, wet-smoothed smoke-blackened		
2a	EII 13.3	sand-tempered	fugitive red slip ext./int.		EI 6.9 EII 17.7
2b	EII 12.1	sand-tempered	fugitive red slip ext./int.		EII 15.3 EIII 26.2 EIII 17.1 & 4 EIII 6.1
3	EIII 17.4	sand-tempered	fugitive red slip ext./int.		
4	EII/III 5.3	sand-tempered	fugitive red slip ext./int.		
5	EIII 17.1	sand-tempered	fugitive red slip ext./int.		
6a	EIII 12.4	sand-tempered	fugitive red slip ext./int. rim		
6b	EIII 21.1	sand-tempered	fugitive red slip ext./int. rim		
6c	EIII 12.2	sand-tempered	fugitive red slip ext./int. rim.		
7a	EII 16.1	sand-tempered	red-slipped & polished ext./int. rim		
7b	EIII 12.1	sand-tempered	fugitive red slip ext./int. rim		
8	EII 15.3	sand-tempered	fugitive red slip ext./int. rim		
9a	EIII 12.4	sand-tempered	fugitive red slip ext./int. rim		
9b	EII 13.2	sand-tempered	plain, wet-smoothed		
10a	EII 13.2	coarse-tempered	fugitive reddish-yellow slip ext./int.		EI 9.7 EII 19.1
10b	EII 12.1	coarse-tempered	fugitive red slip ext./int, unusual white paste (10YR 8/1)		EII 16.1 EII 15.5 EII 13.2 EII 12.1 EIII 17.1 & 3 EIII 12.1 & 4
11	EII 28.2	coarse-tempered	wet-smoothed, red painted (series a)		
12	EIII 21.1	coarse-tempered	Pink- to reddish-yellow slip ext./int.	fugitive red slip & reddish-yellow slip	EI 9.13 EIII 12.1 & 4
13	EI 9.7	coarse-tempered	fugitive red-slip ext./int.	plain	EI 6.10 EI 9.7, 11, 19 & 21 EII 17.7
Fig. 8					
14a	EII 28.2	coarse-tempered	fugitive red slip(?) ext./red painted (series a) int.	fugitive red slip	EI 9.16
14 b	EII 28.2	coarse-tempered	fugitive red slip ext./int.		
15	EIII 12.4	coarse-tempered	plain	red slip	EII 18.2 EII 15.3
16	EIII 17.2	coarse-tempered	very pale brown fugitive slip ext. incised decoration (series a) on rim		
17	EI 9.18	coarse-tempered	reduced red slip ext./int.	red slip	EI 9.17 EII 13.3

