

QĀ' ABŪ ṬULAYḤA WEST: AN INTERIM REPORT OF THE 1999 SEASON

by
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Introduction

The third excavation season at Qā' Abū Ṭulayḥa West - a Late Neolithic to Early Bronze Age site in the al-Jafr basin, southern Jordan - was conducted from 14 August through 30 September in 1999. There were three major objectives for this season: (1) the excavation of Structure 07 - the third example of the Layer 3 tabular scraper workshops; (2) the re-excavation of Structure 02 - a component of the Layer 4 two-rowed upright slab wall structures; (3) the comprehensive survey of the latter complex. The first goal formed a part of the technotypical studies of tabular scraper production at this factory site. The latter two, on the other hand, aimed at exploring the earlier (i.e., pre-tabular scraper) phase of this site. The following is a brief report of this season, focusing on these three major objectives.

Incidentally, the author must point out a regretful matter; unfortunately, Qā' Abū Ṭulayḥa West and East were heavily damaged by illegal excavations and limestone quarrying. The former act almost completely destroyed Structure 01 - the largest tabular scraper workshop that had been excavated in the first season (Fujii 1998: 127-134). Besides, it left a number of pits and trenches in many other spots. Also serious was the damage caused by modern limestone quarries. Qā' Abū Ṭulayḥa East was extensively erased, resulting in the disappearance of some core concentration areas. Qā' Abū Ṭulayḥa West, our main concern for these three seasons, was no exception with regard to this damage; for example, Structure 1001 (Fujii 1999: 83-86) - a Jafr-blade workshop that was due to be excavated in this season -

was crushed out under the track of heavy vehicles.

It is a great pity that there is no end to such illegal acts. The author does hope that the government agencies concerned would take more effective measures to protect the rich cultural heritage of this country from further damage.

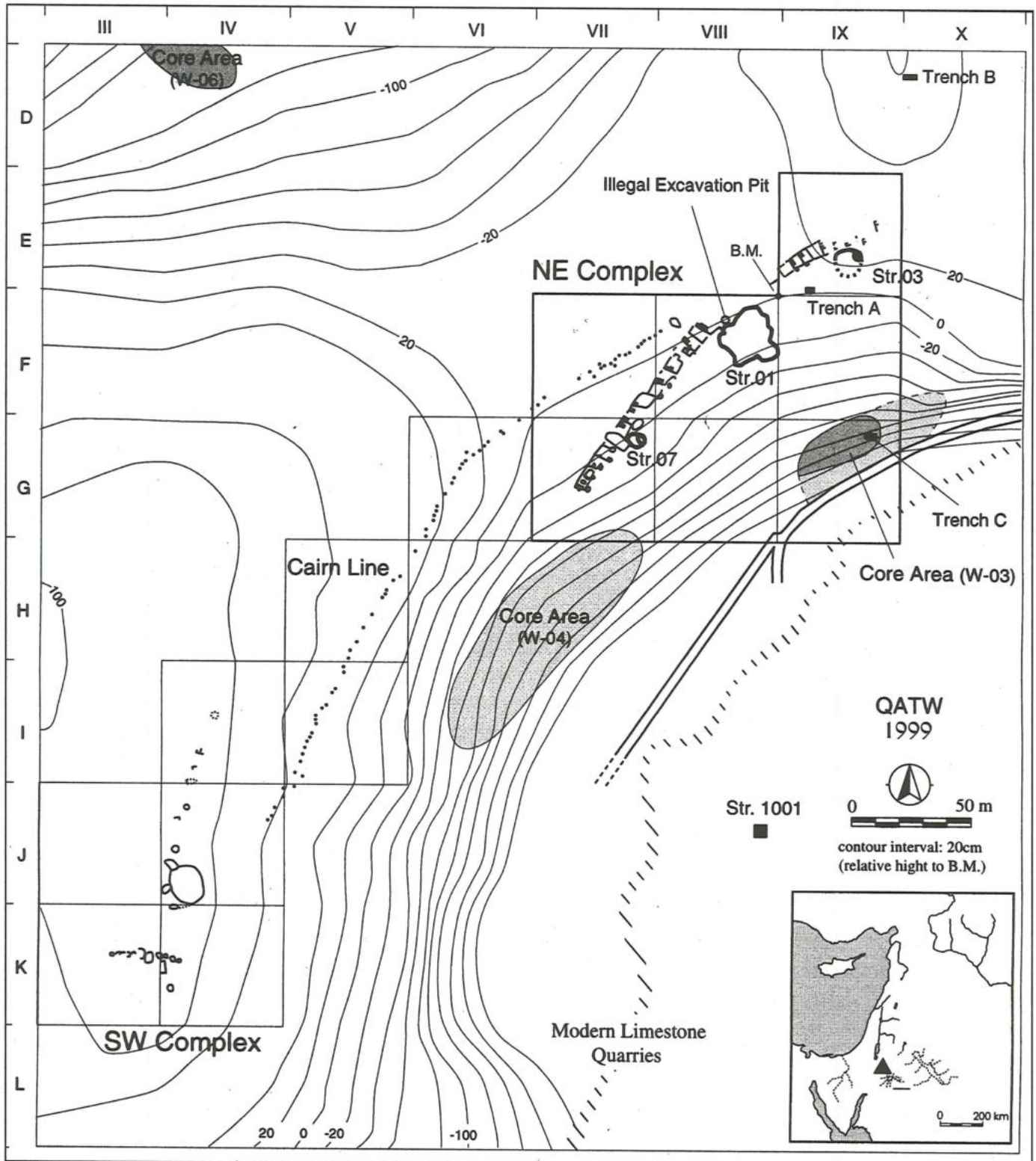
The Excavation of Structure 07

Structure 07, a small tabular scraper workshop, was situated in the southwestern part (Square G-VII) of the Northeastern Complex (Figs. 1 and 2). It was about 50 m and 100 m southwest of Structure 01 (Fujii 1998) and 03 (Fujii 1999a; 1999b) respectively. Of these three tabular scraper workshops, which stood roughly in a line, Structure 07 was the southernmost in location and the smallest in size.

Structure 07

Structure 07 was based on the upper surface of Layer 3, thus stratigraphically belonging to the same horizon as the other two tabular scraper workshops (for the details of stratigraphy, see Fujii 1998: 128; 1999: Fig. 12). It was a ground type, stone-built structure with a slightly oblong plan, measuring about 6.5 m in the NW-SE long axis and about 5 m in the NE-SW short axis (Figs. 3 and 4).

No special treatment was recognized on the floor. Neither postholes nor foundations for posts were found. The wall consisted of one row of undressed limestone cobbles and boulders, which remained mostly in one course. These construction materials were put on the ground either in a horizontal or in an upright position with the former being