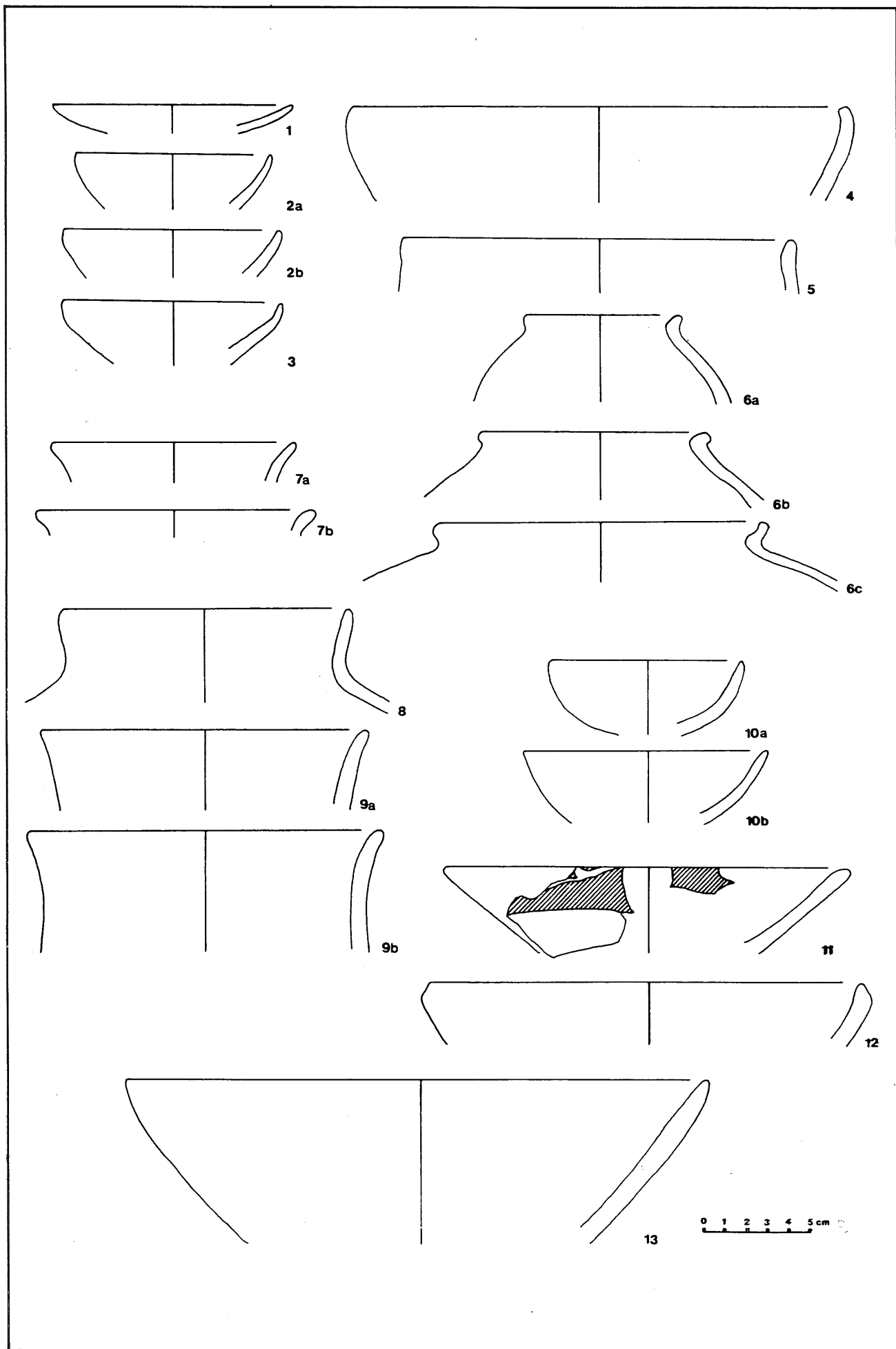


Fig. 7

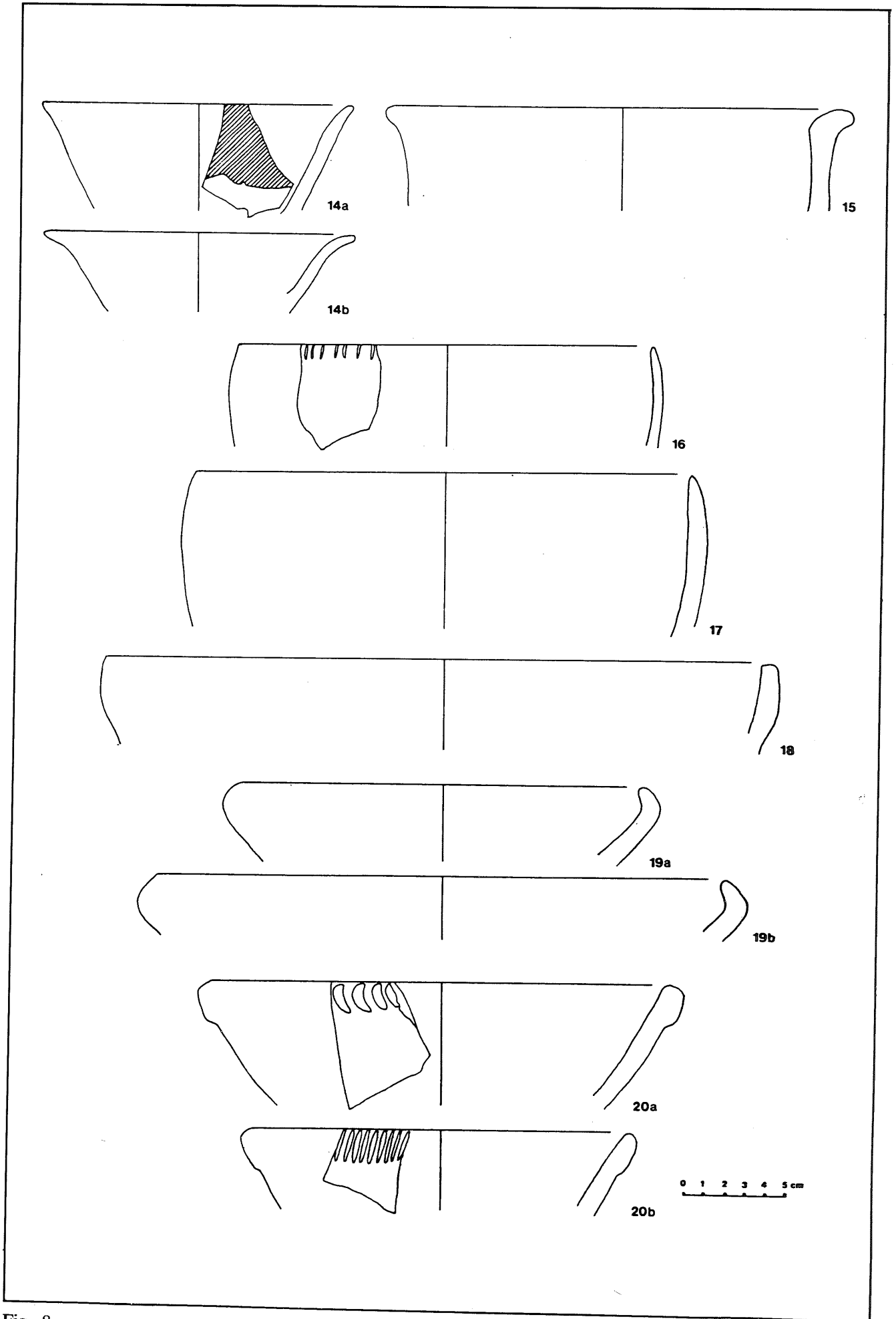


Fig. 8

18	EII/III 5.3	coarse-tempered	fugitive red slip ext./int. rim		
19a	EIII 12.2	coarse-tempered	reduced slip ext./int. rim	red slip	EIII 12.1, 4 & 5
19b	EIII 12.2	coarse-tempered	reduced red slip & burnish ext./int.		
20a	EII 16.3	coarse-tempered	Plain, rope decoration (series e) on rim	plain, rope decoration series b, d&e	EII 16.2 EII 12.1
20b	EIII 12.4	coarse-tempered	fugitive red slip ext./int. rope decoration (series b) on rim		
Fig. 9					
21a	EII 15.2	coarse-tempered	plain, rope decoration (series d) on rim	predominantly plain, rope decoration (series d&e) on rim 1 ex. red slip	EI 9.7 EI/II 2.1 EII 16.2 EII/III 5.2 EIII 26.2 EIII 12.3
21b	EII/III 11.1	coarse-tempered	fugitive red slip ext./int. rim, rope decoration (series e) on rim		
22	EII 17.7	coarse-tempered	plain, rope decoration (series b) below rim	red slip with rope decoration series b	EII 20.1 EII 17.2
23	EIII 17.4	coarse-tempered	fugitive red slip ext.		
24a	EI 10.3	coarse-tempered	red-painted (series a) ext.	red slip, plain or red painted series a.	EI 10.2 EI 9.13, 15 & 20
24b	EII 28.3	coarse-tempered	red slip (heavily eroded) ext./red painted (series a) int.		EII 28.2 EII 25.1 EII 17.3
24c	EIII 12.1	coarse-tempered	fugitive red painted (series b?) ext.		
24d	EII 28.3	coarse-tempered	fugitive red painted (series a) ext.		
25	EII 13.3	coarse-tempered	red painted (series d) ext., crude manufacture, stance approximate		
26	EII 15.2	coarse-tempered	plain, rope decoration (series e) below rim	plain with rope decoration series e below rim	EII 21.1
Fig. 10:					
27	EII 13.3	coarse-tempered	wet-smoothed, red painted (series e) ext.		
28	EII 28.3	coarse-tempered	wet-smoothed, red painted (series e) ext.		
29	EIII 12.4	coarse-tempered	fugitive red to reduced slip ext./int. rim, rope decoration (series e) on rim		
30	EII 21.1	coarse-tempered	light brown slip ext./int. rim, incised decoration (series b) below rim.	light reddish-brown slip ext.	EII 16.2
31	EIII 12.1	coarse-tempered	fugitive red slip ext.	red slip & plain	EII 15.2 EII 13.2
32	EIII 12.2	coarse-tempered	thick fugitive red slip ext., rope decoration (series c) on rim		
33a	EII 28.2	coarse-tempered	plain		EI 10.3 EII 17.5&7
33b	EII 28.2	coarse-tempered	plain		EII 13.2 EIII 17.4
34	EII 13.3	coarse-tempered	plain		EII 19.1

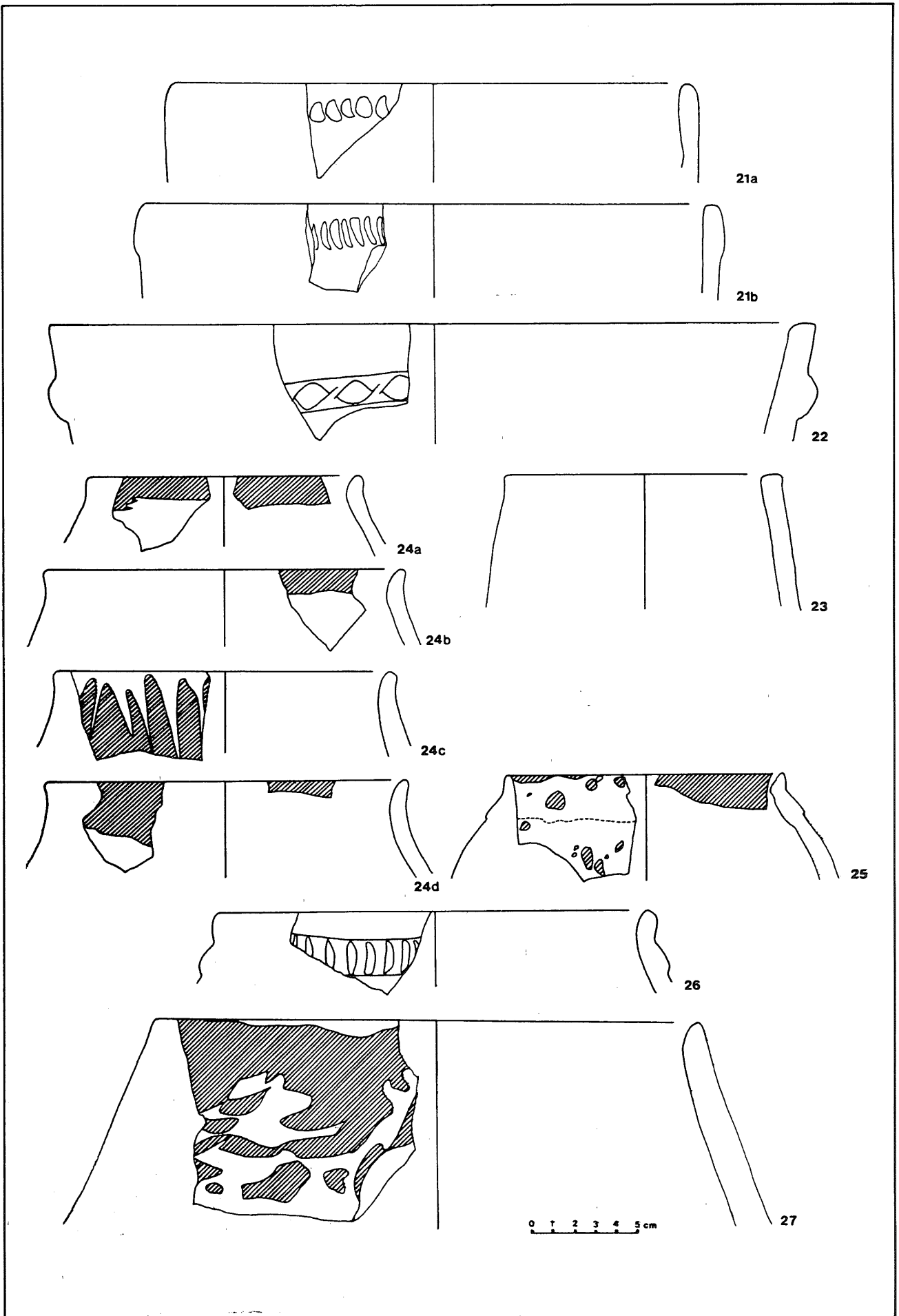


Fig. 9

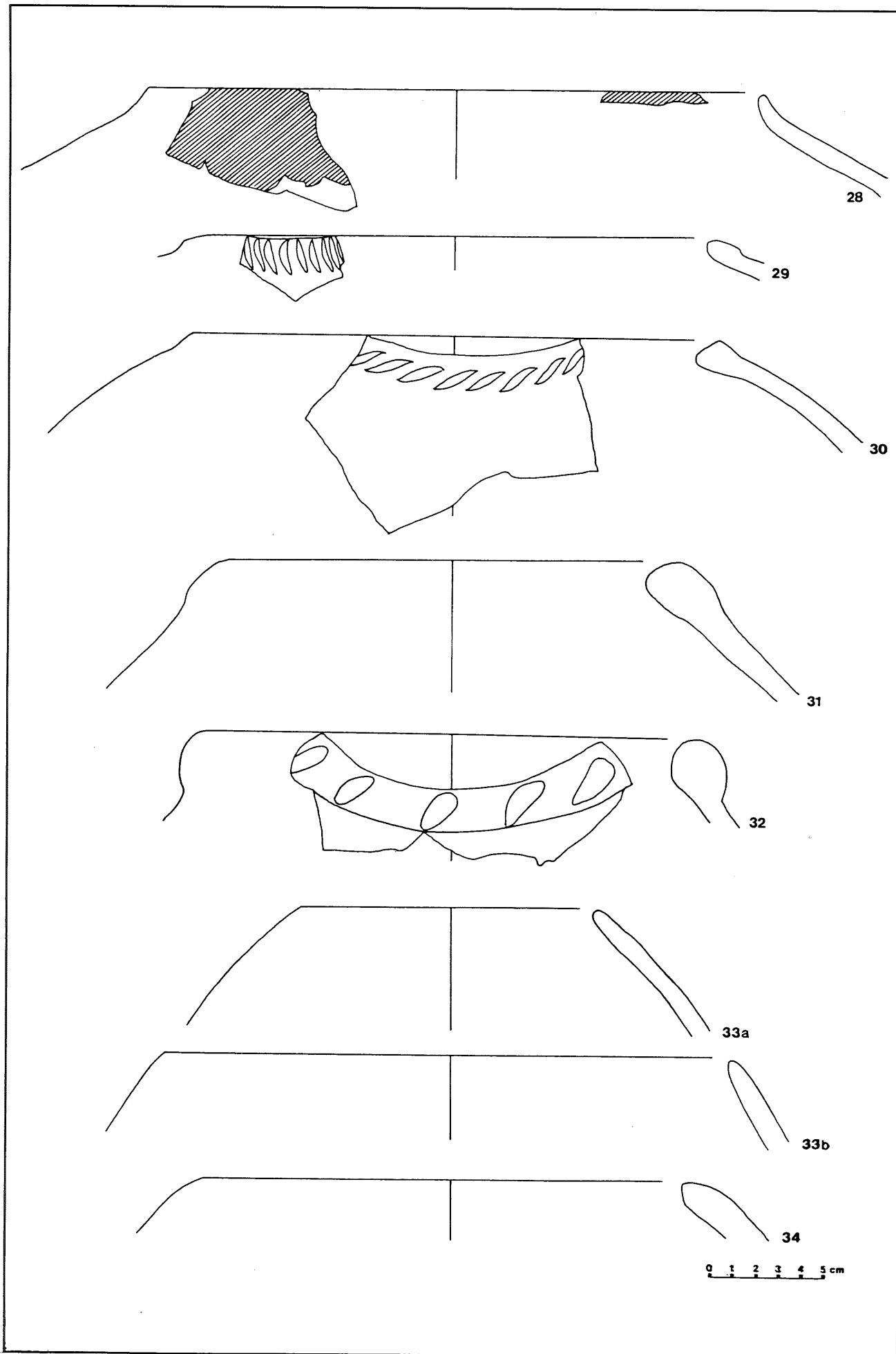


Fig. 10



Fig. 11				
35a	EIII 12.4	coarse-tempered	plain	EII 15.3
35b	EIII 12.4	coarse-tempered	plain	EII 13.3
36	EIII 12.2	coarse-tempered	fugitive red slip ext.	EIII 12.1-2
37	EII 12.1	coarse-tempered	red slip ext., incised decoration (series b) on shoulder	EIII 12.4
				without incised decoration
				EII 15.5
				EII 13.1
38	EI 9.16	coarse-tempered	red slip ext./int. rim	EIII 17.1
39	EII 15.3	coarse-tempered	plain	EIII 6.2
40	EIII 12.4	coarse-tempered	plain	EII/III 5.2
				EIII 6.2
Fig. 12				
41	EIII 17.1	coarse-tempered	red slip ext./int.	
42	EII 12.1	coarse-tempered	red slip ext./int. rim	
43	EII 13.2/3	coarse-tempered	red slip ext./int. rim rope decoration (series g) on rim	EII 12.1
				EII 13.1-3
44	EI 9.19	coarse-tempered	plain	EII 17.3
45	EIII 12.1	coarse-tempered	fugitive red slip ext.	
46a	EIII 12.2	coarse-tempered	fugitive red slip ext.	
46b	EIII 17.2	coarse-tempered	fugitive red slip ext.	
47	EIII 17.2	coarse-tempered	plain	
48	EIII 12.2	coarse-tempered	fugitive red slip ext./int. rim	
49	EIII 12.4	coarse-tempered	fugitive red slip ext.	1 ex. possibly band-slipped, surface heavily eroded
				EIII 12.1-2&4
Fig. 13				
50	EIII 12.1	coarse-tempered	slightly reduced fugitive red slip ext.	
51	EII 17.5	coarse-tempered	red slip ext.	
52	EI/II 2.1	coarse-tempered	heavily eroded, unclear	
53	EI 9.13	coarse-tempered	fugitive red slip ext./int. collar	predominantly red slip ext./int. plain
				EI 13.1
				EI 9.3 & 16
				EII 17.2
				EII 16.1-2
				EII 13.3
				EIII 26.2
				EIII 17.1&4
				EIII 12.2&4
54a	EIII 26.2	coarse-tempered	red slip ext./int. rim	reduced red slip ext. EIII 12.2
54b	EII 13.1	coarse-tempered	red slip ext./int. rim	
55a	EI 10.3	coarse-tempered	light red to reddish-yellow slip ext./int. collar	fugitive red slip and plain
				EI 13.1
				EI 10.3
				EI 9.4
				EI 6.9-10
55b	EI 9.4	coarse-tempered	plain	EII 28.2
55c	EII 17.2	coarse-tempered	fugitive red slip ext./int. rim, simple punctate decoration on shoulder	EII 25.1
				EII 24.1
				EII 17.2&7
				EII 15.3
				EII 13.1-2
				EIII 17.1
				EIII 12.1
Fig. 14				
56	EIII 6.1	coarse-tempered	fugitive red slip ext./int. rim, grooved rim	
57	EII 25.1	coarse-tempered	plain	
58a	EI 9.18	coarse-tempered	red-slip & burnish ext./int. rim	
58b	EII 28.2	coarse-tempered	light red painted ext. (series a)	