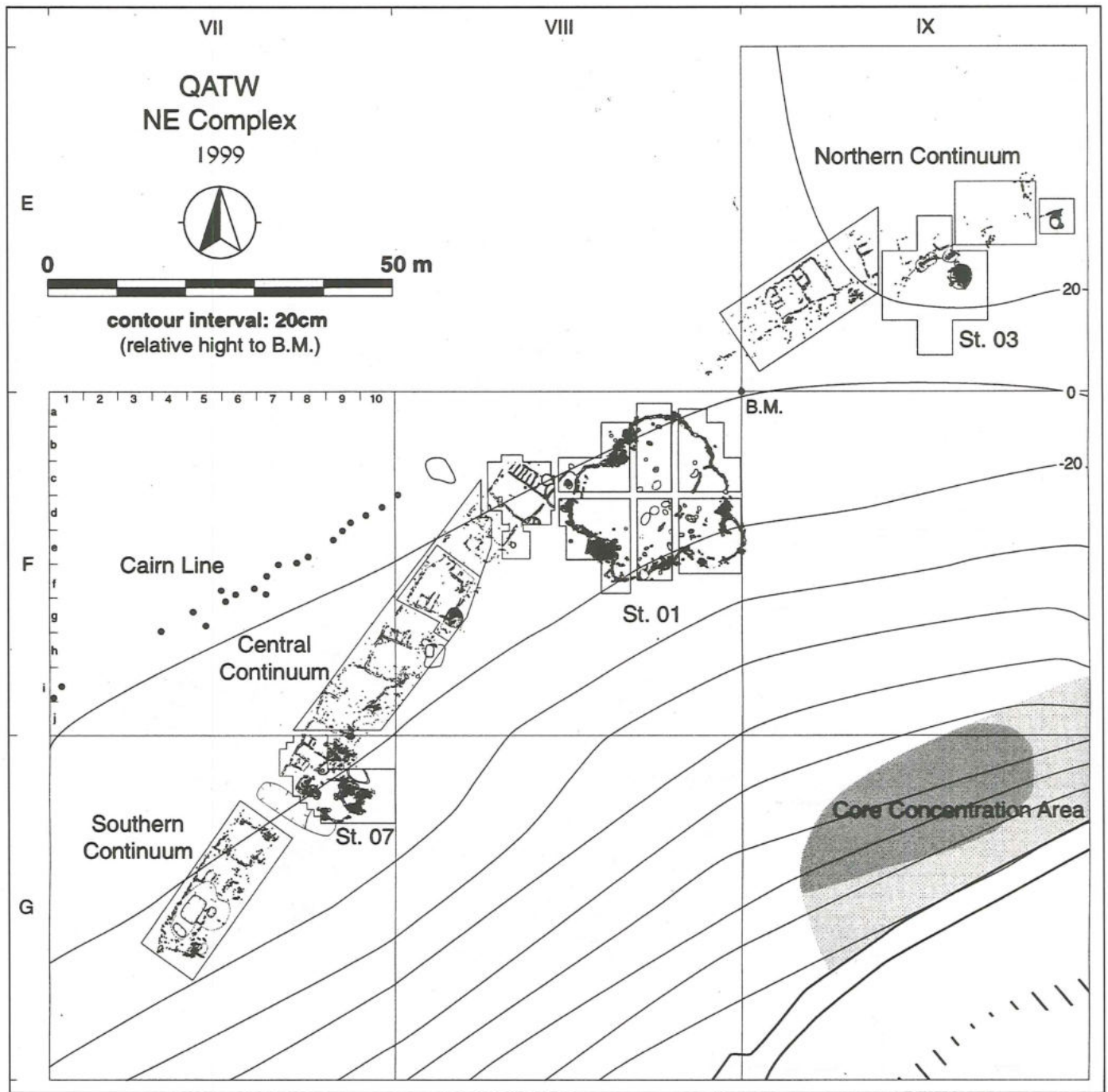


1. Topographic map of Qā' Abū Ṭulayḥa West.

much frequent. As was the case of Structure 01 (Fujii 1998: 128), the number and volume of fallen stones around the wall implied that the original height of the wall had been less than 1 m. This estimate was consistent with an experimental reconstruction of the

southern wall using the fallen stones around it (Fig. 5). It is therefore likely that this structure was a kind of tent-base structure of which the upper structure was probably made of some soft material.

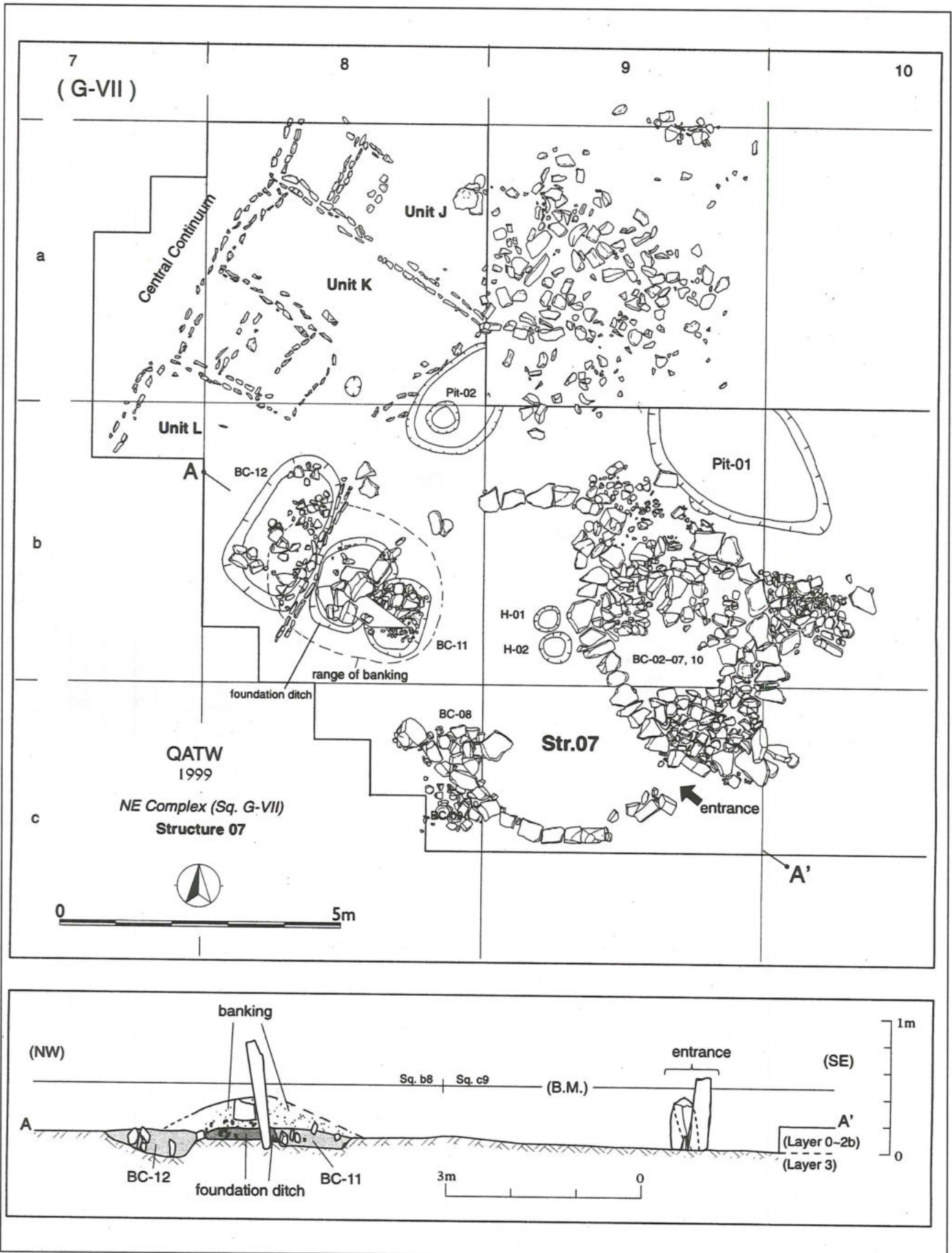
A narrow entrance about 70 cm wide



2. The Northeastern Complex.

opened to the southeast, the lee side (Fig. 6). It consisted of a pair of upright, angular limestone boulders, which were supported either by rubble or by smaller uprights. Neither a threshold nor stepping stones were recognized between these two main uprights. Just opposite this entrance, that is, at the deepest part of this structure, three upright limestone boulders stood up to a maximum height of about 80 cm - a common feature to the other two workshops. They were

put on a shallow foundation ditch about 1.8 m by 1.2 m in size and about 10 cm in depth, and supported by a compact soil banking including limestone cobbles and abraded flint pebbles - another similarity with the other two workshops. This upright boulder wall, as was the case of the other two workshops, was oriented to one of the black-surfaced, extinct volcanoes that were dotted in the background. It might be that it was some religious imitation of the volcano



3. Structure 07 and its surrounding structures: plan and elevation.



4. Structure 07: general view from south.



5. Structure 07: an experimental reconstruction of the southern wall.



6. Structure 07: the entrance (front) and the upright boulder wall (rear).

in question, although it is also possible that it was constructed simply as a screen from the prevailing wind.

The indoor space was divided into two sections by a curvilinear partition wall about 4.5 m long. The western section, which was connected directly with the entrance, was relatively empty of small features. Apart from three burial cairns along the southern (BC-08, 09) and the rear wall (BC-11), only

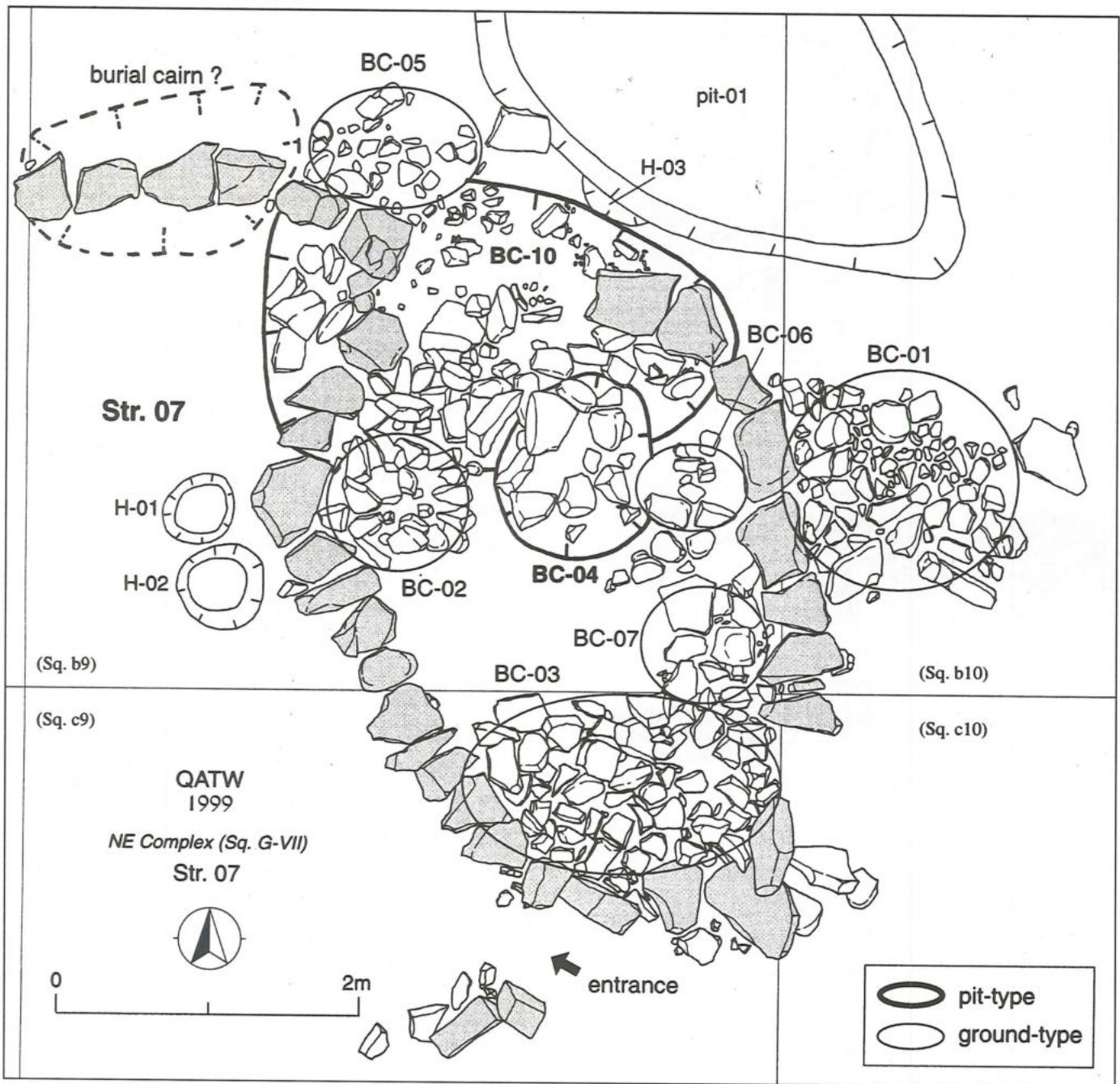
two small hearths (H-01 and H-02), about 30-50 cm in diameter and about 10 cm in depth, were found beside the partition wall. In contrast, the eastern section was filled out with burial cairns, the details of which will be described below.