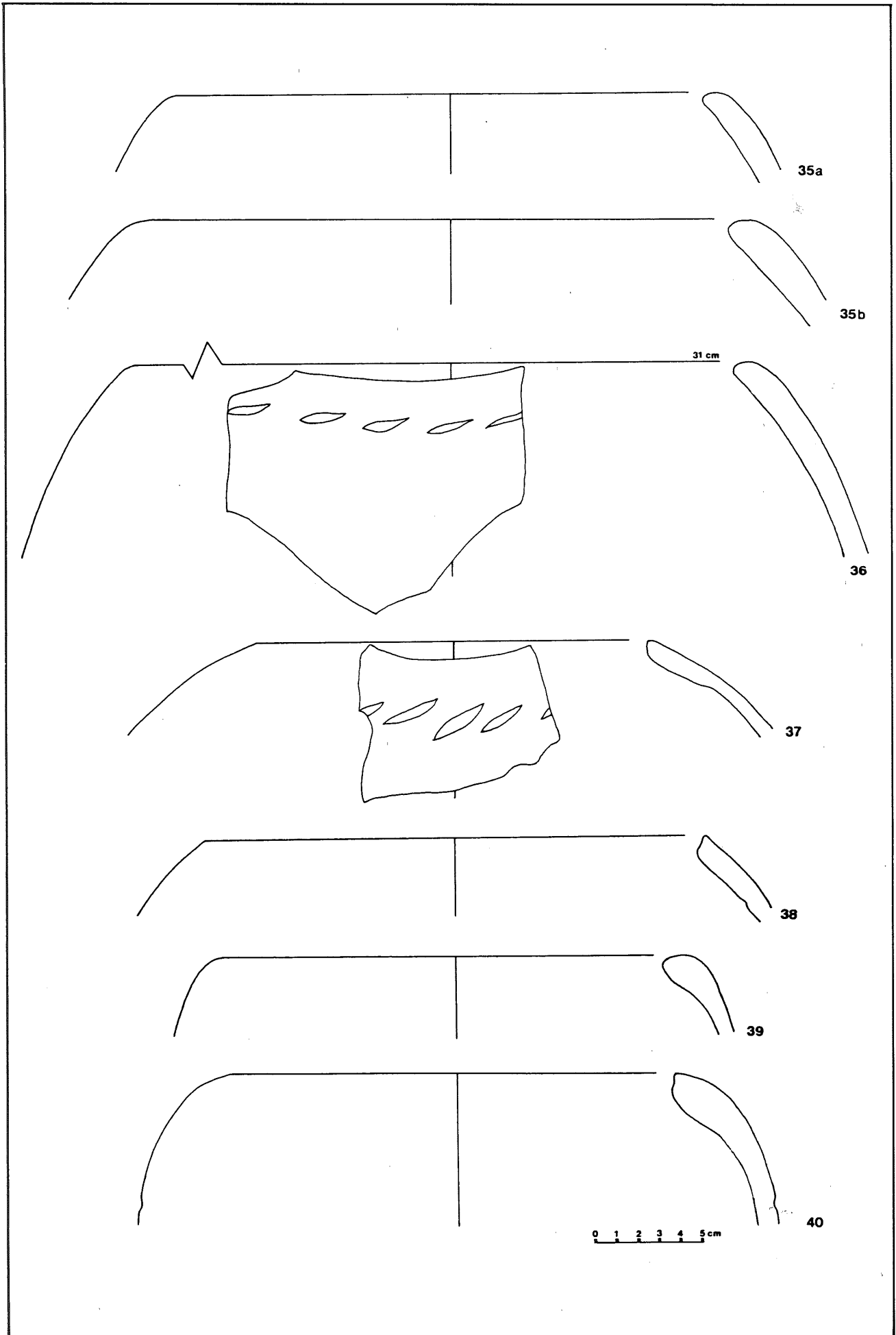


Fig. 11

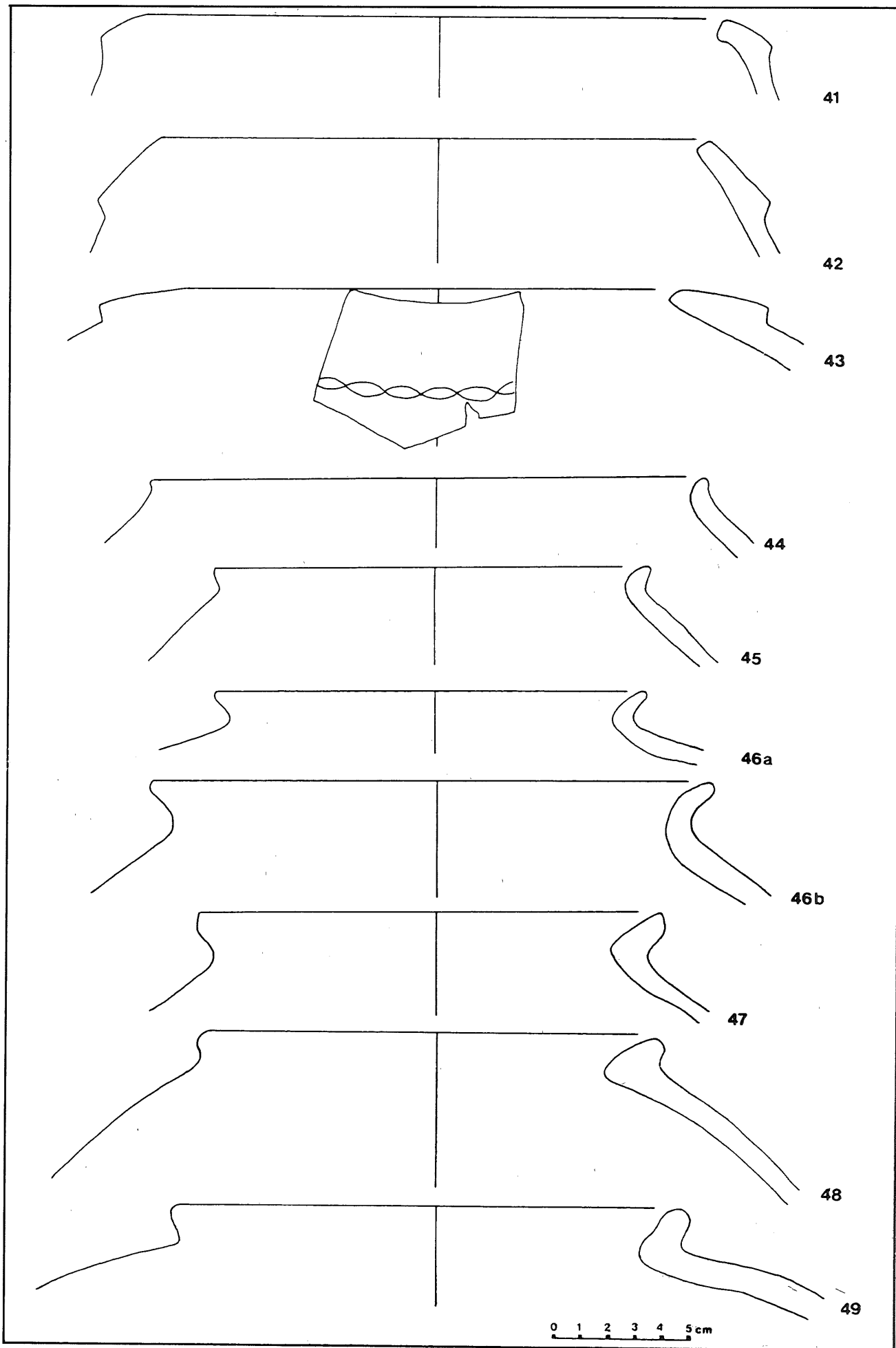


Fig. 12

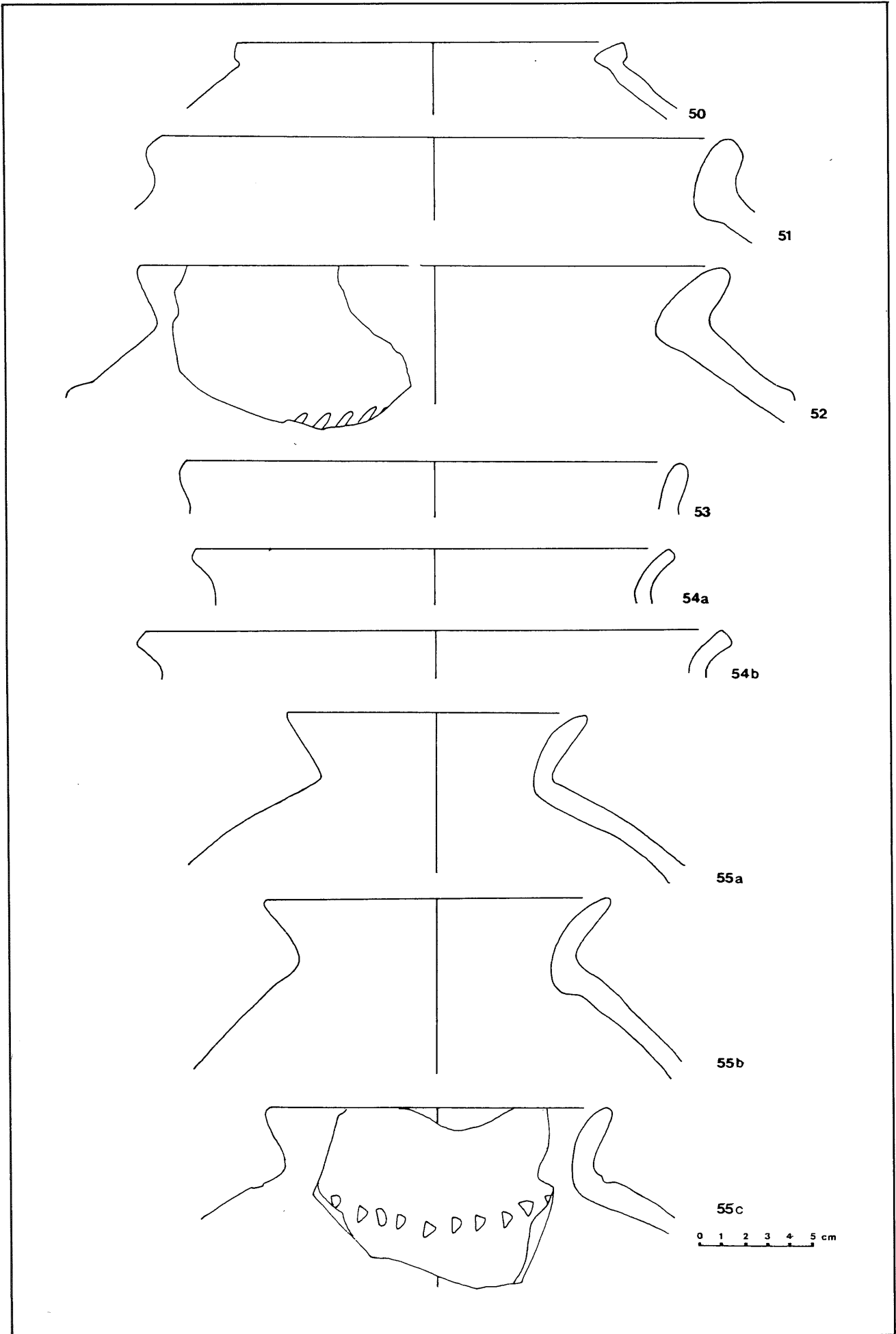


Fig. 13

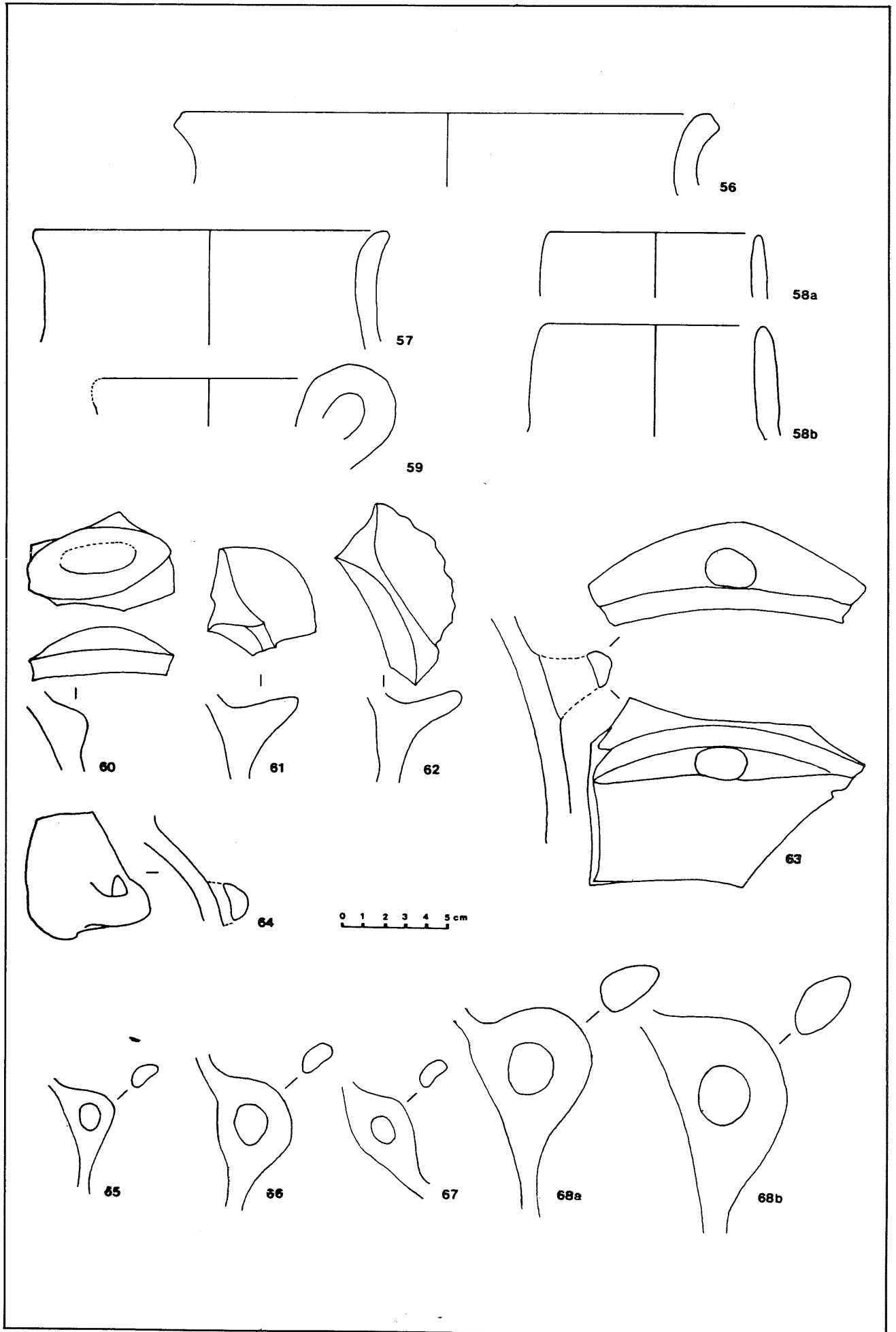


Fig. 14

59a	EIII 6.2	coarse-tempered	plain (stance approximate)		EII 13.3
59b	(not illus.) Small loop handle frag- ments	coarse-tempered	fugitive red slip & plain		EI 9.4 EII 15.3 EII 13.2-3 EIII 12.4
60	EII 17.7	coarse-tempered	plain		EII 17.2&6
61	EIII 12.2	coarse-tempered	fugitive red slip ext.		EII 17.2 EII 15.3
62	EII/III 5.2	coarse-tempered	fugitive red slip ext.		EII 17.2 EIII 6.2
63	EI 10.3	coarse-tempered	fugitive red slip ext.	predominantly red slip, also plain	EI 10.1 EI 9.1,4&7 EII 28.2 EII 17.2,5&7 EIII 17.1(?) EIII 12.4
64	EII 28.2	coarse-tempered	fugitive red slip ext.		
65	EI 9.17	coarse-tempered	red slip ext., unusual light red to reddish- yellow core (10R 6/6, 5YR 7/4-6/4)		EI 9.14
66	EII 28.2	coarse-tempered	red painted (series f) ext.	fugitive red slip ext.	EI 9.15&16
67	EII 25.1	coarse-tempered	fugitive red slip ext.		
68a	EII 28.2	coarse-tempered	fugitive red slip ext.	plain	EI 13.12 EI 9.11,13,14, 16&21
68b	EII 28.2	coarse-tempered	fugitive red slip ext.		EII 28.4 EII 25.1 EII 17.2,6-7 EII 16.3 EII 15.3 EIII 6.2
Fig. 15					
69	EII 17.2	coarse-tempered	fugitive very pale brown slip ext., rope decoration (series c) on lower body		
70	EII 15.3	fine-tempered grey	dark grey burnish (heavily eroded)		
71	EII 13.1	fine-tempered grey	heavily eroded, burnish(?)	dark grey burnish	(same loci)
72a	EII 12.1	fine-tempered grey	dark grey to reddish- brown (2.5YR 4/4) burnish ext./int. collar	dark grey to grey burnish	EII 13.1 EII 12.2 EII/III 5.2 EIII 17.1&4
72b	EII 13.2	fine-tempered grey	very dark grey burnish ext./int. collar		
73	EII 12.1	fine-tempered very pale brown	very pale brown to reddish-yellow burnish ext./int. collar		EII 15.5 EIII 26.2
74	EII 13.3	fine-tempered very pale brown	reddish-yellow burnish ext./int. collar		
75a	EII 13.1	fine-tempered grey	black burnish ext.	grey to dark grey & black burnish ext. or ext./int.	EII 13.2-3 EIII 34.1 EIII 17.4