Burial Cairns

Aside from one obscure example along the northern wall, a total of twelve burial cairns were found within the clear context of Structure 07 (Figs. 2 and 7). Four of them were found inside or along the western section and the remainder eight in the eastern one. As for the relative position to the parent structure, eight of them were found indoors and the remaining four (BC-01, -05, -09, -12) along the outer wall. (However, pits for the construction of some burial cairns, as illustrated by BC-10, often extended across a wall of the parent structure - a point of discussion referred to later.)

These burial cairns were roughly round to oblong in general plan, ranging from about 1 m to 2.5 m in maximum diameter. Undressed limestone cobbles and pebbles were used for their construction, but a few flint cores were also included. Apart from only a rare occurrence of tabular scrapers, neither burial goods nor human skeletal remains were recovered from them - a similarity to EB burial cairns in the Negev (Haiman 1992; 1993).

Typologically, they were divided into the shallow pit-type (BC-04, -10 ~12) and the ground-type (BC-01~03, -05~09) with the latter being more frequent. The former type was further subdivided into the upright stone circle variety with a central hollow space (BC-04, -10, -12) and the stone concentration variety without it (BC-11), although the latter variety may simply represent a collapsed state of the former one. The ground type, on the other hand, was subdivided into the upright stone circle variety without floor pavement (BC-02) and the horizontal stone circle variety with chalky limestone slab



7. Structure 07: burial cairns in the eastern section.

pavement (BC-01, -03, -05~09).

No conclusive remarks can be made about the chronology of these burial cairns, but a few hints were found in their contexts. First, BC-10 and BC-04 were partly covered by BC-02 and BC-05 on the one hand and by BC-06 on the other, respectively, thus suggesting that pit-type burial cairns were anterior to ground-type ones in their construction order. Second, among the latter type burial cairns, the horizontal stone circle variety, especially BC-01, was found in a

slightly upper level than the upright stone circle variety (BC-02), probably implying that the former was posterior to the latter. Given these observations, it may be possible to suppose that burial cairns at this workshop changed from the pit-type ones (BC-04, -10~12) to the ground-type ones and that the latter type shifted from the upright stone circle variety (BC-02) to the horizontal stone circle one (BC-01, 03, 05~09). However, this working hypothesis must be tested by further investigations. The excavation at the

SW Complex - probably a cairn field of Qā' Abū Ṭalayḥa West - would hopefully provide a further clue to the chronology of burial cairns - a critical issue to arid zone archaeology.

Also noteworthy was the relation between these burial cairns and their parent structure. As was the case of the example at Structure 03 (Fujii 1999: Fig. 3), some burial cairns at Structure 07, especially pit type ones, seem to have been constructed deliberately disturbing an original wall of the parent structure. A good example was given by BC-10 and its relevant wall. This wall, when compared with its southern extension, was irregular both in a horizontal and in a sectional view, suggesting that it was once removed by BC-10, but soon, though only irresponsibly, restored on it - a long tradition descended from the Layer 4 complex mentioned below. Another suggestion comes from BC-11 and BC-12 (Fig. 3). The section of both examples clearly illustrates that they partly erased the banking and the foundation for the upright boulders but the former was soon restored.

The Findings from Structure 07

The findings from Structure 07 consisted exclusively of tabular scrapers and their relevant debitage. Besides, several anvils and hammerstones occurred as equipment for tabular scraper production. No pottery sherds were recovered. Aside from some pieces of charcoal that occurred in the ashy lens of hearths, neither faunal nor floral evidence was retrieved despite the dry sieving of the floor soil. All these illustrate that this structure was used for a tabular scraper workshop.

Chipped Stone Artifacts

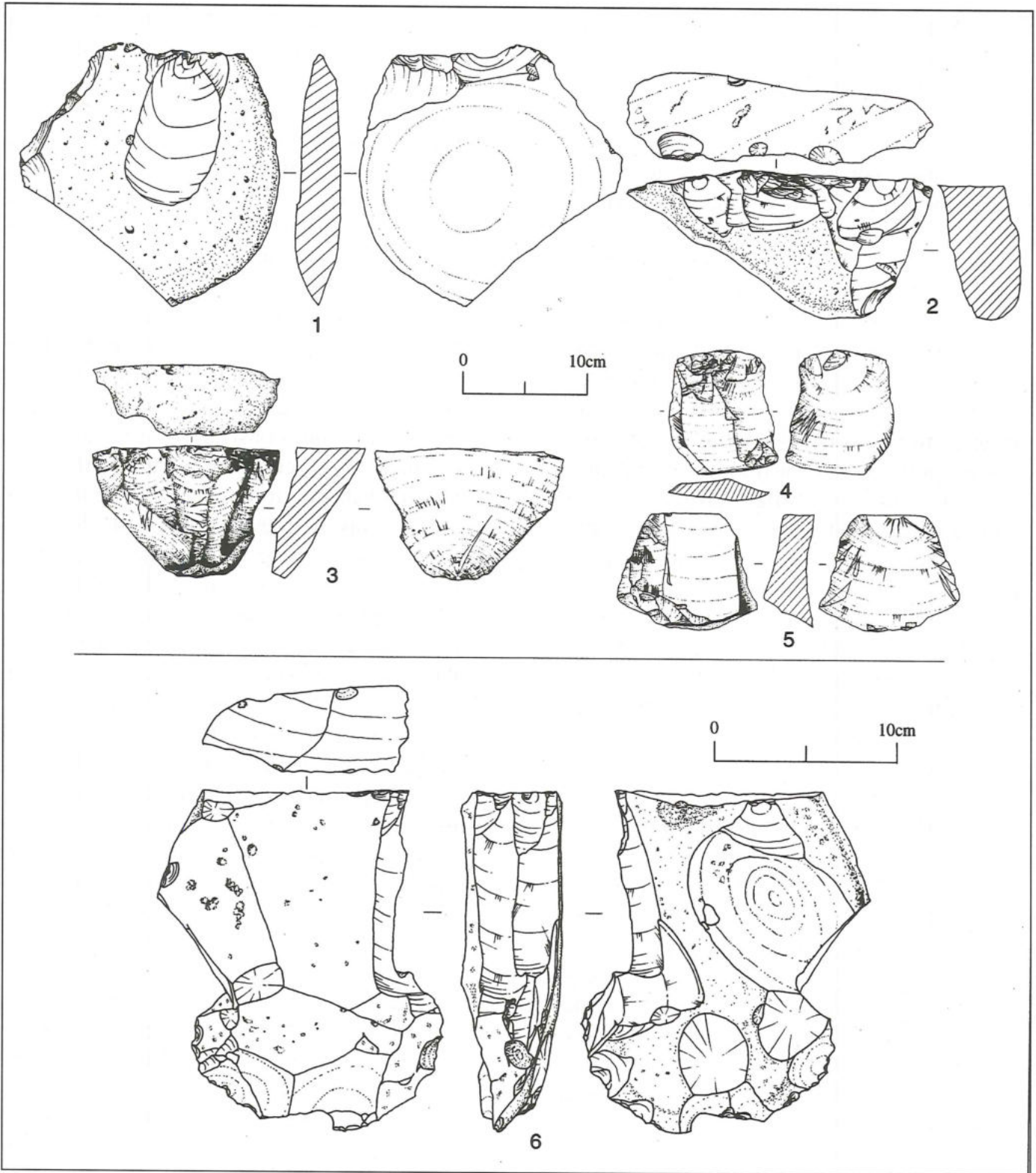
Some thousands of flint artifacts were recovered including a few tabular scraper cores (Fig. 8: 1-2). In addition, some limestone cores and flakes were also found as a minor element (Fig. 8: 3-5). These artifacts

occurred mostly from the following three loci. First, Pit-01 north of Structure 07 included some dense lumps of chips and chunks, indicating its use as a rubbish pit for this workshop (see also Fujii 1998: 136). Second, the entrance hall, especially its southern half, yielded some volume of finished products as well as a large quantity of debitage, suggesting its use for the final stage atelier. Third, a large number of finished products were found in the eastern and northern fringe of the main room, implying that it was a living and/or storage space. (Interestingly, they were found mostly under or between the construction materials, not on the floor - a common feature to the other two workshops. It may be possible that flint artisans inserted them into walls for temporary safekeeping.) In contrast to these loci, the rear section, namely the front space of the upright boulder wall, was very poor in flint artifacts - again a common feature with the other two workshops and another suggestion of some ritual use of this space.

The flint industry of this workshop was basically similar to that of the other two workshops in that it was specialized in tabular scraper production. However, some noticeable techno-typological differences were discerned among these three assemblages. The following comments are focused on these differences, omitting the general description for the final report.

The first point of notice is the frequency of split blanks at this workshop. According to preliminary examination (Hayasaka 2000: 42-44), it was about 75 % in Structure 03, about 95% in Structure 01 and almost 100 % in Structure 07. Needless to say, whole blanks without splitting decreased in this order from about 25% in Structure 03 to almost 0% in Structure 07. The tabular scraper assemblage at Structure 07 is thus characterized by the exclusive use of split blanks.

The exclusive use of split blanks affects the size and morphology of the finished



8. Structure 07: chipped stone artifacts and relevant equipment.

products. Tabular scrapers from Structure 07 were generally smaller and more amorphous than the examples from the other two workshops, especially those from Structure 03. However, it may be misleading to stress too

much the shift in frequency of split blanks as the background of such typological differences, because the frequency is fairly high even in Structure 03. It seems, therefore, more reasonable to assume that the ex-

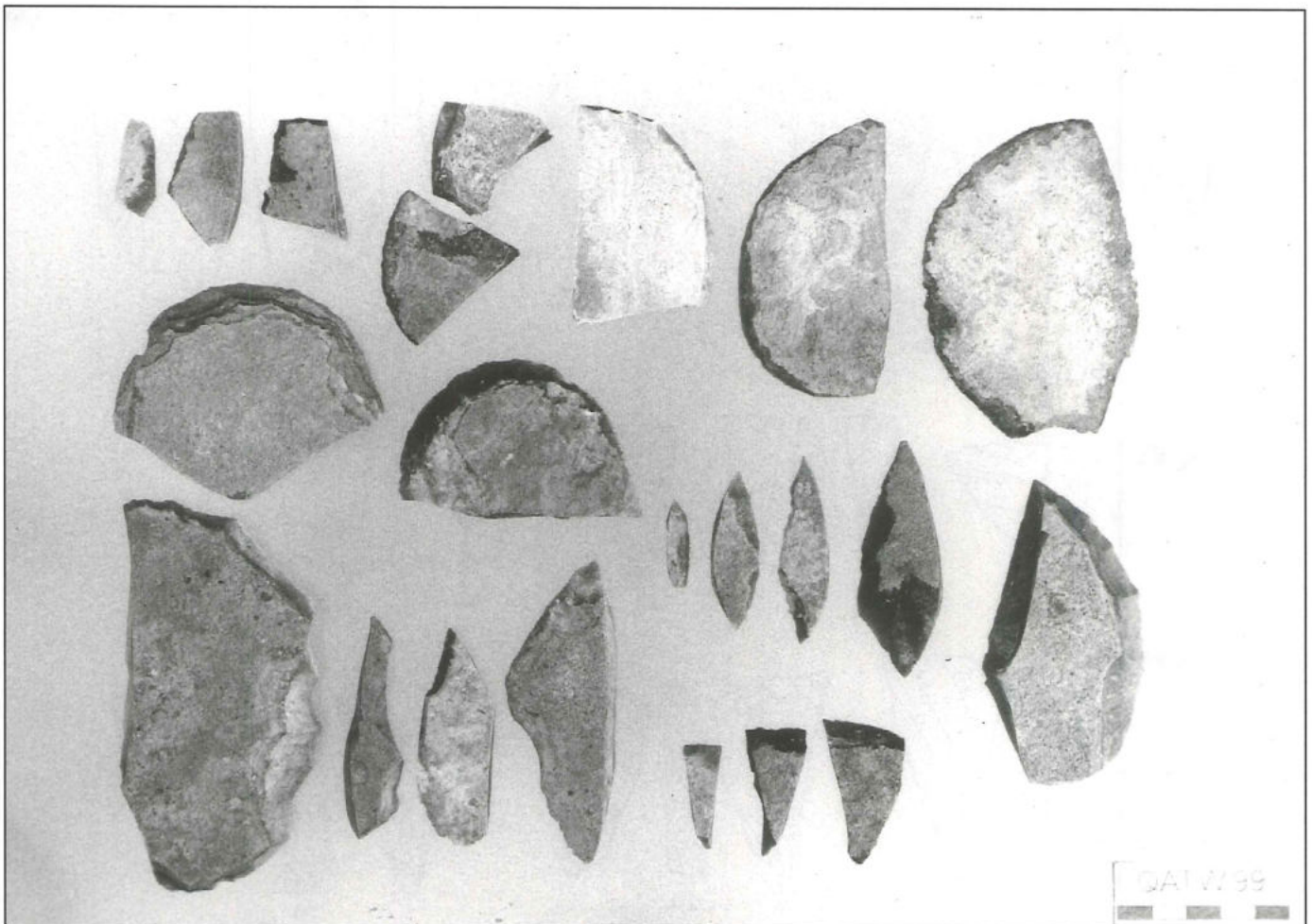
haustive use of blanks, along with the de-standardization of the blank-splitting technique itself, caused such a deterioration of tabular scrapers both in size and in morphology.

Another difference consists in the variety of retouched tools. The flint implements from Structure 07 was much diversified than those from the other two workshops (Fig.9). Specifically, it included small, geometric tabular scrapers, endscrapers, massive scrapers, shouldered knives or reamers, arrowheads/points, and small, triangular implements, to say nothing of ordinary tabular scrapers. These implements were all made on split blanks with original cortex, clearly indicating that they were produced as part of the tabular scraper industry.

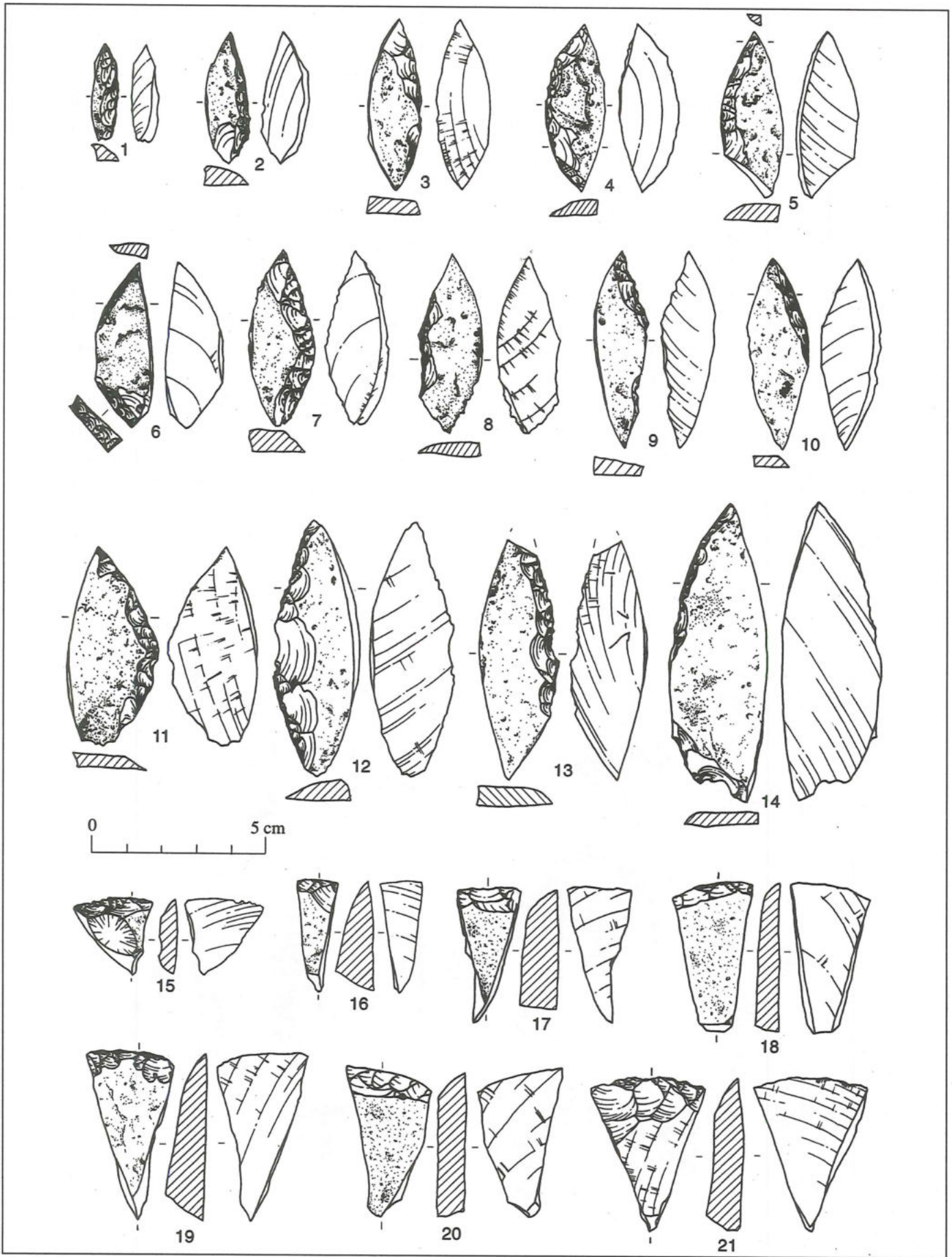
Of special interest is the foliate to lozenge-shaped arrowheads/points - probably