75b	EII 13.1	fine-tempered grey	black burnish ext./int.		
75c	EII/III 5.3	fine-tempered grey	black surfaced burnish possibly eroded		

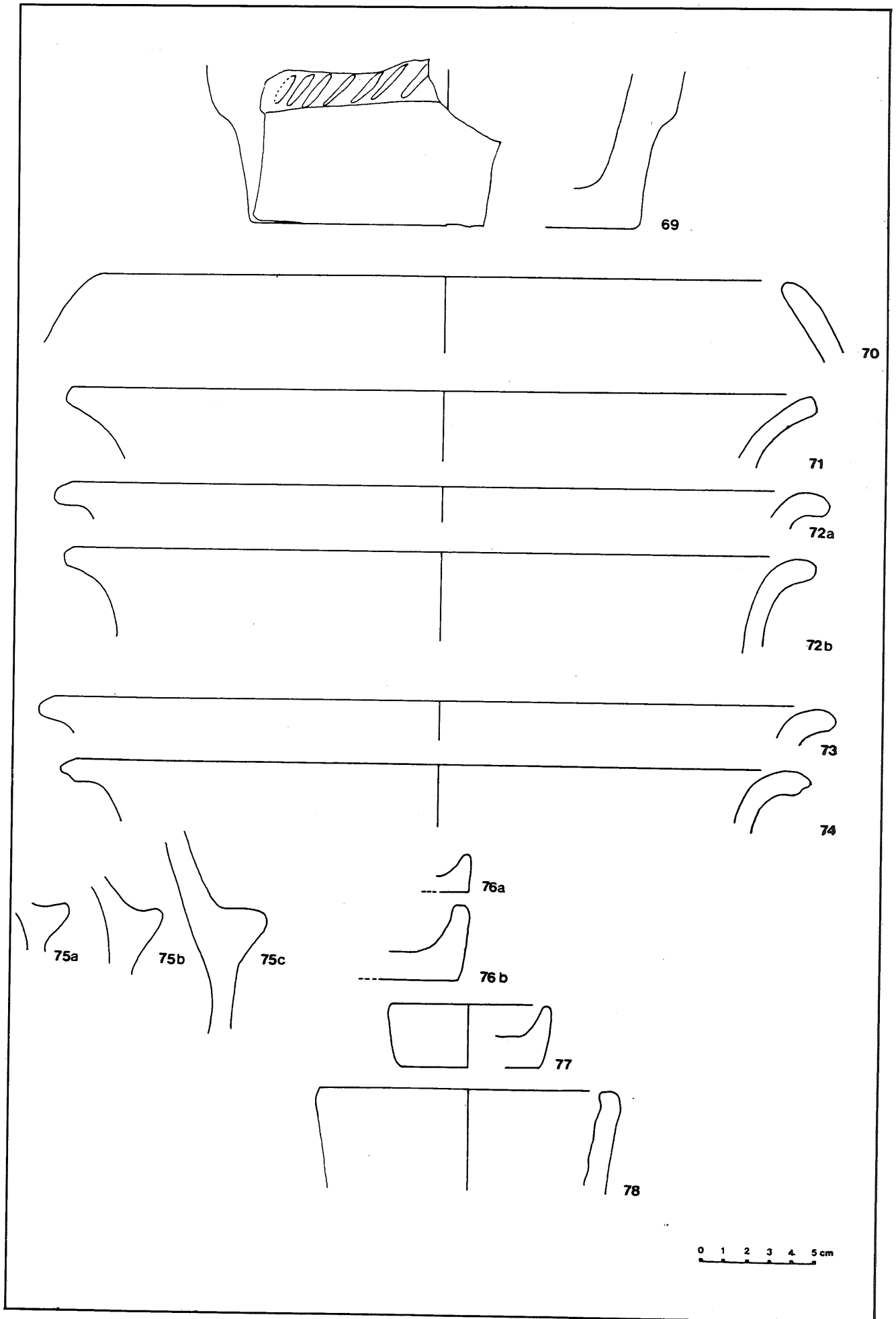


Fig. 15

76a	EIII 12.2	coarse chaff-tempered	plain
76b	EIII 12.2	coarse chaff-tempered	plain
77	EIII 12.2	coarse chaff-tempered	plain
78	EIII 12.4	coarse chaff-tempered	plain

Fig. 16

79a	EI 9.20	coarse-tempered	fugitive red slip ext./both int. surfaces rope decoration (series b)
79b	EII/III 5.2	coarse-tempered	red paint (series e) & rope decoration (series b)
79c	EII 13.3	coarse-tempered	red slip & rope decoration (series c) ext.
79d	EIII 26.2	coarse-tempered	fugitive red slip & rope decoration (series d) ext.
80	EIII 17.2	coarse-tempered	plain with irregular incised design on shoulder
81	EII 13.3	coarse-tempered	red-painted (series b) ext. red slip on base
82a	EII 16.2	coarse-tempered	red paint ext./int (series c & d) respectively
82b	EI 10.2	coarse-tempered	red paint (series e) ext.
82c	EI 10.4	coarse-tempered	red paint (series e) ext.
82d	EII 28.2	coarse-tempered	red paint (series e) ext.