the first identification among tabular scraper industries (Fig. 10: 1-14). They varied in size from microlithic- to Palaeolithic-level samples with the moderate ones of about 4 to 5 cm in length being the most frequent. Interestingly, one lateral fracture was usually left unmodified for a lateral edge and/or a tip of arrowheads - probably a device to utilize marginal fragments that originated in the blank-splitting process of tabular scrapers (Fujii 1999: 74-79). Still more importantly, rings on their ventral surfaces varied in direction - another suggestion that these arrowheads were made on various fragments of their parent whole blanks.

Other intriguing finds were the small, triangular implements with a straight to slightly curvilinear working edge at one end (Fig. 10: 15-21). Although they may be incorporated in small, geometric tabular scrap-



9. Structure 07: chipped stone artifacts.



10. Structure 07: chipped stone artifacts.

ers mentioned above, it may also be possible that they represent the al-Jafr version of transverse arrowheads - a guide fossil of the LN to the EBA in arid peripheries of the southern Levant (e.g., Friedman 1979; Bar-Yosef *et al.* 1986; Rosen 1984; 1997). (In passing, it might also be possible that the microlithic tabular arrowheads introduced above represent the al-Jafr version of lunates - another guide fossil of the EBA entity of the inland Levant). Whatever the case, the identification of these new implements would renew the overall picture of the tabular scraper industry that has so far been considered to specialize in tabular scraper production. Further, the frequency of hunting weapons would require us to reassess the subsistence strategy of the mobile populations who were engaged in the tabular scraper production and trade.

Incidentally, the techno-typological transitions discussed above would provide a clue to the intra-site chronology of the tabular scraper industry. My tentative opinion is that it shifted from larger, more standardized products often made on whole blanks (Structure 03) to smaller, less standardized ones made exclusively on split blanks (Structure 07), with the intermediate industry of Structure 01 bridging both. This hypothesis, when accepted, may account for the diversification of retouched tools at Structure 07, since the diversification was probably related to the increase in smaller, often geometric, secondary blanks with sharp fracture(s).

Another support for this view comes from the difference in the preservation state of the three workshops; the more southwest it is located, the better the workshop is preserved - an implication of the construction order from Structure 03 to Structure 07. It is also suggestive that the construction material of Structure 03 was probably diverted to Structure 01 (Fujii 1999: 73). In addition, the typological transition of burial cairns from the pit-type to the ground-type, though not yet

fully illustrated, is also indicative, since the former type is representative of Structure 03 and the latter one is predominant in Structure 07. All these may serve as another line of evidence for the tentative intra-site chronology of the Layer 3 complex.

Remarks on a Reused Core

A special comment should be made about a flint core that occurred as a construction material in the southern wall (Fig. 8: 6). It has a few centripetal, wide flake scars on one cortical surface and a series of long blade scars on one side. Evidently, the former represents the blank detachment for tabular scraper production and the latter is related to that for al-Jafr blade production (Fujii 1999: 84).

The key here is that a few al-Jafr blade scars crosscut one of the tabular scraper scars. This means that the former was posterior to the latter in their flaking order. It seems, however, questionable due to the following two reasons to extend this flaking order to the chronological one. First, both kinds of scars show a similar degree of patination. Second and still more importantly, this core, as mentioned above, occurred as a construction material of Structure 07 - a tabular scraper workshop. Taking these two points into the consideration, it is likely that this core was used originally for tabular scraper production, and then reused for the al-Jafr blade one, but lastly diverted to the construction material for a tabular scraper workshop. A reasonable explanation for this labyrinth would be that both industries partly, if not wholly, coexisted at this site. It is also consistent with this view that al-Jafr blades occurred as punch blades at tabular scraper workshops (Fujii 1999: 79).

It is therefore most likely that al-Jafr blade industry, which has generally been placed in an Upper Palaeolithic context (Huckriede and Wisemann 1968; Quintero and Wilke 1998), belonged to the same horizon as the tabular scraper industry. Pos-

sibly, it might have been a steppe/desert variant of the Canaanean blade industry that spread over the Levant during the Early Bronze Age. (Needless to say, the reverse would also be possible).

Anvils and Hammerstones

Several pieces of anvils and hammerstones were recovered. They were all made of limestone except for one hammerstone that utilized an abraded flint pebble. Anvils were less standardized both in size and in morphology than the examples from Structure 03 and 01 (Fig. 11). Interestingly, the same is roughly true of the quality of the retouch; bidirectional, symmetrical retouch, which often characterized anvils from the other two workshops (Fujii 1998: Fig. 11; 1999: Fig. 8), is no longer recognized on these samples. However, it must be stressed that such techno-typological deterioration of relevant equipment, as was mentioned above, corresponds with the generalization, rather than the decline, of tabular scraper blank-splitting technique.

The Re-Excavation of Structure 02 (Unit A of the Central Continuum)

Structure 02 was situated roughly in the center of the NE Complex and had partly been exposed along the western wall of Structure 01 in the first season (Fujii 1998: 134-136). At that time, it was thought to be a small, oblong, separate structure about 3 m



11. Structure 07: anvils

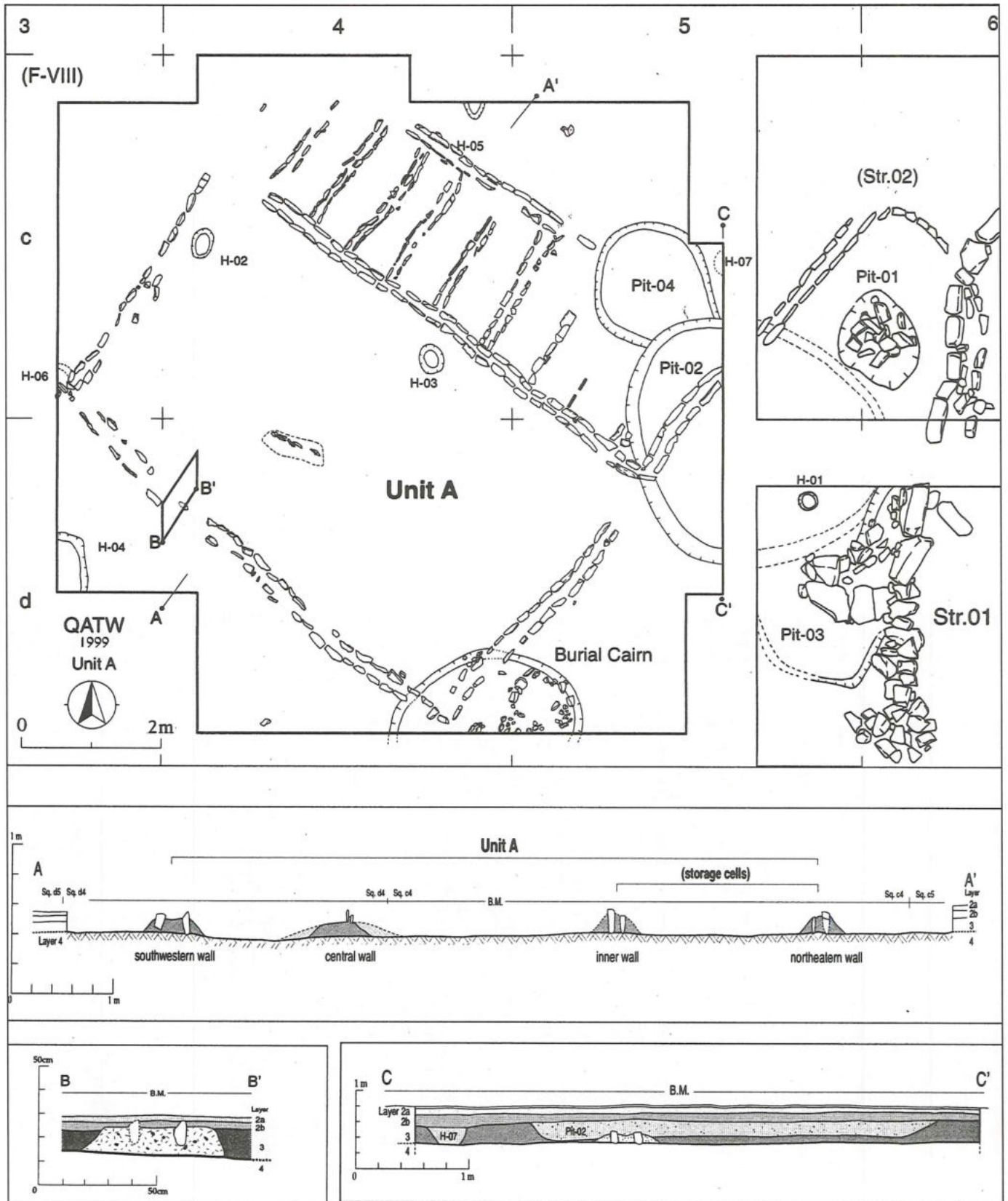
by 4 m in size. However, as a result of the enlargement of the excavation, it turned out to be nothing but a long, curvilinear windbreak that extended from a large, rectangular structure in the adjacent squares. The following description is thus focused on this Unit A, the main body of the former Structure 02.

Unit A

As was the case of its annexed windbreak (the former Structure 02), Unit A belonged to the upper surface of Layer 4, thus being assigned to an earlier phase than the Layer 3 tabular scraper workshops. It was large in size, measuring about 8 m by 6 m, and rectangular in general plan. The most distinctive characteristic of this structure was, however, two-rowed upright slab walls (Fig. 12-13) - a similarity to PPNB and PN structures in *al-Badiyah* (e.g., Waichter and Seton-Williams 1938; Garrard *et al.* 1994).

The indoor space consisted of the main room and a series of narrow cells. The former space, measuring about 3.2 m wide and 8 m deep, was equipped with two small hearths (H-02, -03) and a short, central partition wall that probably functioned as a foundation for a center post(s). No special treatment was recognized on the floor. A narrow entrance about 0.6 m wide opened at the southeastern corner of this main room, being oriented to the lee side. This entrance, as mentioned above, was protected from the prevailing wind by a large, curvilinear windbreak (the former Structure 02) - again a common feature to Neolithic structures in *al-Badiyah* (e.g., Betts 1998: Fig. 3.15). (In passing, Hearth-01, which had been excavated in the first season, turned out to be equipment in the forecourt of this large structure).

The smaller section, on the other hand, included a total of ten narrow cells about 0.6 m by 1.8 m respectively, although its southern quarter was heavily damaged by two rubbish pits, Pit-02 and -04, that were dug from the Layer 3 tabular scraper complex. It



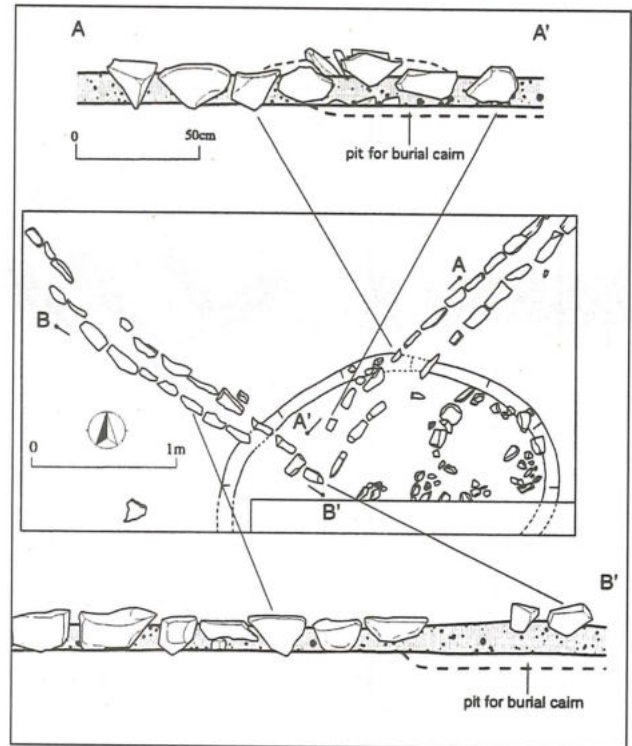
12. Unit A: Plan, elevation, and section.

seems that these narrow cells, though no direct evidence was found, were used for storage. However, here too, no special floor treatment was recognized.

In addition to these main features, one pit-type burial cairn, about 2 m by 1.5 m in size, was found across the southwestern corner of the main room. To be noticed is the

irregular arrangement of limestone slabs on this burial cairn both in a horizontal and in a sectional view (Fig. 14). This is more remarkable when compared with the regular arrangement of the other slabs that was placed outside the burial cairn. This contrast probably illustrates that this wall had once been removed by the burial cairn but soon, though only irresponsibly, restored on it - a deep-rooted tradition handed down through millennia to the Layer 3 tabular scraper workshop complex at this site. Neither human bones nor burial goods were found - again a common feature to the Layer 3 burial cairns and a probable suggestion of a symbolic tomb.

Incidentally, the excavation of Unit A led to the revision of the former view about the construction method of two-rowed upright slab walls (Fujii 1999: 74). As is clearly il-



14. Unit A: the burial cairn.



13. Unit A: general view from southeast.

illustrated by the elevation, it is now evident that they were built on the ground, not in a foundation ditch. The construction method of these walls is thus summarized as follows:

- 1) A long banking about 50 cm wide and about 20 cm high was built in advance following an expected plan of a new structure;
- 2) Two-rowed (or sometimes one-rowed) limestone and/or flint slabs were inserted deep into this banking with their tops slightly protruding on the surface;
- 3) Then, posts and/or some wall material were inserted between these two-rowed uprights (or along one-rowed uprights);
- 4) Lastly, some walling and roofing was made.

The point of discussion is the strength of these walls. One may doubt whether a banking made of aeolian sand and silt, which characterizes *al-Badiyah* sites including Qā' Abū Ṭulayḥa West, could tightly support posts as well as upright slabs. An experimental reconstruction (Fig. 15), however, demonstrated that sand and silt of Layer 4, when added water and sun-dried, changes into cement-like, very hard material, probably due to the lime components that originated in the bedrock. (Incidentally, this experiment hints at the seasonality of the construction of two-rowed upright slab wall structures; presumably, it took place in winter and early spring with the former less



15. An experimental reconstruction of a two-rowed upright slab wall.

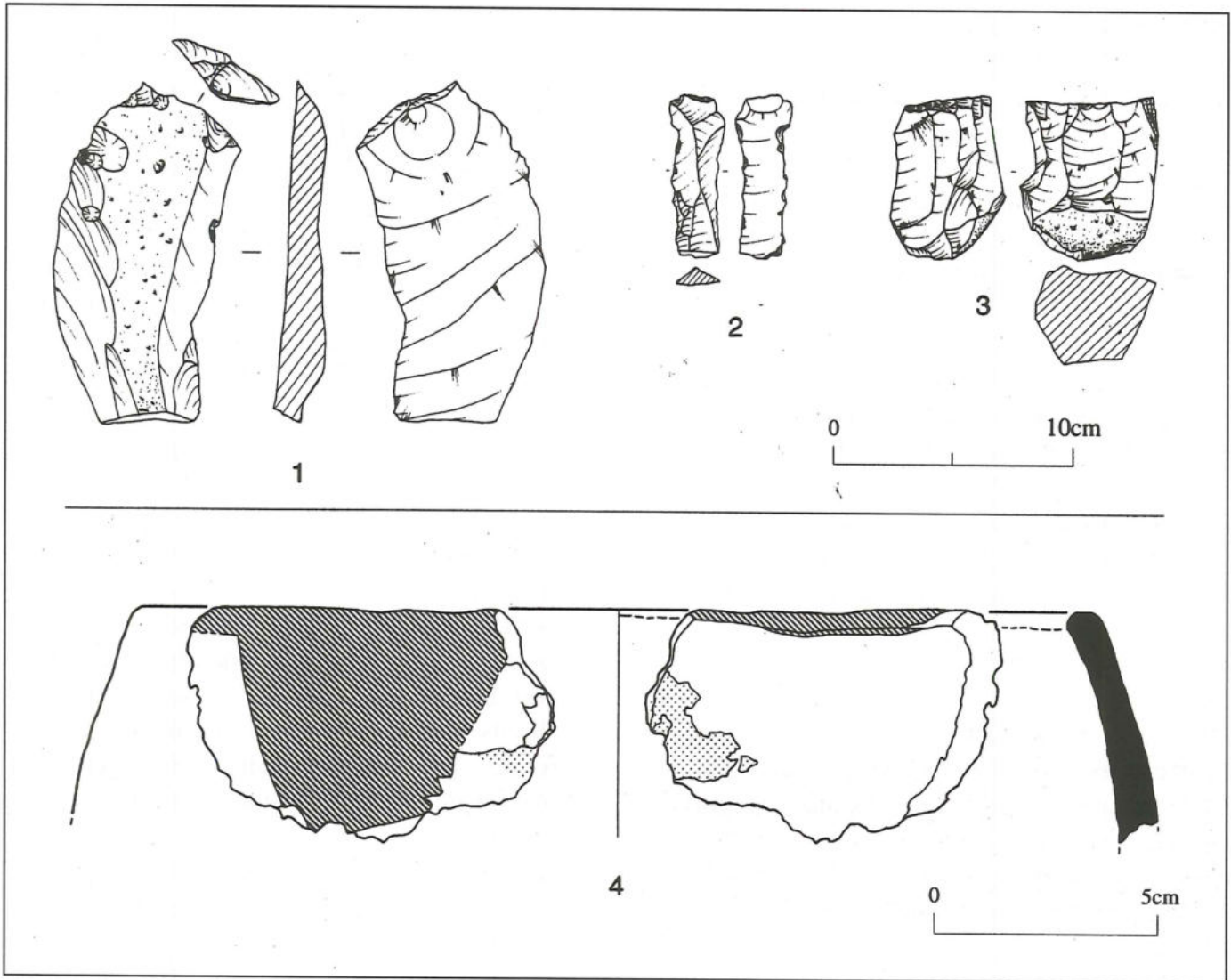
likely due to cold weather and heavy storm).