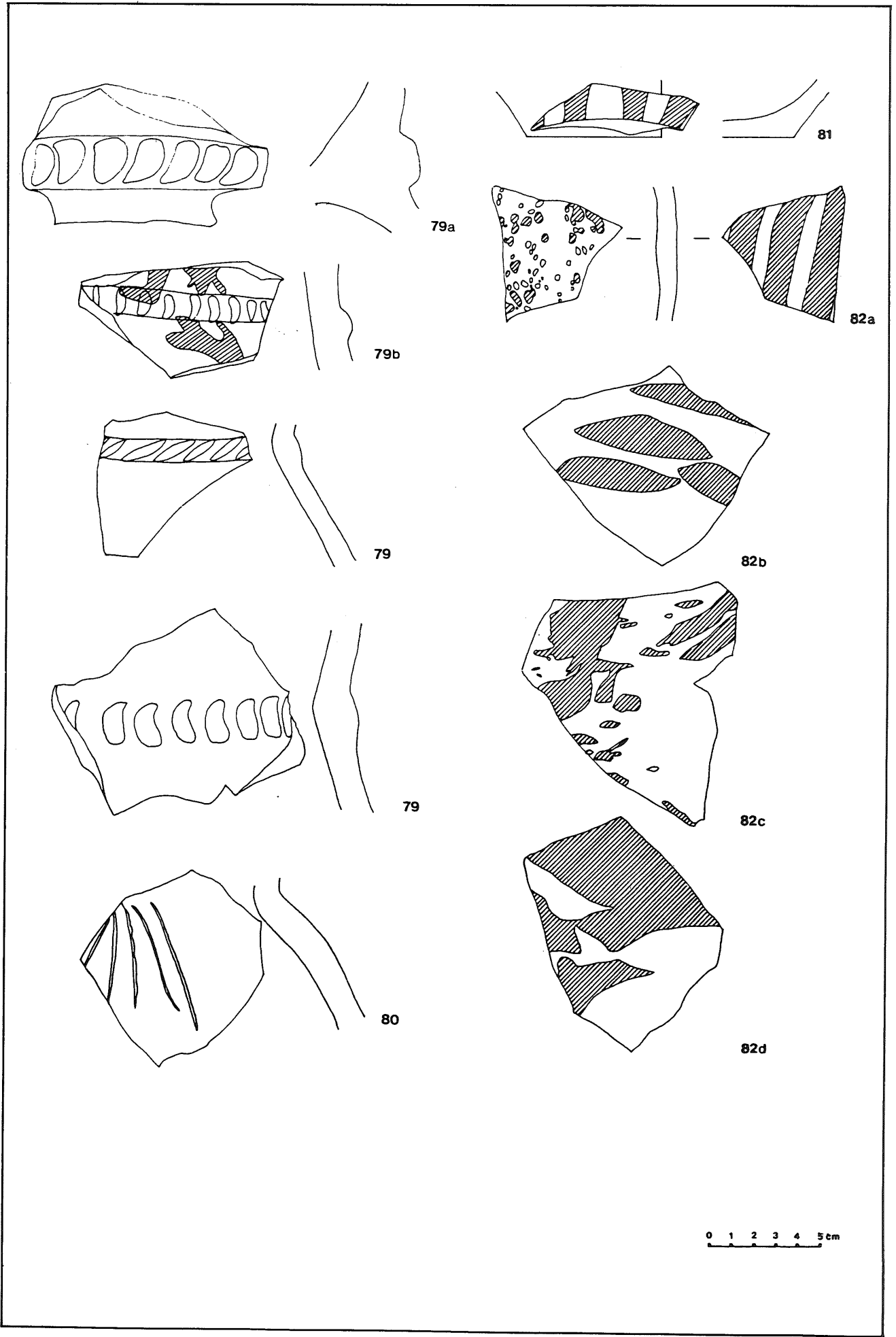


Fig. 16

**Ceramic types (both form and decoration) not specifically illustrated:**

- |    |  |   |
|----|--|---|
| 83 | Applied horizontal band on the vessel body (rope-like decoration a in the text, not illustrated)   | EIII 12.1   |
| 84 | Closely spaced, parallel vertical to slightly oblique lines on a slightly raised band on or near the vessel rim (rope-like decoration e in the text, see types 20a, 21b & 26)    | EI 9.7<br>EII 16.2-3<br>EII 15.2<br>EI/II 2.1<br>EII/III 5.1<br>EIII 12.1&4                               |
| 85 | Small pieces of clay applied to the vessel body creating a rope-like decoration (rope-like decoration f in text, not illustrated)  | EII 13.1 & 3<br>EII 12.1<br>EII/III 5.2<br>EIII 12.4  |
| 86 | Holemouth vessel with thickened rim, impressed rope-like decoration along the bottom rim (rope-like decoration g in text, see type 43)   | EII 16.1<br>EII 13.1-3<br>EII 12.1  |
| 87 | Horizontal band of short parallel incisions on vessel body (incised decoration a in text, see type 16)   | EIII 17.2<br>EII 12.6   |
| 88 | Horizontal band of parallel oblique incisions on the vessel body (incised decoration b in text, see types 30 & 37)   | EI 31.1<br>EII 12.1<br>EIII 12.2&4  |
| 89 | Horizontal band of simple punctate decoration on vessel shoulder (see type 55c)  | EII 17.2 & 4<br>EIII 12.1   |
| 90 | Red painted parallel bands of undeterminable orientation (painted design c in text, see type 82 a)   | EII 17.3<br>EII 16.1-2<br>EII 15.2<br>EII 13.1 & 3<br>EIII 12.4   |
| 91 | Red painted horizontal band or bands (painted design a in text, see types 11, 14a, 24a, b&d & 58b)   | EI 9.13, 16-17<br>EII 28.2  |
| 92 | Red painted decoration of undeterminable design, however, in all cases, the paint terminates along a straight line, possibly indicating a broad band of colour (not illustrated) | EI 13.1<br>EI 9.14-15, 17-19<br>EII 28.2-4<br>EII 25.1<br>EII 20.1<br>EII 17.6-7<br>EII 16.1<br>EIII 17.4 |
| 93 | Band-slipped decoration (no preserved vessel form, not illustrated)  | EII 13.1-3<br>EIII 17.2<br>EIII 12, 1, 2, 4 & 6<br>EIII 17.2  |

**Appendix C: Tell esh-Shuna North, 1984: A Preliminary Report on the Chipped Stone**

A total of 979 flints were recovered from the four five-metre squares which were excavated. Of these, 243 or 24.8% were tools. All tools were sorted into ten

typological categories and bagged separately. Those tools from the loci used in this preliminary analysis<sup>1</sup> were then given a more complete typological sorting. The type and distribution of flints from selected loci in squares EI-III are as follows:

Square EI:

<i>Locus</i>	9	10	13	<i>Total</i>
Blade	34	10	6	50
Bladelet	0	1	0	1
Flake	83	12	5	100
Paleolithic	0	1	0	1
Microflake	3	0	0	3
Other	1	0	0	1
Debris	10	1	0	11
Core	3	0	1	4
<b>Total</b>	<b>134</b>	<b>25</b>	<b>12</b>	<b>171</b>
Tools	17	9	3	29
Arrowhead	1	1	0	2
Sickle	1	0	0	1
Simple Burin	1	0	1	2
Angle Burin	0	0	1	1
Burin on Break	0	1	0	1
End Scraper	1	0	1	2
Side Scraper	0	1	0	1
Notch	0	1	0	1
Awl Borer	1	0	0	1
Drill	1	0	0	1
Wedge	0	0	0	0
Knife	0	1	0	1
Retouched blade	4	2	0	6
Retouched Flake	3	0	0	3
Other	1	0	0	1
Utilized Blade	1	0	0	1
Utilized Flake	2	2	0	4

Square EII:

<i>Locus</i>	15	17	24	25	28	<i>Total</i>
Blade	4	34	1	11	26	76
Bladelet	0	0	0	2	0	2
Flake	2	46	0	5	11	64
Core Trim	0	2	0	0	1	3

<sup>1</sup> Of the "prime" loci chosen for preliminary analysis, the following contained tools: the cobbled pavements and chipped stone surfaces of EI 10, 13,

EII 25 & EIII 6, pits EII 24 & EIII 12, ash lens EII 15 and sealed fill layers EI 9, EII 17, 28 & EIII 17.