Another line of evidence for the toughness of these walls came from the excavation itself. First, the excavated walls of Unit A were solid enough to be easily distinguished from the floor soil, to say nothing of the surrounding fill. Second, two-rowed uprights were often too tightly mortared to be pulled off. Third, Pit-02 abandoned the removal of the façade, leaving it protruding on the pit. All these imply that these two-rowed upright slab walls served well as a foundation for an upper structure.

The Findings from Unit A

Considering its size and elaboration, the findings from Unit A were extremely poor both in number and in variety. They consisted simply of some undiagnostic flakes and blades (Fig. 16: 1-3); neither pottery sherds nor groundstone implements were found. It is therefore evident that this structure was neither a flint workshop nor a house for an agriculture-oriented, sedentary population. Instead, it was probably constructed by a mobile population who was dependant mainly on pastoralism. The scarcity of the findings, along with the harsh environment around the site, may also support this view.

No occurrence of chronological indicators makes it difficult to date this structure. However, the dating to the Late Neolithic would be possible on the basis of negative evidence - the total absence of naviform cores and bidirectional blades on the one hand and that of typical tabular scrapers on the other. Two pottery sherds, which occurred in another two-rowed upright slab wall structure (Unit L of the same Continuum), as mentioned below, may serve as another line of evidence for this tentative dating. Besides, the typological comparison of structures may also support this, although the final conclusion must await further investigation and the C14 dating now in progress.



16. The Findings from two-rowed upright slab wall structure (Unit A: 1 - 3; Unit L: 4).

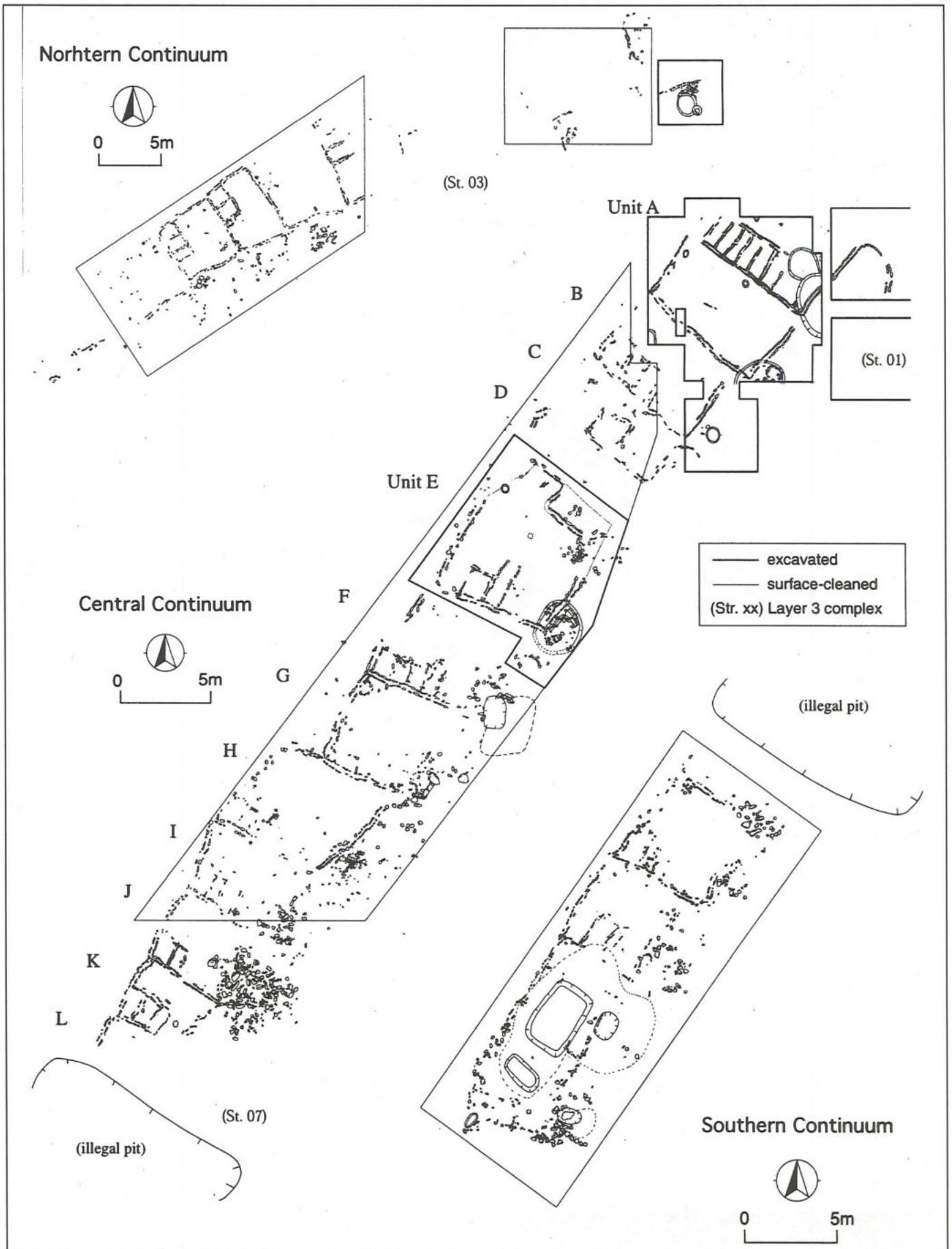
Comprehensive Survey Of The Layer 4 Complex

The excavation of Unit A, along with the partial exposure of similar structures (Unit J-L) beside Structure 07 (see Fig. 3), necessitated the reassessment of the chronology of two-rowed upright slab wall structures that had sporadically been observed on the ground surface (Fujii 1998: Fig. 3). For this reason, the *ḥammada* surface around these structures was some 1,000 square meters cleaned down to the upper surface of Layer 2a. As a result, some thirty structural units were identified.

Three Continua

These structural units extended about 150

m long from NE to SW, slightly overlapping the Layer 3 tabular scraper workshops (see Fig. 2). They were divided into the Northern, Central, and Southern Continuum, although the latter two, which were interrupted by a large illegal trench, might have been connected with each other (Figs. 2, 17 and 18). Each continuum consisted of several to more than ten units that connected each other by both sides, thus forming a long chain. The total length of a continuum thus varied from 25 m to 60 m depending on the number and size of units it included. (Incidentally, Structures 04 and 05, which had been only partly excavated in the second season (Fujii 1999: 74), turned out to be central components of the Northern Continuum. Hence, their stratigraphical assignment,



17. The Layer 4 complex.



18. The Central and the Southern Continuum (from northeast).

which was based on the limited exposure, must be revised; it is now evident that they are included in the Layer 4 complex).

Some interesting points were recognized concerning the intra-continuum constitution. First, a façade was gradually setback as it went toward the southwest within a continuum. Second, a unit became less elaborate following this order. In contrast, units were rather homogeneous in contents; they were roughly square to rectangular in general plan and consisted of one main room generally in the right and a series of narrow storage cells usually in the rear left. A narrow entrance was always placed at the southeastern corner of the main room, thus being oriented to the lee side. Further, it was often protected from the prevailing wind by a curvilinear windbreak. In addition, one pit-type burial cairn was always built at the southwestern corner of a façade.

The overall continuation of rear walls, the sharing of side walls, and the similarity in general plan - all these may provide the first impression of a small, linear settlement that gradually developed from the northeast to the southwest. However, as is suggested by the constant construction of a burial cairn across the southwestern corner of a façade and the consequent, gradual setback of the adjacent, southwestern façade, it seems more reasonable to assume that a continuum represents a *pseudo-settlement* - the final, overlapping picture of the constant renewal of one dwelling at the adjacent, southwestern lot (Fujii 2000). The scarcity of the findings and the thinness of floor and hearth sediment in each unit may serve as another line of evidence for this hypothesis.

Pottery Sherds

Two pottery sherds - one flat rim and one

uncarinated body fragment - were found just between the upper surface of the façade of Unit L on the one hand and the bottom of the rear banking of Structure 07 on the other (see Fig. 3). They probably provide a *terminus a quo* for the Layer 4 complex including Unit L. For this reason, a brief description will be made here.