Burin Spawll	0	0	0	0	1	1
Microflake	0	0	0	2	0	2
Debris	1	11	0	1	1	14
<hr/>						
Total	7	93	1	21	40	162
Tools	2	8	1	2	5	18
Sickle	0	1	0	1	2	4
Double Burin	0	0	0	0	1	1
End Scraper	0	0	0	1	0	1
Steep Scraper	0	1	0	0	0	1
Notch	1	0	0	0	0	1
Backed Blade	0	0	1	0	0	1
Retouched Blade	1	3	0	0	0	4
Retouched Flake	0	0	0	0	1	1
Other	0	1	0	0	1	2
Indeterminate	0	2	0	0	0	2

Square EIII:

<i>Locus</i>	6	12	17	<i>Total</i>
Blade	2	100	13	115
Bladelet	0	6	0	6
Flake	2	27	11	40
Core Trim	0	0	1	1
Burin Spawll	0	1	0	1
Microflake	0	2	0	2
Other	0	1	1	2
Debris	2	10	2	14
<hr/>				
Total	6	147	28	181
Tools	4	69	3	76
Arrowhead	1	55	0	56
End Scraper	0	1	0	1
Cortical Scraper	0	1	0	1
Notch	0	1	0	1
Wedge	0	1	0	1
Retouched Blade	0	3	0	3
Retouched Flake	1	0	0	1
Other	0	1	1	2
Utilized Flake	0	0	1	1
Indeterminate	2	6	1	9

The nature of the excavation<sup>2</sup> and the limited exposure in this initial season make

it impossible to formulate any specific inferences about cultural activities at Shu-

<sup>2</sup> This was a salvage project with the aim of achieving an overall stratified sequence. Sifting was employed only in special circumstances (beaten earth floors, ash lenses and pits) and was not used to collect debitage. It is thus impossible to determine to what extent the site was used for the

production of the flint implements recovered. Therefore, the totals listed in the tables given above may reflect this variability more than they reflect actual numbers of flints in a particular locus.

na North in relation to the flint assemblage. The excavations have none the less shown that there was a thriving flint industry associated with the site.

Of special interest are the two loci in square EIII which yielded large concentration of small flint projectile points: locus 12 yielded 55 retouched points representing 91% of its tools. All of the points were of similar construction, being produced on convergent blades with abrupt unifacial retouch on at least one margin. Often there was slight retouch on the proximal margins suggesting that the points were dulled or shaped for hafting. The average size of the points in locus 12 was 35.7 mm. in length, 14.2 mm. in width and 4.2 mm. in thickness. The points from locus 15 (which yielded a second concentration of this tool type) show a slightly smaller average: 32.2 mm. 13.0 mm. and 4.2 mm. respectively. Points from all other loci had averages of 38.4 mm., 12.2 mm., and 4.4 mm., respectively. Distribution patterns according to length/width, length/thickness and width/

thickness are given in Figure 17.

The concentration of points from the locus 15 fill layer may represent disturbed caches, especially as they were found in restricted areas within the general fill context. The concentration of points in the 12 pit may represent the refuse of a neighboring butchering site or possible manufacturing locale, but without the associated debitage and a thorough examination of associated animal bones we can only speculate.

With regard to the other tool types, retouched blades are the only other tool category represented in a significant proportion, constituting 20.7% of the tools in square EI, 22.2% in EII and only 3.9% in EIII.

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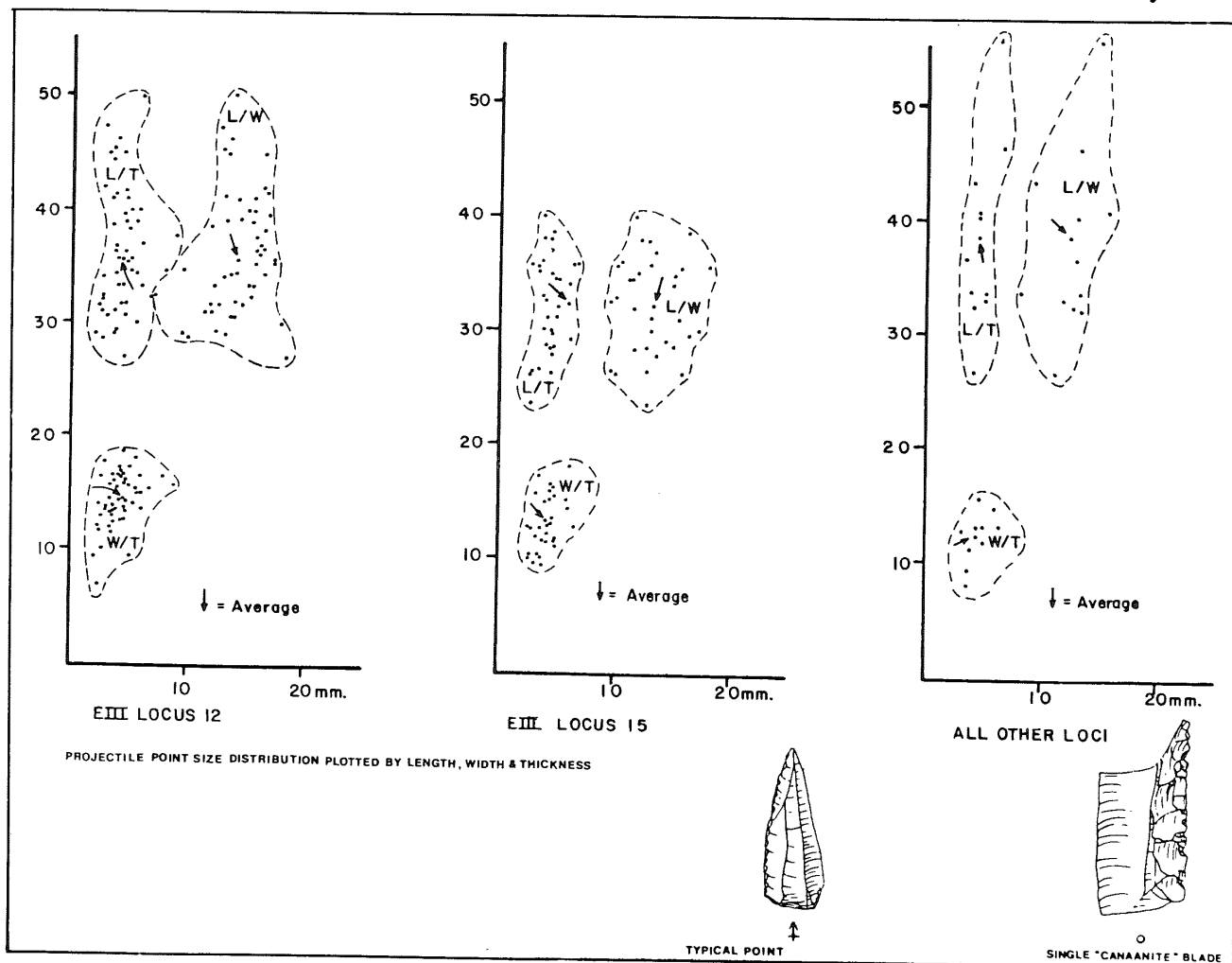


Fig. 17