Both sherds were hand-made and poorly fired. They were tempered with angular or laminar, white grit about 1-5 mm in diameter, although similar-sized, black grit was sporadically included. The rim sherd was a fragment of a hole-mouth jar about 22 cm in diameter (Fig. 16: 4). The original form of the body fragment, on the other hand, was unidentified due to its small size. However, the similarity of texture, tint, thickness and surface treatment of both sherds, along with their side by side occurrence, probably indicates that they derived from the same pottery.

The surface treatment of the rim sherd was characterized by dull red paint on creamy slip. Along with a straight line running on the rim down to the upper fringe of the outer wall, a pending, bold, and solid triangle motif was recognized. The body sherd, on the other hand, was unpainted and covered simply with a creamy slip. Both sherds were heavily blackened or sooted, suggesting that the pottery was used for cooking.

The sample size is too small to make some comments on the chronology, but the least we can say is that these two sherds are similar to Jericho IX (i.e., PNA or Lodian) pottery both in texture and in painted motif (Gopher and Gophna 1993: Gopher 1995). In this regard, the location of Khirbat adh-Dhariḥ, a Jericho IX hamlet site along a tributary of Wādī al-Ḥasa, southern Jordan, is highly suggestive (MacDonald 1992; Bossut *et al.* 1988). Although, to date, no hole mouth jars have been reported from this site, it might possibly bridge the spatial hiatus between the main body of the Jericho IX cul-

tural entity and its most peripheral occurrence (?) - the Layer 4 complex at Qā' Abū Ṭulayḥa West.

Survey of the other Loci

In addition to these main works, the followings were executed in order to further explore the overall picture of this site.

Unit E (Central Continuum)

Unit E was additionally excavated in order to obtain more information about the Layer 4 two-rowed upright slab wall structures (Fig. 19). However, the description of this unit is omitted here for the next report.

Core Concentration Areas

A short survey of Qā' Abū Ṭulayḥa West and East, which was conducted at the end of this season, identified a total of ten core concentration areas; seven of them (W-01~07) were located in the West and the remainder three (E-01~03) in the East. In order to trace the technological transition in blank detachment strategy within this large factory site, a series of random sampling was carried out in each area. The examination is still underway.

Cairn Line

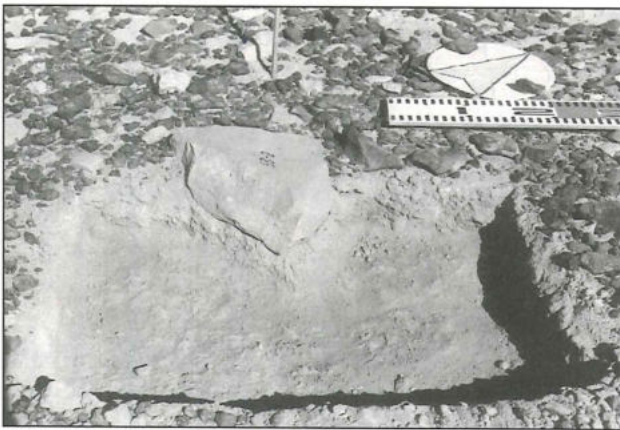
In order to check the stratigraphy of the cairn line that extends between the NE and SW complex, a total of eight spots (Cairn No. 6, 9, 10, 38, 47, 58, 61b, and 74) were excavated (Fig. 20). As a result, it was clarified that the cairn line belongs to Layer 2b. The former view that the cairn line was probably constructed reusing the material of the Layer 3 tabular scraper workshops (Fujii 1999: 83) was thus reinforced.

Structure 11

Structure 11, a small, oblong structure that forms the eastern end of the cairn line, was excavated. The result was consistent with the excavation of several spots of the cairn line mentioned above. It is therefore



19. Unit E: general view from southeast.



20. The Cairn Line: spot no. 58.

concluded that the cairn line (including Structure 11) is irrelevant to the Layer 3 tabular scraper workshops. However, the function and dating of this Layer 2b complex is still unknown.

Illegal Pit

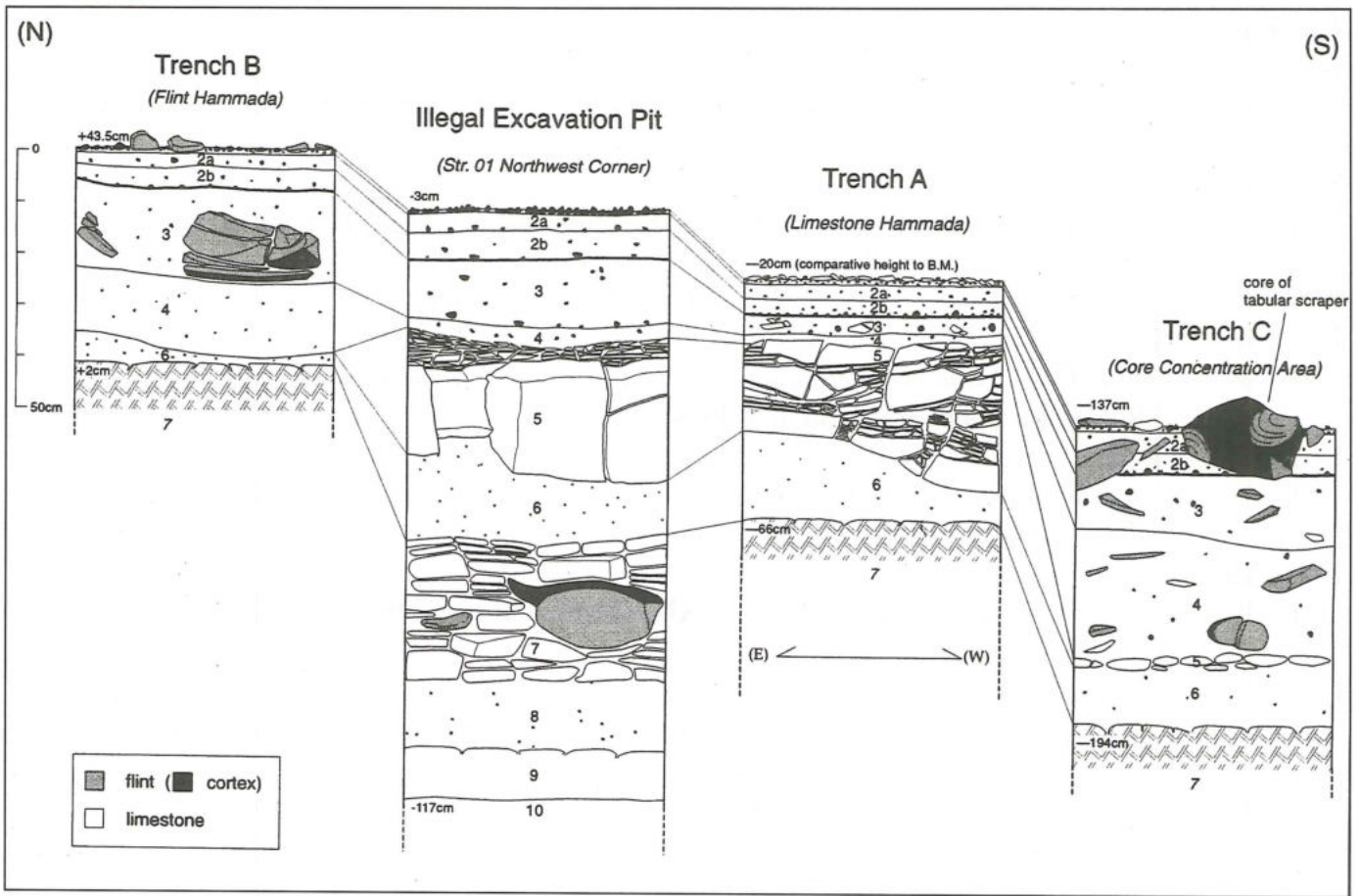
The exposed section of an illegal pit, which had been dug beside Structure 01 during the last off-season, was examined in order to further explore the sedimentological and geological background of this site (Fig. 21). The result accorded well with the for-

mer observations (Fujii 1999: Fig. 12), and the description is omitted here for the final report.

Concluding Remarks

The overall picture of Qā' Abū Ṭulayḥa West has become clearer. To date, it has been clarified that this site includes the following three cultural complexes: 1) Layer 4, tentatively dated to the Late Neolithic, complex represented by two-rowed upright slab wall structures; 2) Layer 3, probably dated to the EBA, complex represented both by tabular scraper workshops and by core concentration areas; 3) another, also probably dated to the EBA, complex represented by Jafr blade workshops that are spotted below the gentle hill. Further, a cairn field in the SW Complex may join them. Thus, Qā' Abū Ṭulayḥa West is a multi-dimensional site where these three, or possibly four, cultural complexes overlap each other either spatially or stratigraphically.

However, still much remains obscure. Further investigation is needed to fully re-



21. Columnar figure of three test trenches and an illegal pit.

trieve the archaeological implications of this site. The fourth excavation season is due to be conducted from August to September in 2000.

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